

**ORANGE COUNTY BOARD OF COMMISSIONERS**

**QUARTERLY PUBLIC HEARING AGENDA**  
**September 12, 2016**  
**7:00 P.M.**  
**Richard Whitted Meeting Facility**  
**300 West Tryon Street**  
**Hillsborough, NC 27278**

**NOTE: Information is available on-line at the “Meeting Agendas” link at: <http://www.orangecountync.gov/> and also in the Planning Department or the County Clerk’s Office**

**NOTICE TO PEOPLE WITH IMPAIRED HEARING: Audio amplification equipment is available on request. If you need this assistance, please call the County Clerk’s Office at (919) 245-2130.**

**Note:** The Legal Advertisement for the Quarterly Public Hearing is included in the agenda packet immediately following the agenda.

**A. OPENING REMARKS FROM THE CHAIR**

**B. PUBLIC CHARGE**

The Board of Commissioners pledges to the residents of Orange County its respect. The Board asks its residents to conduct themselves in a respectful, courteous manner, both with the Board and with fellow residents. At any time should any member of the Board or any resident fail to observe this public charge, the Chair will ask the offending member to leave the meeting until that individual regains personal control. Should decorum fail to be restored, the Chair will recess the meeting until such time that a genuine commitment to this public charge is observed. All electronic devices such as cell phones, pagers, and computers should please be turned off or set to silent/vibrate.

**C. PUBLIC HEARING – QUASI JUDICIAL ITEMS**

- 1. Application for a Class A Special Use Permit – To review a Special Use Permit application seeking to develop a solar array/public utility station on a 52 acre parcel of property (PIN 9835-02-9137, no address assigned yet) which is accessed via an easement from 6519 U.S. Highway 70 West within the Cheeks Township.**

**D. PUBLIC HEARING – LEGISLATIVE ITEMS**

**Note:** Items D.1, 2, and 3 are related but separate, stand-alone, items. Because public comment may address aspects of the three items, staff’s presentation will encompass all three items before opening the public comment portion of the hearing for the three items.

1. **Town Of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan Amendment** - To review government-initiated amendments to the Land Use Plan, involving five parcels south of Interstate 40 in the vicinity of Old Highway 86.
  - Four parcels totaling approximately 166.2 acres are proposed to be changed from “Suburban Office Complex” to “Employment”.
  - One parcel totaling 34.58 acres is proposed to be changed from “Mixed Residential Neighborhood” to “Suburban Office Complex”.
2. **Unified Development Ordinance (UDO) Text Amendment** - To review government-initiated amendments to the text of the UDO that would modify existing regulations that pertain to the Hillsborough Economic Development District.
3. **Zoning Atlas Amendment**- To review government-initiated amendments to the Zoning Atlas that would rezone:
  - Four parcels totaling approximately 166.2 acres and 17.05 acres of Interstate right-of-way from EDH-3 (Economic Development Hillsborough Limited Office with Residential [current name]) to EDH-5 (Economic Development Hillsborough Research and Manufacturing [proposed name]). The parcels are located immediately south of Interstate 40 and west of Old Highway 86.
  - One parcel totaling 34.58 acres and 8.92 acres of Interstate right-of-way from EDH-2 (Economic Development Hillsborough Limited Office) to EDH-4 (Economic Development Hillsborough Office / Retail [proposed name]). The parcel is located immediately south of Interstate 40 and east of Old Highway 86.
4. **Unified Development Ordinance (UDO) Text Amendment** - To review government-initiated amendments to the text of the UDO that would establish use standards to allow certain principal uses to include a small component of other specific uses in the O/RM (Office/Research and Manufacturing) zoning district.

## **E. ADJOURNMENT OF PUBLIC HEARINGS**

**NOTICE OF PUBLIC HEARING  
ORANGE COUNTY BOARD OF COMMISSIONERS**

A meeting of the Orange County Board of Commissioners will be held at the Whitted Building, 300 West Tryon Street, 2<sup>nd</sup> Floor, Hillsborough, North Carolina, on Monday, September 12, 2016 at 7:00 PM. At the meeting the Board will hold several public hearings including both Legislative and Quasi-Judicial matters. For Legislative matters all interested persons may speak on the item. In contrast, only persons with standing may participate as parties in Quasi-Judicial hearings.

Quasi-Judicial Hearings:

The purpose of this hearing will be to gather evidence to determine whether the ordinance’s standards have been met. The Board must base its decision solely on the competent, material and substantive evidence presented during the hearing. The Board must exclude from consideration both their personal and the public’s opinions. All interested persons are welcomed to observe the hearing regardless of their ability to participate.

The Orange County Planning and Inspections Department provides a Special Use Fact Sheet online explaining the submittal and review process: [http://www.orangecountync.gov/departments/planning\\_and\\_inspections/SUP\\_Fact\\_Sheet.pdf](http://www.orangecountync.gov/departments/planning_and_inspections/SUP_Fact_Sheet.pdf)

- 1. **Application for a Class A Special Use Permit:** In accordance with the provisions of Section 2.7 *Special Use Permits (SUP)* and Section 5.9.6 (C) *Solar Array – Public Utility* of the Unified Development Ordinance (UDO), ESA Renewables, Oakwood Solar LLC, and Helen and Carl Mace (the property owners) have submitted a Class A SUP request to develop a Solar Array- Public Utility on a parcel of property off of US Highway 70 within the Cheeks Township.

The array will be located on a 27.3 acre portion (leased acreage) of a 52.1 acre parcel of property, further identified as Orange County Parcel Identification Number (PIN) 9835-02-9137. Access to the array shall be through an adjacent property located at 6517 US Highway 70, (PIN) 9835-10-3858, also owned by the Mace family. The SUP, if approved, would encumber both properties to allow for the development of the proposed solar array.

The properties in question are zoned:

- Rural Residential (R-1),
- Existing Commercial (EC-5)

Approximately half of the 5 acre parcel (PIN 9835-10-3858) is zoned EC-5 with the remaining acreage zoned R-1. This is the property where the access easement for the solar array will be located,

- Back Creek Protected Watershed Protection Overlay District, and
- Efland-Cheeks Overlay District (ECOD) Pre-designated commercial area.

and are located within the 10 Year Transition land use classification as denoted on the Future Land Use Map of the Comprehensive Plan and the Urban Designated Area as denoted on the Growth Management System Map.

The Orange County Planning Board has recommended approval, with conditions, of the SUP application.

Purpose: To review the item and receive sworn testimony on the Class A Special Use Permit application.

Legislative Hearings:

The purpose of these hearings will be to collect public opinion. All are welcome to comment or express their concerns. The Board has more discretion in its legislative decisions than its quasi-judicial actions. Thus, here they are permitted to incorporate public opinion as they seek to further the health, safety and general welfare of the county.

1. **Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan Amendment:**

In accordance with the provisions of the Hillsborough-Orange Interlocal Land Management Agreement, the Town of Hillsborough and Orange County have initiated amendments to the Land Use Plan involving five parcels south of Interstate 40 in the vicinity of Old Highway 86. The amendments are proposed to better promote economic development opportunities in the area and help preserve planned sewer capacities for non-single-family residential uses.

- Four parcels totaling approximately 166.2 acres are proposed to be changed from “Suburban Office Complex” to “Employment”. The Parcel Identification Numbers (PIN) are as follows:

9863-93-6843 (portion of)	9863-71-8857	9863-91-6573 (portion of)	9873-01-4031
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- One parcel (PIN 9873-20-2388) totaling 34.58 acres is proposed to be changed from “Mixed Residential Neighborhood” to “Suburban Office Complex”.

The Orange County Planning Board has recommended approval of the proposed Land Use Plan amendments.

Purpose: To review the item and receive public comment on the proposed amendments.

2. **Unified Development Ordinance (UDO) Text Amendment:** In accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the Unified Development Ordinance, the Planning Director has initiated amendments to the text of the Unified Development Ordinance (UDO).

Text amendments are proposed to the following sections:

- 3.7 *Economic Development Districts*
- 5.2.2 *Table of Permitted Uses – Economic Development Districts*
- 5.5 *Standards for Residential Uses*
- 5.6 *Standards for Commercial Uses*
- 6.7.5 *Specific Standards for Hillsborough EDD*

The purpose of the proposed text amendments is to better promote economic development opportunities in the Hillsborough Economic Development district by modifying some development standards, types of permitted uses, and use standards

The Orange County Planning Board has recommended approval of the proposed UDO text amendment.

Purpose: To review the item and receive public comment on the proposed amendments.

3. **Zoning Atlas Amendment:** In accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the Unified Development Ordinance, the Planning Director has initiated amendments to the Zoning Atlas (Map). The proposed amendment involves five parcels south of Interstate 40 in the vicinity of Old Highway 86 plus adjacent interstate right-of-way.

All or portions of four parcels, totaling 166.2 acres, located west of Old Highway 86 are proposed to be rezoned

**FROM: EDH-3 (Economic Development Hillsborough Limited Office with Residential [current name])**

**TO: EDH-5 (Economic Development Hillsborough Research and Manufacturing [proposed name, per separate text amendment action])**

The affected Parcel Identification Numbers (PIN) are as follows:

Parcel Identification Number (PIN)	Owner on Record	Acreage Proposed to be Rezoned
9863-93-6843 (portion of)	Sally and Allen Addison	4.15 acres
9863-71-8857 (entire)	Suzanne Upton	88.52 acres
9863-91-6573 (portion of)	Christy D. Bailey, et al	59.53 acres
9873-01-4031 (entire)	Rant B. Barlow, Jr.	14.0 acres

Additionally, 17.05 acres of Interstate right-of-way are proposed to be rezoned from and to the same zoning districts.

One 34.58 acre parcel located east of Old Highway 86 is proposed to rezoned

**FROM: EDH-2 (Economic Development Hillsborough Limited Office)**

**TO: EDH-4 (Economic Development Hillsborough Office / Retail [proposed name, per separate text amendment action]).**

The affected Parcel Identification Number (PIN) is as follows:

Parcel Identification Number (PIN)	Owner on Record	Acreage Proposed to be Rezoned
9873-20-2388 (entire)	Robert J. Ayers, et al	34.58 acres

Additionally, 8.92 acres of Interstate right-of-way are proposed to be rezoned from and to the same zoning districts.

Three zoning overlay districts also apply in this geographic area (Watershed Protection, Special Flood Hazard Area, and Major Transportation Corridor). No modifications are being proposed to the boundaries of the three overlay districts.

The geographic area of the five affected parcels and the affected Interstate right-of-way are located primarily within the Hillsborough Township portion of the county with a small portion of the overall area located within Chapel Hill Township.

The properties are located within the Economic Development Transition Activity Node as denoted on the Future Land Use Map of the Comprehensive Plan and within the Urban Designated Area as denoted on the Growth Management System Map.

The Orange County Planning Board has recommended approval of the proposed UDO text amendments.

Purpose: To review the item and receive public comment on the proposed amendments.

- 4. **Unified Development Ordinance (UDO) Text Amendment:** In accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the Unified Development Ordinance, the Planning Director has initiated amendments to the text of the Unified Development Ordinance (UDO).

Text amendments are proposed to the following sections:

- Section 5.14, *Standards for Manufacturing, Assembly, and Processing*
- Section 5.17, *Standards for Miscellaneous Uses*

The purpose of the proposed amendments is to establish standards to allow certain principal uses to include a small component of other specific uses in the O/RM (Office/Research and Manufacturing) zoning district.

The Orange County Planning Board has recommended approval of the proposed UDO text amendments.

Purpose: To review the item and receive public comment on the proposed amendments.

Substantial changes in items presented at the public hearing may be made following the receipt of comments made at the public hearing. Accommodations for individuals with physical disabilities can be provided if the request is made to the Planning Director at least 48 hours prior to the Public Hearing by calling one of the phone numbers below. The full text of the public hearing items may be obtained no later than September 2, 2016 at the County website [www.orangecountync.gov](http://www.orangecountync.gov) at the County Commissioners Agendas link ([http://www.orangecountync.gov/departments/board\\_of\\_county\\_commissioners/agendas.php#](http://www.orangecountync.gov/departments/board_of_county_commissioners/agendas.php#)).

Questions regarding the proposals may be directed to the Orange County Planning Department located on the second floor of the County Office Building at 131 West Margaret Lane, Suite 201, Hillsborough, North Carolina. Office hours are from 8:00 a.m. to 5:00 p.m. Monday through Friday. You may also call (919) 245-2575 or 245-2585 and you will be directed to a staff member who will answer your questions or you may e-mail questions to [planningdept@orangecountync.gov](mailto:planningdept@orangecountync.gov).

PUBLISH:	<u>The Herald Sun</u> August 31, 2016 September 7, 2016	<u>News of Orange</u> August 31, 2016 September 7, 2016
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**ORANGE COUNTY  
BOARD OF COMMISSIONERS  
QUARTERLY PUBLIC HEARING ACTION AGENDA ITEM ABSTRACT**  
**Meeting Date:** September 12, 2016

**Action Agenda  
Item No.   C.1**

**SUBJECT:** Class A Special Use Permit – Solar Array off US Highway 70 in Cheeks Township

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**DEPARTMENT:** Planning and Inspections

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**ATTACHMENTS:**

1. Application
2. Site Plan
3. Site Assessment
4. Staff Review Comments
5. Neighborhood Information Meeting Notes and Mailing Certification
6. Draft August 3, 2016 Planning Board Minutes
7. Public Hearing Mailing Certification
8. Special Use Permit Findings of Fact including Planning Board/Staff Recommendations

**Under Separate Cover** – Full Scale Copy of Site Plan

**INFORMATION CONTACT:**

Patrick Mallett, Planner II	(919) 245-2577
Michael D. Harvey, Planner III	(919) 245-2597
Craig Benedict, Director	(919) 245-2592

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**PURPOSE:** To hold a quasi-judicial public hearing, receive sworn testimony and evidence, and receive the Planning Board and staff recommendations on a Class A Special Use Permit (hereafter 'SUP') application proposing the development of a solar array in accordance with Section 2.7 *Special Use Permits* and Section 5.9.6 (C) *Solar Array-Public Utility* of the Orange County Unified Development Ordinance (UDO).

**BACKGROUND (PROCESS):** A quasi-judicial hearing means that testimony is sworn and evidence must be competent and substantial. Hearsay or unsubstantiated opinions are not sufficient testimony. Board members are prohibited from engaging in conversations with anyone on the merits of project outside of the public hearing. Such conversations, commonly referred to as '*ex-parte communications*' are prohibited.

Decisions relating to the ultimate approval or denial of SUP applications are based solely on the sworn testimony of all parties with standing involved with the case, both those for and against, as well as the review of competent, material, and substantial evidence submitted during the public hearing.

CADENCE OF REVIEW: The review of a SUP is as follows:

- **STEP ONE – NEIGHBORHOOD INFORMATION MEETING (NIM)**: The first step in the review of a SUP application is a holding of a NIM to allow the applicant to meet with local property owners to review the project.

*STAFF COMMENT*: The required NIM was held on July 27, 2015 from 5:30 p.m. to 7:30 p.m. in accordance with the UDO. Notes from this meeting are contained within Attachment 5.

- **STEP TWO – PLANNING BOARD REVIEW**: The Planning Board reviews the request and makes a recommendation to the BOCC on the project's compliance with specific development standards (Section 5.9.6) and the general standards (Section 5.3.2 *Special Uses*) of the UDO. Staff prepares a script to aid the Board in making a recommendation.

*STAFF COMMENT*: The Planning Board reviewed this item at its August 3, 2016 regular meeting and unanimously recommended approval. Please refer to Attachment 6 for a copy of the minutes from this meeting.

Attachment 8 contains the findings of fact for the project as recommended by the Planning Board and staff.

- **STEP THREE – PUBLIC HEARING**: The BOCC holds a public hearing to allow the applicant and other interested parties to provide sworn testimony related to the proposal.

*STAFF COMMENT*: The required public hearing will be held at the September 12, 2016 Quarterly Public Hearing.

Please refer to Attachment 7 for a copy of the public hearing notice.

- **STEP FOUR – DECISION**: The BOCC will review the Planning Board/staff recommendation as well as any other testimony/evidence presented at the hearing, deliberate, certify the record, close the public hearing, and then render a final decision.

**BACKGROUND (APPLICATION)**: The applicant is proposing to develop a solar facility on a 27.3 acre leased portion of the 52.1 acre subject property with the remaining 24.8 acres being undeveloped. Please refer to Attachment(s) 1 through 3 for additional information

Proposed individual arrays shall be approximately 7-to 9-feet in height, with approximately 2-to 3-feet of ground clearance, and approximately 50-feet in length. A gated 6 foot high chain link security fence, topped with 3-feet of strand barbed wire, shall enclose the perimeter of the array to prevent access. This fenced area shall be further surrounded by a Type D 50-foot wide landscaped buffer.

There shall be no business or other occupied office located on the property. Vehicular access is proposed via a 30-to 50-foot wide access easement through Orange County PIN 9835-10-3858 to an existing driveway onto US Highway 70. This parcel is also owned by the family leasing the subject areas to Oakwood Solar Farm LLC / ESA Renewables.

The site contains floodplain, numerous stream buffers and connected water body features in the northeastern and eastern portions of the subject parcel. These areas will remain undisturbed and the required 65-and 80-foot wide stream buffers along the floodplain and top of bank shall be provided.

Analysis: As required under Section 2.7.4 of the UDO, the Planning Director is required to: *'cause an analysis to be made of the application'* and pass that analysis on to the reviewing body. In analyzing this request, the Planning Director offers the following:

- a. Application submittal requirements detailed within Section 2.7 of the UDO have been satisfied.
- b. The applicant has demonstrated compliance with respect to landscaping and buffering requirements as detailed within Section 6.8 of the UDO.
- c. Staff has made the determination that a formal Environmental Impact Statement would not be required per Section 6.16 of the UDO.
- d. The applicant has complied with specific development standards associated with the development of a solar facility as detailed within Section 5.9.6 (C) of the UDO.
- e. Comments received from various County agencies (i.e. Sheriff, Fire Marshal, DEAPR, Orange County Health) indicate there are no concerns associated with the request. Please note this item was submitted to the State Clearinghouse for review where no significant issues with the proposed SUP were identified.

For more information please refer to Attachment 4.

- f. Staff finds the proposal is consistent with the various goals outlined within the Comprehensive Plan concerning development, including:
  1. Natural and Cultural Systems Goal 1: Energy conservation, sustainable use of non-polluting renewable energy resources, efficient use of non-renewable energy resources and clean air.
  2. Objective AE-15: Foster participation in green energy programs such as installation incentives for solar hot water/solar generation/solar tempering in residential or commercial construction. The County should develop programs that will link citizens and businesses with options for alternative and sustainable energy sources.
  3. Objective AG-8: Encourage the use and production of natural fuel alternatives to petroleum based products and pursue new types of energy sources.
- g. To date, no substantial, competent evidence demonstrating the project does not comply with the various standards of the UDO has been presented and/or submitted to staff.

Planning Director's Recommendation: In accordance with the provisions of Section 2.7.4 of the UDO, the Planning Director recommends **approval** of the application subject to:

- Approval of the recommended Findings of Fact as detailed within Attachment 8,
- The imposition of the recommended conditions detailed within Attachment 8, and
- The BOCC's ability to make an affirmative finding on the general standards outlined within Section 5.3.2 of the UDO.

Planning Board Recommendation: At its August 3, 2016 meeting the Board voted unanimously to **recommend approval** of the SUP application.

Draft minutes from this meeting are included in Attachment 6. The Board's recommended findings are contained within Attachment 8.

Agenda materials from the August 3, 2016 Planning Board meeting can be viewed at: <http://www.orangecountync.gov/8.3.16PlanningBoardAgendaPacket.pdf>.

**FINANCIAL IMPACT:** Consideration and approval will not create the need for additional funding for the provision of County services. Costs for the required legal advertisement were paid from FY2016-17 Departmental funds budgeted for this purpose. Existing Planning staff included in the Departmental staffing budget will accomplish the work required to process this amendment.

**SOCIAL JUSTICE IMPACT:** There is no specific Orange County Social Justice Goal impact associated with this item.

Please note the review and required findings of fact associated with special use permits is detailed within State law and the UDO. A finding that a project supports or in some way contributes to the concept of Social Justice is not a required finding and cannot be a basis of approval or denial.

**RECOMMENDATION:** The Administration recommends the Board:

1. Receive the application,
2. Conduct the Public Hearing and receive sworn testimony and evidence as well as the Planning Board and staff recommendation(s) on the application,
3. Close the public hearing,
4. Review and make a decision on the Findings of Fact and Conditions of Approval as contained in Attachment 8;

Please note once the public hearing is closed there can be no further questions asked/answered by the staff, the applicant, or other party and no additional evidence can be placed into the record. If additional information is needed, the BOCC should continue the public hearing to a date/time certain in order to hear the information in a quasi-judicial setting. The date/time certain need not be a quarterly public hearing date (i.e. it can be a regular BOCC meeting date, if desired).



Orange County Planning and Inspections Department

APPLICATION FOR CLASS A SPECIAL USE PERMIT

APPLICANT INFORMATION:

Date: May 3, 2016

Applicant: Oakwood Solar Farm, LLC Phone: 407.915.5436

Address: 4150 St. Johns Parkway Suite 1000 Cell Phone: same

Sanford, FL 32771 E-mail: kcampbell@esarenewables.com

Agent: Parker Poe Adams & Bernstein, LLP Phone: 919.828.0264

Address: 301 Fayetteville Street Suite 1400 Cell Phone: same

Raleigh, NC 27601 E-mail: katherineross@parkerpoe.com

Address of subject property: 6517 US Highway 70 Mebane, NC 27302

Parcel Identification Number (PIN): 9835-02-9137 Lot Size: \_\_\_\_\_

Zoning Designation: Rural Residential (R1) Watershed Overlay: Back Creek Protected Watershed

Other Overlay Zoning Districts: Efland-Cheeks Hwy 70

Request (include detailed description of proposed land use): Please see attached.

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**RE: Per Orange County Planning & Inspections Department Application for Special Use Permit**

**Detailed description of proposed land use:**

The Special Use permit request is for a ground mount solar generating plant. Oakwood Solar Farm, LLC is located on US Highway 70 in Mebane, NC. The PIN to the parcel of the solar farm proposed is 9835-02-9317. The PIN to the site access agreed upon with the landowner is 9835-10-9858. The existing soils consisted in the project area are "GeB" Georgeville silt loam and "GeC" Georgeville silt loam. The majority of the site is comprised of scrub/shrub vegetation. The site was cleared for timber purposes 3-5 years ago. The southeast portion of the site is used as staging for Mace Grading Company, Inc. Two jurisdictional man-made open water ponds with a 65 foot buffer are located on the southern and northwestern portions of the boundary, respectively. A stream is located on the northeast portion of the boundary with an 80 foot buffer. The site will meet and exceed the buffer regulations (depicted on the site plan). No buildings are located within the site boundary. FIRM Panel 9835 indicates the projects limits are not within a special flood hazard area (attached). The site is located within the Back Creek Protected Watershed Overlay District and Eiland-Cheeks Hwy 70 Overlay District (pre-designated commercial area). Project will use no groundwater or have impact on water table or groundwater. Project construction and operation has no impact on wetlands. Project site Latitude is 36° 5'27.08"N and Longitude is 79°14'0.07"W.

The proposed ground-mount solar farm will consist of fixed solar panels, racking arrays with driven posts, pad mounted inverter/and transformer areas (as depicted on the site plan) and a chain link fence w barbed wire to keep safe and secure the site. Land is not paved and is left virtually undisturbed.

A Type D Landscaping buffer will be planted where existing natural vegetation is not consistent with the County requirements (depicted on site plans). Site access will be through PIN 9835-103-858 which has been agreed with the landowner. During construction it is estimated that a maximum of 40 workers will be on site each day with less than 100 trips in/out of the site to occur approximately 4 months of construction until completion (attached Trip Generation report). The site will be odorless, un-manned, produce no waste, and create a tax base for the County. Remote monitoring will be in place for energy production reasons.

ORANGE COUNTY

RE: Oakwood Solar Farm, LLC  
 Orange County PIN: (parcel) 9835-02-9137 (easement) 9835-10-3858  
 Address: 6517 US Highway 70 Mebane, NC 27302

**STATEMENT OF JUSTIFICATION IN SUPPORT OF THE SPECIAL USE PERMIT APPLICATION**

**I. Introduction**

Oakwood Solar Farm, LLC proposes to construct a solar array-public utility on 35+/- acres of land owned by Carl and Helen Mace. The property is located on US Highway 70 near the intersection of Buckhorn Road. The property is currently zoned Rural Residential (R1). The majority of the properties adjacent to the site are also Rural Residential (R1). ~~The easement with site access is zoned EC5 (Existing Commercial) with one adjoining parcel zoned NC2 (Neighborhood Commercial).~~

The solar array proposed meets the needs of the present generation without compromising the ability of future generations in meeting their needs as required in the Orange County Comprehensive Plan. The proposed solar array fulfills the County and the State of North Carolina's goal to reduce dependence on fossil fuels and nuclear power and move to a more sustainable form of generation.

In recent years, across the US we have seen solar energy become competitive with fossil fuel generation. The benefits of solar energy production go far beyond its price competitiveness compared to its fossil fuel counterparts including tax base, no emissions, increased electrical grid stability, local economic impact and low intensity development.

**II. Statement In Support of Application**

This Class A Special Use Permit application for a Solar Array-Public Utility meets all general standards for approval as required by Section 5.3.2 (A), those specific standards required by Section 5.3.2 (B), and the requirements of 5.9 (C). This Statement addresses both general and specific standards as required by Orange County Ordinance.

**A. The use will maintain or promote the public health, safety and general welfare, if located where proposed and developed and operated according to the plan as submitted.**

The proposed solar array-public utility will not affect the public health or safety. Access to the site will be from US Highway 70 and formally agreed upon with the landowners. The Solar Array configuration contains no moving parts. The electric components will have an Underwriters Laboratories listing and the Solar Array will comply with the edition of the National Electrical Code adopted at the time of construction. The Solar Array will be surrounded by a wire mesh fence with three strand barbed wire on top. The solar array will not have any lighting, and no hazardous substances will be utilized on the site.

**APPLICATION FOR ENVIRONMENTAL ASSESSMENT**

**Project Name** Oakwood Solar Farm, LLC

**Applicant** Kyle Campbell

Project Manager

ESA Renewables, LLC

**Phone** 407.915.5436 ext 106

**Owner** Helen/Carl Mace

**Address** 6517 US Highway 70

Mebane, NC 27302

**Phone** 252.745.3352

**Location of Property** 6517 US Highway 70

6517 US Highway 70

Mebane, NC 27302

**Acreage** 52.1 **Township** \_\_\_\_\_

**Tax Map Reference** \_\_\_\_\_ **PIN(s)** 9835-02-9137 (parcel)

9835103858 (easement)

**FOR DEPARTMENT USE ONLY**

**Date received** \_\_\_\_\_ **Reviewed by** \_\_\_\_\_

**Date accepted/rejected** \_\_\_\_\_

**Summary Comments:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**APPLICATION FOR ENVIRONMENTAL ASSESSMENT**

**Project Name** Oakwood Solar Farm, LLC

**Applicant** Kyle Campbell  
Project Manager  
ESA Renewables, LLC

**Phone** 407.915.5436 ext 106

**Owner** Helen/Carl Mace

**Address** 6517 US Highway 70  
Mebane, NC 27302

**Phone** 252.745.3352

**Location of Property** 6517 US Highway 70  
6517 US Highway 70  
Mebane, NC 27302

**Acreage** 52.1 **Township** \_\_\_\_\_

**Tax Map Reference** \_\_\_\_\_ **PIN(s)** 9835-02-9317 (parcel)  
9835103858 (easement)

**FOR DEPARTMENT USE ONLY**

**Date received** \_\_\_\_\_ **Reviewed by** \_\_\_\_\_

**Date accepted/rejected** \_\_\_\_\_

**Summary Comments:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I. GENERAL SITE INFORMATION

TO BE COMPLETED BY APPLICANT, WITH ASSISTANCE FROM PLANNING DEPARTMENT AS NEEDED

A. Zoning and use of adjacent property.

North R1 \_\_\_\_\_ South R1 \_\_\_\_\_  
East EC5, NC2, R1 \_\_\_\_\_ West R1 \_\_\_\_\_

B. Topography

Highest Elevation 705 +/- \_\_\_\_\_

Lowest Elevation 675 +/- \_\_\_\_\_

General direction of slope North and South \_\_\_\_\_

Estimated % of property with

0 - 5% slope 0% \_\_\_\_\_

5 - 15% slope 100% (2 to 6 % slopes-per USDA Soils map)

15 - 25% slope 0% \_\_\_\_\_

more than 25% slope 0% \_\_\_\_\_  
(Required only for the portion of the site associated with or impacted by the proposed activity)

C. Drainage

Are there any streams or drainage easements located on the property? Yes. \_\_\_\_\_

Is any of the site located within a:

Watersupply Watershed Back Creek Protected

Water Quality Critical Area NA \_\_\_\_\_

Floodplain \_\_\_\_\_

Describe \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

D. Does the property contain any of the following Inventory of Natural or Cultural Resources? (As identified in the "Inventory of Sites of Cultural, Historical, Recreational, Biological, and Geological Significance in the Unincorporated Portions of Orange County" or the "Inventory of Natural Areas and Wildlife Habitats of Orange County, North Carolina".)

	<u>Yes</u>	<u>No</u>
a. cemeteries	_____	<u>X</u>
b. archaeological sites	_____	<u>X</u>
c. historic sites	_____	<u>X</u>
d. areas of geological significance	_____	<u>X</u>
e. designated natural areas	_____	<u>X</u>
f. designated habitat	_____	<u>X</u>
g. other	_____	<u>X</u>

For each "yes" answer above, please indicate the location on site plan and complete the following, with the assistance of the Orange County Environmental Planner. Also complete Attachment A.

- (1) Type of resource \_\_\_\_\_  
 Inventory reference no. or page \_\_\_\_\_  
 Description of Resource \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  
- (2) Type of resource \_\_\_\_\_  
 Inventory reference no. or page \_\_\_\_\_  
 Description of Resource \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(Attach additional sheets if needed)

II. TO BE COMPLETED BY APPLICANT

A. PROJECT DESCRIPTION

1. Describe proposed use of property:

Ground Mount Solar Farm. (see attached).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Number of lots: 0

3. Number of structures: 0

4. Estimated square footage of area to be graded for development of attached residential units (excluding roads, but including parking areas) 0

5. Estimated square footage of area to be graded for non-residential use (excluding roads) 1200 sq ft.

6. Estimated area to be graded for roads +/- 85,000 sq ft.

7. Road Type: Public NA Private \_\_\_\_\_  
Class A X  
Class B NA

Total road length <87,000 sq ft.

8. Hours of operation for commercial or industrial use:

The solar farm is a 24X7 operation with minimal site visits for maintenance per year.

**B. STATE PERMITS REQUIRED**

1. Does the project involve the mining of earth products? NA  
If so, how many cubic feet of material are expected to be excavated? NA

Has an application for a Mining Permit been submitted to NCDRCD? NA

Please attach map indicating expected extent of proposed activity.

2. Does the project involve generation or storage of hazardous or toxic wastes, as identified by the Environmental Protection Agency? (A listing of all hazardous materials is available from the Planning Department)

Describe the wastes to be generated. No emissions or hazardous waste is generated or emitted from the farm.

How much material is expected to be generated per month?  
NA

Will any material be treated onsite? NA

Volume? NA

Will any material be stored onsite? NA

Volume? NA

Where will disposal of the material take place?  
NA

How will materials be transported to the disposal site?  
NA

What measures are proposed to protect water quality and air quality in case of spills?  
NA

3. Will the project involve a land application system for treatment of wastewater? NA

If yes, describe \_\_\_\_\_  
\_\_\_\_\_

Has an application for a non-discharge permit been submitted to the NC Department of Environmental Management or Orange County Department of Environmental Health?

4. Is a septic tank system proposed which as a design capacity of more than 3000 gallons per day? NA

If yes, describe \_\_\_\_\_  
\_\_\_\_\_

Has an application for a non-discharge permit been submitted to the NC Department of Environmental Management or Orange County Department of Environmental Health?

5. Does the activity involve sludge disposal? NA

If yes, where is the source of the sludge? \_\_\_\_\_  
\_\_\_\_\_

Describe where and how the sludge is being disposed.

NA

Has a NPDES permit from the NC Division of Environmental Management been issued? NA

6. Water Usage

a. Estimated no. of employees \_\_\_\_\_ x 25 gpd = \_\_\_\_\_ gpd

b. Estimated water use for climate control = \_\_\_\_\_ gpd

c. Process water

- \_\_\_\_\_ % consumed
  - \_\_\_\_\_ % discharged to septic system
  - \_\_\_\_\_ % discharged to surface (including storm sewers) (describe: \_\_\_\_\_)
  - \_\_\_\_\_ % evaporated
  - \_\_\_\_\_ % reclaimed/reused
  - \_\_\_\_\_ % other
- 100%

d. Water used for cooling, heating, etc., in association with production or manufacturing

\_\_\_\_\_ % reused  
\_\_\_\_\_ % consumed  
\_\_\_\_\_ % discharged  
(describe: \_\_\_\_\_ )

100%

\_\_\_\_\_ gpd  
Total Water Usage

e. Describe source of water

NA  
\_\_\_\_\_  
\_\_\_\_\_

**ATTACHEMENT A**  
**TO BE COMPLETED ONLY IF INVENTORY SITES ARE IDENTIFIED IN I.E.**  
**(ATTACH ADDITIONAL SHEETS IF NECESSARY)**

(1) a. Impact on Resource from Proposed Development

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. Proposed Mitigation

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) a. Impact on Resource from Proposed Development

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. Proposed Mitigation

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

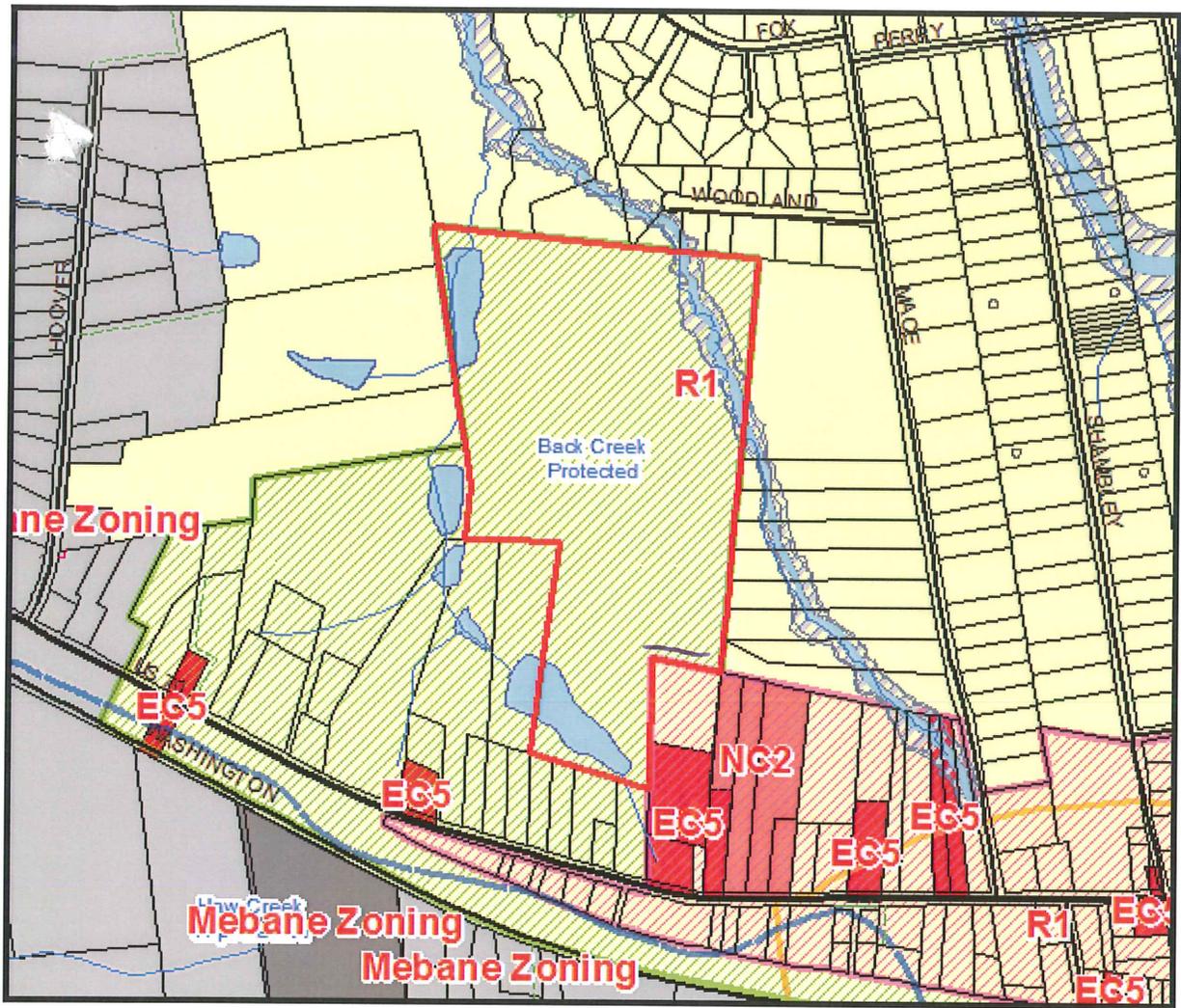
**RE: Per Orange County Planning & Inspections Department Application for Special Use Permit**

**Detailed description of proposed land use:**

The Special Use permit request is for a ground mount solar generating plant. Oakwood Solar Farm, LLC is located on US Highway 70 in Mebane, NC. The PIN to the parcel of the solar farm proposed is 9835-02-9317. The PIN to the site access agreed upon with the landowner is 9835-10-3858. The existing soils consisted in the project area are "GeB" Georgeville silt loam and "GeC" Georgeville silt loam. The majority of the site is comprised of scrub/shrub vegetation. The site was cleared for timber purposes 3-5 years ago. The southeast portion of the site is used as staging for Mace Grading Company, Inc. Two jurisdictional man-made open water ponds with a 65 foot buffer are located on the southern and northwestern portions of the boundary, respectively. A stream is located on the northeast portion of the boundary with an 80 foot buffer. The site will meet and exceed the buffer regulations (depicted on the site plan). No buildings are located within the site boundary. FIRM Panel 9835 indicates the projects limits are not within a special flood hazard area (attached). The site is located within the Back Creek Protected Watershed Overlay District and Efland-Cheeks Hwy 70 Overlay District (pre-designated commercial area). Project will use no groundwater or have impact on water table or groundwater. Project construction and operation has no impact on wetlands. Project site Latitude is 36° 5'27.08"N and Longitude is 79°14'0.07"W.

The proposed ground-mount solar farm will consist of fixed solar panels, racking arrays with driven posts, pad mounted inverter/and transformer areas (as depicted on the site plan) and a chain link fence w barbed wire to keep safe and secure the site. Land is not paved and is left virtually undisturbed.

A Type D Landscaping buffer will be planted where existing natural vegetation is not consistent with the County requirements (depicted on site plans). Site access will be through PIN 9835-103-858 which has been agreed with the landowner. During construction it is estimated that a maximum of 40 workers will be on site each day with less than 100 trips in/out of the site to occur approximately 4 months of construction until completion (attached Trip Generation report). The site will be odorless, un-manned, produce no waste, and create a tax base for the County. Remote monitoring will be in place for energy production reasons.



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## Orange County NC Property Zoning Report

**PIN# 9835029137**

### Jurisdiction

**County**

### Zoning Designations

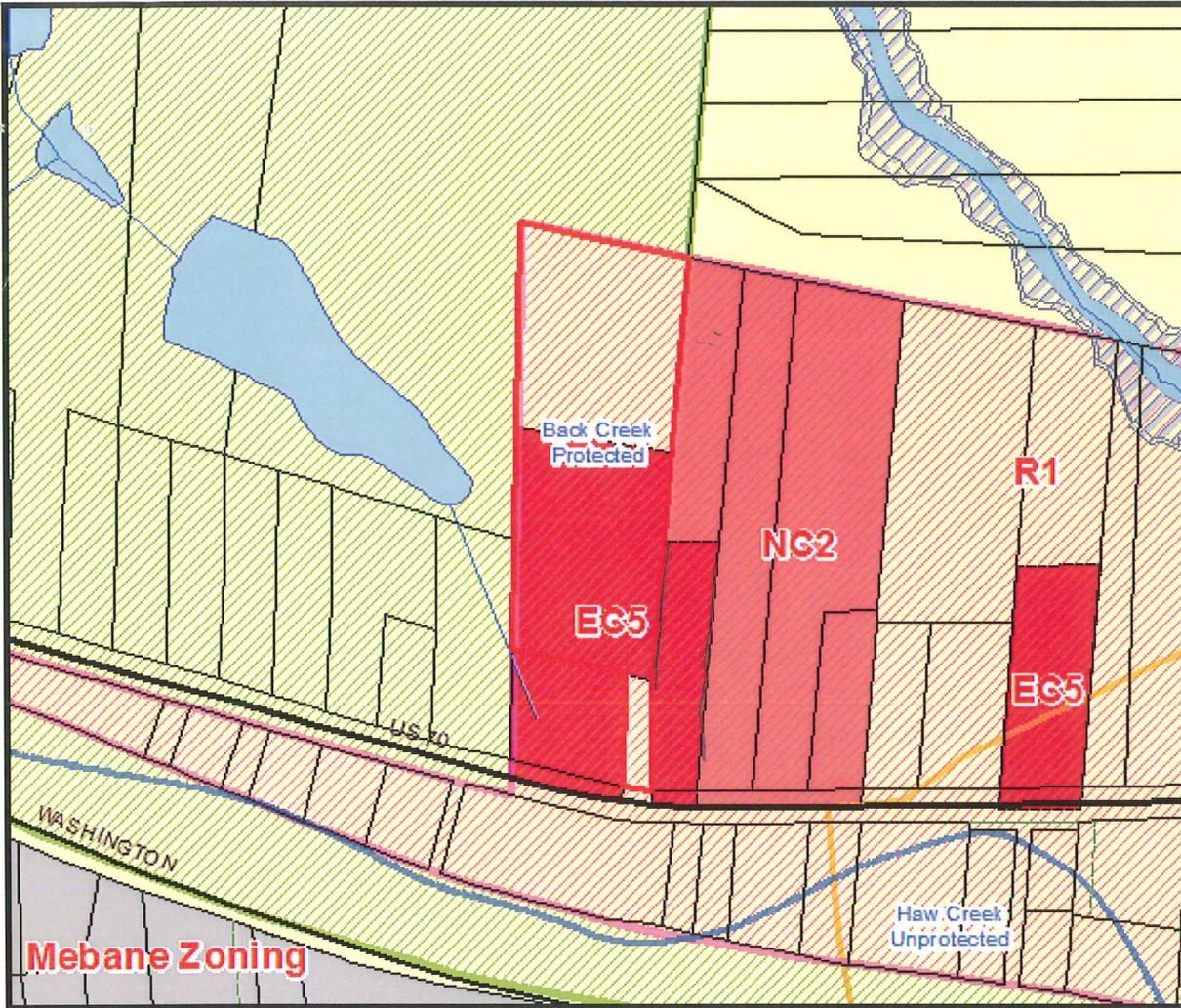
<p><b>EC5 - Existing Commercial</b>          The district is used only during the application of zoning to previously unzoned townships to accommodate existing non-residential land uses. EC-5 zoning districts cannot be expanded or moved nor can adjacent property be rezoned to EC-5 to accommodate additional non-residential activities.</p>
<p><b>R1 - Rural Residential</b>          The purpose of the district is to provide locations for residential development, at low intensities, in areas where the short and long-term solutions to domestic water supply and sewage disposal shall be individual wells and ground absorption system. Development(s) within this district may qualify for higher densities based on the land use and availability of utilities (i.e. water/sewer) and established approval processes. Inquiries should be made with the Planning office at (919) 245-2575.</p>

### Overlay Districts

<b>Watershed Zoning Overlay Designation: Back Creek Protected</b>
<b>Efland-Cheeks Highway 70 Overlay District</b>
<b>Efland-Cheeks Highway 70 Overlay District (Pre-Designated Commercial Area)</b>
<b>Special Flood Hazard Area (100 Year FloodZone)</b>

### Additional Info

**500 Year Floodplain**



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## Orange County NC Property Zoning Report

PIN# 9835103858

### Jurisdiction

County
--------

### Zoning Designations

<p><b>EC5 - Existing Commercial</b></p> <p>The district is used only during the application of zoning to previously unzoned townships to accommodate existing non-residential land uses. EC-5 zoning districts cannot be expanded or moved nor can adjacent property be rezoned to EC-5 to accommodate additional non-residential activities.</p>
<p><b>NC2 - Neighborhood Commercial</b></p> <p>The purpose of the district is to provide sites for limited commercial uses designed to serve the local population with convenience goods and personal services.</p>
<p><b>R1 - Rural Residential</b></p> <p>The purpose of the district is to provide locations for residential development, at low intensities, in areas where the short and long-term solutions to domestic water supply and sewage disposal shall be individual wells and ground absorption system. Development(s) within this district may qualify for higher densities based on the land use and availability of utilities (i.e. water/sewer) and established approval processes. Inquiries should be made with the Planning office at (919) 245-2575.</p>

### Overlay Districts

<b>Watershed Zoning Overlay Designation: Back Creek Protected</b>
<b>Efland-Cheeks Highway 70 Overlay District</b>
<b>Efland-Cheeks Highway 70 Overlay District (Pre-Designated Commercial Area)</b>

### Additional Info

## ORANGE COUNTY

RE: Oakwood Solar Farm, LLC  
 Orange County PIN: (parcel) 9835-02-9317 (easement) 9835-10-3858  
 Address: 6517 US Highway 70 Mebane, NC 27302

### **STATEMENT OF JUSTIFICATION IN SUPPORT OF THE SPECIAL USE PERMIT APPLICATION**

#### **I. Introduction**

Oakwood Solar Farm, LLC proposes to construct a solar array-public utility on 35+/- acres of land owned by Carl and Helen Mace. The property is located on US Highway 70 near the Intersection of Buckhorn Road. The property is currently zoned Rural Residential (R1). The majority of the properties adjacent the site are also Rural Residential (R1). The easement with site access is zoned EC5 (Existing Commercial) with one adjoining parcel zoned NC2 (Neighborhood Commercial).

The solar array proposed meets the needs of the present generation without compromising the ability of future generations in meeting their needs as required in the Orange County Comprehensive Plan. The proposed solar array fulfills the County and the State of North Carolina's goal to reduce dependence on fossil fuels and nuclear power and move to a more sustainable form of generation.

In recent years, across the US we have seen solar energy become competitive with fossil fuel generation. The benefits of solar energy production go far beyond its price competitiveness compared to its fossil fuel counterparts including tax base, no emissions, increased electrical grid stability, local economic impact and low intensity development.

#### **II. Statement in Support of Application**

This Class A Special Use Permit application for a Solar Array-Public Utility meets all general standards for approval as required by Section 5.3.2 (A), those specific standards required by Section 5.3.2 (B), and the requirements of 5.9 (C). This Statement addresses both general and specific standards as required by Orange County Ordinance.

##### **A. The use will maintain or promote the public health, safety and general welfare, if located where proposed and developed and operated according to the plan as submitted.**

The proposed solar array-public utility will not affect the public health or safety. Access to the site will be from US Highway 70 and formally agreed upon with the landowners. The Solar Array configuration contains no moving parts. The electric components will have an Underwriters Laboratories listing and the Solar Array will comply with the edition of the National Electrical Code adopted at the time of construction. The Solar Array will be surrounded by a wire mesh fence with three strand barbed wire on top. The solar array will not have any lighting, and no hazardous substances will be utilized on the site.

The access is adequate for the proposed use and emergency services. The site will be maintained periodically and through scheduled maintenance and landscaping performed as necessary. Parking spaces will be available for maintenance on site.

Soil erosion and sedimentation will be mitigated prior construction. During construction, erosion control measures will be taken as required in accordance with the County regulations. The solar array-public utility will comply with County storm water regulations. All environmental buffers will also be in compliance.

**B. The use will maintain and enhance the value of contiguous property (unless the use is a public necessity, in which case the use need not maintain or enhance the value of contiguous property.)**

The site for the solar array is hidden from the neighboring residences and the roadway. The nearest residence is 410' from the site. The site has significant natural trees, shrubs and other vegetation. The vegetation surrounding the site will be left undisturbed to provide a natural buffer. The solar farm-public utility will meet the requirements of a Type D evergreen landscape buffer intended to obstruct views of the solar farm and preserve the appearance of the area. The solar farm produces no harmful emissions, no noise, and requires no lighting. An independent study has been performed by an appraiser that indicates that the contiguous properties will maintain their value with the installation of a Solar Array. The solar farm will increase the tax base of the County without adding any burdens on existing infrastructure such as schools, water, and/or waste systems. Furthermore, the Solar Array installation has received a Certificate of Public Convenience and Necessity from the North Carolina Utilities Commission on February 2, 2016.

**C. The location and character of the use, if developed according to the plan submitted, will be in harmony with the area in which it is to be located and the use is in compliance with the plan for the physical development of the County as embodied in these regulations or in the Comprehensive Plan, or portion thereof, adopted by the Board of County Commissioners.**

Throughout the Orange County Land Use Plan references are made to the County's desire to encourage locally-generated alternative energy resources and to promote alternative and sustainable fuels. The Greenhouse Gas Emission Inventory and Reduction Action Plan initiated by Orange County in 2006 suggested that private alternative energy production be encouraged in the County. The Orange County Comprehensive Plan designates this as a *10 Year Transition area*. Allowing the subject property to develop as a solar array-public utility provides an opportunity for locally generated energy resources in Orange County and creates income for the property owners and tax base for the County.

The installation will be in harmony and maintain the character of the area. The majority of the surrounding properties are Rural Residential with the abutting property to the south Existing Commercial. The Solar Farm is a low intensity use which will not disturb the existing wetland areas and streams and ponds on site. The installation will maintain existing trees and shrubs on site as a natural buffer which will be supplemented as necessary to meet Type D buffer requirements. The Solar Array presents no potential hazardous waste and the production of electricity is virtually silent with any noise from the inverters dissipating to background levels at the fence line of the Solar Array. The traffic for the use will be less than that of a single family home.

**D. The method and provision of sewage disposal facilities, solid waste and water adequate.**

There will be no buildings or employees on the property after construction, so there is no need for sewage or waste disposal on site. The Solar Array does not use any water. Any refuse generated by landscaping maintenance will be controlled and disposed by the professional service providers using approved and safe methods.

**E. Police, fire, and rescue squad protection is sufficient to the site.**

The facility will be unmanned with no buildings. As a result, there will be little to no demand for police, fire, or rescue squad protection at this location.

**F. Vehicular access to the site and traffic condition around the site are acceptable.**

Traffic conditions around the site are acceptable. The proposed Solar Array-Public Utility will generate less traffic than one (1) single family home after construction.

**G. The proposed Class A Special Use Permit is for a Solar Array- Public Utility subject to the requirements of Section 5.9.6 (C)(2) and (3) as follows:**

**(a) All on site utility and transmission lines shall be placed underground to the extent feasible placed underground.**

***Affirmed. Utility and Transmision lines shall be placed underground to the extent feasible.***

**(b) The height of proposed arrays and support structures shall not exceed 40 feet.**

***Affirmed. Height of proposed arrays and support structures will be approximately 8 feet.***

**(c) Individual arrays/solar panels shall be designed and located in order to prevent reflective glare toward any inhabited buildings on adjacent properties as well as adjacent street rights-of-way.**

***Affirmed. The solar panels are manufactured with anti-glare coating which minimizes any glare. The roadway is approximately 1030 feet from the site and the nearest residence is 410 feet from the site and these distances will prevent any glare. Furthermore, the solar array will be screened by natural vegetation supplemented as required to meet Type D buffer standards. The screening will prevent any potential glare to adjacent properties.***

**(d) A clearly visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.**

***Affirmed. The sign will be clearly marked per County requirements and standards.***

(e) All mechanical equipment of principal solar energy systems including any structure for batteries or storage cells, shall be completely enclosed by a minimum eight (8) foot fence with a self-locking gate, and provided with screening in accordance with the provisions of Section 6.8.

***Affirmed. The site will be in enclosed and in compliance with this section.***

(f) The applicant shall submit proof of liability insurance covering bodily injury and property damage demonstrating a minimum coverage limit of \$500,000.00 per occurrence.

***Affirmed. Appropriate insurance coverage will be provided.***

(g) A Type D Land Use Buffer shall be provided along any portion of the perimeter of the parcel, easement, or leasehold area located adjacent to property zoned, or otherwise utilized for, residential use except where such property is owned, leased or consists of other utility easements currently used for electrical distribution or transmission purposes. Existing vegetation may be used to satisfy landscaping requirements.

***Affirmed. A Type D Land Use Buffer will be used as documented on the site plans.***

(h) Decommissioning

The applicant and owners, as appropriate, agree to the following as conditions in case the utility is to be abandoned;

(i) The owner/operator of the facility is required to notify the Orange County Planning Director in writing 60 days prior to the planned cessation or abandonment of the facility for any reason. This notice shall provide the exact date when the use of the facility will cease.  
***Agreed.***

(ii) Documentation shall be provided indicating that the public utility purchasing the power has been made aware of the decision. ***Agreed.***

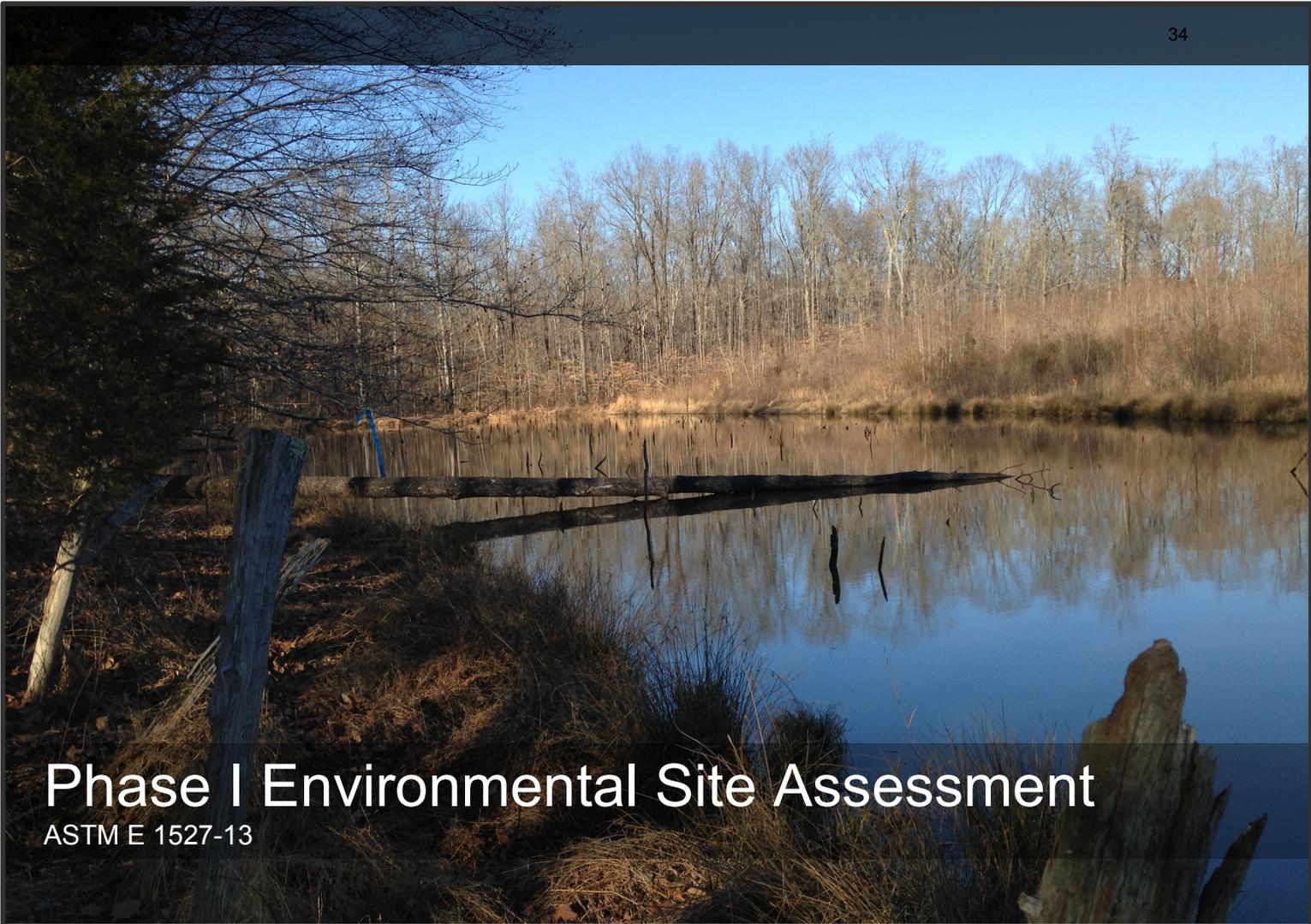
(iii) The facility shall be removed within 12 months from the date applicant ceases use of the facility. ***Agreed.***

(iv) Once the Infrastructure is removed from the property, owner shall obtain the necessary Erosion Control permits to re-stabilize the property. The time frame for completion shall be determined by the Orange County Erosion Control Officer. *Agreed.*

(v) Upon removal of the facility, the Department shall cause a notice to be recorded within the Orange County Registrar of Deeds office indicating the Class A Special Use Permit has been revoked. *Agreed.*

### **III. Anticipated Development Schedule for Completion of the Project**

Construction is expected to begin within 4 months of receipt of the Interconnection Agreement and associated Power Purchase Agreement from Duke Energy. Construction is expected to take around 4 months. The site is expected to be operational before the end of 2017.



# Phase I Environmental Site Assessment

ASTM E 1527-13

## Mace Site

6517 U.S. Highway 70  
Mebane, Orange County, North Carolina  
HEnv Project #201603

Prepared for:  
Oakwood Solar Farm, LLC  
4150 Saint Johns Parkway, Suite 1000  
Sanford, Florida 32771

March 1, 2016



Phase I Environmental Site Assessment

for the

Oakwood Solar Farm  
at the  
Mace Site  
6517 U.S. Highway 70  
Mebane, Orange County, North Carolina

HEnv Project #201603

Prepared for:

Oakwood Solar Farm, LLC  
4150 Saint Johns Parkway, Suite 1000  
Sanford, Florida 32771

Prepared by:

Headwater Environmental, Inc.  
512 Sweetbay Court  
Wilmington, North Carolina 28405

Report Dated: March 1, 2016

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**  
**Oakwood Solar Farm**  
**Mace Site**  
**6517 U.S. Highway 70**  
**Mebane, Orange County, North Carolina**  
**HEnv Project #201603**

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- Appendix A – Figures
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## I. EXECUTIVE SUMMARY

The approximate 53-acre site is located at 6517 U.S. Highway 70 in Mebane, Orange County, North Carolina. According to the Orange County GIS, the site is identified as Parcel Identification Number (PIN) 9835-02-9137. The parcel is owned by Mr. Carl J. Mace. A legal description of the parcel is included in Deed Book 1313, Page 319.

The subject site (or site) is comprised of the entire legal parcel. The project area includes the limits of a proposed solar farm. The project area is located within the subject site. The approximate 25-acre project area is to be defined by Oakwood Solar Farm, LLC, their successors, and/or assigns. Recognized environmental conditions (RECs) were not identified within the current project area.

The majority of the site is comprised of scrub/shrub vegetation. The site was cleared for timber purposes 3 to 5 years ago. The southeast portion of the site is used as staging for Mace Grading Company, Inc. Two man-made ponds are located on the southern and northwestern portions of the site, respectively. A stream is located on the northeast portion of the site. No buildings are located within the site boundary.

The site has been used for agricultural, pastoral, and silvicultural purposes since at least 1938. A man-made pond has been located on the southern portion of the site since the 1960s. Two man-made ponds on the northeastern and northwestern portions of the site have been successively filled and drained on different occasions since the 1970s/1980s. Mace Grading Company, Inc. has utilized the southeast portion of the site as a staging area since 2011/2012. HEnv was unable to determine the date of first developed use of the subject site. The inability to determine the date of first developed use represents a data gap. However, based on the past use of the site for agricultural, pastoral, and silvicultural purposes, this data gap does not represent a recognized environmental condition (REC) of the site.

The site is bounded on the north and east by wooded land and residential dwellings, to the southeast by Mace Grading Company, Inc.; to the south by residential dwellings; and to the west by residential dwellings, two ponds, wooded land, and pasture land. The surrounding lands were historically used for agricultural purposes or otherwise wooded and undeveloped. Residential development began to increase on the lands to south in the 1950s, and on the lands to the east and west in the 1970s. Mace Grading Company, Inc. was established on the adjoining property to the southeast in the 1970s.

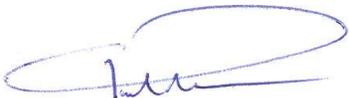
We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of the site located at 6517 U.S. Highway 70 in Mebane, Orange County, North Carolina. Any exceptions to, or deletions from, this practice are described in Section III of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the site, except for the following:

- HEnv observed three empty ASTs (varying between 250-gallon and 1,000-gallons in volume), six 55-gallon drums (contents unknown), and seven empty 5-gallon motor oil buckets on the southeast portion of the site. Petroleum stained soil was observed around the perimeter of the ASTs, drums, and buckets. The area of stained soil represents a REC of the site. Presuming the area of stained soil is outside the project area, further assessment may not be warranted.

- Piles of miscellaneous solid waste were observed on the southeast portion of the site. The solid waste piles are substantial and include asphalt, timber, gravel, concrete/construction rubble, 12-inch corrugated plastic piping, cardboard, aluminum cans, plastic bottles, and other assorted trash. The miscellaneous solid waste falls within the limits of the proposed project area. Proper removal of the miscellaneous solid waste represents a BER of the site.

**II. PROFESSIONAL STATEMENT**

In conducting this Phase I Environmental Site Assessment (ESA), I, Carmen Paul Pascaros, Jr., of Headwater Environmental, Inc. (HEnv) have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Carmen Paul Pascaros, Jr.  
**Headwater Environmental, Inc.**  
President

March 1, 2016

### **III. INTRODUCTION**

#### **III.1. Purpose and Scope**

On February 8, 2016, HEnv was authorized by Oakwood Solar Farm, LLC to conduct a Phase I Environmental Site Assessment (ESA) for the site located at 6517 U.S. Highway 70 in Mebane, Orange County, North Carolina.

The purpose of this Phase I ESA was to identify on-site or off-site recognized environmental conditions (RECs) that may adversely affect the subject site. The environmental assessment was conducted in accordance with ASTM E 1527-13 and EPA Standards and Practices for All Appropriate Inquiries. The environmental assessment was conducted under the supervision or responsible charge of an individual that qualifies as an environmental professional, as defined in 40 CFR §312.

This report is provided for Oakwood Solar Farm, LLC; ESA Renewables, LLC; their successors, and/or assigns. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties. The use of this report by any undesignated third party or parties will be at such party's sole risk and HEnv disclaims liability for any such third party use or reliance.

#### **III.2. General Limiting Conditions**

This report involves a site reconnaissance, review of regulatory information, and historical summary in accordance with the ASTM standard. In conducting this Phase I ESA, HEnv used and assumed accuracy and completeness in information obtained from the North Carolina Department of Environmental Quality (NCDEQ) and/or the Orange County government. Additionally, HEnv used information obtained from a database search prepared by Environmental Data Resources, Inc. (EDR).

It should be noted that a Phase I ESA does not include subsurface exploration or chemical screening of soil and groundwater. Therefore, no statement of scientific certainty can be made regarding subsurface conditions that may be the result of on-site or off-site sources. The findings and conclusions of this report are based on professional judgment regarding the data gathered during the course of this assessment. The findings of this Phase I ESA are based on the conversations, data reviews, and field observations noted in this report. The findings could change, based on other information that could become available in the future. HEnv is not liable for the discovery or elimination of hazards that may potentially cause damage, accidents, or injury.

ASTM E-1527-13 defines a "recognized environmental condition" (REC) as: "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

ASTM E 1527-13 defines a “controlled recognized environmental condition” (CREC) as: a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

ASTM E 1517-13 defines a “historical recognized environmental condition” (HREC) as: a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

ASTM E-1527-13 defines a “business environmental risk” (BER) as “a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate”.

ASTM E 1527-13 defines a “data gap” as a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance, historical review, database review, and interviews.

Additional limiting conditions imposed by the client, or hindrances encountered during the site visit are explained in further detail in Section VII of this report.

## **IV. SITE DESCRIPTION**

### **IV.1. Site Location and Legal Description**

The approximate 53-acre site is located at 6517 U.S. Highway 70 in Mebane, North Carolina. According to the Orange County GIS, the site is identified as Parcel Identification Number (PIN) 9835-02-9137. The parcel is owned by Mr. Carl J. Mace. A legal description of the parcel is included in Deed Book 1313, Page 319.

An existing access road extends north from Highway 70 to the subject site. The access road traverses land also owned by Mr. Mace. The project area includes the limits of a proposed solar farm. The proposed solar farm is located on the central portion of the site. The approximate 25-acre project area is to be defined by Oakwood Solar Farm, LLC, their successors, or assigns.

### **IV.2. Current Use of the Site and Vicinity**

The site is undeveloped scrub/shrub land. The southeast portion of the site is used a staging area by Mace Grading Company, Inc. The site is currently zoned R1 (residential).

The site is bounded on the north and east by wooded land and residential dwellings, to the southeast by Mace Grading and Contracting, to the south by residential dwellings; and to the west by residential dwellings, two ponds, wooded land, and pasture land.

The surrounding residential and commercial properties utilize septic systems for wastewater, and Orange/Alamance Water Systems, Inc. provides potable water.

### **IV.3. Physiography and Hydrogeology**

The subject site is located in the Piedmont physiographic region of North Carolina. The Piedmont is characterized by irregular plains and rolling hills. Elevations generally range from about 90 feet to 350 feet above mean sea level (MSL), but rise to about 1,300 feet at the interface with the Eastern Mountains. Numerous rivers and streams comprise a major feature of the landscape.

HEnv reviewed the 7.5-Minute series, United States Geological Survey (USGS), Efland, North Carolina Quadrangle (Figure 1), dated 2002. According to the topographic map, the site is situated between 660 and 710 feet above mean sea level (MSL). The site slopes downgradient towards the east, north, and west. Two unnamed streams (dashed blue lines) are mapped on the northeast portion of the site and along the western boundary of the site, respectively. Several impoundments are mapped along the western stream. The two streams flow north towards Lake Michael. The confluence of the two streams is located approximately 450 feet north of the site. Lake Michael drains to Lower Back Creek (via Mill Creek), which is in the Cape Fear River basin.

Lands to the north, east, and west are downgradient of the site. Lands to the south are slightly upgradient. The direction of groundwater flow generally follows surface topography. As such, the overall direction of groundwater flow would be expected to flow radially to the north, east, and west from the central portion of the site. The actual groundwater flow direction cannot be determined without site-specific groundwater information obtained through the installation of groundwater monitoring wells.

## **V. USER PROVIDED INFORMATION**

The User is defined by ASTM as the party seeking to use Practice E1527-13 to complete an environmental site assessment of the site. A user may include, without limitation, a potential purchaser of site, a potential tenant of site, an owner of site, a lender, a property manager, or developer.

The completed User Questionnaire was provided by Mr. Kyle Campbell of ESA Renewables, LLC, on February 8, 2016 (Appendix B). Mr. Campbell indicated the reason for completing this Phase I ESA is for development of a ground mount solar farm. The following information was obtained from the User Questionnaire:

- The User indicated they are not aware of activity and land use limitations associated with the site.
- The User indicated they do not have specialized knowledge pertaining to the site or surrounding properties.

- The User did not provide commonly known or reasonably ascertainable information.
- The User indicated the purchase price represents the fair market value.
- The User indicated they are not aware of obvious indicators that point to the presence of likely presence of contamination at the site.

## VI. RECORDS REVIEW

The purpose of the records review is to obtain and review records that will help identify RECs in connection with the subject site. The ASTM standard regulatory databases and additional databases was conducted by EDR. EDR searched databases maintained by the Environmental Protection Agency (EPA) and the NCDEQ. The EDR database results are included in Appendix C.

If deemed necessary, HEnv will utilize the Freedom of Information Act (FOIA), in order to review additional information on file NCDEQ, EPA, or local municipality.

### VI.1. Standard Database Review

The regulatory records search involves searching a series of databases for facilities that are located within a specified distance from the subject site. The ASTM standard specifies an approximate minimum search distance from the subject site for each database. The following table indicates the standard environmental record sources and the approximate minimum search distances for each:

Standard Environmental Record Sources	Approximate Minimum Search Distance Per ASTM (miles)
Federal NPL	1.0
Federal Delisted NPL	0.5
Federal CERCLIS	0.5
Federal CERCLIS NFRAP	0.5
Federal RCRA CORRACTS	1.0
Federal RCRA non-CORRACTS TSD	0.5
Federal RCRA Generators	Subject Site and Adjoining Properties
Federal IC/EC	Subject Site Only
Federal ERNS	Subject Site Only
State and Tribal Hazardous Waste Sites (NPL Equivalent)	1.0
State and Tribal Hazardous Waste Sites (CERCLIS Equivalent)	0.5
State and Tribal Landfill and/or solid waste disposal sites	0.5
State and Tribal LUST	0.5
State and Tribal Registered UST	Subject Site and Adjoining Properties
State and Tribal IC/EC	Subject Site Only
State and Tribal Voluntary Cleanup (VCP) Sites	0.5
State and Tribal Brownfield Sites	0.5

While this attempt at verification is made with due diligence, HEnv cannot guarantee the accuracy of the record(s) search beyond that of information provided by the regulatory

report(s). HEnv makes no warranty regarding the accuracy of the database report information included within the regulatory report(s).

Distances recommended by ASTM Practice E1527-13 were maintained for the databases reviewed.

#### **Federal National Priority List (NPL)**

The NPL is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories.

The site is not listed on the NPL. There are no properties on the NPL within one mile of the site.

#### **Federal Delisted NPL**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

The site is not included on the Delisted NPL. There are no properties on the Delisted NPL within 0.5 mile of the site.

#### **Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)**

CERCLIS contains data on potentially hazardous waste sites that have been reported to the EPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the NPL and sites which are in the screening and assessment phase for possible inclusion on the NPL. This review includes properties on the CERCLIS No Further Action Planned (NFRAP) database. The CERCLIS NFRAP include sites that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time.

The site is not listed on the CERCLIS databases. There are no properties on the CERCLIS database within 0.5 mile of the site.

#### **Federal Resource Conservation and Recovery (RCRA) Lists:**

##### **RCRA Corrective Action Report (CORRACTS)**

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

##### **RCRA Treatment, Storage, and Disposal (TSD)**

EPA's comprehensive information system, providing access to data supporting the RCRA of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the RCRA.

Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

#### **Federal RCRA Generators**

The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the RCRA. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

The site is not listed on the RCRA CORRACTS or TSD databases. There are no properties on the RCRA CORRACTS or TSD databases within one mile of the site.

Neither the site, nor adjoining properties, are listed on RCRA Generators list.

#### **Federal and State Engineering Controls (EC)**

The EC is a listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

The State of North Carolina currently does not maintain an EC database.

#### **Federal and State Institutional Controls (IC)**

The IC is a listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

The subject site is not included on the IC database.

#### **Federal Emergency Response Notification System (ERNS)**

ERNS records and stores information on reported releases of oil and hazardous substances.

The subject site is not included on the ERNS database.

#### **State Hazardous Substance Disposal Site (HSDS)**

The State HSDS records are locations of uncontrolled and unregulated hazardous waste sites. The records include sites on the NPL as well as those on the state priority list.

The site is not listed on the HSDS. There is one property on the HSDS database within one mile of the site:

- **General Electric Co., Mebane Operation, State Route 1374** – This property is located approximately 2,200 south-southwest and downgradient of the site. Based on the distance from the site, this HSDS listing does not represent a REC of the site.

#### **State and Tribal Hazardous Waste Sites (SHWS)**

Locations of uncontrolled and unregulated hazardous waste sites.

The site is not listed on the SHWS. There is one property on the SHWS database within one mile of the site:

- **Pak-Lite, 6508 East Washington Street** – This property is located approximately 1,000-feet south-southeast and slightly upgradient of the site. Based on the distance from the subject site, this incident does not represent a REC of the site.

#### **State and Tribal Landfill and/or Solid Waste Disposal Sites:**

##### **Solid Waste Facilities/Landfills (SWL/LF)**

SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

##### **Old Landfill Inventory (OLI)**

Old landfill inventory location information. Does not include no further action sites and other agency lead sites).

The site is not listed as a solid waste disposal site. No properties are listed on the SWL/LF databases within 0.5 mile of the site.

#### **State and Tribal Leaking Underground Storage Tank (LUST) database**

This database contains information obtained from the NCDEQ. It provides an explanation of current and historic activity for individual sites, as well as what was previously found in the Incident Management Database. Sites in this database with Incident Numbers are considered LUSTs.

The site is not listed on the LUST database. Four properties and three incidents are on the LUST database are mapped with 0.5 mile of the site:

- **Mace Grading Company, Inc., 6517 Highway 70** – The property is located southeast and adjoining the site. There are two incidents associated with this facility:

##### Incident 20432

Mace Grading Company, Inc. installed one 7,500-gallon diesel UST in 1975 and an 8,000-gallon diesel UST in 1985. The UST basin was located approximately 375 feet southeast and cross-gradient of the site. According to the "UST Closure Report" prepared by Omega Services, Inc. on January 1, 1999, petroleum contaminated soil was encountered during UST removal. Free product was not observed during removal, and the approximate depth to groundwater was

measured to be 35 below ground surface (bgs). Approximately 15 tons of contaminated soil were removed from the UST basin down to 10 feet bgs. The fuel pump was located above the USTs, and was also removed. After excavation, laboratory analysis of the soil for petroleum hydrocarbons was below detectable levels (BDL). A groundwater sample was not deemed unwarranted. On August 18, 1999, the NCDEQ issued a "No Further Action" letter. Based on the distance from the subject site and lack of reported groundwater contamination, this incident does not represent a REC of the site.

#### Incident 22369

Mace Grading Company, Inc. installed one 2,000-gallon diesel UST in May 1984. The UST basin was located approximately 350 feet southeast of the site. According to the "Tank Closure Report" prepared by Environmark, P.A. on July 7, 1997, laboratory analysis of the soil detected diesel range organics at 26 parts per million (ppm). At the time, 26 ppm of DRO was below the NCDEQ action level of 40 ppm (Note: The DRO action level was reduced to 10 ppm in the early 2000s).

Neither groundwater, nor free product, was detected during UST removal. In October 2000, the NCDEQ requested additional information regarding the product line and pump island. Foust Oil Company, Inc. confirmed the product line and pump island was located above the UST and removed with the USTs. On January 18, 2001, the NCDEQ issued a "No Further Action" letter. Based on the distance from the subject site and lack of reported groundwater contamination, this incident does not represent a REC of the site.

- **Bernell Company (Cassell Company), 6600 East Washington Street** – This incident occurred approximately 800 feet south and upgradient of the site. Upon removal of a 1,000-gallon gasoline UST, soil and groundwater contamination was detected. Based on the distance from the site, this LUST does not represent a REC of the site.
- **Sams Mart, 6321 Highway 70** – This incident occurred approximately 1,500 feet southeast and upgradient of the site. In November 2008, one 8,000-gallon gasoline UST, 6,000-gallon gasoline UST, and one 4,000-gallon gasoline UST were removed. Groundwater contamination was not reported. Based on the distance from the site, this incident does not represent a REC of the site.

#### **LUST Trust Fund Database (LUST TRUST)**

This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating LUSTs.

The site is not listed on the LUST TRUST database. There is one property on the LUST TRUST database within 0.5 mile of the site:

- **Cassell Company, 6600 East Washington Street** – This incident occurred approximately 800 feet south and upgradient of the site. Upon removal of a 1,000-gallon gasoline UST, soil and groundwater contamination was detected. Based on the distance from the site, this LUST incident does not represent a REC of the site.

### **State and Tribal Underground Storage Tank (UST) database**

UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

The site is not listed on the UST database. The adjoining property to the southeast is included on the UST database:

- **Mace Grading Company, Inc., 6517 Highway 70** – In May 1984, Mace Grading Company, Inc. installed one 2,000-gallon diesel UST. The UST basin was located approximately 350 feet southeast of the site. The UST was removed in July 1997.

Mace Grading Company, Inc. installed one 7,500-gallon diesel UST in 1975 and an 8,000-gallon diesel UST in 1985. The UST basin was located approximately 375 feet southeast and cross-gradient of the site. The USTs were removed in January 1999. These USTs are no longer located at the adjoining property to the southeast and do not represent a REC of the site.

### **LAST (Leaking Above Ground Storage Tanks)**

This database includes a listing of leaking aboveground storage tank locations.

The site is not listed on the LAST database. There is one property on the LAST database mapped within 0.5 mile of the site:

- **NC DMV, Interstate 40/Interstate 85 Scale Facility** – This incident occurred over one mile southeast of the site and is improperly mapped on the EDR report. Based on the distance from the site, this incident does not represent a REC of the site.

### **State and Tribal Voluntary Cleanup (VCP) sites**

Responsible Party Voluntary Action site locations.

The site is not listed on the VCP database. There are no properties on the VCP database within 0.5 mile of the site.

### **State and Tribal Brownfield Sites**

A brownfield site is an abandoned, idled, or underused property where the threat of environmental contamination has hindered its redevelopment. All of the sites in the inventory are working toward a brownfield agreement for cleanup and liability control.

The site is not listed on the Brownfield database. There are no properties on the Brownfield database within 0.5 mile of the site.

## **VI.2. Additional Environmental Records**

### **Incident Management Database (IMD)**

A record of soil or groundwater contamination incidents.

The site is not listed on the IMD. There are four properties within one mile of the site that are listed on the IMD:

- **Mace Grading Company, Inc., 6517 Highway 70**
- **NC DMV, Interstate 40/Interstate 85 Scale Facility**
- **Pak-Lite, 6508 East Washington Street**
- **Bernell Company (Cassell Company), 6600 East Washington Street**

Each of the properties on the IMD are included on either the, LUST, LUST TRUST, LAST, or SHWS databases and previously discussed. Based on the distance and/or elevation relative to the site, the properties on the IMD do not represent a REC of the site.

### **Dry Cleaners Databases**

A list of former and active dry cleaning facilities are compiled on multiple data sets provided by EDR.

The site is not listed on a dry cleaners database. There are no properties within 0.5 mile of the site that are listed on the Dry Cleaners database.

### **Historical Automotive Stations**

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers.

The site is not listed as a Historical Automotive Station. No properties on the Historical Automotive Stations database are mapped within 0.5 mile of the site.

### **US Brownfields**

The US Brownfields identifies Brownfield properties inventoried with the EPA. The properties in the listing are addressed by Cooperative Agreement Recipients and Targeted Brownfields Assessments.

Neither the site, nor the properties located within one mile of the site, are identified on the US Brownfields database.

### **EDR Orphan Summary**

The Orphan Summary lists incidents that are not included on the Radius Map due to inadequate address information and poor geospatial data.

Neither the site, nor the properties located within one mile of the site are identified on the Orphan Summary.

## **VII. SITE RECONNAISSANCE**

### **VII.1. Methodology**

Mr. Paul Pascarosa of HEnv conducted the site reconnaissance on February 11, 2016. Mr. Pascarosa met with Mr. Carl Mace prior to conducting the reconnaissance. The weather at the time of the site visit was sunny and in the high-30s (degrees Fahrenheit).

Mr. Pascaros entered the site from a paved access road extending north from Highway 70. The interior and perimeter of the site was walked and visually assessed. Photographs taken during the site reconnaissance are provided in Appendix D.

The adjacent properties were visually observed from the limits of the subject site and public right-of-ways.

## **VII.2. Physical and Visual Limitations**

The site was assessed to the extent feasible and reasonable. Dense vegetation is located throughout the site. The dense vegetation creates a visual limitation to the site visit. Additional physical and visual limitations were not encountered during the site visit.

## **VII.3. Site Observations**

The majority of the site is comprised of scrub/shrub vegetation. The site was cleared for timber purposes 3 to 5 years ago. The southeast portion of the site is used as a staging for Mace Grading Company, Inc. Two man-made ponds are located on the southern and northwestern portions of the site, respectively. A stream is located on the northeast portion of the site. No buildings are located within the site boundary.

Piles of miscellaneous solid waste were observed on the southeast portion of the site. The solid waste piles are substantial and include asphalt, timber, gravel, concrete/construction rubble, 12-inch corrugated plastic piping, cardboard, aluminum cans, plastic bottles, and other assorted trash. The miscellaneous solid waste appears to be surficial. Proper removal of the miscellaneous solid waste represents a BER of the site.

HEnv observed three empty ASTs (varying between 250-gallon and 1,000-gallons in volume), six 55-gallon drums (contents unknown), and seven empty 5-gallon motor oil buckets. Petroleum stained soil was observed around the perimeter of the ASTs, drums, and buckets. The area of stained soil represents a REC of the site.

Additionally, HEnv observed an approximate 10,000-gallon empty AST on the southern portion of the site, north of the pond. Neither stained soil, nor evidence of a leak was observed around the empty AST. The approximate 10,000-gallon AST does not represent a REC of the site.

Refer to Figure 2, Appendix A, for a depiction of the site and surrounding properties.

## **VII.4. Adjoining Properties**

The site is bounded on the north and east by wooded land and residential dwellings. The residential dwellings and wooded land extend over 1,000 feet to the north and east.

The site is bounded on the southeast by Mace Grading Company, Inc. Numerous vehicles, storage buildings, construction equipment, and miscellaneous solid waste were observed throughout the adjoining property to the southeast. Two ~10,000-gallon diesel ASTs are located approximately 500 feet south of the site. Mace Grading Company, Inc. uses the ASTs for fueling fleet vehicles. An above ground fuel line and pump system are located adjacent to the ASTs. Based on the distance from the subject site, the

diesel fuel ASTs do not represent a REC of the site. Three former ASTs have been cut in half and are utilized as a covered storage area. This covered storage area resembles active ASTs when viewed on aerial photography. The covered storage area does not represent a REC of the site.

The site is bounded on the south by residential dwellings, followed by Highway 70. Additional residential dwellings are located on the south side of Highway 70.

The site is bounded on the west by residential dwellings, two ponds, wooded land, and pasture land. Residential dwellings and pasture land extend over 1,000 feet west.

## VIII. HISTORICAL REVIEW

### VIII.1. Sanborn Mapping

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. The site is located in an area that was not mapped by the Sanborn company (Appendix E).

### VIII.2. City Directories

The Orange County Public Library in Hillsborough, North Carolina does not have city directories available for review. HEnv reviewed the Haines and Polk City Directories at the Chapel Hill Public Library. Directories for the years 1980 to 2016 are available for review and include listings for Orange County. However, the directories do not include listings for Mebane, North Carolina.

The site is located in a historically rural area with no coverage available in the city directories. Based on the information obtained from other historical resources, the lack of city directory data does not represent a data gap.

### VIII.3. Aerial Photography

We have reviewed aerial photographs of the site and surrounding properties for evidence of former usage which may constitute a potential for environmental concern. HEnv obtained the historic aerial photographs from the Orange County Soil and Water Conservation District and the NC One Map online mapping resource. The aerial photographs reviewed were dated 1938, 1942, 1955, 1966, 1982, 1993, 2008, and 2013 (Appendix E).

**1938 and 1955 Aerial Photographs** – The central portion of the site is mapped as agricultural land. Wooded land is located on the northeastern, southern, and northwestern portions of the site. Wooded land, agricultural land, and residential dwellings are mapped throughout the site vicinity. Highway 70 is located approximately 450 feet south of the site.

**1966 Aerial Photograph** – A man-made pond is visible on the southern portion of the site. The remainder of the site and surrounding properties appear similar to the 1955 photograph.

**1972 Aerial Photograph** – Cleared land and a man-made pond are visible on the southern portion of the site. Residential development is underway on lands east of the site. The remainder of the site and surrounding properties appear similar to the 1966 photograph.

**1982 Aerial Photograph** – A man-made ponds is visible on the northeast portion of the site. The majority of the site appears to be in a pastoral setting. Mace Grading Company, Inc. appears to occupy the adjoining property to the southeast. Increased residential development is visible along Highway 70. The surrounding properties appear similar to the 1972 photograph.

**1993 Aerial Photograph** – The site is wooded. Mace Grading Company, Inc. appears to have encompassed additional land to the southeast. Industrial buildings are visible on lands located south of Highway 70. Surrounding properties to the north, east, and west appear similar to the 1982 photograph.

**2008 Aerial Photograph** – The site is wooded. A man-made pond is visible on the northwest portion of the site. The pond on the northeast portion of the site has been drained. The pond on the southern portion of the site has been partially drained. The surrounding properties appear similar to the 1993 photograph.

**2013 Aerial Photograph** – The site is cleared (trees removed for silvicultural purposes). The southeastern portion of the site appears to be utilized as a staging area for Mace Grading Company, Inc. The ponds on the southern and northwestern portions of the site are bank full. The surrounding properties appear similar to the 2008 photograph.

#### **VIII.4. Historical Topographic Maps**

Topographic maps prepared by USGS utilize assorted mapping symbols and shapes to help determine the location of past and present buildings and land use types (Appendix E). Historical topographic maps were reviewed to help ascertain the past use of the site. A review of the site physiography is discussed in Section III.3 of this report.

#### **USGS, Efland, North Carolina, 7.5-Minute Topographic Quadrangle, dated 1968**

The central portion of the site is mapped as cleared land. Wooded land is located on the northeastern, southern, and northwestern portions of the site. A man-made pond is depicted on the southern portion of the site. Wooded land, agricultural land, and residential dwellings are mapped throughout the site vicinity. Highway 70 is located approximately 450 feet south of the site.

#### **VIII.5. Additional Historical Resource**

Additional historical records were not reviewed during the scope of this report.

## **IX. INTERVIEWS**

On February 26, 2016, HEnv conducted a telephone interview with Mr. Carl Mace, the current owner of the site. Mr. Mace has over 50 years knowledge of the site and surrounding properties. Mr. Mace acquired the property from his paternal family in the early 1970s. Mr. Mace indicated the site was planted with soy beans during his youth, and was later used as cow pasture until the 1980s. The site was used for silvicultural

purposes from the 1980s until 2012, when it was cleared. Mr. Mace established Mace Grading Company on the adjoining property to the south in the 1970s.

Mr. Mace indicated he is not aware of (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the site; (2) any pending, threatened or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the site; and (3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

According to Mr. Jason Sheppard with the Orange County Fire Marshall's Office, there is no record of spill response or hazardous waste recovery at the site. Mr. Sheppard was not aware of the UST removal activity at the adjoining property to the southeast.

On February 24, 2016, HEnv contacted Joan with the Orange County Department of Environmental Health. According to Joan, there is no record of well or septic permits associated with the site.

On February 24, 2016, HEnv contacted Orange/Alamance Water Systems, Inc. According to available personnel, the surrounding properties are connected to public water services, and utilize septic systems for waste water.

## **X. NON-SCOPE SERVICES**

HEnv was conducted a Wetland Delineation at the subject site. HEnv identified two wetland areas and two ponds within the site boundary. It is estimated that jurisdictional wetlands occupy 3 to 5 acres of the site. The ponds encompass approximately 5 to 8 acres. Detailed findings of that report are provided under a separate cover.

## **XI. FINDINGS AND CONCLUSION**

The approximate 53-acre site is located at 6517 U.S. Highway 70 in Mebane, North Carolina. According to the Orange County GIS, the site is identified as Parcel Identification Number (PIN) 9835-02-9137. The majority of the site is comprised of scrub/shrub vegetation. The southeast portion of the site is used as staging for Mace Grading Company, Inc. Two man-made ponds are located on the southern and northwestern portions of the site, respectively. A stream is located on the northeast portion of the site. No buildings are located within the site boundary.

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of the site located at 6517 U.S. Highway 70 in Mebane, Orange County, North Carolina. Any exceptions to, or deletions from, this practice are described in Section III of this report. This assessment has revealed evidence of recognized environmental conditions in connection with the site:

- HEnv observed three empty ASTs (varying between 250-gallons and 1,000-gallons in volume), six 55-gallon drums (contents unknown), and seven empty 5-gallon motor oil buckets on the southeast portion of the site. Petroleum stained soil was observed around the perimeter of the ASTs, drums, and buckets. The

area of stained soil represents a REC of the site. Presuming the area of stained soil is outside the project area, further assessment may not be warranted.

- Piles of miscellaneous solid waste were observed on the southeast portion of the site. The solid waste piles are substantial and include asphalt, timber, gravel, concrete/construction rubble, 12-inch corrugated plastic piping, cardboard, aluminum cans, plastic bottles, and other assorted trash. The miscellaneous solid waste falls within the limits of the proposed project area. Proper removal of the miscellaneous solid waste represents a BER of the site.

## XII. REFERENCES

ASTM Designation E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process

Enviromark, P.A., "Tank Closure Report" for Mace Grading Company, Inc., dated July 21, 1997

Environmental Data Resources, Inc., Certified Sanborn Map Report, dated February 8, 2016

Environmental Data Resources, Inc., The EDR Radius Map Report, dated February 26, 2016

NC One Map, <http://www.nconemap.com>, historic aerial photography dated 1993, 2008, and 2013

North Carolina Geological Survey, Division of Land Resources, Physiography of North Carolina, 2004

North Carolina Department of Environmental Quality (Formerly North Carolina Department of Environment and Natural Resources), Notice of No further Action Required, Incident 20432, Facility ID 0-020510, dated August 18, 1999

North Carolina Department of Environmental Quality (Formerly North Carolina Department of Environment and Natural Resources), Notice of No further Action Required, Incident 22369, Facility ID 0-025200, dated January 18, 2001

Omega Environmental Services, Inc., "UST Closure Report" for Mace Grading Company, Inc., dated January 18, 1999

Orange County GIS service, <http://server2.co.orange.nc.us/OrangeNCGIS/default.aspx>, accessed in February 2016 (includes parcel data, aerial photography, and tax information)

Orange County Planning and Inspections, "Site Assessment", email from Ms. Molly Boyle, dated February 11, 2016

Orange County Register of Deeds, Deed Book 1313, Page 319

Orange County Soil and Water Conservation Service, historic aerial photography dated 1938, 1955, 1966, 1972 and 1982

Site Reconnaissance, Mr. Paul Pascarosa, Headwater Environmental, Inc., February 11, 2016

Telephone interview, Mr. Carl Mace, current owner of the site, February 24, 2016

Telephone Interview, Ms. Joan (last name not provided), Orange County Department of Environmental Health, February 24, 2016

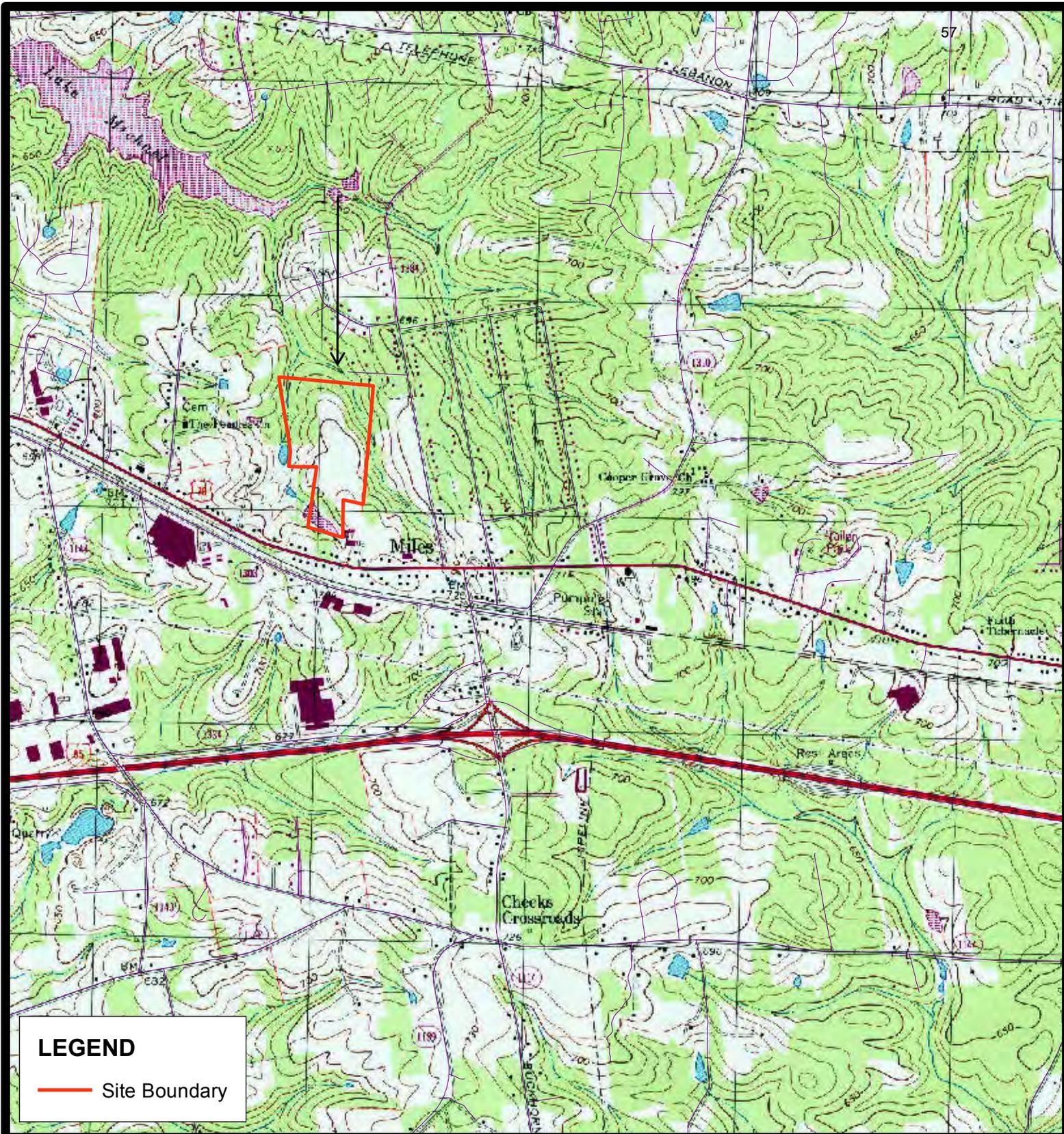
User Questionnaire, Mr. Kyle Campbell, ESA Renewables, LLC, February 8, 2016

USGS, Efland, North Carolina Quadrangles (7.5-minute series), dated 1968 and 2002

Voicemail, Mr. Jason Sheppard, Orange County Fire Marshall's Office, February 25, 2016

Wetland Delineation, prepared by Headwater Environmental, Inc., dated February 16, 2016

## **APPENDIX A**



**LEGEND**  
 — Site Boundary

**HEADWATER ENVIRONMENTAL, INC.**  
 512 Sweetbay Court  
 Wilmington, North Carolina

**Date:**

**02/15/2016**

**Prepared by:**

**DFH**

**Source:**  
 USGS  
 7.5-minute Topographic Quadrangle  
 Efland, NC  
 dated 2002  
 Contour Interval = 10 feet



Scale 1"-2000'

**PHASE I ESA - FIGURE 1  
 LOCATION MAP**  
 Oakwood Solar Farm, LLC  
 Mace Site  
 6517 U.S. Highway 70  
 Mebane, Orange County, NC  
 Env Project #201603



**LEGEND**

- Site Boundary
- ■ ■ Access Road
- AST Two ~10,000-gal diesel ASTs
- REC Area of stained soil, empty ASTs, 5-gallon motor oil buckets, and partially full 55-gallon drums (contents unk.)
- A** Mace Grading and Contracting
- B** Automotive repair facility
- C** Down Home Garden Center
- D** Pak-Lite
- E** Forma-Fab Metals
- RES** Residential

**HEADWATER ENVIRONMENTAL, INC.**  
 512 Sweetbay Court  
 Wilmington, North Carolina

**Source:**

Site Reconnaissance and ESRI  
 World Base Map Imagey  
 Mebane, NC

**PHASE I ESA - FIGURE 2  
 SITE MAP**

Oakwood Solar Farm, LLC  
 Mace Site  
 6517 U.S. Highway 70  
 Mebane, Orange County, NC  
 Env Project #201603

**Date:**

**02/15/2016**

**Prepared by:**

**DFH**



Scale 1"-500'

## **APPENDIX B**

Five Sites  
 Various locations throughout North Carolina  
 HEnv Proposal #16-103  
 January 22, 2016

**Environmental Questionnaire for User**  
**PLEASE COMPLETE ONE PER SITE**

Completion required for conformance with ASTM E 1527-13. Failure to provide this information may preclude CERCLA liability protections for the property purchaser. Please return answered form to HEnv.

Site Name: Oakwood Solar Farm, LLC

Name and Title of Person Completing Questionnaire (Please Print):

Kyle Campbell Project Manager

Signature of Person Completing Questionnaire:

*Kyle Campbell*

Date: \_\_\_\_\_

Name of Your Company and Your Contact Number (Please Print):

ASTM E 1527-13 indicates that, "Either the user shall make known to the environmental professional the reason why the user wants to have the Phase I Environmental Site Assessment performed or, if the user does not identify the purpose of the Phase I Environmental Site Assessment, the environmental professional shall assume the purpose is to qualify for an LLP to CERCLA liability and state this in the report." As the user of this ESA, what is the reason for conducting the Phase I ESA? If this question is unanswered, HEnv will assume that the user's reason for the ESA is to qualify for landowner liability protections to CERCLA liability.

Please state reason for having ESA performed: Ground Mount Solar Farm.

Will you provide Property Title Records and a Legal Description to HEnv?

Please select one: NO  YES

Will you provide a 50-year chain of title abstract to HENV?

Please select one: NO  YES

(1a.) Environmental liens that are filed or recorded against the site (40 CFR 312.25). ASTM E 1527-13 states that the user should perform a review of recorded land title records and judicial records for environmental liens or activity and use limitations for the site. Please forward the results of the land title record and judicial record review. If you would prefer, HEnv can obtain this information from a third party provider for an additional fee. Please let HEnv know if you would like to contract HEnv for this service.

Please select one: Client to Provide  HEnv to Provide for Additional Fee of \$200

Five Sites  
 Various locations throughout North Carolina  
 HEnv Proposal #16-103  
 January 22, 2016

- (1b.) Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26). Are you aware of any activity use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?**

Please select one:                      NO                       YES   
 If yes, please explain: \_\_\_\_\_

- (2.) Specialized knowledge - As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?**

Please select one:                      NO                       YES   
 If yes, please explain: \_\_\_\_\_

- (3.) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30). Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:**

- (a.) Do you know the past uses of the property?**

Please select one:                      NO                       YES   
 If yes, please state uses: \_\_\_\_\_

- (b.) Do you know of specific chemicals that are present or once were present at the property?**

Please select one:                      NO                       YES   
 If yes, please explain: \_\_\_\_\_

- (c.) Do you know of spills or other chemical releases that have taken place at the property?**

Please select one:                      NO                       YES   
 If yes, please explain: \_\_\_\_\_

- (d.) Do you know of any environmental cleanups that have taken place at the property?**

Please select one:                      NO                       YES

Five Sites  
 Various locations throughout North Carolina  
 HEnv Proposal #16-103  
 January 22, 2016

If yes, please explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- (4.) **Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).** Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

Please select one: NO  YES   
 If no, please explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

If you are aware that there is a difference, is the lower purchase price because contamination is known or believed to be present at the property?

Please select one: NO  YES   
 If yes, please explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- (5.) **Parcel Property Owner(s), Contact Number(s), and email:**

A. Helen Mace Carl Mace Access Road  
 B. 6517 US HWY 70 916 Mebane Road  
 C. Mebane, NC 27302 Mebane, NC 27302  
 D. 252 745 3352

**Property Manager and Occupant(s) & Contact Number(s)**

Property Manager: \_\_\_\_\_

Occupant/Tenant: \_\_\_\_\_

Occupant/Tenant: \_\_\_\_\_

- (6.) **The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).** As the user of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

Please select one: NO  YES   
 If yes, please explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## APPENDIX C

**Oakwood Solar**

6517 U.S. Highway 70  
Mebane, NC 27302

Inquiry Number: 4548564.2s  
February 26, 2016

## EDR Summary Radius Map Report

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Map Findings .....	8
Orphan Summary .....	25
Government Records Searched/Data Currency Tracking .....	GR-1

### GEOCHECK ADDENDUM

**GeoCheck - Not Requested**

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

6517 U.S. HIGHWAY 70  
MEBANE, NC 27302

#### COORDINATES

Latitude (North):	36.0912460 - 36° 5' 28.48"
Longitude (West):	79.2328470 - 79° 13' 58.24"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	659097.2
UTM Y (Meters):	3995313.8
Elevation:	703 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

Target Property:	SW
Source:	U.S. Geological Survey

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120511, 20120531
Source:	USDA

MAPPED SITES SUMMARY
----------------------

Target Property Address:  
6517 U.S. HIGHWAY 70  
MEBANE, NC 27302

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">A1</a>	MACE GRADING COMPANY	6517 US 70	LUST, IMD		TP
<a href="#">A2</a>	MACE GRADING COMPANY	6517 US 70	RGA LUST		TP
<a href="#">Reg</a>	GENL ELEC CO/MEBANE		NC HSDS	Same	707, 0.134, SSW
<a href="#">3</a>	MACE GRADING	HIGHWAY 70 E	LUST, UST, IMD	Higher	468, 0.089, SSE
<a href="#">B4</a>	BERNELL COMPANY (MEL	6600 E. WASHINGTON S	LUST, IMD, UIC	Higher	794, 0.150, South
<a href="#">B5</a>	CASSELL CO	6600 EAST WASHINGTON	LUST TRUST	Higher	794, 0.150, South
<a href="#">C6</a>	PAK-LITE	6508 EAST WASHINGTON	SHWS, IMD	Higher	997, 0.189, SSE
<a href="#">C7</a>	NC DMV I-40/85 SCALE	INTERSTATE 40/85	LAST, IMD	Higher	1266, 0.240, SSE
<a href="#">8</a>	SAMS MART	6321 US HIGHWAY 70	LUST	Higher	1527, 0.289, SE

## EXECUTIVE SUMMARY

### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
MACE GRADING COMPANY 6517 US 70 MEBANE, NC 27302	LUST Incident Phase: Closed Out Incident Number: 20432 Current Status: File Located in Archives  IMD Facility Id: 20432	N/A
MACE GRADING COMPANY 6517 US 70 MEBANE, NC	RGA LUST Facility ID: 0-020510 Facility ID: 20432	N/A

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STANDARD ENVIRONMENTAL RECORDS

#### ***State- and tribal - equivalent NPL***

NC HSDS: A review of the NC HSDS list, as provided by EDR, and dated 08/09/2011 has revealed that there is 1 NC HSDS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GENL ELEC CO/MEBANE		SSW 1/8 - 1/4 (0.134 mi.)	0	8

#### ***State- and tribal - equivalent CERCLIS***

SHWS: A review of the SHWS list, as provided by EDR, and dated 11/04/2015 has revealed that there is

## EXECUTIVE SUMMARY

1 SHWS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PAK-LITE</b> Facility Id: NONCD0002254	<b>6508 EAST WASHINGTON</b>	<b>SSE 1/8 - 1/4 (0.189 mi.)</b>	<b>C6</b>	<b>9</b>

### **State and tribal leaking storage tank lists**

LUST: A review of the LUST list, as provided by EDR, and dated 11/06/2015 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>MACE GRADING</b> Incident Phase: Closed Out Incident Number: 22369 Current Status: File Located in Archives	<b>HIGHWAY 70 E</b>	<b>SSE 0 - 1/8 (0.089 mi.)</b>	<b>3</b>	<b>8</b>
<b>BERNELL COMPANY (MEL)</b> Incident Phase: Follow Up Incident Number: 9435 Current Status: File Located in House	<b>6600 E. WASHINGTON S</b>	<b>S 1/8 - 1/4 (0.150 mi.)</b>	<b>B4</b>	<b>9</b>
<b>SAMS MART</b> Incident Phase: Closed Out Incident Number: 33621 Current Status: File Located in Archives	<b>6321 US HIGHWAY 70</b>	<b>SE 1/4 - 1/2 (0.289 mi.)</b>	<b>8</b>	<b>10</b>

LAST: A review of the LAST list, as provided by EDR, and dated 11/06/2015 has revealed that there is 1 LAST site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>NC DMV I-40/85 SCALE</b> Close Out: 07/01/2003 Incident Number: 16362 Current Status: C	<b>INTERSTATE 40/85</b>	<b>SSE 1/8 - 1/4 (0.240 mi.)</b>	<b>C7</b>	<b>9</b>

LUST TRUST: A review of the LUST TRUST list, as provided by EDR, and dated 01/08/2016 has revealed that there is 1 LUST TRUST site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CASSELL CO</b> Facility Id: 0-032230 Site ID: 9435	<b>6600 EAST WASHINGTON</b>	<b>S 1/8 - 1/4 (0.150 mi.)</b>	<b>B5</b>	<b>9</b>

## EXECUTIVE SUMMARY

### ***State and tribal registered storage tank lists***

UST: A review of the UST list, as provided by EDR, and dated 11/06/2015 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>MACE GRADING</b> Tank Status: Removed Facility Id: 00-0-0000025200	<b>HIGHWAY 70 E</b>	<b>SSE 0 - 1/8 (0.089 mi.)</b>	<b>3</b>	<b>8</b>

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Records of Emergency Release Reports***

IMD: A review of the IMD list, as provided by EDR, and dated 07/21/2006 has revealed that there are 4 IMD sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>MACE GRADING</b> Facility Id: 22369	<b>HIGHWAY 70 E</b>	<b>SSE 0 - 1/8 (0.089 mi.)</b>	<b>3</b>	<b>8</b>
<b>BERNELL COMPANY (MEL)</b> Facility Id: 9435	<b>6600 E. WASHINGTON S</b>	<b>S 1/8 - 1/4 (0.150 mi.)</b>	<b>B4</b>	<b>9</b>
<b>PAK-LITE</b> Facility Id: 7258	<b>6508 EAST WASHINGTON</b>	<b>SSE 1/8 - 1/4 (0.189 mi.)</b>	<b>C6</b>	<b>9</b>
<b>NC DMV I-40/85 SCALE</b> Facility Id: 16362	<b>INTERSTATE 40/85</b>	<b>SSE 1/8 - 1/4 (0.240 mi.)</b>	<b>C7</b>	<b>9</b>

Count: 0 records.

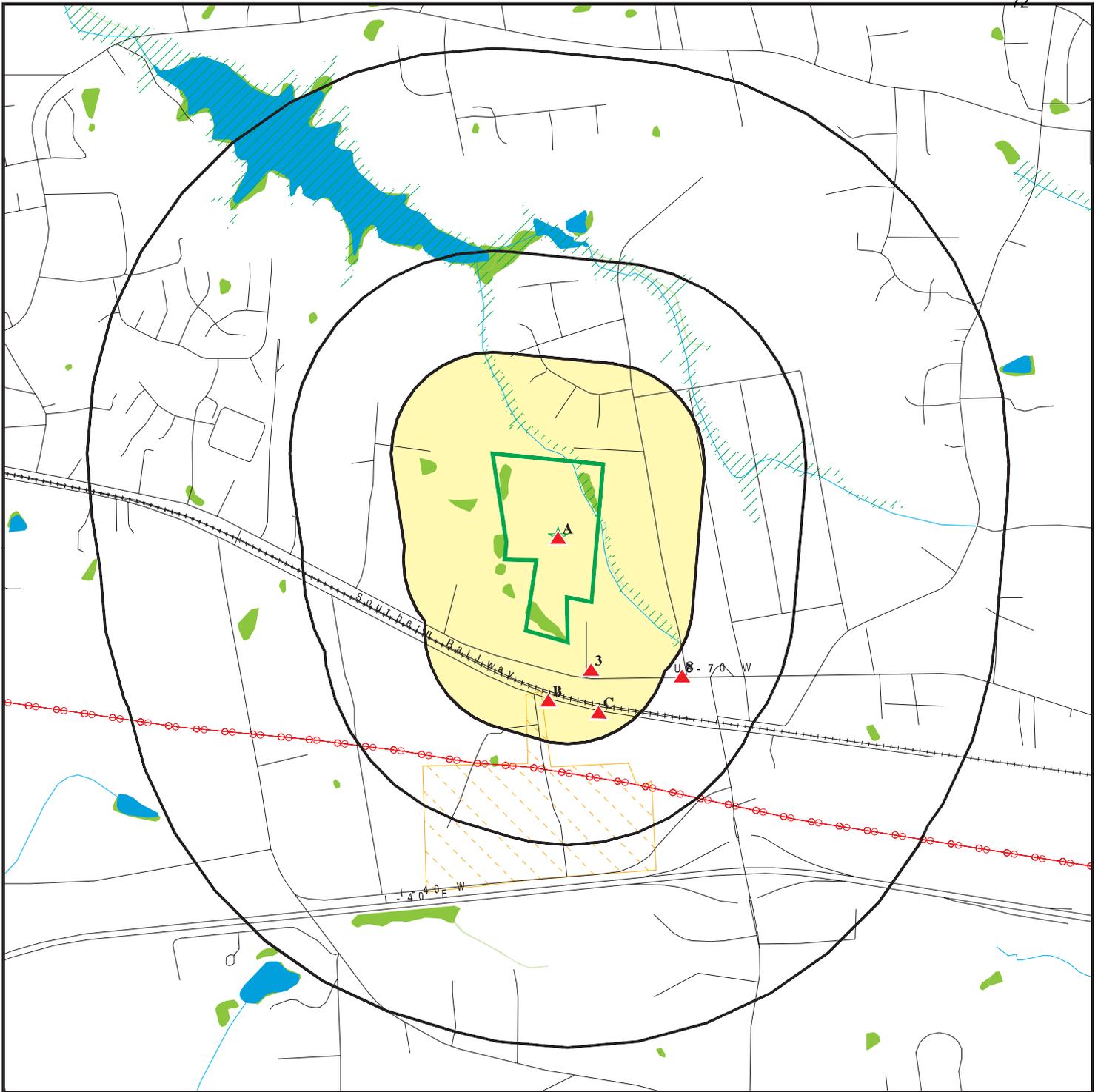
ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
------	--------	-----------	--------------	-----	-------------

NO SITES FOUND

# OVERVIEW MAP - 4548564.2S

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Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Hazardous Substance Disposal Sites



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Oakwood Solar  
 ADDRESS: 6517 U.S. Highway 70  
 Mebane NC 27302  
 LAT/LONG: 36.091246 / 79.232847

CLIENT: Headwater Environmental, Inc  
 CONTACT: Paul  
 INQUIRY #: 4548564.2s  
 DATE: February 26, 2016 7:51 am

# DETAIL MAP - 4548564.2S

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-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Power transmission lines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands
-  Hazardous Substance Disposal Sites

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Oakwood Solar  
 ADDRESS: 6517 U.S. Highway 70  
 Mebane NC 27302  
 LAT/LONG: 36.091246 / 79.232847

CLIENT: Headwater Environmental, Inc  
 CONTACT: Paul  
 INQUIRY #: 4548564.2s  
 DATE: February 26, 2016 7:51 am

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
CERCLIS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site List</i></b>								
CERCLIS-NFRAP	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL</i></b>								
NC HSDS	1.000		0	1	0	0	NR	1
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
SHWS	1.000		0	1	0	0	NR	1
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
OLI	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500	1	1	1	1	NR	NR	4

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LAST	0.500		0	1	0	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	1	0	NR	NR	1
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal institutional control / engineering control registries</b>								
INST CONTROL	0.500		0	0	0	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
HIST LF	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<b>Local Land Records</b>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
IMD	0.500	1	1	3	0	NR	NR	5
SPILLS 90	TP		NR	NR	NR	NR	NR	0
SPILLS 80	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0

### EDR HIGH RISK HISTORICAL RECORDS

#### *EDR Exclusive Records*

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

### EDR RECOVERED GOVERNMENT ARCHIVES

#### *Exclusive Recovered Govt. Archives*

RGA HWS	TP		NR	NR	NR	NR	NR	0
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## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP	1	NR	NR	NR	NR	NR	1
- Totals --		3	3	8	1	0	0	15

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**A1** MACE GRADING COMPANY  
Target 6517 US 70  
Property MEBANE, NC 27302

LUST S104157237  
IMD N/A

Actual:  
703 ft.

[Click here for full text details](#)

**LUST**

Incident Number: 20432  
Current Status: File Located in Archives  
Incident Phase: Closed Out

**IMD**

Facility Id: 20432

**A2** MACE GRADING COMPANY  
Target 6517 US 70  
Property MEBANE, NC

RGA LUST S115629115  
N/A

Actual:  
703 ft.

[Click here for full text details](#)

**RGA LUST**

Facility ID: 0-020510  
Facility ID: 20432

**HSDS** GENL ELEC CO/MEBANE OPER  
Region , NC  
SSW  
1/8-1/4  
707 ft.

NC HSDS S102442201  
N/A

[Click here for full text details](#)

**3** MACE GRADING  
SSE HIGHWAY 70 E  
< 1/8 MEBANE, NC 27302  
0.089 mi.  
468 ft.

LUST U001438590  
UST N/A  
IMD

Relative:  
Higher

[Click here for full text details](#)

**LUST**

Incident Number: 22369  
Current Status: File Located in Archives  
Incident Phase: Closed Out

**UST**

Facility Id: 00-0-0000025200  
Tank Status: Removed

**IMD**

Facility Id: 22369

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**B4**      **BERNELL COMPANY (MELVILLE FURNITURE)**      **LUST**      **S105765001**  
**South**      **6600 E. WASHINGTON ST.**      **IMD**      **N/A**  
**1/8-1/4**      **MEBANE, NC 27302**      **UIC**

Relative:  
Higher

[Click here for full text details](#)

**LUST**

Incident Number: 9435  
Current Status: File Located in House  
Incident Phase: Follow Up

**IMD**

Facility Id: 9435

**UIC**

Permit Num: WI0500682  
Env Interest Status: Active  
Env Interest Status: Proposed

**B5**      **CASSELL CO**      **LUST TRUST**      **S105218456**  
**South**      **6600 EAST WASHINGTON ST**           **N/A**  
**1/8-1/4**      **MEBANE, NC**

Relative:  
Higher

[Click here for full text details](#)

**LUST TRUST**

Site ID: 9435  
Facility Id: 0-032230

**C6**      **PAK-LITE**      **SHWS**      **1001198973**  
**SSE**      **6508 EAST WASHINGTON ST.**      **IMD**      **N/A**  
**1/8-1/4**      **MEBANE, NC**

Relative:  
Higher

[Click here for full text details](#)

**SHWS**

Facility Id: NONCD0002254

**IMD**

Facility Id: 7258

**C7**      **NC DMV I-40/85 SCALES FACILITY**      **LAST**      **S104913535**  
**SSE**      **INTERSTATE 40/85**      **IMD**      **N/A**  
**1/8-1/4**      **CHEEKS CROSSROADS, NC**

Relative:  
Higher

[Click here for full text details](#)

**LAST**

Incident Number: 16362  
Current Status: C

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**NC DMV I-40/85 SCALES FACILITY (Continued)**

**S104913535**

Close Out: 07/01/2003

**IMD**

Facility Id: 16362

**8**  
**SE**  
 1/4-1/2  
 0.289 mi.  
 1527 ft.

**SAMS MART**  
**6321 US HIGHWAY 70**  
**MEBANE, NC N/A**

**LUST S109567393**  
**N/A**

[Click here for full text details](#)

Relative:  
 Higher

**LUST**

Incident Number: 33621  
 Current Status: File Located in Archives  
 Incident Phase: Closed Out

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
NC	AST	AST Database	Department of Environment and Natural Resourc	04/14/2015	06/23/2015	07/17/2015
NC	BROWNFIELDS	Brownfields Projects Inventory	Department of Environment and Natural Resourc	01/04/2016	01/07/2016	02/08/2016
NC	COAL ASH	Coal Ash Disposal Sites	Department of Environment & Natural Resources	04/22/2015	08/04/2015	09/15/2015
NC	DRYCLEANERS	Drycleaning Sites	Department of Environment & Natural Resources	03/02/2015	06/25/2015	09/08/2015
NC	Financial Assurance 1	Financial Assurance Information Listing	Department of Environment & Natural Resources	08/13/2015	08/14/2015	09/15/2015
NC	Financial Assurance 2	Financial Assurance Information Listing	Department of Environmental & Natural Resourc	10/02/2012	10/03/2012	10/26/2012
NC	Financial Assurance 3	Financial Assurance Information	Department of Environment & Natural Resources	09/14/2015	09/15/2015	10/22/2015
NC	HIST LF	Solid Waste Facility Listing	Department of Environment & Natural Resource	11/06/2006	02/13/2007	03/02/2007
NC	HSDS	Hazardous Substance Disposal Site	North Carolina Center for Geographic Informat	08/09/2011	11/08/2011	12/05/2011
NC	IMD	Incident Management Database	Department of Environment and Natural Resourc	07/21/2006	08/01/2006	08/23/2006
NC	INST CONTROL	No Further Action Sites With Land Use Restrictions Monitorin	Department of Environment, Health and Natural	11/04/2015	12/17/2015	02/08/2016
NC	LAST	Leaking Aboveground Storage Tanks	Department of Environment & Natural Resources	11/06/2015	11/11/2015	01/04/2016
NC	LUST	Regional UST Database	Department of Environment and Natural Resourc	11/06/2015	11/11/2015	01/04/2016
NC	LUST TRUST	State Trust Fund Database	Department of Environment and Natural Resourc	01/08/2016	01/13/2016	02/08/2016
NC	NPDES	NPDES Facility Location Listing	Department of Environment & Natural Resources	12/02/2015	12/17/2015	02/08/2016
NC	OLI	Old Landfill Inventory	Department of Environment & Natural Resources	03/27/2015	04/17/2015	04/30/2015
NC	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Environment, Health and Natural		07/01/2013	12/24/2013
NC	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Environment, Health and Natural		07/01/2013	01/13/2014
NC	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Environment, Health and Natural		07/01/2013	12/20/2013
NC	SHWS	Inactive Hazardous Sites Inventory	Department of Environment, Health and Natural	11/04/2015	12/17/2015	02/08/2016
NC	SPILLS	Spills Incident Listing	Department of Environment & Natural Resources	12/10/2015	12/14/2015	02/08/2016
NC	SPILLS 80	SPILLS80 data from FirstSearch	FirstSearch	06/14/2001	01/03/2013	03/06/2013
NC	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	09/27/2012	01/03/2013	03/06/2013
NC	SWF/LF	List of Solid Waste Facilities	Department of Environment and Natural Resourc	12/28/2015	12/30/2015	02/08/2016
NC	SWRCY	Recycling Center Listing	Department of Environment & Natural Resources	09/24/2015	09/25/2015	10/22/2015
NC	UIC	Underground Injection Wells Listing	Department of Environment & Natural Resources	11/20/2015	11/23/2015	01/04/2016
NC	UST	Petroleum Underground Storage Tank Database	Department of Environment and Natural Resourc	11/06/2015	11/12/2015	12/02/2015
NC	VCP	Responsible Party Voluntary Action Sites	Department of Environment and Natural Resourc	11/04/2015	12/17/2015	02/08/2016
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2013	02/24/2015	09/30/2015
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	12/31/2014	04/17/2015	06/02/2015
US	CORRACTS	Corrective Action Report	EPA	06/09/2015	06/26/2015	09/16/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	Delisted NPL	National Priority List Deletions	EPA	10/30/2015	11/07/2015	01/04/2016
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	09/20/2015	09/23/2015	01/04/2016
US	EDR Hist Auto	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	06/22/2015	06/26/2015	09/16/2015
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	03/26/2015	04/08/2015	06/11/2015

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	07/20/2015	09/09/2015	11/03/2015
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	01/31/2015	07/08/2015	10/13/2015
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	11/23/2015	11/24/2015	02/18/2016
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	11/23/2015	11/24/2015	02/18/2016
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	06/24/2015	06/26/2015	09/02/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	10/27/2015	10/29/2015	01/04/2016
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	01/07/2016	01/08/2016	02/18/2016
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	11/24/2015	12/01/2015	01/04/2016
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	11/04/2015	11/13/2015	01/04/2016
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	08/20/2015	10/30/2015	02/18/2016
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	03/30/2015	04/28/2015	06/22/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	10/13/2015	10/23/2015	02/18/2016
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	10/20/2015	10/29/2015	01/04/2016
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	01/07/2016	01/08/2016	02/18/2016
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	11/24/2015	12/01/2015	01/04/2016
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	11/05/2015	11/13/2015	01/04/2016
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	08/20/2015	10/30/2015	02/18/2016
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	10/13/2015	10/23/2015	02/18/2016
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	05/28/2015	05/29/2015	06/11/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	06/26/2015	07/10/2015	10/13/2015
US	NPL	National Priority List	EPA	10/30/2015	11/07/2015	01/04/2016
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	10/30/2015	11/07/2015	01/04/2016
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/07/2015	07/09/2015	09/16/2015
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	06/09/2015	06/26/2015	09/16/2015

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	06/09/2015	06/26/2015	09/16/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	06/09/2015	06/26/2015	09/16/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	06/09/2015	06/26/2015	09/16/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	06/09/2015	06/26/2015	09/16/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2015	08/26/2015	11/03/2015
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2013	02/12/2015	06/02/2015
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/20/2015	10/27/2015	01/04/2016
US	US AIRS MINOR	Air Facility System Data	EPA	10/20/2015	10/27/2015	01/04/2016
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2015	12/23/2015	02/18/2016
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	09/17/2015	12/04/2015	02/18/2016
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/10/2015	09/11/2015	11/03/2015
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	09/01/2015	09/03/2015	11/03/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	09/17/2015	12/04/2015	02/18/2016
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/10/2015	09/11/2015	11/03/2015
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/18/2015	09/01/2015	01/04/2016
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	07/30/2013	08/19/2013	10/03/2013
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2013	07/17/2015	08/12/2015
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	11/02/2015	11/08/2015	12/09/2015
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2014	07/24/2015	08/18/2015
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2013	06/19/2015	07/15/2015
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	12/31/2014	03/19/2015	04/07/2015

### Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

### Electric Power Transmission Line Data

Source: PennWell Corporation

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## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
NC	Daycare Centers	Sensitive Receptor: Child Care Facility List	Department of Health & Human Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
NC	State Wetlands	Wetland Inventory	US Fish & Wildlife Service			
US	Topographic Map		U.S. Geological Survey			

### STREET AND ADDRESS INFORMATION

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## APPENDIX D



Entrance to the site from the adjoining property to the south.



Area of petroleum staining and empty ASTs on the southeast portion of the site.



Assorted 55-gallon drums (contents unknown) and empty 5-gallon motor oil buckets on the southeast portion of the site.



Pile of miscellaneous solid waste on the southeast portion of the site.



Facing north along Stream A on the northeast portion of the site.



Dense vegetation located throughout the central portion of the site.



Pond B2, located on the northwest portion of the site.



Facing east along the northern boundary of the site.



Empty AST on the southern portion of the site, north of Pond B1.



Pond B1, located on the southern portion of the site.

## **APPENDIX E**

**Mace Site**

6517 U.S. Highway 70

Mebane, NC 27302

Inquiry Number: 4533092.5

February 08, 2016

**Certified Sanborn® Map Report**

6 Armstrong Road, 4th Floor  
Shelton, Connecticut 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

**Certified Sanborn® Map Report**

2/08/16

**Site Name:**

Mace Site  
6517 U.S. Highway 70  
Mebane, NC 27302

**Client Name:**

Headwater Environmental, Inc  
512 Sweetbay Court  
Wilmington, NC 28405



EDR Inquiry # 4533092.5

Contact: Paul Pascaros

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Headwater Environmental, Inc were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

**Certified Sanborn Results:**

**Site Name:** Mace Site  
**Address:** 6517 U.S. Highway 70  
**City, State, Zip:** Mebane, NC 27302  
**Cross Street:**  
**P.O. #** 201603  
**Project:** Oakwood Solar Farm, LLC  
**Certification #** F0C3-4104-A6B0



Sanborn® Library search results  
Certification # F0C3-4104-A6B0

**UNMAPPED PROPERTY**

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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1938 AERIAL PHOTOGRAPH



**SOURCE:**

Orange County Soil and Water Conservation District.

Not to Scale.  
Image captured with digital camera.

**1955 AERIAL PHOTOGRAPH**

5 P-134



**SOURCE:**

Orange County Soil and Water Conservation District.

Not to Scale.  
Image captured  
with digital camera.

**1966 AERIAL PHOTOGRAPH**



**SOURCE:**  
Orange County Soil and Water  
Conservation District.

Not to Scale.  
Image captured  
with digital camera.

**1972 AERIAL PHOTOGRAPH**



**SOURCE:**  
Orange County Soil and Water  
Conservation District.  
  
Not to Scale.  
Image captured  
with digital camera.

**1982 AERIAL PHOTOGRAPH**



**SOURCE:**  
Orange County Soil and Water  
Conservation District.

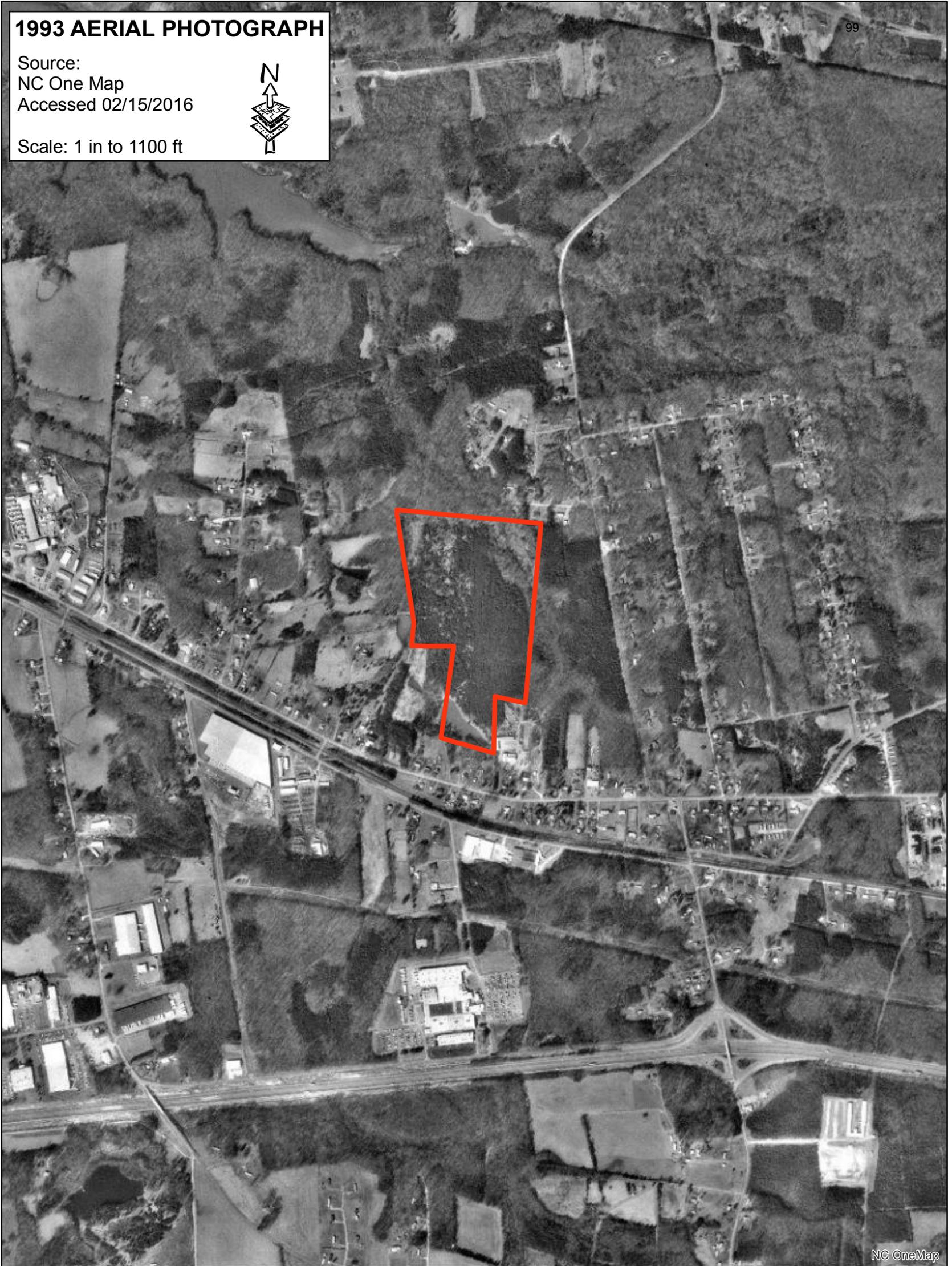
Not to Scale.  
Image captured  
with digital camera.

# 1993 AERIAL PHOTOGRAPH

Source:  
NC One Map  
Accessed 02/15/2016



Scale: 1 in to 1100 ft



# 2008 AERIAL PHOTOGRAPH

Source:  
NC One Map  
Accessed 02/15/2016



Scale: 1 in to 500 ft



# 2013 AERIAL PHOTOGRAPH

Source:  
NC One Map  
Accessed 02/15/2016



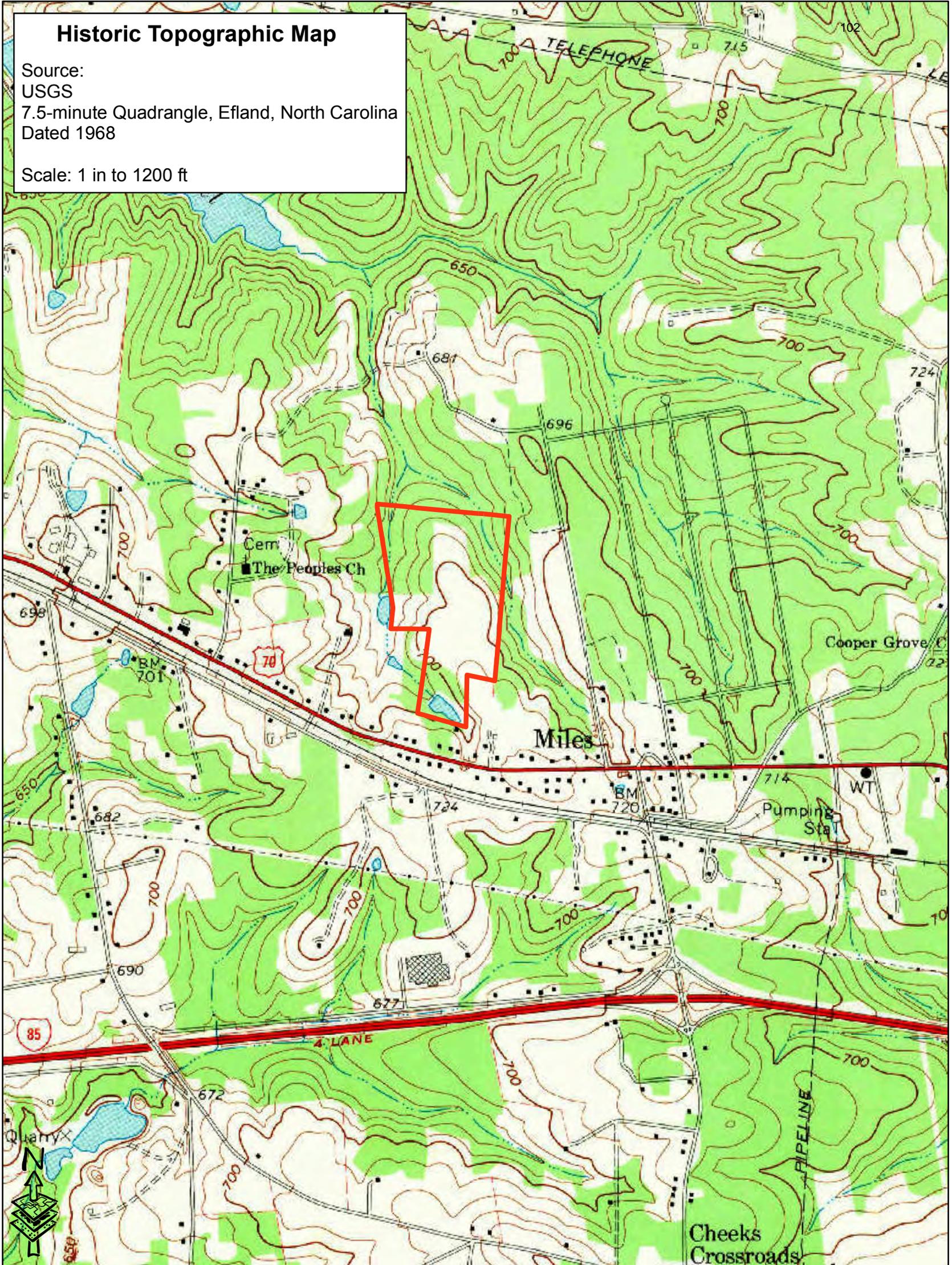
Scale: 1 in to 500 ft



# Historic Topographic Map

Source:  
USGS  
7.5-minute Quadrangle, Efland, North Carolina  
Dated 1968

Scale: 1 in to 1200 ft



## **APPENDIX F**

**SAMPLE PROJECT EXPERIENCE**

- FLS Energy, LLC; a suite of Environmental Due Diligence services, Marion and Orangeburg Counties, South Carolina
- Pilot Environmental, LLC; subcontractor services provided for ~1,000-acre Wetland Delineation, Kershaw County, South Carolina
- Dominion Power; subcontractor services provided for Wetland Delineation and Habitat Assessment along the proposed Atlantic Coast Pipeline, Various Locations, North Carolina and West Virginia
- Piedmont Private Equity, LLC; Baseline Natural Resources Assessment for 675-acre site, Caldwell County, North Carolina
- Overlook at Middle Sound; Wetland Delineation and Permitting, New Hanover County, North Carolina
- ESA Renewables, LLC; a suite of Environmental Due Diligence services for over 20 proposed solar sites, Various Locations, North Carolina
- City of Hamlet; Phase I ESA, Richmond County, North Carolina
- Tabor City Industrial Park; Site Certification, Columbus County, North Carolina
- Scotland County Economic Development Council; Wetland Determination and Species Survey, Scotland County, North Carolina
- Strata Solar, LLC; a suite of Environmental Due Diligence services for 15 proposed solar sites, Various Locations, North Carolina
- Volvo Rents; Phase I ESAs, extensive travel to Numerous Locations in Alabama, Wisconsin, North Dakota, Texas, and California.
- City of Virginia Beach; Lake Trashmore Wetland Restoration and Monitoring, Virginia Beach, Virginia
- Virginia Modeling, Analysis, & Simulation Center; Wetland Delineation and Permitting; Suffolk, Virginia



## Carmen Paul Pascarosa

### PRESIDENT

Mr. Pascarosa founded Headwater Environmental, Inc., in August 2014. He has 12 years of experience in the environmental field. His experience includes Phase I Environmental Site Assessments (ESAs), Coastal Surveying, Wetland Delineation and Permitting, NEPA document preparation, Cultural Resource Studies, and hazardous waste recovery efforts.

**EDUCATION**

Bachelor of Science, Environmental Science, 2004, The University of the North Carolina at Wilmington, Wilmington, NC

**REGISTRATIONS**

40-hour HAZWOPER Certified; NC State Wetland Delineation Training; Society of Wetland Scientists; National Association of Environmental Professionals

**WETLAND AND STREAM ASSESSMENTS**

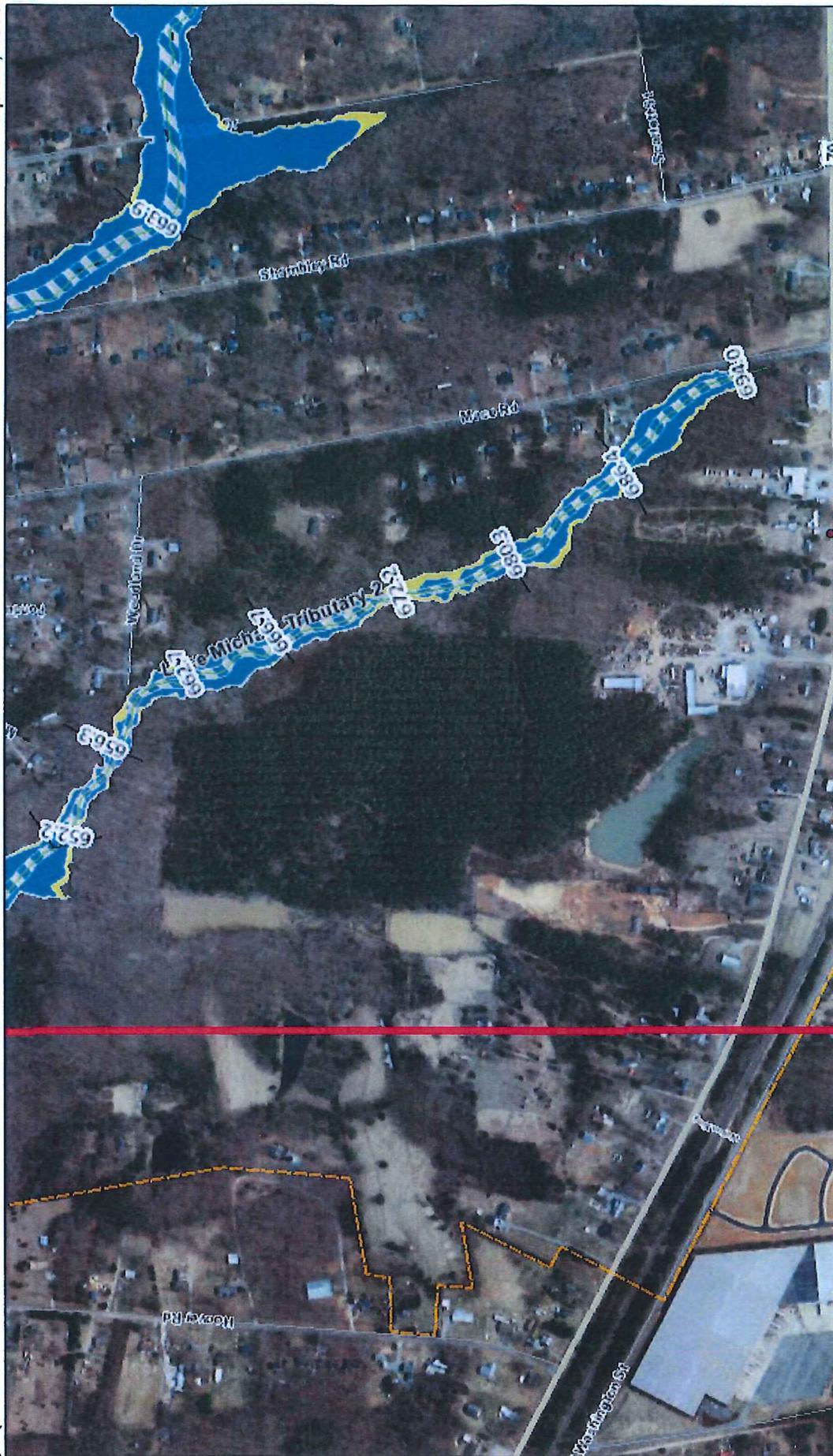
Mr. Pascarosa has experience consulting with clients and performing site specific wetland and stream studies and coordinating with regulatory agencies. He has experience in delineating varieties of wetland ecosystems and has experience with Federal/State permitting requirements.

**PHASE I ENVIRONMENTAL SITE ASSESSMENTS**

Since 2005, Mr. Pascarosa has performed over 275 Phase I ESAs throughout the United States. Project types range from residential developments, commercial properties, industrial facilities, solar sites, and publicly owned lands.

**COASTAL AREA CONSULTING**

Mr. Pascarosa has experience managing projects from the site acquisition stage, through the coastal permitting process. His range of expertise includes marina development, maintenance dredging, wetland restoration, beach nourishment, and coastal development. He has worked on projects throughout the Mid-Atlantic and Southeast regions of the United States.



North Carolina Floodplain Mapping Program

- Legend**
- Panels
  - Political Areas
  - Stream Centerline
  - Cross Sections
  - Levee
- Flood Hazard Areas**
- AE
  - Floodway (AE)
  - 0.2 % Chance Annual Flood Hazard
  - Future Conditions 1% Annual Chance Flood Hazard





**HEADWATER ENVIRONMENTAL, INC.**  
It all starts here.

November 12, 2015

Mr. Kyle Campbell  
Oakwood Solar Farm, LLC  
4150 Saint Johns Parkway  
Suite 1000  
Sanford, Florida 32771

Reference: Jurisdictional Summary  
Oakwood Solar Farm – Mace Site  
6517 U.S. Highway 70  
Mebane, Orange County, North Carolina  
HEnv Project #201603

Dear Mr. Campbell:

On February 14, 2016, Headwater Environmental, Inc. (HEnv) issued a Wetland Delineation report for the above referenced site. During our initial assessment, we identified two wetland areas, two ponds, and two streams within the site boundary. Wetland Area A is located on the northeast portion of the site. Stream A flows north, through Wetland Area A, towards Michael Creek.

Pond B1 is located on the southern portion of the site. Pond B1 continues off-site to the west and drains to an unnamed stream (Stream B). There are no peripheral wetlands around Pond B1. There are two man-made ponds located west of the site along Stream B. Stream B enters the northwestern portion of the site and drains to Pond B2. Wetland Area B is located around the peripheral of Pond B2. It is estimated that jurisdictional wetlands occupy 3 to 5 acres of the site. The ponds encompass approximately 5 to 8 acres.

Ms. Molly Boyle with the Orange County Planning and Inspections Department issued a Site Assessment for the Mace parcel. According to Ms. Boyle, an 80-foot buffer will be required along the Stream A, and a 65-foot buffer is required along Ponds B1, B2, and Stream B. Additionally, information associated with zoning requirements, building setbacks, and erosion control is included with the Orange County Site Assessment.

On March 18, 2016, HEnv conducted a jurisdictional determination (JD) site visit with Mr. David Bailey of the Army Corps of Engineers (USACE). During our site visit, an additional wetland area was observed and flagged in the field. Wetland Area C is located south of Pond B, along the western boundary of the site. Wetland Area C is less than 1,000 square feet. Mr. Bailey concurred with our findings regarding the remainder of the site. An approved JD is expected to take four to six months. If wetland areas are to be avoided during development, HEnv recommends submitting updated site plans in order to obtain a "No Authorization Required" letter, which can be obtained in one to two months.

If impacts to wetlands or streams occur from proposed development, authorization from the DWR and USACE is required. The regulatory correspondence is enclosed for your records. HEnv appreciates the opportunity to provide our environmental services for this project. If you have questions or need additional information, please contact us at (910) 777-3908.

Respectfully submitted,

**Headwater Environmental, Inc.**

  
C. Paul Pascaros  
President

Enclosures: Orange County Planning and Inspections Site Assessment  
Revised Wetland Delineation Map (Figure 5)

**Site Assessment for PIN: 9835-02-9137**

**Site Data**

Zoning: Rural Residential (R1)  
 Acreage: 52.1 acres  
 Overlay Districts: Back Creek Protected Watershed Overlay District

Deed: No deed reference found. Legal Reference: 10-E-451.  
 Plat/Legal Description: N/O Hwy 70 (no plat found)

**Zoning Requirements:**

Density: Max. dwelling units/acre or sq. ft.: 1 dwelling unit per 40,000 sq. ft.  
 Min. Lot Size: 40,000 sq. ft.  
 Min. lot width: 130'  
 Maximum height: 25'

**Building Setbacks:**

-Front (and Corner lots) = 40' from public or private rights-of-way  
 -Side Setbacks = 20' from side lot lines  
 -Rear Yard Setback = 20' from rear lot lines

**Environmental Features:**

Streams located on lot. Stream buffer for stream to the east: 80 ft. (Method A). Stream buffer for stream to the west: 65 ft. (Method A). Six water bodies located to the west. Water body buffers: 65 ft. (Method A).  
 Slope: Slope of stream to the east: 8.8%. Slope of stream to the west: 6.4%. Slopes of water bodies to the west: ranging from 2.4% to 6.4%.

100 and 500 year Floodplains.

Base Flood Elevation (BFE) based on FIRM Map: 669  
 County Freeboard: 671  
 Minimum Finished Floor Elevation (FFE): 671  
 Flood Panel: 9835J

Impervious Surface Limits: 12% based on UDO (Sec. 4.2.5) - 272,337.12 sq. ft. of allowable impervious surface area

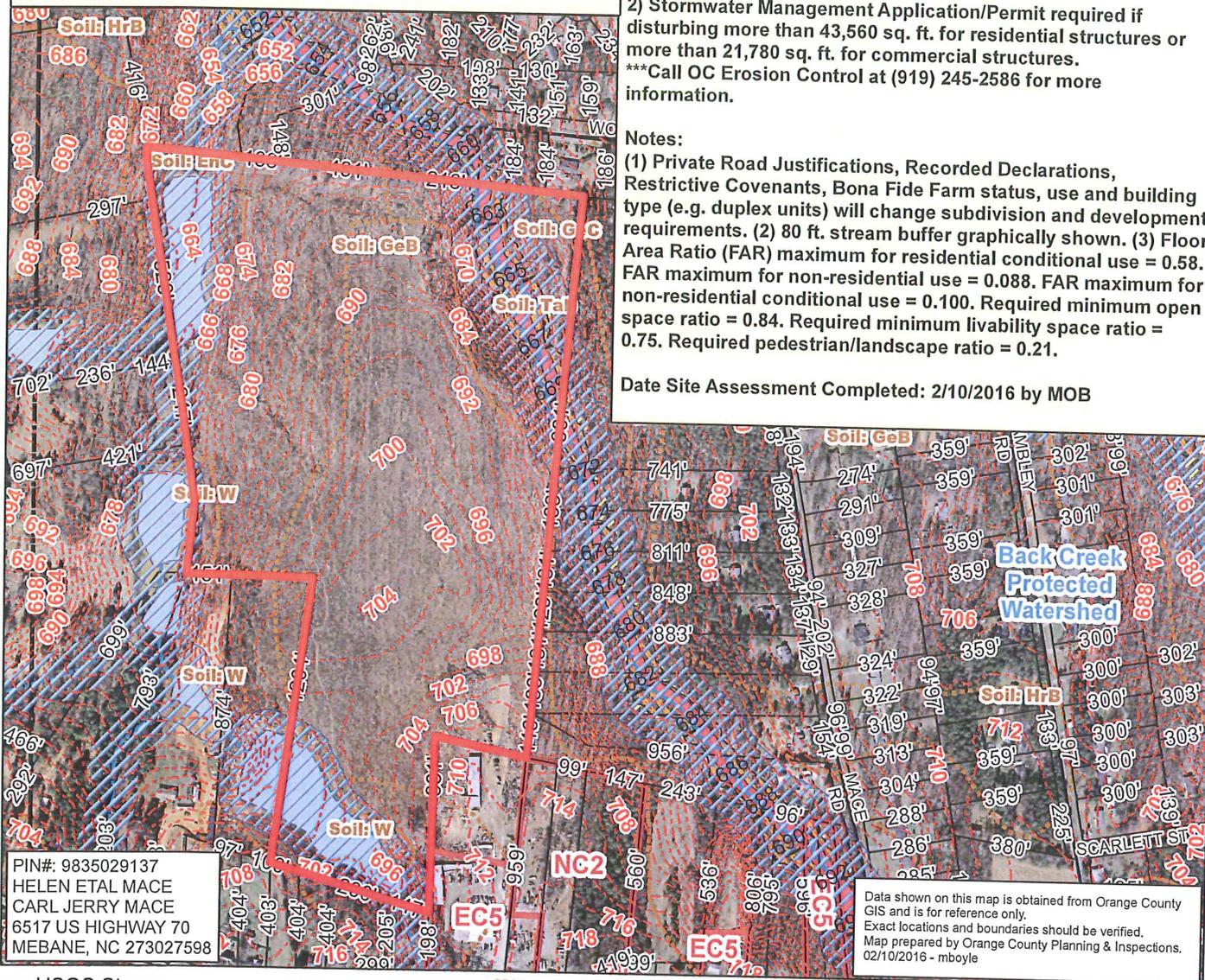
**Land Disturbance Thresholds (Erosion Control)**

1) Erosion Control Application/Permit required if disturbing more than 20,000 sq. ft.  
 2) Stormwater Management Application/Permit required if disturbing more than 43,560 sq. ft. for residential structures or more than 21,780 sq. ft. for commercial structures.  
 \*\*\*Call OC Erosion Control at (919) 245-2586 for more information.

**Notes:**

(1) Private Road Justifications, Recorded Declarations, Restrictive Covenants, Bona Fide Farm status, use and building type (e.g. duplex units) will change subdivision and development requirements. (2) 80 ft. stream buffer graphically shown. (3) Floor Area Ratio (FAR) maximum for residential conditional use = 0.58. FAR maximum for non-residential use = 0.088. FAR maximum for non-residential conditional use = 0.100. Required minimum open space ratio = 0.84. Required minimum livability space ratio = 0.75. Required pedestrian/landscape ratio = 0.21.

Date Site Assessment Completed: 2/10/2016 by MOB



PIN#: 9835029137  
 HELEN ETAL MACE  
 CARL JERRY MACE  
 6517 US HIGHWAY 70  
 MEBANE, NC 273027598

Data shown on this map is obtained from Orange County GIS and is for reference only. Exact locations and boundaries should be verified. Map prepared by Orange County Planning & Inspections. 02/10/2016 - mboyle

USGS Stream	2' Contours (NCDOT)	Soils	500 Year Floodplains (Effective 02/02/07)
Soils Survey Stream	Parcels	100 YR Floodplain (Effective 02/02/07)	Base Flood Elevation (Symbol)
Water Body Buffer 65ft	Zoning	Floodway (Effective 02/02/07)	FIRM
Floodplain Buffer 80ft	Water Body		
Stream Buffer 80ft	Watershed		

Paul,

Yes, the map you sent in your previous email is consistent with our findings in the field (streams, ponds, and wetlands) for the Oakwood Solar project, Action ID: SAW-2016-00531. I will process the JD in the coming weeks. Please let me know if you have any questions.

-Dave Bailey

---

David E. Bailey, PWS  
Regulatory Project Manager  
US Army Corps of Engineers  
CE-SAW-RG-R  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, North Carolina 27587  
Phone: (919) 554-4884, Ext. 30.  
Fax: (919) 562-0421  
Email: [David.E.Bailey2@usace.army.mil](mailto:David.E.Bailey2@usace.army.mil)

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=136:4:0](http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0).

-----Original Message-----

From: Paul Pascarosca [<mailto:cpascarosca@headwaterenvironmental.com>]  
Sent: Wednesday, March 23, 2016 4:38 PM  
To: Bailey, David E SAW <[David.E.Bailey2@usace.army.mil](mailto:David.E.Bailey2@usace.army.mil)>  
Subject: [EXTERNAL] Oakwood JD

David,

The wetland delineation map has been revised and attached for your review. We are going to proceed with an approved JD. The following revisions and additions are included with this email:

1. Wetland Area A was adjusted to depict the former pond berm. Turns out the pond berm is entirely within the parcel boundary.
2. There are no fringe wetlands from W-B17 to W-B28, as these flags represent the edge of water of Pond B2.
3. Wetland Area C has been included.
4. Data Point 5 is attached and represents the conditions within Wetland Area C. (btw, rubus leucodermis and rubus alleghaniensis and two blackberry species known to persist through the winter. R. leuco is a western species, so, I went with R. alleg. Its FACU and is growing throughout the upland portion of the site.)
5. The header note has been revised accordingly .
6. The legend has been adjusted accordingly.

Since the JD will take a while, can you provide an email reply stating the map is consistent with our findings in the field? thanks

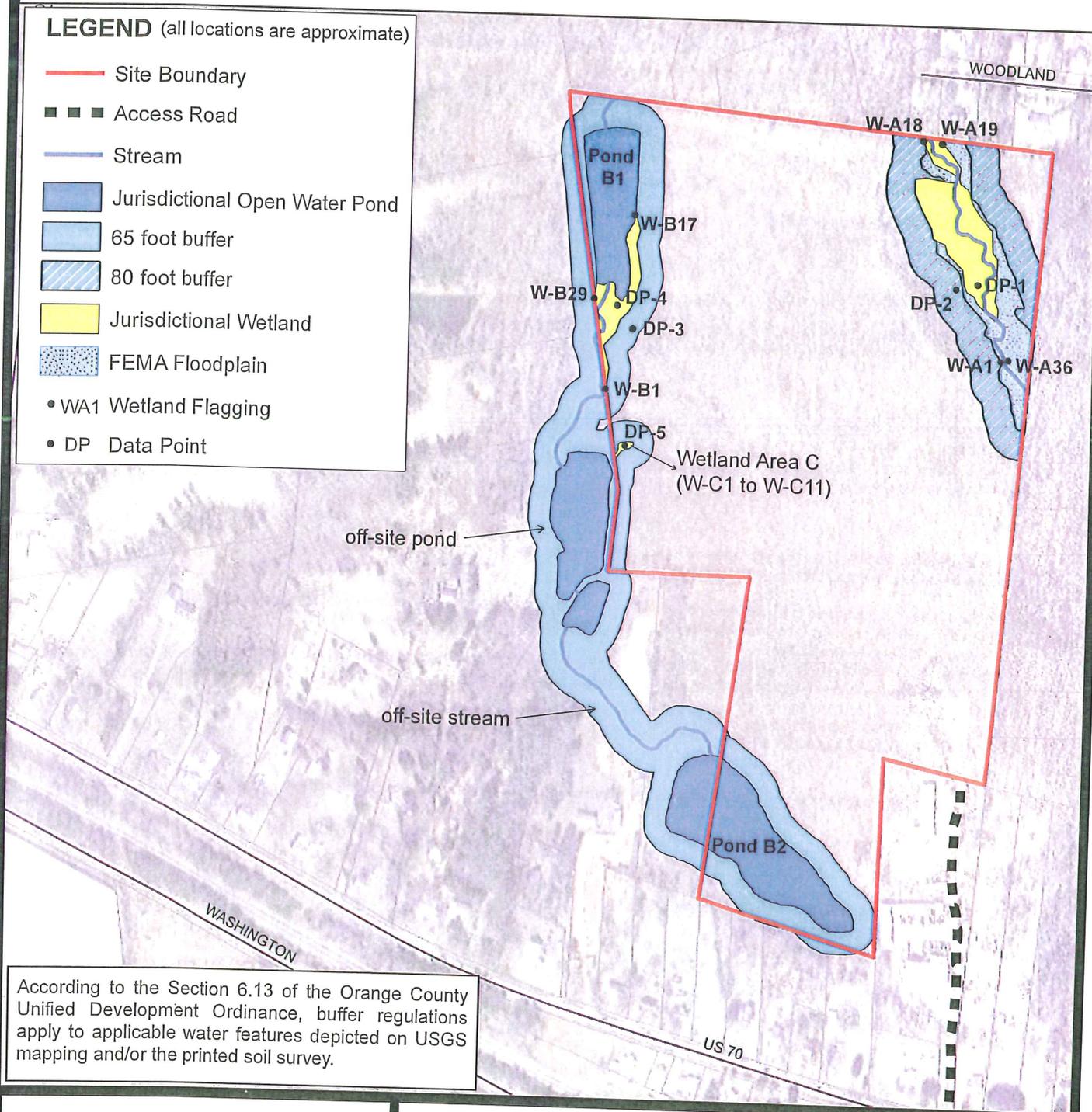
C. Paul Pascarosca  
President  
Headwater Environmental, Inc.

512 Sweetbay Court, Wilmington, North Carolina 28405  
[Blockedwww.headwaterenvironmental.com](http://www.headwaterenvironmental.com)  
910-777-3908

This is not a survey. All locations depicted on this figure are approximate. The Wetland Delineation was conducted by Headwater Environmental, Inc. (HEnv) on February 11, 2016. This Wetland Delineation was verified in the field by Mr. David Bailey with the U.S. Army Corps of Engineers (USACE) on March 18, 2016. HEnv utilized the Trimble Outdoors mobile application (v6.0.0) to locate and map the wetland boundary.

**LEGEND** (all locations are approximate)

- Site Boundary
- ■ ■ Access Road
- Stream
- Jurisdictional Open Water Pond
- 65 foot buffer
- 80 foot buffer
- Jurisdictional Wetland
- FEMA Floodplain
- WA1 Wetland Flagging
- DP Data Point



According to the Section 6.13 of the Orange County Unified Development Ordinance, buffer regulations apply to applicable water features depicted on USGS mapping and/or the printed soil survey.

**HEADWATER ENVIRONMENTAL, INC.**  
 512 Sweetbay Court  
 Wilmington, North Carolina

Date:	02/13/2015
Rev:	03/21/2015

Prepared by:	DFH
--------------	-----

Source:

ESRI  
 World Base Map Imagery  
 Mebane, NC



Scale 1" = 400'

**FIGURE 5  
 WETLAND DELINEATION**

Oakwood Solar Farm, LLC  
 Mace Site  
 6517 U.S. Highway 70  
 Mebane, Orange County, NC  
 Env Project #201603



# Kirkland Appraisals, LLC

Richard C. Kirkland, Jr., MAI  
9408 Northfield Court  
Raleigh, North Carolina 27603  
Phone (919) 414-8142  
[rkirkland2@gmail.com](mailto:rkirkland2@gmail.com)  
[www.kirklandappraisals.com](http://www.kirklandappraisals.com)

February 12, 2016

Ms. Jessica Galloza  
ESA Renewables, LLC  
4150 St. Johns Parkway, Suite 1000  
Sanford, F32771

**RE: Oakwood Solar Impact Study**

Dear Ms. Galloza:

At your request, I have considered the likely impact of solar farms proposed to be constructed on 53.74 acres of land located at 6517 US Highway 70, in Mebane, North Carolina. Specifically, I have been asked to give my professional opinion on whether the proposed solar farm will “maintain or enhance adjoining or contiguous property values” and whether “the location and character of the use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located.”

To form an opinion on these issues, I have researched and visited existing and proposed solar farms in North Carolina, researched articles through the Appraisal Institute and other studies, and discussed the likely impact with other real estate professionals. I have not been asked to assign any value to any specific property.

This letter is a limited report of a real property appraisal consulting assignment and subject to the limiting conditions attached to this letter. My client is ESA Renewables, LLC, represented to me by Ms. Jessica Galloza. My findings support the Conditional/Special Use Permit application. The effective date of this consultation is February 12, 2016.

**Proposed Use Description**

The proposed solar farm will be constructed on 53.74 acres of land located at 6517 US Highway 70, in Mebane, North Carolina.

Adjoining land is primarily residential low density and agricultural uses, which is common for solar farms as detailed later in this report. The solar farm will consist of fixed solar panels that will generate no noise, no odor, and less traffic than a residential subdivision. The panels will be less than 15 feet in height and located behind a chain link fence.

I have considered adjoining uses and included a map to identify each parcel’s location. The breakdown of those uses by acreage and number of parcels is summarized below.

<b>Adjoining Use Breakdown</b>		
	<b>Acreage</b>	<b>Parcels</b>
Residential	71.98%	96.77%
Agricultural	28.02%	3.23%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

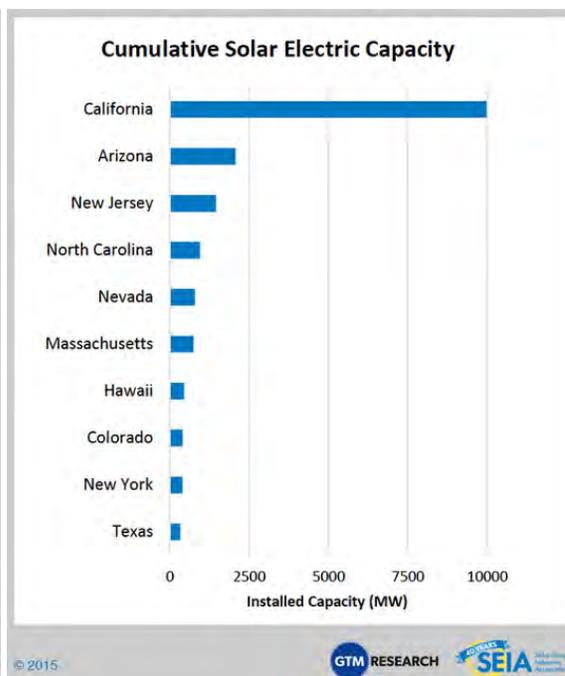
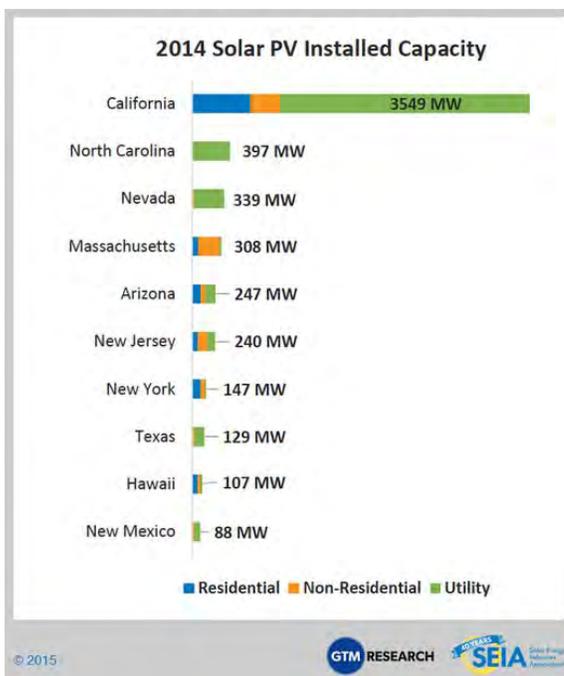
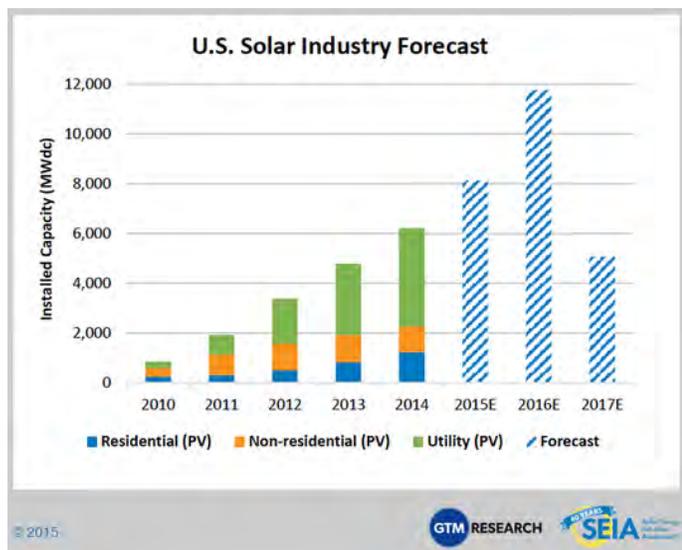


**Surrounding Uses**

#	MAP ID	Owner	GIS Data		% Adjoining	% Adjoining	Distance in Feet:
			Acres	Present Use	Acres	Parcels	Home to Panels
1	9825948348	Curtis	52.66	Agricultural	28.02%	3.23%	N/A
2	9835037821	Beaver HOA	6.30	Residential	3.35%	3.23%	N/A
3	9835130411	Curtis	2.71	Residential	1.44%	3.23%	N/A
4	9835131231	Ivey	1.02	Residential	0.54%	3.23%	460
5	9835132079	Ivey	0.59	Residential	0.31%	3.23%	N/A
6	9835134009	Ivey	0.48	Residential	0.26%	3.23%	590
7	9835135019	Ivey	0.47	Residential	0.25%	3.23%	N/A
8	9835136180	James	0.82	Residential	0.44%	3.23%	790
9	9835129681	Rhodes	12.33	Residential	6.56%	3.23%	730
10	9835220129	Gilmore	2.29	Residential	1.22%	3.23%	605
11	9835210959	Morgan	2.40	Residential	1.28%	3.23%	835
12	9835210868	Lawson	2.50	Residential	1.33%	3.23%	830
13	9835210575	Foster	2.61	Residential	1.39%	3.23%	855
14	9835210672	Douglas	2.66	Residential	1.42%	3.23%	920
15	9835210582	Riley	2.84	Residential	1.51%	3.23%	1010
16	9835210367	Cordero	2.49	Residential	1.32%	3.23%	1020
17	9835212233	Seifts	3.16	Residential	1.68%	3.23%	1090
18	9835105787	Mace	2.20	Residential	1.17%	3.23%	N/A
19	9835103858	Mace	5.17	Residential	2.75%	3.23%	715
20	9835101614	Hobbey	1.31	Residential	0.70%	3.23%	970
21	9835009723	Murdock	1.34	Residential	0.71%	3.23%	930
22	9835007790	Horne	0.92	Residential	0.49%	3.23%	950
23	9835007703	Mace	0.89	Residential	0.47%	3.23%	N/A
24	9835006716	Ellis	0.90	Residential	0.48%	3.23%	1030
25	9835016318	Mace	4.81	Residential	2.56%	3.23%	N/A
26	9835013165	Najera	5.81	Residential	3.09%	3.23%	710
27	9835011302	Herbert	6.35	Residential	3.38%	3.23%	1250
28	9825918836	Southard	14.82	Residential	7.88%	3.23%	805
29	9825924159	Adams	12.84	Residential	6.83%	3.23%	1950
30	9825926712	Hoover	19.05	Residential	10.13%	3.23%	1165
31	9825937298	Tsiapera	13.23	Residential	7.04%	3.23%	1200
		<b>Total</b>	<b>187.970</b>		<b>100.00%</b>	<b>100.00%</b>	931

## I. Overview of Solar Farms Development in North Carolina

Across the nation the number of solar installations has dramatically increased over the last few years as changes in technology and the economy made these solar farms more feasible. The charts below show how this market has grown and is expected to continue to grow from 2010 to 2017, the drop off in 2017 is expected due to the expiration of tax credits for solar installations. The U.S. Solar Market Insight Reports for 2010 and 2011 which is put out by the Solar Energy Industries Association note that 2010 was a “breakout” year for solar energy. The continued boom of solar power is shown in the steady growth. North Carolina was ranked as having the second most active photovoltaic installed capacity in 2014.



As shown in the charts above, North Carolina ranked second in installed solar energy in 2014. North Carolina ranked fifth in cumulative installed solar energy in the United States.

## **II. Market Analysis of the Impact on Value from Solar Farms**

I have researched a number of solar farms in North Carolina to determine the impact of these facilities on the value of adjoining property. I have provided a breakdown of the adjoining uses to show what adjoining uses are typical for solar farms and what uses would likely be considered consistent with a solar farm use. This breakdown is included in the Harmony of Use section of this report.

I also conducted a series of matched pair analyses. A matched pair analysis considers two similar properties with only one difference of note to determine whether or not that difference has any impact on value. Within the appraisal profession, matched pair analysis is a well-recognized method of measuring impact on value. In this case, I have considered residential properties adjoining a solar farm versus similar residential properties that do not adjoin a solar farm. I have also considered matched pairs of vacant residential and agricultural land.

As outlined in the discussion of each matched pair, I concluded from the data and my analysis that there has been no impact on sale price for residential, agricultural, or vacant residential land that adjoins the existing solar farms included in my study.

**1. Matched Pair – AM Best Solar Farm, Goldsboro, NC**

This solar farm adjoins Spring Garden Subdivision which had new homes and lots available for new construction during the approval and construction of the solar farm. The recent home sales have ranged from \$200,000 to \$250,000. This subdivision sold out the last homes in late 2014. The solar farm is clearly visible particularly along the north end of this street where there is only a thin line of trees separating the solar farm from the single-family homes.



Homes backing up to the solar farm are selling at the same price for the same floor plan as the homes that do not back up to the solar farm in this subdivision. According to the builder, the solar farm has been a complete non-factor. Not only do the sales show no difference in the price paid for the various homes adjoining the solar farm versus not adjoining the solar farm, but there are actually more recent sales along the solar farm than not. There is no impact on the sellout rate, or time to sell for the homes adjoining the solar farm.

I spoke with a number of owners who adjoin the solar farm and none of them expressed any concern over the solar farm impacting their property value.

The data presented on the following page shows multiple homes that have sold in 2013 and 2014 adjoining the solar farm at prices similar to those not along the solar farm. These series of sales indicate that the solar farm has no impact on the adjoining residential use.

The homes that were marketed at Spring Garden are shown below.

	<p><b>Americana</b> SqFt: 3,194 Bed / Bath: 3 / 3.5</p>	Price: \$237,900	<a href="#">View Now »</a>		<p><b>Washington</b> SqFt: 3,292 Bed / Bath: 4 / 3.5</p>	Price: \$244,900	<a href="#">View Now »</a>
	<p><b>Presidential</b> SqFt: 3,400 Bed / Bath: 5 / 3.5</p>	Price: \$247,900	<a href="#">View Now »</a>		<p><b>Kennedy</b> SqFt: 3,494 Bed / Bath: 5 / 3</p>	Price: \$249,900	<a href="#">View Now »</a>
	<p><b>Virginia</b> SqFt: 3,449 Bed / Bath: 5 / 3</p>	Price: \$259,900	<a href="#">View Now »</a>				

**AM Best Solar Farm, Goldsboro, NC****Matched Pairs**

As of Date: 9/3/2014

**Adjoining Sales After Solar Farm Completed**

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600195570	Helm	0.76	Sep-13	\$250,000	2013	3,292	\$75.94	2 Story
3600195361	Leak	1.49	Sep-13	\$260,000	2013	3,652	\$71.19	2 Story
3600199891	McBrayer	2.24	Jul-14	\$250,000	2014	3,292	\$75.94	2 Story
3600198632	Foresman	1.13	Aug-14	\$253,000	2014	3,400	\$74.41	2 Story
3600196656	Hinson	0.75	Dec-13	\$255,000	2013	3,453	\$73.85	2 Story
	Average	1.27		\$253,600	2013.4	3,418	\$74.27	
	Median	1.13		\$253,000	2013	3,400	\$74.41	

**Adjoining Sales After Solar Farm Announced**

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
0	Feddersen	1.56	Feb-13	\$247,000	2012	3,427	\$72.07	Ranch
0	Gentry	1.42	Apr-13	\$245,000	2013	3,400	\$72.06	2 Story
	Average	1.49		\$246,000	2012.5	3,414	\$72.07	
	Median	1.49		\$246,000	2012.5	3,414	\$72.07	

**Adjoining Sales Before Solar Farm Announced**

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600183905	Carter	1.57	Dec-12	\$240,000	2012	3,347	\$71.71	1.5 Story
3600193097	Kelly	1.61	Sep-12	\$198,000	2012	2,532	\$78.20	2 Story
3600194189	Hadwan	1.55	Nov-12	\$240,000	2012	3,433	\$69.91	1.5 Story
	Average	1.59		\$219,000	2012	2,940	\$74.95	
	Median	1.59		\$219,000	2012	2,940	\$74.95	

**Nearby Sales After Solar Farm Completed**

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600193710	Barnes	1.12	Oct-13	\$248,000	2013	3,400	\$72.94	2 Story
3601105180	Nackley	0.95	Dec-13	\$253,000	2013	3,400	\$74.41	2 Story
3600192528	Mattheis	1.12	Oct-13	\$238,000	2013	3,194	\$74.51	2 Story
3600198928	Beckman	0.93	Mar-14	\$250,000	2014	3,292	\$75.94	2 Story
3600196965	Hough	0.81	Jun-14	\$224,000	2014	2,434	\$92.03	2 Story
3600193914	Preskitt	0.67	Jun-14	\$242,000	2014	2,825	\$85.66	2 Story
3600194813	Bordner	0.91	Apr-14	\$258,000	2014	3,511	\$73.48	2 Story
3601104147	Shaffer	0.73	Apr-14	\$255,000	2014	3,453	\$73.85	2 Story
	Average	0.91		\$246,000	2013.625	3,189	\$77.85	
	Median	0.92		\$249,000	2014	3,346	\$74.46	

**Nearby Sales Before Solar Farm Announced**

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600191437	Thomas	1.12	Sep-12	\$225,000	2012	3,276	\$68.68	2 Story
3600087968	Lilley	1.15	Jan-13	\$238,000	2012	3,421	\$69.57	1.5 Story
3600087654	Burke	1.26	Sep-12	\$240,000	2012	3,543	\$67.74	2 Story
3600088796	Hobbs	0.73	Sep-12	\$228,000	2012	3,254	\$70.07	2 Story
	Average	1.07		\$232,750	2012	3,374	\$69.01	
	Median	1.14		\$233,000	2012	3,349	\$69.13	

**Matched Pair Summary**

	<b>Adjoins Solar Farm</b>		<b>Nearby Solar Farm</b>	
	<b>Average</b>	<b>Median</b>	<b>Average</b>	<b>Median</b>
Sales Price	\$253,600	\$253,000	\$246,000	\$249,000
Year Built	2013	2013	2014	2014
Size	3,418	3,400	3,189	3,346
Price/SF	\$74.27	\$74.41	\$77.85	\$74.46

**Percentage Differences**

Median Price	-2%
Median Size	-2%
Median Price/SF	0%

I note that 2308 Granville Drive sold again in November 2015 for \$267,500, or \$7,500 more than when it was purchased new from the builder two years earlier (Tax ID 3600195361, Owner: Leak). The neighborhood is clearly showing appreciation for homes adjoining the solar farm.

The Median Price is the best indicator to follow in any analysis as it avoids outlying samples that would otherwise skew the results. The median sizes and median prices are all consistent throughout the sales both before and after the solar farm whether you look at sites adjoining or nearby to the solar farm. The average for the homes nearby the solar farm shows a smaller building size and a higher price per square foot. This reflects a common occurrence in real estate where the price per square foot goes up as the size goes down. This is similar to the discount you see in any market where there is a discount for buying larger volumes. So when you buy a 2 liter coke you pay less per ounce than if you buy a 16 oz. coke. So even comparing averages the indication is for no impact, but I rely on the median rates as the most reliable indication for any such analysis.

**AM Best Solar Farm, Goldsboro, NC**



View of home in Spring Garden with solar farm located through the trees and panels – photo taken on 9/23/15.



View from vacant lot at Spring Garden with solar farm panels visible through trees taken in the winter of 2014 prior to home construction. This is the same lot as the photo above.

## **2. Matched Pair – White Cross Solar Farm, Chapel Hill, NC**

A new solar farm was built at 2159 White Cross Road in Chapel Hill, Orange County in 2013. After construction, the owner of the underlying land sold the balance of the tract not encumbered by the solar farm in July 2013 for \$265,000 for 47.20 acres, or \$5,606 per acre. This land adjoins the solar farm to the south and was clear cut of timber around 10 years ago. I compared this purchase to a nearby transfer of 59.09 acres of timber land just south along White Cross Road that sold in November 2010 for \$361,000, or \$6,109 per acre. After purchase, this land was divided into three mini farm tracts of 12 to 20 acres each. These rates are very similar and the difference in price per acre is attributed to the timber value and not any impact of the solar farm.

<b>Type</b>	<b>TAX ID</b>	<b>Owner</b>	<b>Acres</b>	<b>Date</b>	<b>Price</b>	<b>\$/Acre</b>	<b>Notes</b>	<b>Conf By</b>
Adjoins Solar	9748336770	Haggerty	47.20	Jul-13	\$265,000	\$5,614	Clear cut	Betty Cross, broker
Not Near Solar	9747184527	Purcell	59.09	Nov-10	\$361,000	\$6,109	Wooded	Dickie Andrews, broker

The difference in price is attributed to the trees on the older sale.

No impact noted for the adjacency to a solar farm according to the broker.

I looked at a number of other nearby land sales without proximity to a solar farm for this matched pair, but this land sale required the least allowance for differences in size, utility and location.

### **Matched Pair Summary**

	<b>Adjoins Solar Farm</b>		<b>Nearby Solar Farm</b>	
	<b>Average</b>	<b>Median</b>	<b>Average</b>	<b>Median</b>
Sales Price	\$5,614	\$5,614	\$6,109	\$6,109
Adjustment for Timber	\$500	\$500		
Adjusted	\$6,114	\$6,114	\$6,109	\$6,109
Tract Size	47.20	47.20	59.09	59.09

### **Percentage Differences**

Median Price Per Acre	0%
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This matched pair again supports the conclusion that adjacency to a solar farm has no impact on adjoining residential/agricultural land.

## **3. Matched Pair – Wagstaff Farm, Roxboro, NC**

This solar farm is located at the northeast corner of a 594-acre farm with approximately 30 acres of solar farm area. This solar farm was approved and constructed in 2013.

After approval, 18.82 acres were sold out of the parent tract to an adjoining owner to the south. This sale was at a similar price to nearby land to the east that sold in the same time from for the same price per acre as shown below.

<b>Type</b>	<b>TAX ID</b>	<b>Owner</b>	<b>Acres</b>	<b>Present Use</b>	<b>Date Sold</b>	<b>Price</b>	<b>\$/AC</b>
Adjoins Solar	0918-17-11-7960	Piedmont	18.82	Agricultural	8/19/2013	\$164,000	\$8,714
Not Near Solar	0918-00-75-9812 et al	Blackwell	14.88	Agricultural	12/27/2013	\$130,000	\$8,739

**Matched Pair Summary**

	<b>Adjoins Solar Farm</b>		<b>Nearby Solar Farm</b>	
	<b>Average</b>	<b>Median</b>	<b>Average</b>	<b>Median</b>
Sales Price	\$8,714	\$8,714	\$8,739	\$8,739
Tract Size	18.82	18.82	14.88	14.88

**Percentage Differences**

Median Price Per Acre 0%

This matched pair again supports the conclusion that adjacency to a solar farm has no impact on adjoining residential/agricultural land.

**4. Matched Pair – Mulberry, Selmer, TN**

This solar farm adjoins two subdivisions with Central Hills having a mix of existing and new construction homes. Lots in this development have been marketed for \$15,000 each with discounts offered for multiple lots being used for a single home site. I spoke with the agent with Rhonda Wheeler and Becky Hearnberger with United County Farm & Home Realty who noted that they have seen no impact on lot or home sales due to the solar farm in this community.

I have included a map below as well as data on recent sales activity on lots that adjoin the solar farm or are near the solar farm in this subdivision both before and after the announced plan for this solar farm facility. I note that using the same method I used to breakdown the adjoining uses at the subject property I show that the predominant adjoining uses are residential and agricultural, which is consistent with the location of most solar farms.



**Adjoining Use Breakdown**

	<b>Acreage</b>	<b>Parcels</b>
Commercial	3.40%	0.034
Residential	12.84%	79.31%
Agri/Res	10.39%	3.45%
Agricultural	73.37%	13.79%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

From the above map, I identified four recent sales of homes that occurred adjoining the solar farm both before and after the announcement of the solar farm. I have adjusted each of these for differences in size and age in order to compare these sales among themselves. As shown below after adjustment, the median value is \$130,776 and the sales prices are consistent with one outlier which is also the least comparable home considered. The close grouping and the similar price per point overall as well as the similar price per square foot both before and after the solar farm.

**Matched Pairs**

#	TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	\$/GBA	Style	Parking
6&7	0900 A 011.00	Henson	Jul-14	\$130,000	2.65	2007	1,511	\$86.04	1 Story	2 Garage
12	0900 A 003.00	Amerson	Aug-12	\$130,000	1.20	2011	1,586	\$81.97	1 Story	2 Garage
15	099C A 003.00	Smallwood	May-12	\$149,900	1.00	2002	1,596	\$93.92	1 Story	4 Garage
16	099C A 002.00	Hessing	Jun-15	\$130,000	1.00	1999	1,782	\$72.95	1 Story	2 Garage
		Average		\$134,975	1.46	2005	1,619	\$83.72		
		Median		\$130,000	1.10	2005	1,591	\$84.00		

**Adjustments\***

#	TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	Style	Parking	Total
6&7	0900 A 011.00	Henson	Jul-14	\$130,000	-\$7,500	\$2,600	\$6,453	\$0	\$0	\$131,553
12	0900 A 003.00	Amerson	Aug-12	\$130,000	\$0	\$0	\$0	\$0	\$0	\$130,000
15	099C A 003.00	Smallwood	May-12	\$149,900	\$0	\$6,746	-\$939	\$0	-\$15,000	\$140,706
16	099C A 002.00	Hessing	Jun-15	\$130,000	\$0	\$7,800	-\$14,299	\$0	\$0	\$123,501
		Average		\$134,975	-\$1,875	\$4,286	-\$2,196	\$0	-\$3,750	\$131,440
		Median		\$130,000	\$0	\$4,673	-\$470	\$0	\$0	\$130,776

\* I adjusted all of the comparables to a base line 2011 Year Built and 1,586 s.f. based on Lot 12

I also considered a number of similar home sales nearby that were both before and after the solar farm was announced as shown below. These homes are generally newer in construction and include a number of larger homes but show a very similar price point per square foot.

**Nearby Sales Before Solar Farm Announced**

TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	\$/GBA	Style	Parking
099B A 019	Durrance	Sep-12	\$165,000	1.00	2012	2,079	\$79.37	1 Story	2 Garage
099B A 021	Berryman	Apr-12	\$212,000	2.73	2007	2,045	\$103.67	1 Story	2 Garage
090O A 060	Nichols	Feb-13	\$165,000	1.03	2012	1,966	\$83.93	1 Story	2 Garage
	Average		\$180,667	1.59	2010	2,030	\$88.99		
	Median		\$165,000	1.03	2012	2,045	\$83.93		

**Nearby Sales After Solar Farm Announced**

TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	\$/GBA	Style	Parking
090N A 040	Carrithers	Mar-15	\$120,000	1.00	2010	1,626	\$73.80	1 Story	2 Garage
099C A 043	Cherry	Feb-15	\$148,900	2.34	2008	1,585	\$93.94	1 Story	2 Garage
	Average		\$134,450	1.67	2009	1,606	\$83.87		
	Median		\$134,450	1.67	2009	1,606	\$83.87		

I then adjusted these nearby sales using the same criteria as the adjoining sales to derive the following breakdown of adjusted values based on a 2011 year built 1,586 square foot home. The adjusted values are consistent with a median rate of \$128,665, which is actually lower than the values for the homes that back up to the solar farm.

Nearby Sales Adjusted				Adjustments*					
TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	Style	Parking	Total
099B A 019	Durrance	Sep-12	\$165,000	\$0	-\$825	-\$39,127	\$0	\$0	\$125,048
099B A 021	Berryman	Apr-12	\$212,000	-\$7,500	\$4,240	-\$47,583	\$0	\$0	\$161,157
090O A 060	Nichols	Feb-13	\$165,000	\$0	-\$825	-\$31,892	\$0	\$0	\$132,283
090N A 040	Carrithers	Mar-15	\$120,000	\$0	\$600	-\$2,952	\$0	\$0	\$117,648
099C A 043	Cherry	Feb-15	\$148,900	-\$7,500	\$2,234	\$94	\$0	\$0	\$143,727
	Average		\$165,500	-\$1,875	\$798	-\$30,389	\$0	\$0	\$134,034
	Median		\$165,000	\$0	-\$113	-\$35,510	\$0	\$0	\$128,665

\* I adjusted all of the comparables to a base line 2011 Year Built and 1,586 s.f. based on Lot 12

If you consider just the 2015 nearby sales, the range is \$117,648 to \$143,727 with a median of \$130,688. If you consider the recent adjoining sales the range is \$123,501 to \$131,553 with a median of \$127,527.

This difference is less than 3% in the median and well below the standard deviation in the sales. The entire range of the adjoining sales prices is overlapped by the range from the nearby sales. These are consistent data sets and summarized below.

#### Matched Pair Summary

	Adjoins Solar Farm		Nearby After Solar Farm	
	Average	Median	Average	Median
Sales Price	\$134,975	\$130,000	\$134,450	\$134,450
Year Built	2005	2005	2009	2009
Size	1,619	1,591	1,606	1,606
Price/SF	\$83.72	\$84.00	\$83.87	\$83.87

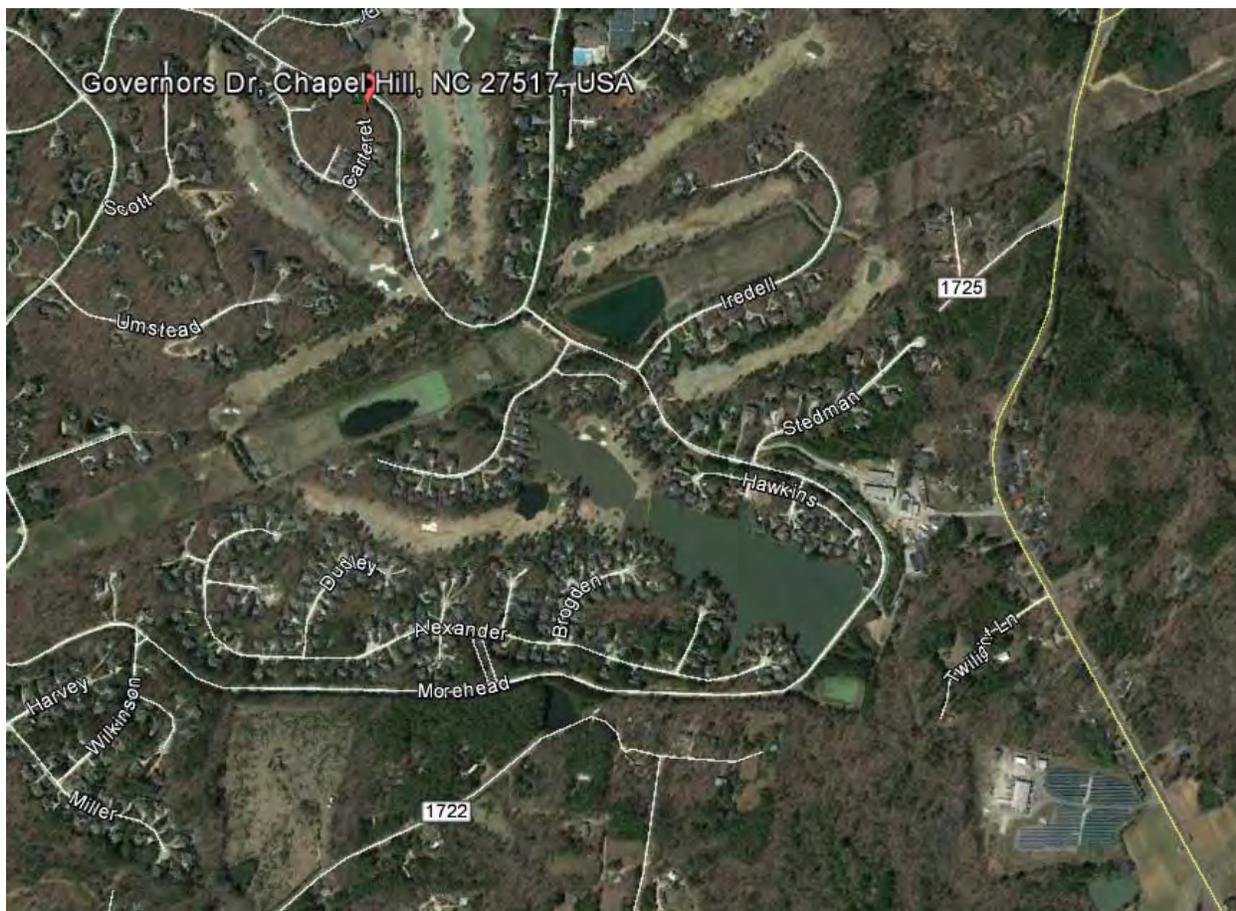
#### Percentage Differences

Median Price	3%
Median Size	1%
Median Price/SF	0%

Based on the data presented above, I find that the price per square foot for finished homes are not being impacted negatively by the presence of the solar farm. The difference in pricing in homes in the neighborhood is accounted for by differences in size, building age, and lot size. The median price for a home after those factors are adjusted for are consistent throughout this subdivision and show no impact due to the proximity of the solar farm. This is consistent with the comments from the broker I spoke with for this subdivision as well.

### III. Harmony of Use/Compatibility

I have visited over 170 solar farms and sites on which solar farms are proposed in North Carolina to determine what uses are compatible with a solar farm. The data I have collected and provide in this report strongly supports the compatibility of solar farms with adjoining agricultural and residential uses. While I have focused on adjoining uses, I note that there are many examples of solar farms being located within a quarter mile of residential developments, including such notable developments as Governor's Club in Chapel Hill, which has a solar farm within a quarter mile as you can see on the following aerial map. Governor's Club is a gated golf community with homes selling for \$300,000 to over \$2 million.



The subdivisions included in the matched pair analysis also show an acceptance of residential uses adjoining solar farms as a harmonious use.

Beyond these anecdotal references, I have quantified the adjoining uses for a number of solar farm comparables to derive a breakdown of the adjoining uses for each solar farm. The chart below shows the breakdown of adjoining or abutting uses by total acreage. While most of these solar farms were located in North Carolina, the breakdown of adjoining uses is very similar to that shown for Oregon as shown earlier in this report.

### Percentage By Adjoining Acreage

Total Solar Farms Reviewed	173							All Res	All Comm
	Res	Ag	Res/AG	Park	Sub	Comm	Ind	Uses	Uses
Average	13%	57%	22%	1%	0%	0%	5%	94%	5%
Median	6%	63%	7%	0%	0%	0%	0%	100%	0%

Res = Residential, Ag = Agriculture, Sub = Substation, Com = Commercial, Ind = Industrial.

I have also included a breakdown of each solar farm by number of adjoining parcels rather than acreage. Using both factors provides a more complete picture of the neighboring properties.

### Percentage By Total Number of Adjoining Parcels

Total Solar Farms Reviewed	173							All Res	All Comm
	Res	Ag	Res/AG	Park	Sub	Comm	Ind	Uses	Uses
Average	58%	27%	9%	0%	0%	2%	4%	94%	5%
Median	63%	25%	4%	0%	0%	0%	0%	100%	0%

Res = Residential, Ag = Agriculture, Sub = Substation, Com = Commercial, Ind = Industrial.

Both of the above charts show a marked residential and agricultural adjoining use for most solar farms. Every single solar farm considered included an adjoining residential use except for one, which included an adjoining residential/agricultural use. These comparable solar farms clearly support a compatibility with adjoining residential uses along with agricultural uses.

## IV. Specific Factors on Harmony of Use

I have completed a number of Impact Studies related to a variety of uses and I have found that the most common areas for impact on adjoining values typically follow the following hierarchy with descending levels of potential impact. I will discuss each of these categories and how they relate to a solar farm.

1. Hazardous material
2. Odor
3. Noise
4. Traffic
5. Stigma
6. Appearance

### 1. Hazardous material

The solar farm presents no potential hazardous waste byproduct as part of normal operation. Any fertilizer, weed control, vehicular traffic, or construction will be significantly less than typically applied in a residential development or even most agricultural uses.

The various solar farms that I have inspected and identified in the addenda have no known pending environmental impacts associated with the development and operation.

### 2. Odor

The various solar farms that I have inspected produced no noticeable odor.

### 3. Noise

These are passive solar panels with no associated noise beyond a barely audible sound during daylight hours. The transformer reportedly has a hum similar to a fluorescent light in an office building that can only be heard in close proximity to this transformer and the buffers on the property are sufficient to make emitted sounds inaudible from the adjoining properties. No sound is emitted from the facility at night.

The various solar farms that I have inspected were inaudible from the roadways. I heard nothing on any of these sites associated with the solar farm.

### 4. Traffic

The solar farm will have no onsite employee's or staff. The site requires only minimal maintenance. Relative to other potential uses of the site (such as a residential subdivision), the additional traffic generated by a solar farm use on this site is insignificant.

### 5. Stigma

There is no stigma associated with solar farms and solar farms and people generally respond favorably towards such a use. While an individual may express concerns about proximity to a solar farm, there is no specific stigma associated with a solar farm. Stigma generally refers to things such as adult establishments, prisons, rehabilitation facilities, and so forth.

Solar panels have no associated stigma and in smaller collections are found in yards and roofs in many residential communities. Solar panels on a roof are often cited as an enhancement to the property in marketing brochures.

I see no basis for an impact from stigma due to a solar farm.

### 6. Appearance

Larger solar farms using fixed panels are a passive use of the land that is considered in keeping with a rural/residential area. As shown below, solar farms are comparable to larger greenhouses. This is not surprising given that a greenhouse is essentially another method for collecting passive solar energy. The greenhouse use is well received in residential/rural areas and has a similar visual impact as a solar farm.





The fixed solar panels are all less than 15 feet high, which means that the visual impact of the solar panels will be similar in height to a typical greenhouse and lower than a single story residential dwelling. Were the subject property developed with single family housing, it would have a much greater visual impact on the surrounding area given that a two-story home with attic could be three to four times as high as these proposed panels. The panels will be located behind a chain link fence.

## **7. Conclusion**

On the basis of the factors described above, it is my professional opinion that the proposed solar farm will be in harmony with the area in which it is to be developed. The breakdown of adjoining uses is similar to the other solar farms tracked.

## **V. Market Commentary**

I have surveyed a number of builders, developers and investors regarding solar farms over the last year. I have received favorable feedback from a variety of sources; below are excerpts from my conversations with different clients or other real estate professionals.

I spoke with Betty Cross with Keller Williams Realty in Chapel Hill, who sold the tract of land adjoining the White Cross Road solar farm. She indicated that the solar farm was not considered a negative factor in marketing the property and that it had no impact on the final price paid for the land.

I spoke with Lynn Hayes a broker with Berkshire Hathaway who sold a home at the entrance to Pickards Mountain where the home exits onto the Pickard Mountain Eco Institute's small solar farm. This property is located in rural Orange County west of Chapel Hill. This home closed in January 2014 for \$735,000. According to Ms. Hayes the buyer was excited to be living near the Eco Institute and considered the solar farm to be a positive sign for the area. There are currently a number of 10 acre plus lots in Pickards Meadow behind this house with lots on the market for \$200,000 to \$250,000.

A new solar farm was built on Zion Church Road, Hickory at the Two Lines Solar Farm on the Punch property. After construction of the solar farm in 2013, an adjoining tract of land with 88.18 acres sold for \$250,000, or \$2,835 per acre. This was a highly irregular tract of land with significant tree cover between it and the solar farm. I have compared this to a current listing of 20.39 acres of land that is located southeast just a little ways from this solar farm. This land is on the market for \$69,000, or \$3,428 per acre. Generally, a smaller tract of land would be listed for more per acre. Considering a size adjustment of 5% per doubling in size, and a 10% discount for the likely drop in the closed price off of the asking price, I derive an indicated value per acre of the smaller tract of \$2,777 per acre. This is very similar to the recently closed sale adjoining the solar farm, which further supports the matched pair analysis earlier in this report.

Rex Vick with Windjam Developers has a subdivision in Chatham County off Mt. Gilead Church Road known as The Hamptons. Home prices in The Hamptons start at \$600,000 with homes over \$1,000,000. Mr. Vick expressed interest in the possibility of including a solar farm section to the development as a possible additional marketing tool for the project.

Mr. Eddie Bacon, out of Apex North Carolina, has inherited a sizeable amount of family and agricultural land, and he has expressed interest in using a solar farm as a method of preserving the land for his children and grandchildren while still deriving a useful income from the property. He believes that solar panels would not in any way diminish the value for this adjoining land.

I spoke with Carolyn Craig, a Realtor in Kinston, North Carolina who is familiar with the Strata Solar Farms in the area. She noted that a solar farm in the area would be positive: "A solar farm is color coordinated and looks nice." "A solar farm is better than a turkey farm," which is allowed in that area. She would not expect a solar farm will have any impact on adjoining home prices in the area.

Mr. Michael Edwards, a broker and developer in Raleigh, indicated that a passive solar farm would be a great enhancement to adjoining property: "You never know what might be put on that land next door. There is no noise with a solar farm like there is with a new subdivision."

These are just excerpts I've noted in my conversations with different clients or other real estate participants that provided other thoughts on the subject that seemed applicable.

## **VI. Conclusion**

The matched pair analysis shows no impact in home values due to the adjacency to the solar farm as well as no impact to adjacent vacant residential or agricultural land. The criteria for making downward adjustments on property values such as appearance, noise, odor, and traffic all indicate that a solar farm is a compatible use for rural/residential transition areas.

Similar solar farms have been approved adjoining agricultural uses, schools and residential developments. Industrial uses rarely absorb negative impacts from adjoining uses. The adjoining residential uses to other solar farms have included single family homes up to \$260,000 on lots as small as 0.74 acres. The solar farm at the Pickards Mountain Eco Institute adjoins a home that sold in January 2014 for \$735,000 and in proximity to lots being sold for \$200,000 to \$250,000 for homes over a million dollars.

Based on the data and analysis in this report, it is my professional opinion that the solar farm proposed at the subject property will maintain or enhance the value of adjoining or abutting property and that the proposed use is in harmony with the area in which it is located.

If you have any further questions please call me any time.

Sincerely,




Richard C. Kirkland, Jr., MAI  
State Certified General Appraiser

### ***Limiting Conditions and Assumptions***

Acceptance of and/or use of this report constitutes acceptance of the following limiting conditions and assumptions; these can only be modified by written documents executed by both parties.

- ❖ The basic limitation of this and any appraisal is that the appraisal is an opinion of value, and is, therefore, not a guarantee that the property would sell at exactly the appraised value. The market price may differ from the market value, depending upon the motivation and knowledge of the buyer and/or seller, and may, therefore, be higher or lower than the market value. The market value, as defined herein, is an opinion of the probable price that is obtainable in a market free of abnormal influences.
- ❖ I do not assume any responsibility for the legal description provided or for matters pertaining to legal or title considerations. I assume that the title to the property is good and marketable unless otherwise stated.
- ❖ I am appraising the property as though free and clear of any and all liens or encumbrances unless otherwise stated.
- ❖ I assume that the property is under responsible ownership and competent property management.
- ❖ I believe the information furnished by others is reliable, but I give no warranty for its accuracy.
- ❖ I have made no survey or engineering study of the property and assume no responsibility for such matters. All engineering studies prepared by others are assumed to be correct. The plot plans, surveys, sketches and any other illustrative material in this report are included only to help the reader visualize the property. The illustrative material should not be considered to be scaled accurately for size.
- ❖ I assume that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. I take no responsibility for such conditions or for obtaining the engineering studies that may be required to discover them.
- ❖ I assume that the property is in full compliance with all applicable federal, state, and local laws, including environmental regulations, unless the lack of compliance is stated, described, and considered in this appraisal report.
- ❖ I assume that the property conforms to all applicable zoning and use regulations and restrictions unless nonconformity has been identified, described and considered in this appraisal report.
- ❖ I assume that all required licenses, certificates of occupancy, consents, and other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.
- ❖ I assume that the use of the land and improvements is confined within the boundaries or property lines of the property described and that there is no encroachment or trespass unless noted in this report.
- ❖ I am not qualified to detect the presence of floodplain or wetlands. Any information presented in this report related to these characteristics is for this analysis only. The presence of floodplain or wetlands may affect the value of the property. If the presence of floodplain or wetlands is suspected the property owner would be advised to seek professional engineering assistance.
- ❖ For this appraisal, I assume that no hazardous substances or conditions are present in or on the property. Such substances or conditions could include but are not limited to asbestos, urea-formaldehyde foam insulation, polychlorinated biphenyls (PCBs), petroleum leakage or underground storage tanks, electromagnetic fields, or agricultural chemicals. I have no knowledge of any such materials or conditions unless otherwise stated. I make no claim of technical knowledge with regard to testing for or identifying such hazardous materials or conditions. The presence of such materials, substances or conditions could affect the value of the property. However, the values estimated in this report are predicated on the assumption that there are no such materials or conditions in, on or in close enough proximity to the property to cause a loss in value. The client is urged to retain an expert in this field, if desired.
- ❖ Unless otherwise stated in this report the subject property is appraised without a specific compliance survey having been conducted to determine if the property is or is not in conformance with the requirements of the

Americans with Disabilities Act (effective 1/26/92). The presence of architectural and/or communications barriers that are structural in nature that would restrict access by disabled individuals may adversely affect the property's value, marketability, or utility.

- ❖ Any allocation of the total value estimated in this report between the land and the improvements applies only under the stated program of utilization. The separate values allocated to the land and buildings must not be used in conjunction with any other appraisal and are invalid if so used.
- ❖ Possession of this report, or a copy thereof, does not carry with it the right of publication.
- ❖ I have no obligation, by reason of this appraisal, to give further consultation or testimony or to be in attendance in court with reference to the property in question unless further arrangements have been made regarding compensation to Kirkland Appraisals, LLC.
- ❖ Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraiser, or the firm with which the appraiser is connected) shall be disseminated to the public through advertising, public relations, news, sales, or other media without the prior written consent and approval of Kirkland Appraisals, LLC, and then only with proper qualifications.
- ❖ Any value estimates provided in this report apply to the entire property, and any proration or division of the total into fractional interests will invalidate the value estimate, unless such proration or division of interests has been set forth in the report.
- ❖ Any income and expenses estimated in this report are for the purposes of this analysis only and should not be considered predictions of future operating results.
- ❖ This report is not intended to include an estimate of any personal property contained in or on the property, unless otherwise stated.
- ❖ This report is subject to the Code of Professional Ethics of the Appraisal Institute and complies with the requirements of the State of North Carolina for State Certified General Appraisers. This report is subject to the certification, definitions, and assumptions and limiting conditions set forth herein.
- ❖ The analyses, opinions and conclusions were developed based on, and this report has been prepared in conformance with, our interpretation of the guidelines and recommendations set forth in the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA).
- ❖ This is a Real Property Appraisal Consulting Assignment.

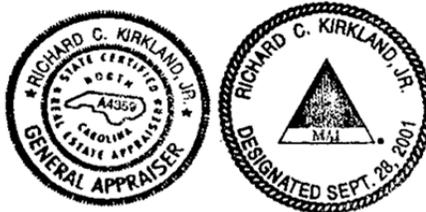
## **Certification – Richard C. Kirkland, Jr., MAI**

I certify that, to the best of my knowledge and belief:

1. The statements of fact contained in this report are true and correct;
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions;
3. I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved;
4. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment;
5. My engagement in this assignment was not contingent upon developing or reporting predetermined results;
6. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of the appraisal;
7. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute;
8. The reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives;
10. I have not made a personal inspection of the property that is the subject of this report, and;
11. No one provided significant real property appraisal assistance to the person signing this certification.
12. As of the date of this report I have completed the requirements of the continuing education program of the Appraisal Institute;
13. I have not appraised this property within the last three years.

Disclosure of the contents of this appraisal report is governed by the bylaws and regulations of the Appraisal Institute and the National Association of Realtors.

Neither all nor any part of the contents of this appraisal report shall be disseminated to the public through advertising media, public relations media, news media, or any other public means of communications without the prior written consent and approval of the undersigned.

Richard C. Kirkland, Jr., MAI  
State Certified General Appraiser



# Kirkland Appraisals, LLC

Richard C. Kirkland, Jr., MAI  
9408 Northfield Court  
Raleigh, North Carolina 27603  
Mobile (919) 414-8142  
[rkirkland2@gmail.com](mailto:rkirkland2@gmail.com)  
[www.kirklandappraisals.com](http://www.kirklandappraisals.com)

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## **PROFESSIONAL EXPERIENCE**

<b>Kirkland Appraisals, LLC</b> , Raleigh, N.C. Commercial appraiser	2003 – Present
<b>Hester &amp; Company</b> , Raleigh, N.C. Commercial appraiser	1996 – 2003

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## **PROFESSIONAL AFFILIATIONS**

<b>MAI</b> (Member, Appraisal Institute) designation #11796	2001
<b>NC State Certified General Appraiser</b> # A4359	1999
<b>VA State Certified General Appraiser</b> # 4001017291	
<b>OR State Certified General Appraiser</b> # C001204	
<b>SC State Certified General Appraiser</b> # 6209	

## **EDUCATION**

<b>Bachelor of Arts in English</b> , University of North Carolina, Chapel Hill	1993
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## **CONTINUING EDUCATION**

Uniform Standards of Professional Appraisal Practice Update	2016
Forecasting Revenue	2015
Wind Turbine Effect on Value	2015
Supervisor/Trainee Class	2015
Business Practices and Ethics	2014
Subdivision Valuation	2014
Uniform Standards of Professional Appraisal Practice Update	2014
Introduction to Vineyard and Winery Valuation	2013
Appraising Rural Residential Properties	2012
Uniform Standards of Professional Appraisal Practice Update	2012
Supervisors/Trainees	2011
Rates and Ratios: Making sense of GIMs, OARs, and DCFs	2011
Advanced Internet Search Strategies	2011
Analyzing Distressed Real Estate	2011
Uniform Standards of Professional Appraisal Practice Update	2011
Business Practices and Ethics	2011
Appraisal Curriculum Overview (2 Days – General)	2009
Appraisal Review - General	2009
Uniform Standards of Professional Appraisal Practice Update	2008
Subdivision Valuation: A Comprehensive Guide	2008
Office Building Valuation: A Contemporary Perspective	2008
Valuation of Detrimental Conditions in Real Estate	2007
The Appraisal of Small Subdivisions	2007
Uniform Standards of Professional Appraisal Practice Update	2006
Evaluating Commercial Construction	2005

Conservation Easements	2005
Uniform Standards of Professional Appraisal Practice Update	2004
Condemnation Appraising	2004
Land Valuation Adjustment Procedures	2004
Supporting Capitalization Rates	2004
Uniform Standards of Professional Appraisal Practice, C	2002
Wells and Septic Systems and Wastewater Irrigation Systems	2002
Appraisals 2002	2002
Analyzing Commercial Lease Clauses	2002
Conservation Easements	2000
Preparation for Litigation	2000
Appraisal of Nonconforming Uses	2000
Advanced Applications	2000
Highest and Best Use and Market Analysis	1999
Advanced Sales Comparison and Cost Approaches	1999
Advanced Income Capitalization	1998
Valuation of Detrimental Conditions in Real Estate	1999
Report Writing and Valuation Analysis	1999
Property Tax Values and Appeals	1997
Uniform Standards of Professional Appraisal Practice, A & B	1997
Basic Income Capitalization	1996

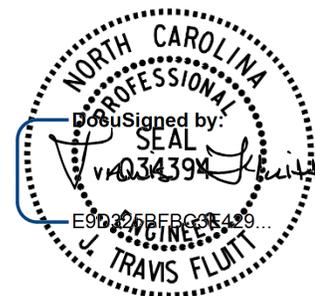
## MEMORANDUM

To: Kyle Campbell, ESA Renewables

From: Travis Fluitt, P.E.  
Kimley-Horn and Associates, Inc.

Date: April 26, 2016

Subject: Oakwood Solar Farm – Trip Generation



4/26/2016

Kimley-Horn has reviewed the trip generation potential of the proposed Oakwood solar farm located on US 70 in Mebane, NC. The ITE Trip Generation Manual does not provide trip generation rates for solar farms. Therefore, the trip generation was estimated based on the anticipated number of employees both during construction and a full build-out.

During construction it is estimated that a maximum of 40 workers will be on site each day. Though some workers will carpool, as a worst case it is assumed that all workers arrive individually in the AM peak hour and depart individually in the PM peak hour. There are also anticipated to be approximately 8 truck deliveries per day during construction with only 1 vehicle on-site at any given time. As a worst case, it is assumed that 2 trucks enter and exit during each peak hour. Therefore, it is anticipated that in a worst case condition, there will be approximately 42 entering trips and 2 exiting trips in the AM peak hour and 2 entering trips and 42 exiting trips in the PM peak hour.

Upon completion the site will have no full-time staff. There will be 1-2 employees that will service this site once every several months. The result is that this site is expected to generate less than 1 trip per day on average. Table 1 below summarizes the anticipated trip generation of the site.

Scenario	Daily		AM Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
Construction	<100	<100	42	2	2	42
Build-out	<1	<1	<1	<1	<1	<1

Please feel free to contact me at 919-653-2948 or [travis.fluitt@kimley-horn.com](mailto:travis.fluitt@kimley-horn.com) with any question or comments.

**Buffer: 1000 Feet on Search Results (1)**

Name
Buffer 1

=====

Buffer selection in Parcels (Table)

PIN	OWNER1_LAST	OWNER1_FIRST	OWNER2_L	OWNER2_FI	ADDRESS1	CITY	ST	ZIPCODE
9835237465	TUCKER	BRENDA F	null	null	602 SHAMBLEY RD	MEBANE	NC	273028573
9835237379	WATFORD	LATISHA			P O BOX 536	EFLAND	NC	27243
9835230360	HOPKINS	JOANN	null	null	746 HANNER RD	BURLINGTON	NC	272171800
9835228947	DILLINGHAM	DONNA RAE			506 SHAMBLEY RD	MEBANE	NC	27302
9835004823	MINHAS	RANJIT	null	null	2040 WEBSTER GROVE DR	MEBANE	NC	27302
9835148177	CRITTENTON	TERESA			702 MACE RD	MEBANE	NC	27302
9835138807	GENTRY	MALCOLM K			6408 FOX TRAIL	MEBANE	NC	27302
9835135834	BUCKHALTER	MARY			6502 FOX TRL	MEBANE	NC	273027555
9835224868	OVERSON	HOWARD C	OVERSON	ELLEN M	1597 NORTHFIELD DR	GRAHAM	NC	27253
9835226007	ELLIS	CASEY NEIL	ELLIS	EMILY L	321 MACE RD	MEBANE	NC	27302
9835002703	HOLY TRINITY	CHURCH			6803 US 70	MEBANE	NC	27302
9835133886	LLOYD	HERMAN ALLEN			6900 BOWMAN RD	MEBANE	NC	273027282
9835133652	LLOYD	HERMAN ALLEN	LLOYD	DIANNE	6900 BOWMAN RD	MEBANE	NC	273027282
9835224575	MCCOY	ZACHARY	MCCOY	EMILY M	421 MACE RD	MEBANE	NC	27302
9824999846	CONCRETE SUP	null	null	null	PO BOX 5247	CHARLOTTE	NC	28225
9835029137	MACE	HELEN ETAL	MACE	CARL JERRY	6517 US HIGHWAY 70	MEBANE	NC	273027598
9835234113	WYNN	PAUL S			515 MACE RD	MEBANE	NC	273028825
9835235854	ROWLEY	JAMES C JR	ROWLEY	BRANDI	6310 PERRY RD	MEBANE	NC	27302

9835135731	BUCKHALTER	MARY				6502 FOX TRL	MEBANE	NC	273027555
9835231280	SLAUGHTER	JIMMIE O	SLAUGHTER	SYLVIA		6408 WOODLAND DR	MEBANE	NC	27302
9835210672	DOUGLAS	RANELLE M	DOUGLAS	DAVID G		300 MACE RD	MEBANE	NC	27302
9835137374	RHODES	BETSY J				418 MACE RD	MEBANE	NC	27302
9835138384	CLEMONS	PAMELA H	null	null		746 HANNER RD	BURLINGTON	NC	27217
9835238108	PORTER	LESLIE N				514 SHAMBLEY RD	MEBANE	NC	27302
9825918836	SOUTHARD	KENNETH D	SOUTHARD	FAYE M		6911 US 70 W	MEBANE	NC	273028531
9835202742	ROWHANI	KAMAL	null	null		500 UMSTEAD DR apt #203	Chapel Hill	NC	27516
9835102571	MACE	ALEASE S				6517 US 70 W	MEBANE	NC	273027598
9835233621	WYNN	JESSIE B	WYNN	VIVIAN		605 MACE RD	MEBANE	NC	27302
9835039845	KESSLER	RALPH D	null	null		2008 S MEBANE ST #2002-H	BURLINGTON	NC	27215
9835016318	MACE	ALEASE S				6517 US HIGHWAY 70	MEBANE	NC	273027598
9835210575	FOSTER	MICHAEL CATO				306 MACE RD	MEBANE	NC	273028823
9835203649	HIPPS	STEVEN M	null	null		7001 US 70	Mebane	NC	27302
9835204750	DAVIS	DALE G				2189 GIFFORD DR	HAW RIVER	NC	27258
9835132590	COPELAND	HENRY E	COPELAND	MARY		1221 BUCKHORN RD	MEBANE	NC	273028090
9835238035	SALAMON	JAMES A				510 SHAMBLEY RD	MEBANE	NC	273028572
9835009371	SYKES	ANN	null	null		BOX 183	MEBANE	NC	27302
9835139865	BULLINS	HERMAN C	BULLINS	DEBORAH		620 MACE RD	MEBANE	NC	27302
9835135582	BRIGHT	WALTER JOSEPH				601 PONDEROSA TRL	MEBANE	NC	273028522
9835238218	ROGERS	LAMECO				P O BOX 1112	MEBANE	NC	273021112
9835233273	NICHOLS	CAROL A	null	null		519 MACE RD	MEBANE	NC	273028825
9835108136	LAWS	CYNTHIA G	null	null		5100 INVERNESS DR	DURHAM	NC	27712
9835106282	WYNN	ROBERT L				6514 US 70 W	MEBANE	NC	27302
9835105787	MACE	ALEASE S				6517 US HIGHWAY 70	MEBANE	NC	273027598
9835234023	WYNN	PAUL S ETAL	WYNN	MICHAEL B		424 FERNANDO ST	DURHAM	NC	277032511
9835007368	COOK	JAMES E				6622 US 70 W	MEBANE	NC	27302
9835132351	RUDDER	MICHAELA				6431 WOODLAND DR	MEBANE	NC	27302
9835129681	RHODES	BETSY JONES				418 MACE ROAD	MEBANE	NC	27302

9835217428	EVANS	JAMES W				223 MACE RD	MEBANE	NC	27302
9835108999	DIOS DE ISRAEL	IGLESIA DEL	null		null	4517 HOLLAND RD	GREENSBORO	NC	27405
9835200488	CECIL	JENNIFER J				6417 US 70	MEBANE	NC	273027597
9835002274	MACE	C JERRY	MACE	JACQUELINE		P O BOX 127	MEBANE	NC	273020127
9835102264	LOFTIS	FRANCES P	null		null	6600 US 70 W	MEBANE	NC	273027599
9835139785	CRAWFORD	ANN				616 MACE RD	MEBANE	NC	273028826
9835216838	SNC PROPERTIES	LLC				PO BOX 487	EFLAND	NC	27243
9825914294	WYNN	SALLY F	null		null	6915 US 70 W	MEBANE	NC	27302
9825913362	WHALEY	JIMMY ERVIN	WHALEY	BARBARA M		6919 US 70 W	MEBANE	NC	27302
9835109459	JONES	NELLIE L				6501 US 70 W	MEBANE	NC	273027598
9835216918	HOWELL	LARRY R	null		null	236 IROQUOIS	LAS CRUCES	NM	88007
9835037821	BEAVER VALLEY	INC				2342 CASTLEROCK FARM	PITTSBORO	NC	27312
9835146256	SMITH	THEO SR	null		null	6413 FOX TRL	MEBANE	NC	27302
9835205638	DAVIS	DALE G				2189 GIFFORD DR	HAW RIVER	NC	27258
9825913882	WHALEY	JIMMY ERVIN	WHALEY	BARBARA M		6919 US HWY 70 EAST	MEBANE	NC	27302
9835048077	KING	HERMAN A	KING	CONNIE		6614 FOX TRL	MEBANE	NC	273028518
9835109184	L AND L OF NC	null	null		null	5100 INVERNESS DR	DURHAM	NC	27712
9835105159	COSTNER	FRANKLIN				6516 US 70 W	MEBANE	NC	27302
9835201119	WHALEY	IRENE H				PO BOX 421	MEBANE	NC	273020421
9835220129	GILMORE	ANTHONY SCOTT	null		null	7005 EBENEZER CHURCH	RALEIGH	NC	27612
9835210959	MORGAN	JUDY A				322 MACE RD	MEBANE	NC	27302
9835217518	BOYDEN	JACQUELINE E				225 MACE RD	MEBANE	NC	27302
9835230369	LINGENFELTER	JOAN M	null		null	604 MACE RD	MEBANE	NC	273028826
9835210868	LAWSON	JOHN W	null		null	314 MACE RD	Mebane	NC	27302
9835011302	HEBERT	THOMAS R ETAL	HEBERT	MICHAEL M		6815 US 70	MEBANE	NC	27302
9835013165	NAJERA	MARIA L				6725 US 70 W	MEBANE	NC	27302
9835106777	MACE	ALEASE S				6517 US HIGHWAY 70	MEBANE	NC	273027598
9835131541	STRADER	JAMES E SR	STRADER	NANCY		600 MILDRED CT	MEBANE	NC	27302
9835134302	RUDDER	MICHAELA				6431 WOODLAND DR	MEBANE	NC	27302
9835135333	BURCH	BEVERLY CAROL				6427 WOODLAND DR	MEBANE	NC	273027008
9835144293	BUCKHALTER	MARY M	BUCKHALTE	MARY L		6502 FOX TRL	MEBANE	NC	27302

9825931178	PATTERSON	CHARLIE T	null	null	703 HEATHER RD	BURLINGTON	NC	272156205
9835002903	ALVARADO	ARTURO	ALVARADO	CHRISTINE	387 PORTSMOUTH CT	BURLINGTON	NC	27215
9835205698	DAVIS	DALE G			2189 GIFFORD DRIVE	HAW RIVER	NC	27258
9835007790	HORNE	MARK J			6623 US 70 W	MEBANE	NC	27302
9835103858	MACE	CARL J	null	null	916 MACE RD	MEBANE	NC	273020127
9835101614	HOBBY	DANIEL B	HOBBY	KAREN L	6611 US 70 W	MEBANE	NC	273027599
9835004223	HOLLEY	MARSELLINE A	null	null	6710 E WASHINGTON ST	MEBANE	NC	273028272
9835135019	IVEY	ROGER D	IVEY	SALLY M	6432 WOODLAND DR	MEBANE	NC	273027008
9835210367	CORDERO	MYLTA R			218 MACE RD	MEBANE	NC	27302
9835212233	SEIFTS	AUSTIN T	WERNEKE	ANDREA M	212 MACE RD	MEBANE	NC	27302
9835131986	SKENES	LENA F			6602 FOX TRL	MEBANE	NC	273028518
9835039659	KESSLER	RALPH D	null	null	2008 S MEBANE ST-2002-H	BURLINGTON	NC	27215
9835131231	IVEY	ROGER D	IVEY	SALLY M	6432 WOODLAND DR	MEBANE	NC	273027008
9835225521	TYRE	OLIVIA P			413 MACE RD	MEBANE	NC	273028824
9835008364	SYKES	DAVID B	null	null	PO BOX 983	Mebane	NC	27302
9835136180	JAMES	HARRY E	JAMES	PEGGY	6422 WOODLAND DR	MEBANE	NC	273027008
9835003574	JANNEY	GUY D JR	null	null	79 POINDEXTER RD	ROXBORO	NC	27574
9835230544	HARRIS	ANNA			608 MACE RD	MEBANE	NC	273028826
9825916458	SOUTHARD	KENNETH D			6911 US HIGHWAY 70	MEBANE	NC	273028531
9835006065	WESTBROOK	WILLIAM D SR	null	null	6624 E WASHINGTON ST	Mebane	NC	27302
9834194786	WINTERSTONE	INC			550 OLD PEACHTREE RD	SUWANEE	GA	300242934
9835007703	MACE	ALEASE S			6517 US HIGHWAY 70	MEBANE	NC	273027598
9835006716	ELLIS	MYRLE K	null	null	6707 US 70 W	MEBANE	NC	27302
9835133733	LLOYD	HERMAN ALLEN	LLOYD	DIANNE	6900 BOWMAN RD	MEBANE	NC	273027282
9835237541	TUCKER	BRENDA F	null	null	602 SHAMBLEY RD	MEBANE	NC	273028573
9835200964	JONES	NELLIE L			6501 US HWY 70	MEBANE	NC	27302
9835108469	BULLDOG INV.	LLC			500 HOOVER RD	MEBANE	NC	276023346
9835131804	KESSLER	RALPH D	null	null	2008 S MEBANE ST #2002-H	BURLINGTON	NC	27215
9835210580	RILEY	KAREN D			222 MACE RD	MEBANE	NC	27302
9835216774	AREHART	WAYNE D SR	AREHART	W DARRELL	PO BOX 731	CARRBORO	NC	27510

9834189593	WESTBROOK	WILLIAM	WESTBROO	PAMELA E	6624 E WASHINGTON ST	MEBANE	NC	27302
9825948348	CURTIS	BRUCE W	CURTIS	SARA E	2342 CASTLEROCK FARM	PITTSBORO	NC	273129649
9835135508	WHITE	CHARLES M	null	null	2126 WESTERN PARK LN	Hillsborough	NC	27278
9835241220	POTEAT	RONALD B	POTEAT	NANCY	619 MACE RD	MEBANE	NC	273028826
9835137533	BRIGHT	JASON R	BRIGHT	SHELIA F	600 PONDEROSA TR	MEBANE	NC	27302
9835132079	IVEY	ROGER D	IVEY	SALLY M	6432 WOODLAND DR	MEBANE	NC	273027008
9835136354	BURCH	BEVERLY CAROL			6427 WOODLAND DR	MEBANE	NC	273027008
9835225186	VERNER	KELLY G			401 MACE RD	MEBANE	NC	27302
9825913415	HILL	GARY LOUIS SR			6919 US 70 W	MEBANE	NC	27302
9825917187	GLISSON	CONSTANCE P	null	null	6903 US HWY 70	MEBANE	NC	27302
9835225361	SWAIM	MICHAEL P			PO BOX 178	EFLAND	NC	27243
9835009723	MURDOCK	MACK B	MURDOCK	MARIE K	6619 US 70 W	MEBANE	NC	27302
9835048139	BROWN	MELINDA A	null	null	5602 E SHORE DR	GREENSBORO	NC	27406
9835230614	KEPNER	ROBERT	KEPNER	MARGARET	4012 BRANCHWOOD DR	DURHAM	NC	27705
9835139946	SCOTT	KIMBERLY K	KELLEY	SANDRA	624 MACE RD	MEBANE	NC	27302
9835228767	TUCKER	EDNA MAE			504 CENTRAL AVE	HILLSBOROUG	NC	27278
9835139262	SLAUGHTER	JIMMIE O	SLAUGHTER	SYLVIA	6408 WOODLAND DR	MEBANE	NC	27302
9835007466	WESTBROOK	WILLIAM D SR	MERRITT	BRENDA W	6624 E WASHINGTON ST	Mebane	NC	27302
9834099635	MLVP LLC	null	null	null	150 PROVIDENCE RD STE 1008	CHAPEL HILL	NC	27514
9825930675	PATTERSON	WILLIAM T TRUSTEE	PATTERSON FAMILY TRUST	null	415 HOOVER RD	MEBANE	NC	273028540
9835233383	HALL	BETTY M	null	null	523 MACE RD	MEBANE	NC	273028825
9835138712	BUCKHALTER	MARY L	null	null	6502 FOX TR	Mebane	NC	27302
9835005719	EARNST	SCOTT A			6711 US 70 W	MEBANE	NC	27302
9825916073	DOBY	STEVE EDWARD			3101 BUCKHORN RD	EFLAND	NC	27243
9835143232	DIXON	JOSEPH G	DIXON	SUE S	224 HARDEN ST	BURLINGTON	NC	272157514
9825926712	HOOVER	DONALD K	HOOVER	PAMELA E	305 HOOVER RD	MEBANE	NC	27302

9835049052	BUCKLEY	KEITH PATRICK	TROSCLAIR	MARI J	627 CHICKEN BRIDGE RD	PITTSBORO	NC	27312
9835130411	CURTIS	BRUCE W	CURTIS	SARA E	2342 CASTLEROCK FARM RD	PITTSBORO	NC	273129649
9835140091	LEMAIRE	BRENDA D	LEMAIRE	JOHN R	6606 FOX TRL	MEBANE	NC	273028518
9835134009	IVEY	ROGER D	IVEY	SALLY M	6432 WOODLAND DR	MEBANE	NC	273027008
9835009586	WILSON	MARK A	WILSON	JOAN B	6615 US 70 W	MEBANE	NC	273027599
9835233522	WYNN	JESSIE B	WYNN	VIVIAN	605 MACE RD	MEBANE	NC	27302
9834094915	WESTBROOK	WILLIAM			6624 E WASHINGTON ST	MEBANE	NC	27302
9835237632	WOOD	BRIAN TODD			606 SHAMBLEY RD	MEBANE	NC	27302
9825937298	TSIAPERA	MARIA			1051 BURNING TREE DR	CHAPEL HILL	NC	275175657
9834191848	RJR PROPERTIES	LLC	null	null	PO BOX 784	GRAHAM	NC	27253
9835233472	HURLEY	JOAN B			601 MACE RD	MEBANE	NC	273028826
9835008433	WESTBROOK	WILLIAM D SR	MERRITT	BRENDA W	6624 E WASHINGTON ST	Mebane	NC	27302
9835232763	OLIVER	TERESA			613 MACE RD	MEBANE	NC	27302
9835130535	STRADER	JAMES E SR	STRADER	NANCY	600 MILDRED COURT	MEBANE	NC	27302
9835107281	FREDRICK	PAUL J	null	null	300 S FOURTH ST	MEBANE	NC	27302
9835006488	MERRITT	BRENDA W	null	null	PO BOX 887	Mebane	NC	27302
9825924159	ADAMS	JAMES ROBERT			5572 NC 119 SOUTH	MEBANE	NC	27302
9835049094	HARRISON	JOHNNY			6610 FOX TRL	MEBANE	NC	273028518
9835137814	KIRK	JOYCE J	null	null	6412 FOX TR	MEBANE	NC	27302
9835233848	THURMAN	ROGER A JR			6320 PERRY RD	MEBANE	NC	273028517
9835138640	GENTRY	MALCOLM			6408 FOX TR	MEBANE	NC	27302

=====

[Print page 1 of 1](#)

Click on the Column Headings to sort accordingly. Click on the Owner Name to get all parcels owned by that owner.

Click on the Parcel ID (PIN) to view the parcel detail. Click on Street name under Location heading to get all parcels on that street.

<u>Parcel ID</u> <u>(PIN)</u>	<u>Location</u>	<u>Owner</u>	<u>Built</u> <u>Type</u>	<u>Assessed</u> <u>Value</u>	<u>Bathrooms</u>	<u>Lot size</u> <u>Fin area</u>	<u>LUC</u> <u>Description</u>	<u>Neighborhood</u>	<u>Sale date</u> <u>Sale price</u>	<u>Book</u> <u>Page</u>
9835029137	UNKNOWN	MACE HELEN ETAL MACE CARL JERRY		\$16,714		52.10000 AC	WOOD Wooded	3006	7/20/2010	10-E- 451

[Print page 1 of 1](#)

# EASEMENT

Register Of Deeds, Orange Co, NC  
Recording Fee: \$26.00  
NC Real Estate TX: \$.00

143

20160720000152590 S/INS  
Bk: 6159 Pg: 250  
07/20/2016 12:17:17 PM 1/5

Prepared by + Return to:

Megan Stevens

4150 St. Johns Pkwy, Suite 1100  
Sanford, FL 32771

## EASEMENT

THIS EASEMENT (the "Agreement") is made this 28th of June, 2016, by and between HELEN MACE and CARL MACE (collectively, "Grantor"), having an address of 916 Mace Road, Mebane, NC 27302, and OAKWOOD SOLAR FARM, LLC, a North Carolina limited liability company ("Grantee"), with a mailing address of Oakwood Solar Farm, LLC, 4155 St Johns Parkway, Suite 1100, Sanford, FL 32771.

WHEREAS, Grantor owns property located in Mebane, Orange County, North Carolina ("Grantor's Property"), and Pin 9835029137 and Pin 9835103858; and

WHEREAS, Grantor and Grantee have entered into Lease Agreement dated December 30, 2015 ("Lease Agreement") whereby the Grantee is leasing certain property for the installation and operation of a photovoltaic solar facility; and

WHEREAS, Grantee desires to obtain an easement on Grantor's Property for the purposes contained herein.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

- Grant.** Grantor grants and conveys to Grantee and its lessees, licensees, representatives, agents, and invitees, the non-exclusive right of ingress, egress and regress for vehicular and pedestrian traffic, including construction vehicles, on, over, across, and under a portion of Grantor's Property ("Easement Area"), together with the exclusive right to install, replace and maintain utility wires, poles, cables, conduits and pipes thereon and therein, as such Easement Area leads from US Highway 70 across Grantor's Property to where Grantee has lease rights on the Grantor's Property under the Lease Agreement for the installation and operation of a solar facility on the parcel with PIN 9835029137. The Easement Area is the Access Easement shown on Exhibit A attached hereto and made a part hereof. The Easement Area may be used twenty-four (24) hours a day, seven (7) days a week.
- Easement Term.** The term of this Agreement shall commence as of the date of this Agreement and may be terminated only as provided for herein.
- Consideration.** Upon execution of this Agreement Grantee shall pay Grantor One and 00/100 Dollars (\$1.00).
- Termination.** This Agreement shall run concurrent with the Lease Agreement and will terminate when the Lease Agreement terminates. Grantee shall have one hundred eighty (180) days from termination to remove all of its personal property from the Easement Area and leave the Easement Area in a clean and orderly fashion.
- Removal of Obstructions.** Grantee has the right to reasonably remove obstructions from the Easement Area, including but not limited to vegetation, which may encroach upon, interfere with or present a hazard to Grantee's use of the Easement Area. Grantee shall dispose of any materials removed.
- Recording.** Grantee or Grantor shall have the right to record this Agreement with the appropriate recording officer.
- Hold Harmless.** The Grantee shall indemnify and defend the Grantor against, and hold the Grantor harmless from, any claim of liability or loss, including reasonable attorney fees, from materialman's liens, personal injury or property damage arising from the use and occupancy of the Easement Area by the Grantee, its employees, contractors, servants or agents.
- Interference with Grantor's Business.** The Grantor shall have the right to grant additional easements over the Easement Area, to publicly dedicate the same and to otherwise use the Easement Area in any manner that will not interfere with the rights of Grantee contained herein.
- Title and Quiet Possession.** Grantor represents and agrees that (a) Grantor owns the Easement Area in fee simple; (b) Grantor has the right to enter into this Agreement; (c) the person signing this Agreement has the authority to sign; (d) Grantee is entitled to access the Easement Area at all times; (e) Grantor has the right to grant to Grantee the rights in the Easement Area as provided herein; and (f) Grantee has the right to use same as provided herein.

IN WITNESS WHEREOF, Grantor and Grantee having read the foregoing and intending to be legally bound hereby, have executed this Agreement as of the day and year first written above.

Grantor:

[Signature]  
Carl Mace

Helen Mace

Helen Mace

STATE OF North Carolina

COUNTY OF Orange

I certify that the following person(s) personally appeared before me this day, each acknowledging to me that he/she voluntarily signed the foregoing Easement for the purpose stated therein and in the capacity indicated: Carl Mace and Helen Mace.

Date: 7/8/16

By: Sharon A Mace

Print Name: Sharon A. Mace

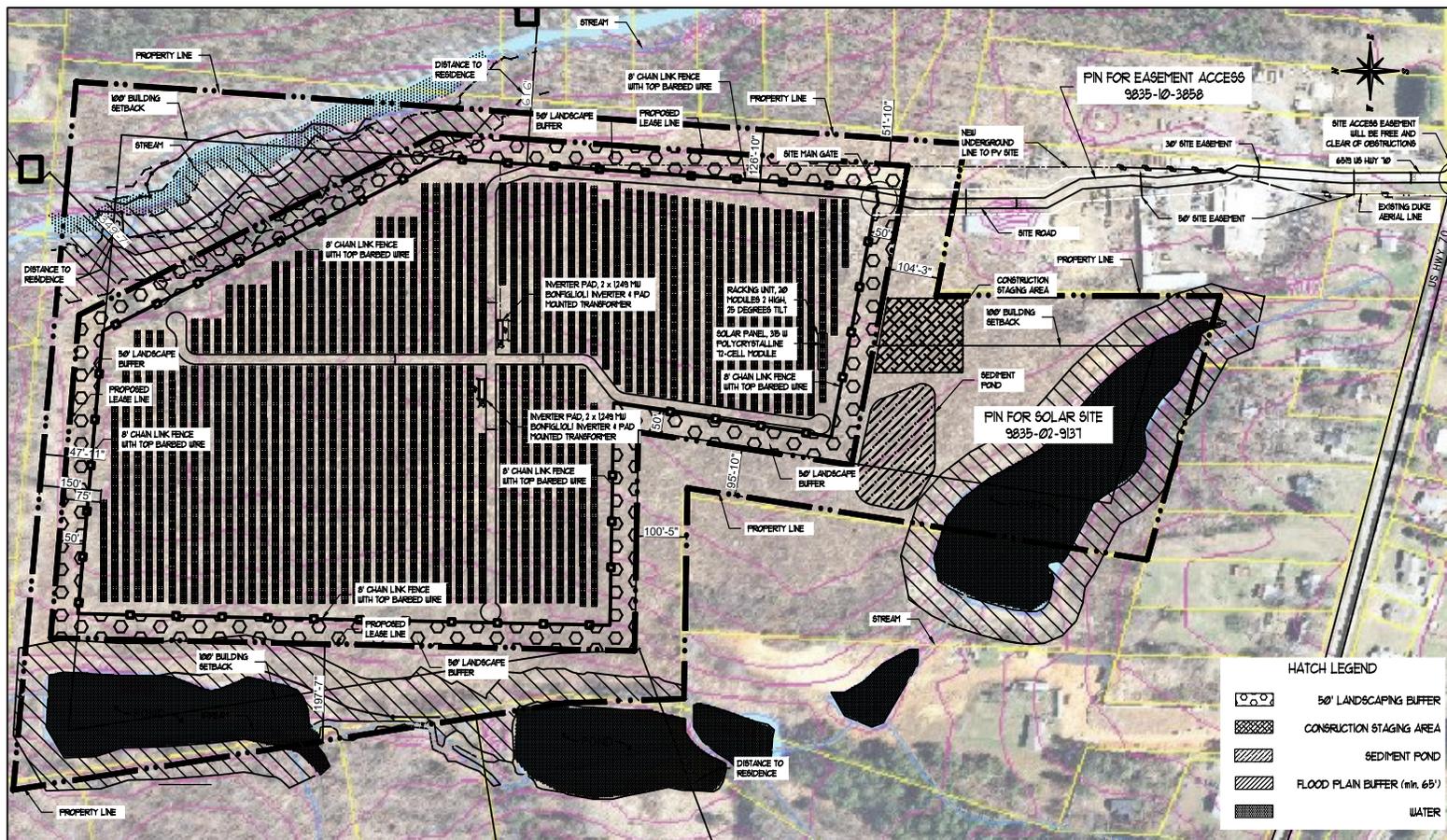
Notary Public

My Commission Expires Aug. 12, 2017

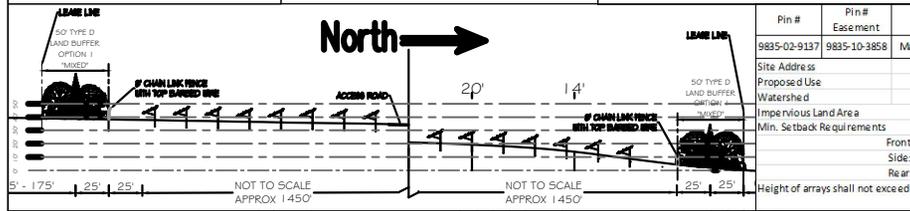
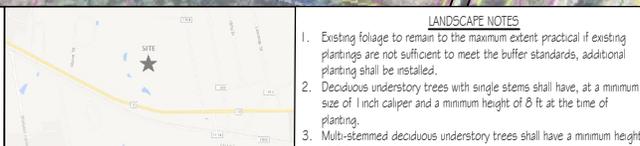
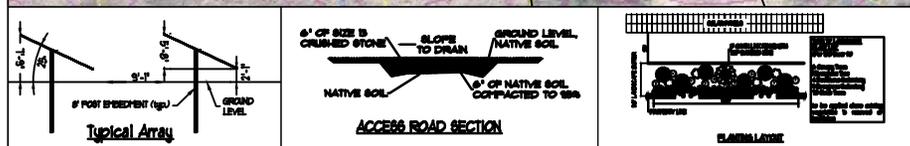


# Exhibit A

Being all of that access easement as shown on map and survey entitled "Survey for Oakwood Solar Farm, LLC" prepared by Gaskins Land Surveying, P.A., dated 5/3/16, and recorded in Plat Book 115, page 175, Orange County Registry.



- NOTES**
- The purpose of this plan is for a special use permit application for review and approval by Orange County to construct a solar array - public utility. All information shown is for planning purposes only. SUP applies to parcel number 9835-02-9137.
  - Existing improvements shown on this plan were taken from Orange County GIS.
  - The property shown contains a special flood hazard area to the north-east subject to inundation by the 1% annual chance flood (i.e. 100 year event).
  - Location of underground utilities are approximate and must be field verified.
  - Copies of all permits and approved plans must be kept on site in a permit box that is conspicuously located and easily accessible during construction.
  - A sediment and erosion control plan will be approved by Orange County followed by a pre-construction conference prior to any land disturbance. There will be no net increase in peak flow leaving the site from the predevelopment conditions for the 1-year 24 hour storm. Nutrient limits for the Back Creek Protected watershed shall not exceed 3.8 lbs/acre/yr of Nitrogen and 1.43 lbs/acre/yr of Phosphorus.
  - A driveway permit will be approved by NC DOT prior to beginning construction.
  - No lighting is proposed for this site.
  - Aluminum signs ("DANGER - HIGH VOLTAGE" and "DANGER - NO TRESPASSING") measuring 1'4" x 1'0" in size will be placed on permanent security fencing alternating every 100 ft around the array.
  - Systems, equipment, and structures will not exceed 10 ft in height (Currently proposed to reach 7'9"). Excluded from this requirement, however, are electric transmission lines and utility poles.
  - Noise levels measured at the property line will not exceed 50 decibels when located adjacent to an existing residence or residential district.
  - Per section 5.9.G(C)(2)(g) of the Orange County UDO, project shall observe a type D land use buffer, 50 ft in width, adjacent to property zoned or otherwise utilized for residential use. This land use buffer shall incorporate existing vegetation where available. Final landscape plan shall be approved by staff prior to commencement of land use activities.
  - Per section 5.9.G(C)(2)(a) of the Orange County UDO, all on-site utility transmission lines shall be placed underground where feasible.
  - Per section 5.9.G(C)(2)(c) of the Orange County UDO, individual arrays shall be designed and located to prevent glare toward inhabited buildings on adjacent properties and adjacent street right-of-ways.
  - Per section 5.9.G(C)(3) of the Orange County UDO, applicant acknowledges the established procedures for the decommissioning of the site and will comply with these aforementioned standards at the appropriate time.
  - Per section 5.9.G(C)(2)(e) of the Orange County UDO, all systems shall be completely enclosed by a minimum 8 foot high fence with a self-locking gate with screening in accordance with the provisions of Section 6.8
  - Easement is recorded on Book 6159, Page 250.



Pin #	Pin# Easement	Owner	Zoning	Parcel Acreage	Leased Acreage
9835-02-9137	9835-10-3858	Mace, Helen B. Carl	R1	52.1	27.3

Site Address: 6519 US HWY 70, Melbane, NC 27302  
 Propose d Use: Ground Mount Solar Farm  
 Watershed: Back Creek and Effland-cheeks HWY 70 Overlay District  
 Impervious Land Area: 2.00 Acres (~7.33%)  
 Min. Setback Requirements: Front: 100 ft, Side: 100 ft, Rear: 100 ft  
 Height of arrays shall not exceed 10 ft (approx 7'9"). Site will be surrounded by a 8 ft gate with 3 strands of barbed wire.

**NOTE**  
 DUKE ENERGY, INTERCONNECTION REQUEST 8-8E SIZE AT FULL SCALE 24" x 36"

REV	DATE	REVISION DESCRIPTION	CHK	APP	DATE	REVISION DESCRIPTION	CHK	APP	DATE	REVISION DESCRIPTION	CHK	APP
01		ISSUE FOR PERMIT	LR	DC								
02		REVISED PERMIT DESCRIPTION	LR	DC								
03		REVISED PERMIT DESCRIPTION	LR	DC								
04		REVISED PERMIT DESCRIPTION	LR	DC								
05		REVISED PERMIT DESCRIPTION	LR	DC								
06		REVISED PERMIT DESCRIPTION	LR	DC								

**esa** ESA MANAGEMENT SERVICES, PLLC  
 4150 St. Johns Parkway, Suite 1000  
 Sanford, FL 32771 USA  
 407.268.6455 tel | 800.755.0801 fax  
 LIC. NCP-P-1522

**SMDCDC** PROJECT NAME: OAKWOOD SOLAR FARM, LLC  
 ADDRESS: 6519 US HIGHWAY 70, Melbane, NC 27302  
 SHEET TITLE: SITE PLAN  
 ENGINEER: DAVID CLICK

SCALE: 1:1000  
 ROW: 24" x 36"  
 DRAWING #: G202  
 DATE: 20/07/20

Site Assessment for PIN: 9835-02-9137 for proposed Solar Array Public Utility (Class A Special Use Permit), non-residential

**Site Data**

Zoning: Rural Residential (R1) and designated 10 Year Transitional Area on Future Land Use Map  
 Acreage: 52.1 acres

Overlay Districts: Back Creek Protected Watershed Overlay District and Efland-Cheeks Hwy 70 Overlay District  
 Deed: No deed reference found. Legal Reference: 10-E-451.  
 Plat/Legal Description: N/O Hwy 70 (no plat found)

Building Setbacks for Special Use Permit (Class A)  
 100 ft. from all property lines  
 50 ft. Type D Land Use Buffer shall be provided along any portion of the perimeter of the parcel and easements (see UDO, 5.10.3 C (2) (f))  
 Maximum height: 40'

**Notes:**

(1) Private Road Justifications, Recorded Declarations, Restrictive Covenants, Bona Fide Farm status, use and building type (e.g. duplex units) will change subdivision and development requirements. (2) 80 ft. stream buffer graphically shown. (3) Floor Area Ratio (FAR) maximum for residential conditional use = 0.58. FAR maximum for non-residential use = 0.088. FAR maximum for non-residential conditional use = 0.100. Required minimum open space ratio = 0.84. Required minimum livability space ratio = 0.75. Required pedestrian/landscape ratio = 0.21.  
 (2) BMP may be required

**Environmental Features:**

Streams located on lot. Stream buffer for stream to the east: 80 ft. (Method A). Stream buffer for stream to the west: 65 ft. (Method A). Six water bodies located to the west. Water body buffers: 65 ft. (Method A).

Slope: Slope of stream to the east: 8.8%. Slope of stream to the west: 6.4%. Slopes of water bodies to the west: ranging from 2.4% to 6.4%

100 and 500 year Floodplains

Base Flood Elevation (BFE) based on FIRM Map: 663  
 County Freeboard: 665  
 Minimum Finished Floor Elevation (FFE): 665  
 Flood Panel: 9835J

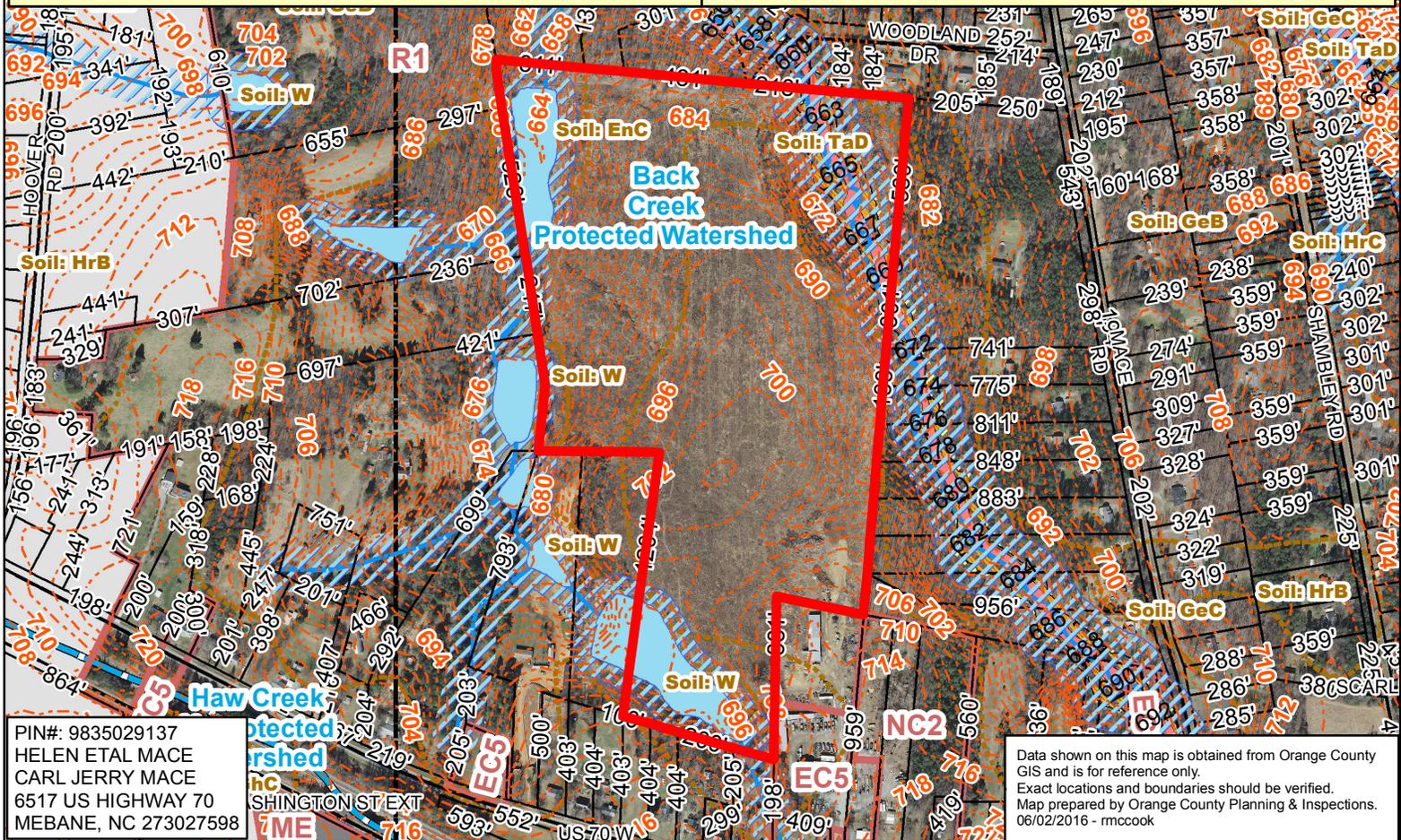
Impervious Surface Limits: 12% based on UDO (Sec. 4.2.6) - 272,337.12 sq. ft. of allowable impervious surface area

Note: On-site infiltration of the first inch of stormwater runoff, per UDO, Sec. 4.2.6 for non-residential use

**Land Disturbance Thresholds (Erosion Control)**

- 1) Erosion Control Application/Permit required if disturbing more than 20,000 sq. ft.
  - 2) Stormwater Management Application/Permit required if more than 21,780 sq. ft. (1/2 an acre) for commercial structures.
- \*\*\*Call OC Erosion Control at (919) 245-2586 for more information.

Date Site Assessment Completed: Updated 05/26/2016



PIN#: 9835029137  
 HELEN ETAL MACE  
 CARL JERRY MACE  
 6517 US HIGHWAY 70  
 MEBANE, NC 273027598

Data shown on this map is obtained from Orange County GIS and is for reference only. Exact locations and boundaries should be verified. Map prepared by Orange County Planning & Inspections. 06/02/2016 - rmccook

USGS Stream	2' Contours (NCDOT)	City Limits	Floodway (Effective 02/02/07)
Soils Survey Stream	Parcels	ETJ	500 Year Floodplains (Effective 02/02/07)
Floodplain Buffer 80ft	Zoning	Soils	Base Flood Elevation (Symbol)
Stream Buffer 80ft	Water Body	100 YR Floodplain (Effective 02/02/07)	FIRM
Water Body Buffer 65ft	Watershed		

1 inch = 600 feet  
 0 150 300 Feet



Attachment 4

Kathryn Johnston  
*Secretary*J. Brian Ratledge  
*General Counsel*

July 25, 2016

Mr. Patrick Mallett  
Orange County  
Orange County Planning & Inspections Dept.  
Post Office Box 8181  
Hillsborough, North Carolina 27278

**Re: SCH File # 16-E-0000-0397; EA; Proposal is for the development of a solar facility on a 27.3 acre parcel located at 6517 US Highway 70, Mebane, NC (submitted pursuant to Orange County SEPA ordinance)**

Dear Mr. Mallett:

The above referenced environmental impact information has been reviewed through the State Clearinghouse under the provisions of the North Carolina Environmental Policy Act.

Attached to this letter are comments made in the review of this document. Because of the nature of the comments, it has been determined that no further State Clearinghouse review action on your part is needed for compliance with the North Carolina Environmental Policy Act. The attached comments should be taken into consideration in project development.

Sincerely,

Crystal Best

State Environmental Review Clearinghouse

Attachments  
cc: Region J



PAT MCCRORY  
*Governor*

DONALD R. VAN DER VAART  
*Secretary*

MEMORANDUM

To: Crystal Best  
State Clearinghouse Coordinator  
Department of Administration

FROM: Lyn Hardison   
Division of Environmental Assistance and Customer Service  
Permit Assistance & Project Review Coordinator

RE: 16-0397  
Environmental Assessment  
Proposal is for the development of a solar facility on a 27.3-acre parcel located at 6517 US  
Highway 70, Mebane NC  
Orange County

Date: July 19, 2016

The Department of Environmental Quality has reviewed the proposal for the referenced project. Based on the information provided, several of our agencies have identified permits that may be required and offered some guidance to minimize impacts to the natural resources within the project area. The comments are attached for the applicant's review.

The Department's agencies will continue to be available to assist the applicant through the environmental review processes.

Thank you for the opportunity to respond.

Attachment

Nothing Compares



## ☐ North Carolina Wildlife Resources Commission ☐

Gordon Myers, Executive Director

### MEMORANDUM

**TO:** Lyn Hardison, Environmental Assistance and SEPA Coordinator  
NCDENR Division of Environmental Assistance and Customer Services

**FROM:** Gabriela Garrison  
Eastern Piedmont Coordinator. *Gabriela Garrison*  
Habitat Conservation

**DATE:** July 18, 2016

**SUBJECT:** Comments on Oakwood Solar Farm LLC, Solar Facility in Orange County; Project Number 16-0397.

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the proposed project description. Comments are provided in accordance with certain provisions of the North Carolina Environmental Policy Act (G.S. 113A-1 through 113A-10; 1 NCAC 25) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

Oakwood Solar Farm, LLC proposes to construct a solar facility in Orange County. The site would be located at 6517 US Highway 70, east of Mebane. A map of the proposed location (provided with the application materials) suggests the project is sited on both cleared and forested land. Clearing trees from this site and installing solar panels will displace wildlife species. Installing solar panels on previously cleared and disturbed land will have less impact and is therefore the preferred option. Solar projects should be sited to avoid impacts to wetlands, streams, riparian buffers and priority wildlife habitat.

Aerial maps and images indicate tributaries to Lake Michael flow through the eastern and western portions of the project site. There have also been wetlands delineated onsite. The NCWRC offers the following recommendations to minimize impacts to aquatic and terrestrial wildlife resources:

1. Maintain or establish a minimum 100-foot undisturbed, native forested buffer along each side of perennial streams and 50-foot undisturbed, native forested buffer along each side of intermittent streams and wetlands. Forested riparian buffers provide habitat areas and travel corridors for wildlife species. In addition, forested riparian buffers protect water quality by stabilizing stream banks and filtering stormwater runoff.
2. Use bridges for all permanent roadway crossings of streams and associated wetlands to eliminate the need to fill and culvert, where practicable. If culverts must be used, the culvert should be designed to allow aquatic life passage. Fords may be appropriate and preferred for intermittent stream crossings or where crossings will be used only once or twice a year. For fords, crossings

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**Mailing Address:** Habitat Conservation • 1721 Mail Service Center • Raleigh, NC 27699-1721  
**Telephone:** (919) 707-0220 • **Fax:** (919) 707-0028

Page 2

July 18, 2016  
Oakwood Solar Farm, LLC  
DENR Project No. 16-0397

in riffles are preferred with the banks lowered upstream and downstream of the crossing. Stabilize the stream bottom with geo-textile fabric and rock; concrete should not be used for bed stabilization.

3. The solar facility will connect to existing utility lines; impacts to wildlife habitat will be minimized by connecting along pathways that do not contain quality wildlife habitat, such as cleared or agricultural land. If additional overhead transmission lines will be installed, measures to minimize impacts to birds should be implemented. These can include increasing line visibility, insulating wires to cover exposed connections and increasing the distance between wires so no contact with ground or other energized wire can be made. For more information see <http://www.fws.gov/birds/documents/powerlines.pdf>.
4. Consider planting native, wildflower seed mixes that will create pollinator habitat within the project boundary. Shade-tolerant plants that are within 12 to 18 inches can be selected for plantings both underneath and around the solar panels. Pollinator habitat can also be created in buffer areas outside of the panel region. Further information and free technical guidance from the NCWRC is available upon request.
5. If pesticides or chemicals will be used for site maintenance, stormwater runoff from the site should be funneled to bio-retention areas prior to discharge to streams or wetlands. Pesticides, fertilizers and other chemicals should not be used in wetland areas or near streams.
6. Sediment and erosion control measures should be installed prior to any land clearing or construction. The use of biodegradable and wildlife-friendly sediment and erosion control devices is strongly recommended. Silt fencing, fiber rolls and/or other products should have loose-weave netting that is made of natural fiber materials with movable joints between the vertical and horizontal twines. Silt fencing or similar materials that have been reinforced with plastic or metal mesh should be avoided as they impede the movement of terrestrial wildlife species. Excessive silt and sediment loads can have detrimental effects on aquatic resources including destruction of spawning habitat, suffocation of eggs and clogging of gills.
7. Develop a plan that identifies the party responsible for decommissioning the facility as well as the conditions under which decommissioning will occur. In addition, the plan should emphasize that all equipment must be removed from the site, and the land should be restored to pre-construction conditions.

Thank you for the opportunity to review and comment on this project. If I can be of further assistance, please contact me at (910) 409-7350 or [gabriela.garrison@ncwildlife.org](mailto:gabriela.garrison@ncwildlife.org).

State of North Carolina  
 Department of Environment and Natural Resources  
 INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

Reviewing Office: Raleigh  
 Project Number 16-0397 Due Date: 7/18/2016  
 County ORANGE

After review of this project it has been determined that the ENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/>	NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Pre-application technical conference usually necessary	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
<input type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.O100 thru 2Q.0300)	Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113).	90 days
<input type="checkbox"/>	Permit to construct & operate Transportation Facility as per 15A NCAC (2D.0800, 2Q.0601)	Application must be submitted at least 90 days prior to construction or modification of the source.	90 days
<input checked="" type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input checked="" type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-707-5950.		
<input type="checkbox"/>	Complex Source Permit required under 15 A NCAC 2D.0800		
<input type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (Land Quality Section) At least 30 days before beginning activity. A fee of \$65 for the first acre or any part of an acre. An express review option is available with additional fees.		20 days (30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable stormwater conveyances and outlets.		(30 days)
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with ENR Bond amount varies with type mine and number of acres of affected land. Any acre mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	North Carolina Burning permit	On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/>	Special Ground Clearance Burning Permit - 22 counties in coastal N.C. with organic soils	On-site inspection by N.C. Division Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to ENR approved plans. May also require permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)

County <u>ORANGE</u>		Project Number: <u>16-0397</u>	Due Date: <u>7/18/16</u>	Normal Process Time (statutory time limit)
PERMITS		SPECIAL APPLICATION PROCEDURES or REQUIREMENTS		
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with ENR running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to ENR rules and regulations.		10 days N/A
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with ENR at least 10 days prior to issue of permit. Application by letter. No standard application form.		10 days N/A
<input type="checkbox"/>	State Lakes Construction Permit	Application fee based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property.		15-20 days N/A
<input type="checkbox"/>	401 Water Quality Certification	N/A		60 days (130 days)
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 fee must accompany application		55 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$50.00 fee must accompany application		22 days (25 days)
<input type="checkbox"/>	Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, NC 27611			
<input checked="" type="checkbox"/>	Abandonment of any wells, if required must be in accordance with Title 15A. Subchapter 2C.0100.			
<input type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.			
<input type="checkbox"/>	Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.			45 days (N/A)
<input type="checkbox"/>	Catawba, Jordan Lake, Randalman, Tar Pamlico or Neuse Riparian Buffer Rules required.			
<input type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq. Plans and specifications should be submitted to 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. All public water supply systems must comply with state and federal drinking water monitoring requirements. For more information, contact the Public Water Supply Section, (919) 707-9100.			30 days
<input type="checkbox"/>	If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/Public Water Supply Section at 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. For more information, contact the Public Water Supply Section, (919) 707-9100.			30 days

Other comments (attach additional pages as necessary, being certain to cite comment authority)

Division	Initials	No comment	Comments	Date Review
DAQ	ddm	<input type="checkbox"/>		7/15/16
DWR-WQROS (Aquifer & Surface)	DS rb	<input type="checkbox"/> <input type="checkbox"/>	<p>- A project that disturbs 1 acre or greater is required to secure an erosion and sedimentation control plan and must comply with construction stormwater permit conditions (NCG010000)</p> <p>-This site and the Unnamed Tributaries drain to Lake Michael, a Water Supply II, HQW, NSW waters, in the Cape Fear River Basin. (project is located in Jordan Lake Watershed.)</p> <p>-The USGS Topographic map depicted blue line streams and ponds adjacent to subject project and within project footprint. (Note: the soil survey was not reviewed.)</p> <p>-I recommend a site visit to ensure compliance with USACE 404 Permit, 401 Water Quality Certification requirements and riparian buffer requirements.</p> <p>-If wetland, stream or riparian buffer impacts are proposed, this project will need to comply with/secure a 404 permit from the USACE, obtain a 401 Water Quality Certification authorization, and/or comply with the Jordan Lake Riparian Buffer Rules.</p> <p>-The project is in a WS II watershed. The development will need to contact local government and comply with water supply watershed requirements.</p>	7/15/16 7/13/16
DWR-PWS		<input type="checkbox"/>		/ /
DEMLR (LQ & SW)	JLH	<input type="checkbox"/>	Sediment and erosion control must be addressed in accordance with the Orange County Local Program.	7/15/16
DWM - UST	MRP	<input checked="" type="checkbox"/>		7/13/16

**REGIONAL OFFICES**

Questions regarding these permits should be addressed to the Regional Office marked below.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> <b>Asheville Regional Office</b><br>2090 US Highway 70<br>Swannanoa, NC 28778<br>(828) 296-4500                            | <input type="checkbox"/> <b> Mooresville Regional Office</b><br>610 East Center Avenue, Suite 301<br>Mooresville, NC 28115<br>(704) 663-1699 | <input type="checkbox"/> <b>Wilmington Regional Office</b><br>127 Cardinal Drive Extension<br>Wilmington, NC 28405<br>(910) 796-7215              |
| <input type="checkbox"/> <b>Fayetteville Regional Office</b><br>225 North Green Street, Suite 714<br>Fayetteville, NC 28301-5043<br>( 910) 433-3300 | <input checked="" type="checkbox"/> <b>Raleigh Regional Office</b><br>3800 Barrett Drive, Suite 101<br>Raleigh, NC 27609<br>(919) 791-4200   | <input type="checkbox"/> <b>Winston-Salem Regional Office</b><br>450 West Hanes Mill Road, Suite 300<br>Winston-Salem, NC 27105<br>(336) 771-9800 |
|   | <input type="checkbox"/> <b>Washington Regional Office</b><br>943 Washington Square Mall<br>Washington, NC 27889<br>(252) 946-6481           |   |



Waste Management  
ENVIRONMENTAL QUALITY

PAT MCCRORY  
*Governor*

DONALD R. VAN DER VAART  
*Secretary*

MICHAEL SCOTT  
*Director*

Date: July 19, 2016

To: Michael Scott, Director  
Division of Waste Management

Through: Dave Lown, Head  
Federal Remediation Branch

From: Doug Rumford, Federal Remediation Branch

Subject: SEPA Project #16-0397, Oakwood Solar Farm, Mebane, Orange County, North Carolina

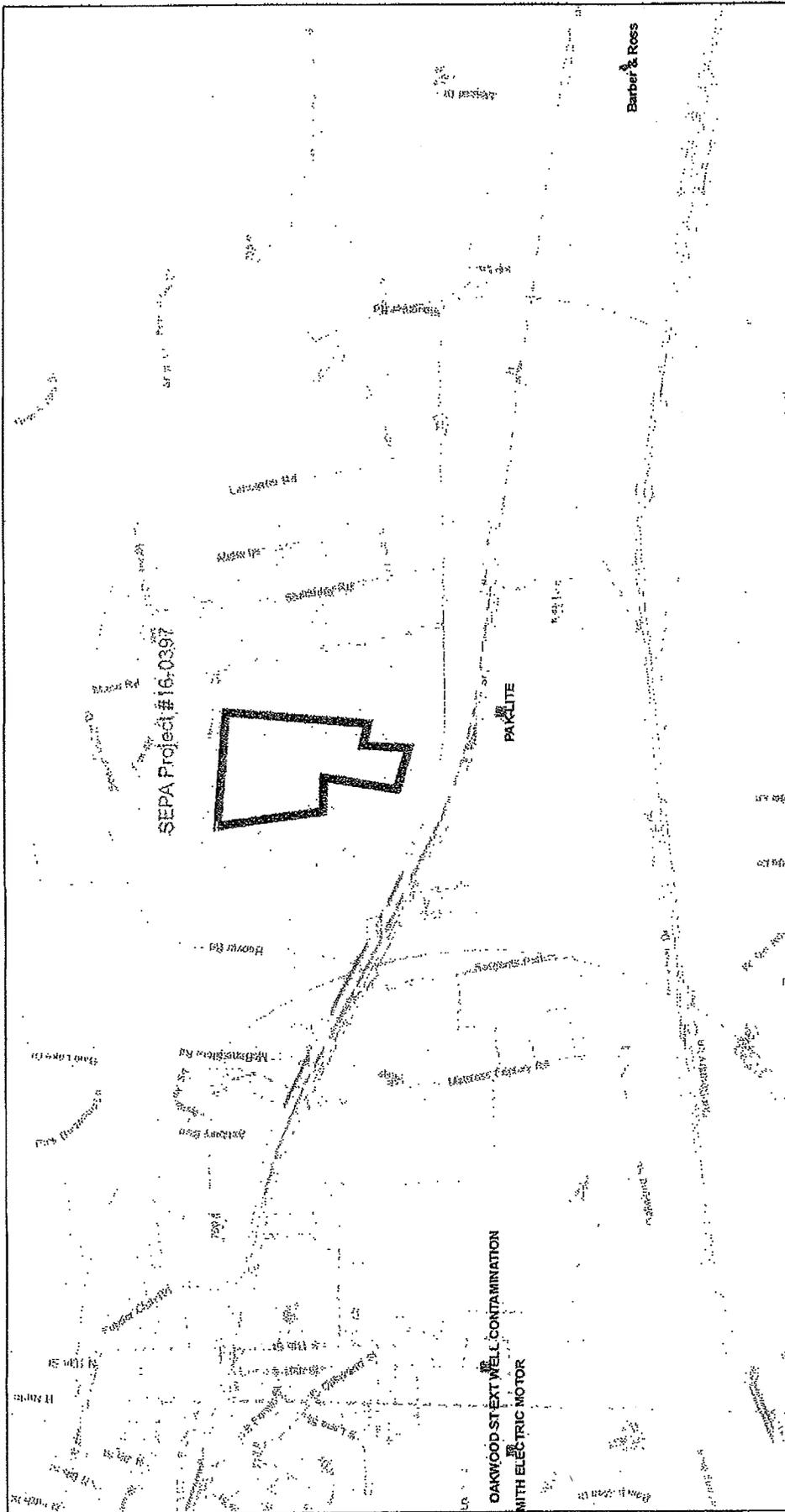
The Superfund Section has reviewed the proximity of CERCLIS and other sites under their jurisdiction to the construction of the Oakwood Solar Farm located at 6517 US Hwy 70, Mebane, Orange County. The proposed project will consist of developing approximately 27.3 acres of a 52.1-acre parcel as a solar array facility. The project will also include a gated site access road and perimeter chain link fence.

One (1) site was identified within one mile of the project as shown on the attached map and in the table below. The Superfund Section recommends that site files be reviewed to ensure that appropriate precautions are incorporated into any construction activities that encounter potentially contaminated soil or groundwater. Superfund Section files can be viewed at: <https://deg.nc.gov/about/divisions/waste-management/waste-management-rules-data/e-documents>.

Please contact me at 919.707.8334 if you have any questions.

ID #	Site Name	Status
NONCD0002254	PAK-LITE	Open site on the Inactive Hazardous Sites Inventory

# Superfund Section SEPA Review





Waste Management  
ENVIRONMENTAL QUALITY

PAT MCCRORY

*Director*

DONALD R. VAN DER VAART

*Secretary*

MICHAEL SCOTT

*Director*

July 18, 2016

To: Michael Scott, Director  
Division of Waste Management

From: Bill Hunneke, Eastern Region Compliance Supervisor,  
Compliance Branch, Hazardous Waste Section

Subject: Hazardous Waste Section Comments on construction of a solar facility located at 6517 US  
Highway 70, Mebane, NC (Orange County)  
Project Number: 16-0397

The Hazardous Waste Section (HWS) has reviewed the subject Scoping Request for the proposed construction of a solar facility located at 6517 US Highway 70, Mebane, NC (Orange County).

Any hazardous waste generated from the demolition, construction, operation, maintenance, and/or remediation (e.g. excavated soil) from the proposed project must be managed in accordance with the North Carolina Hazardous Waste Rules. The demolition, construction, operation, maintenance, and remediation activities conducted will most likely generate a solid waste, and a determination must be made whether it is a hazardous waste. If a project site generates more than 220 pounds of hazardous waste in a calendar month, the HWS must be notified, and the site must comply with the small quantity generator requirements. If a project site generates more than 2200 pounds of hazardous waste in a calendar month, the HWS must be notified, and the facility must comply with the large quantity generator requirements.

The proposed project site does not currently have an existing EPA Identification numbers for the generation of hazardous waste.

Should any questions arise, please contact me at 252-364-8977.

Kind regards,

William Hunneke  
Eastern Region Compliance Supervisor



PAT MCCRORY

Lafayette

DONALD R. VAN DER VAART

Nashville

MICHAEL SCOTT

Durham

DATE: July 12, 2016

TO: Michael Scott, Division Director through Sharon Brinkley

FROM: Deb Aja, Western District Supervisor - Solid Waste Section *Deborah Aja*

RE: SEPA Review Project #16-0397, Orange County  
ESA Renewables and Oakwood Solar Farm LLC Solar Array Project, Mebane

Digitally signed by  
Deborah Aja  
DN: cn=Deborah Aja,  
ou=Solid Waste Section, ou=  
emailedelimited@ncdeq.nc.gov, c=US  
Date: 2016.07.12 16:17:17  
+0400

The Solid Waste Section has reviewed the Environmental Assessment for the development of a solar facility on a 27.3 acre parcel located at 6517 US Highway 70, Mebane, Orange County, North Carolina. The review has been completed and has seen no adverse impact on the surrounding community and likewise knows of no situations in the community, which would affect this project from a solid waste perspective.

During the project, every feasible effort should be made to minimize the generation of waste, to recycle materials for which viable markets exist, and to use recycled products and materials in the development of this project where suitable. Any waste generated by this project that cannot be beneficially reused or recycled must be disposed of at a solid waste management facility approved to manage the respective waste type. The Section strongly recommends that any contractors are required to provide proof of proper disposal for all waste generated as part of the project. A list of permitted solid waste facilities is available online at: <http://deq.nc.gov/about/divisions/waste-management/waste-management-rules-data/solid-waste-management-annual-reports/solid-waste-permitted-facility-list>.

Please contact Mr. John Patrone, Environmental Senior Specialist, for with any questions regarding solid waste. Mr. Patrone may be reached at (336)-776-9673 or by email at [john.patrone@ncdenr.gov](mailto:john.patrone@ncdenr.gov).

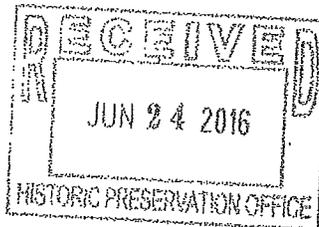
Cc: Jason Watkins, Field Operations Branch Head  
John Patrone, Environmental Senior Specialist  
Sarah Rice, Compliance Officer

NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

COUNTY: ORANGE

H11: ENERGY RELATED  
FACILITIES/ACTIVITIES

STATE NUMBER: 16-E-0000-0397  
DATE RECEIVED: 06/21/2016  
AGENCY RESPONSE: 07/18/2016  
REVIEW CLOSED: 07/21/2016



CH 15-2753

MS RENEE GLEDHILL-EARLEY  
CLEARINGHOUSE COORDINATOR  
DNCR - DIV OF PARKS AND RECREATION  
MSC 4617 - ARCHIVES BUILDING  
RALEIGH NC

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DEPT OF TRANSPORTATION  
DNCR - DIV OF PARKS AND RECREATION  
DPS - DIV OF EMERGENCY MANAGEMENT  
TRIANGLE J COG

7 (AK) g/22/16 j/24/16  
De 7/12/16

PROJECT INFORMATION

APPLICANT: Orange County  
TYPE: State Environmental Policy Act  
Environmental Assessment

DESC: Proposal is for the development of a solar facility on a 27.3 acre parcel located at 6517 US Highway 70, Mebane, NC (submitted pursuant to Orange County SEPA ordinance)

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:  NO COMMENT  COMMENTS ATTACHED

SIGNED BY: Renee Gledhill-Earley

DATE: 7.1.16



NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

160

JUN 23 2016

COUNTY: ORANGE

H11: ENERGY RELATED  
FACILITIES/ACTIVITIES

STATE NUMBER: 16-E-0000-0397  
DATE RECEIVED: 06/21/2016  
AGENCY RESPONSE: 07/18/2016  
REVIEW CLOSED: 07/21/2016

MS PAULA CUTTS  
CLEARINGHOUSE COORDINATOR  
DPS - DIV OF EMERGENCY MANAGEMENT  
FLOODPLAIN MANAGEMENT PROGRAM  
MSC # 4218  
RALEIGH NC

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TRIANGLE J COG

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AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:  NO COMMENT  COMMENTS ATTACHED

SIGNED BY:

*David Heilong*

DATE:

*6/23/16*

*Not in SFHA*



NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

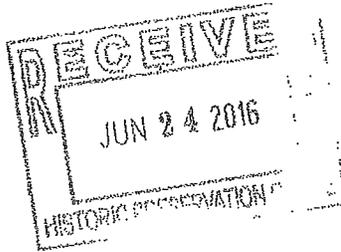
161

COUNTY: ORANGE

H11: ENERGY RELATED  
FACILITIES/ACTIVITIES

STATE NUMBER: 16-E-0000-0397  
DATE RECEIVED: 06/21/2016  
AGENCY RESPONSE: 07/18/2016  
REVIEW CLOSED: 07/21/2016

MS RENEE GLEDHILL-EARLEY  
CLEARINGHOUSE COORDINATOR  
DEPT OF NATURAL & CULTURAL RESOURCE  
STATE HISTORIC PRESERVATION OFFICE  
MSC 4617 - ARCHIVES BUILDING  
RALEIGH NC



CH 15-2753

PREVIOUSLY  
CLEARED

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DEPT OF TRANSPORTATION  
DNCR - DIV OF PARKS AND RECREATION  
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TRIANGLE J COG

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If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:  NO COMMENT  COMMENTS ATTACHED

SIGNED BY:

Renee Gledhill-Earley

DATE:

6.28.16



**PLANNING & INSPECTIONS DEPARTMENT**

**Craig N. Benedict, AICP, Director**

**Current Planning**  
**(919) 245-2575**  
**(919) 644-3002 (FAX)**  
**www.orangecountync.gov**



**131 W. Margaret Lane**  
**Suite 201**  
**P. O. Box 8181**  
**Hillsborough, NC 27278**



July 11, 2016

ESA Renewables  
 Oakwood Solar LLC  
 C/o Kyle Campbell and Javier Latre  
 4150 St. John's Parkway  
 Suite 1000  
 Sanford, FL 32771

RE: Initial Site Plan Review for Class A Special Use Permit (Case SU16-0003)  
 Orange County PINs 9835-02-9137 (site); and 9835-10-3858 (access)  
 Address: 6519 US Highway 70 West, Mebane, NC 27302

Dear Mr. Campbell and Mr. Latre:

Staff has reviewed your initial submittal documents for the above referenced Class A SUP for a Solar Array- Public Utility. The materials were deemed complete enough to start the staff review process. We do, however, have the following Staff Comments to offer. These comments should be addressed prior to the Neighborhood Information Meeting (NIM) on July 27, 2016.

**Current Planning Comments:**

1. Please add more labels and leaders to 8' foot- tall barbed-wire fence and reference Orange County Development Ordinance (UDO) Section 5.9.6 (C)(2)(e). Also show fence detail. Also, provide leader to others boxes with text to clearly indicate the areas the text boxes are referencing.
2. Review note indicating the solar arrays will be less than 40' tall. Give true or maximum height. I do not think you are intending to build 40' tall arrays.
3. Revise stated 40' and 20' building setbacks to 100', which is what is required for non-residential uses, and solar array-public utility uses (see most updated Site Plan for non-residential use).
4. Revise the address to 6519 US Highway 70 (and not this is the location of the easement area). 6515 US Highway 70 is the adjacent lot owned by the Mace family but the subject area is not yet addressed.

5. Revise proposed use to reflect UDO code language "Solar Array- Public Utility."
6. Recommend that you consider adding a landscape plan to better address the below comments.
7. Please consolidate the notes and clarify the Type D Land Use Buffer on the site plan. Please provide Staff with a detailed drawing/rendering of a typical 100 ft. section of the buffer. For every 100 ft. note the number of plants to be planted per the landscape requirements for the Type D Land Use Buffer. Also note that the typical section is to be applied where existing vegetation is removed or is insufficient to meet the stated Type D buffer rate. Also label areas outside the buffer that are to remain undisturbed.
8. Revise note 6 to also indicate species will be native, non-invasive and drought tolerant.
9. Provide a general list or range of proposed landscape materials and consolidate into a plant list.
10. Add notes and labels regarding existing vegetation throughout the site with species, height and caliper size (measured at DBH) ranges.
11. Indicate your limits of disturbance and tree save areas.
12. Provide a detail and/or cross section of the access easement and interior utility drives.
13. Please demarcate the floodplain with appropriate buffers on the site plan with a pattern or notation. Please do likewise with streams.
14. Provide a legend on plans to make it clearer what symbology and hatches represent.
15. There are several boxes without text and leaders to what may be the lease limits.
16. Please be advised and acknowledge on the plan that the SUP applies to the entire parcel and not just the leased area.
17. Please label and note dimensions on all driveways throughout the solar array area.
18. Record and reference the access easement on the frontage lot.
19. Indicate that access easement will be free and clear of any structures and/or obstructions.
20. Please also label and note the dimensions of the access easement leading to the site.
21. The current site plan shows that the easement leads into a driveway without change in dimension. This implies the EOP for the utility vehicles is 50' or that you have these interior drives within easements.
22. Please also reference the book and page number of the recorded easement.
23. Consider having one version of the plan with an ortho-photo and one without. This may make the plans easier to read and follow.
24. Please identify the outlined boxes (3) with lines connected from the edges of the solar array area to the boxes.
25. Please show more clearly the Parcel Identification Numbers (PINs) on the subject areas to make clear distinction between the parcel with the proposed solar arrays and the parcel from which an easement will be established.
26. Please ensure that the PIN is 9835-02-9137 (some of these numbers have been transposed so that the PIN is inaccurate in some cases) on all application materials and reference easement.

27. Recommend that you add an Existing Conditions sheet with the existing vegetation and environmentally sensitive areas (including slope ranges, etc).
28. Please review the tab labels and references to contents so that they directly reflect the name of the document(s) and or type of requirements. For example EA - Environmental Assessment is a specific application and requirement and should not be confused with a Phase I Environmental study. We also recommend that at the front of these binders you provide a summary sheet that outlines the general site plan, SUP specific/general standards and findings of fact and where the item can be found within the booklet and/or the site plan. This will make it easier for you to guide people as you conduct your presentations.

#### Erosion Control/Stormwater Comments:

1. The project will need both an Erosion Control and Stormwater plan with a corresponding application and fees. Please note as such on plans.
2. Item 3. in the site plan denotes that a 100 yr. flood plain doesn't exist on the subject parcel when the Orange County GIS indicates a 100 year. flood plain. Please remove reference and revised to reflect FEMA Panel and Base Flood Elevation.
3. The report results of wetland delineation denotes three ponds contiguous for the western stream of the subject parcel however, Orange County GIS indicates five pond features. The report also references the Orange County UDO incorrectly with regards to Buffer's. The report denotes < 7.5 % slope buffer = 60' actual is 65' and > 7.5% slope report denotes 85' actual is 80'. A Stream Call request (SWID) is suggested for the parcel since current field conditions are the determining factor for buffering surface waters.
4. Item 6. In the site plan needs to also reference that after approval of the Erosion Control and Stormwater plan a preconstruction conference is required prior to any land disturbance.
5. No net increase in peak flow leaving the site from the predevelopment conditions for the 1 year, 24 Hour storm.
6. Nutrient limits for the Back Creek Protected watershed are Nitrogen 3.8 pounds/acre/year, Phosphorous 1.43 pounds/acre/year.
7. Low Impact Development (LID) is suggested as a practical alternative for management of the Stormwater for the site as we have seen success with Solar Farm use of LID.

#### Department of Environment and Park and Recreation (DEAPR):

1. No edits/comments. See Attached memo.

#### Solid Waste Management:

1. No edits/comments. See Attached memo.

#### NCDOT:

1. Please coordinate directly with NCDOT District Engineer office at (336) 570-6833 to discuss change in use and driveway permit needs/requirements.

**Fire Marshal/EMS:**

1. Please add notes regarding HAZMAT on-site.
2. Add a gate detail and how EMS access will be provided.
3. Add Note that Fire Marshal shall review and approve the access gate prior to site plan approval.

**Environmental Health:**

1. No comments received to date.

**Building Inspections:**

1. No comments received to date.

**County Attorney:**

1. No comments received to date.

Please address these comments and provided revised plans and/or materials by July 20<sup>th</sup> so we can help you prepared for the Neighborhood Information Meeting (NIM) on July 27<sup>th</sup>.

As always, please feel free to contact me if you have any comments or questions. You can reach me at (919) 245-2577 and/or [pmallett@orangecountync.gov](mailto:pmallett@orangecountync.gov).

Very Respectfully,  
*Patrick R. Mallett*  
Patrick R. Mallett  
Planner II

**CC:**

File;  
Michael Harvey, Current Planning supervisor; and  
Rachel McCook, Planner I.

**OFFICE OF THE ORANGE COUNTY SHERIFF**

**Sheriff Charles S. Blackwood**  
106 East Margaret Lane  
Hillsborough, North Carolina 27278

Hillsborough  
(919) 644-3050

Chapel Hill  
(919) 942-6300

Fax  
(919) 732-6403

July 26, 2016

Patrick R. Mallett  
Orange County Planning & Inspections  
131 W. Margaret Lane, Suite 201  
Hillsborough, NC 27278

**Re: Oakwood Solar Farm Class A SUP**  
**PIN 9835-02-9137**

Dear Mr. Mallett:

This letter confirms that The Orange County Sheriff's Office does not foresee any issues with the Special Use Permit for the Oakwood Solar Farm. Given its location in the unincorporated portion of Mebane, my Office is responsible for providing law enforcement services to this area. I am not aware of any safety issues related to this location

If you have any questions, please contact me via email at [csblackwood@orangecounty.nc.gov](mailto:csblackwood@orangecounty.nc.gov) or by phone at (919) 612.0003.

Sincerely,

A handwritten signature in black ink that reads "Charles S. Blackwood". The signature is written in a cursive, flowing style.

Sheriff Charles S. Blackwood  
Orange County Sheriff's Office

**Patrick R. Mallett**

---

**To:** Steve Brantley  
**Subject:** RE: Oakwood Solar Farm information for your review

---

**From:** Steve Brantley  
**Sent:** Wednesday, June 22, 2016 10:29 AM  
**To:** Molly Boyle  
**Subject:** RE: Oakwood Solar Farm information for your review

The proposed solar farm will be the 3<sup>rd</sup> solar facility in that immediate area. This new one seems particularly surrounded by private residences, according to my quick review of the County's GIS web site. However, the site appears to be shielded from view along U.S 70 due to other properties facing the road. The proposed solar farm does not occupy land that I would consider to be prime development land, with respect to attracting industry, so I really have no negative comments, other than to caution the growing opposition (recently seen in Person County) as more solar farms spread.

---

**From:** Molly Boyle  
**Sent:** Tuesday, June 21, 2016 2:39 PM  
**To:** Rachel McCook; Michael Harvey; Alan Clapp; Anne Marie Tosco; 'Chuck Edwards'; Craig Benedict; 'D'Angelo Jones'; Howard W. Fleming; James Bryan; Jason Shepherd; Jeff Scouten; Jennifer Geda; Jocelyn Gentry; John Kase; Kevin Lindley; Michael Burton; Patrick R. Mallett; Peter Sandbeck; Rich Shaw; Sheriff Charles Blackwood; Steve Brantley; Steve J Kaltenbach; Tammy Hicks; Tom Altieri; Max Bushell; Wesley Poole; Michael Rettie; James Baxter; Abigaile Pittman; David Ward; Tina Love  
**Subject:** Oakwood Solar Farm information for your review

Good afternoon, DAC members.

Planning staff requests your feedback on the Special Use Permit documents for the Oakwood Solar Farm (PIN 9835-02-9137). You can access the documents on the T: drive using the following pathway:

T:\Orange County Planning - Development Advisory Committee (DAC) Meeting Folder\June 16, 2016\SU16-00003  
Oakwood Solar Farm Class A SUP

Please submit feedback to Rachel and Pat by July 1, 2016. Thank you in advance for your review of this project.

Kind Regards,

**Molly Boyle**  
Planning Technician  
Orange County Planning & Inspections  
(919) 245-2599

*Pursuant to North Carolina General Statute 132, correspondence sent and received from this account is a public record and may be disclosed to third parties.*

**Patrick R. Mallett**

---

**To:** Rachel McCook  
**Subject:** RE: Oakwood Solar Farm information for your review

---

**From:** Peter Sandbeck  
**Sent:** Monday, June 27, 2016 10:51 AM  
**To:** Rachel McCook; Patrick R. Mallett  
**Cc:** Michael Harvey; Rich Shaw  
**Subject:** FW: Oakwood Solar Farm information for your review

Rachel and Pat,

Attached is the comment memo from DEAPR for the Oakwood Solar Farm project, prepared by Rich with my comments added regarding cultural resources. We did not see any concerns based on our review of the site and plans.

Let us know if you have any questions. Thanks.

Peter

---

**From:** Molly Boyle  
**Sent:** Tuesday, June 21, 2016 2:39 PM  
**To:** Rachel McCook; Michael Harvey; Alan Clapp; Anne Marie Tosco; 'Chuck Edwards'; Craig Benedict; 'D'Angelo Jones'; Howard W. Fleming; James Bryan; Jason Shepherd; Jeff Scouten; Jennifer Geda; Jocelyn Gentry; John Kase; Kevin Lindley; Michael Burton; Patrick R. Mallett; Peter Sandbeck; Rich Shaw; Sheriff Charles Blackwood; Steve Brantley; Steve J Kaltenbach; Tammy Hicks; Tom Altieri; Max Bushell; Wesley Poole; Michael Rettie; James Baxter; Abigaile Pittman; David Ward; Tina Love  
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Please submit feedback to Rachel and Pat by July 1, 2016. Thank you in advance for your review of this project.

Kind Regards,

**Molly Boyle**  
 Planning Technician  
 Orange County Planning & Inspections  
 (919) 245-2599

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## ORANGE COUNTY



Department of Environment,  
Agriculture, Parks & Recreation

## MEMORANDUM

To: Michael Harvey, *Current Planning Supervisor*

From: Rich Shaw, *Land Conservation Manager*  
Peter Sandbeck, *Cultural Resources Coordinator*

Date: June 30, 2016

Re: Proposed Oakwood Solar Farm – U.S. Highway 70 Mebane

---

Thank you the opportunity to review and comment on the proposed Oakwood Solar Farm at 6517 U.S. Hwy 70 in Mebane. DEAPR comments on such developments are generally to address concerns with respect to potential impacts on important natural or cultural resources.

The solar farm would be located on an interior 25-acre portion of 53-acre property (PIN 9835-02-9137) owned by Mr. Carl J. Mace. The parcel is zoned Rural Residential (R-1), Back Creek Protected Watershed Overlay, and includes land in 100- and 500-year flood zones. The site is bordered by large- and small-lot rural residential properties, and by one or more commercial businesses along the southern boundary with access from US 70.

*Natural Resources Review Comments:* There are no known identified or mapped natural resource areas of significance (e.g., natural heritage sites, proposed wildlife corridors, prime forest) located on this property. The former pine plantation was clearcut sometime between 2010 and 2013. There are two wetland areas (ponds) and two streams (draining to Lake Michael) documented by Headwater Environmental, Inc., but the solar arrays would be contained within the interior portion of the site, outside of the stream corridors.

Therefore, the plan appears consistent with the County's desire to minimize adverse environmental impacts with respect to the protection of floodplains, wetlands, natural areas and wildlife habitat.

The project is also consistent with policies in the Orange County Comprehensive Plan, such as the goal of "Energy conservation, sustainable use of non-polluting renewable energy resources, efficient use of non-renewable energy resources and clean air." [Natural and Cultural Systems Goal 1, Page 6-34] and the County's objective of "Foster[ing] participation in green energy programs such as installation incentives for solar hot water/solar generation/solar tempering in residential and commercial construction." [Objective AE-15]

*Cultural Resources Review Comments:* There are no known identified or mapped cultural resources or historic cemeteries within the project parcel or on any of the surrounding adjoining parcels. The project appears to be consistent with the historic preservation goals in the Orange County Comprehensive Plan, Goal 4: "Preservation of historic, cultural, architectural and archaeological resources, and their associated landscapes."

If you have questions please contact Rich at x-2514 or Peter at x-2517.

**Patrick R. Mallett**

---

**To:** Patrick R. Mallett  
**Subject:** RE: EMS Oakwood Solar Farm

---

**From:** Jason Shepherd  
**Sent:** Friday, July 08, 2016 11:40 AM  
**To:** Patrick R. Mallett  
**Subject:** Oakwood Solar Farm

Patrick,

I've reviewed this plan and conducted a fire inspection and have no comments that would prohibit this project to proceed.

Jason

Jason B. Shepherd  
Orange County Fire Marshal  
Orange County Emergency Services  
Fire Marshal Division  
510 Meadowlands Drive, Hillsborough NC 27278  
P.O. Box 8181, Hillsborough NC 27278  
Office (919) 245-6151  
Cellular (919) 257-8316  
Fax (919) 732-8137  
[jshepherd@orangecountync.gov](mailto:jshepherd@orangecountync.gov)

**Patrick R. Mallett**

---

**From:** Jeff Scouten  
**Sent:** Friday, June 17, 2016 10:08 AM  
**To:** Patrick R. Mallett  
**Subject:** Oakwood Solar Farm Plan Review Comments Dated 6/17/16  
**Attachments:** Oakwood Solar Farm Plan Review Comments Dated 6-17-16 JS.pdf

Pat,

I have completed my review of the subject plans and my comments are on the attached memo document. Thanks for the opportunity to review and comment on this application and let me know if you have any questions or wish to discuss this matter further.

*Jeff Scouten  
Environmental Enforcement Supervisor  
Orange County Solid Waste Management  
P.O. Box 17177  
1207 Eubanks Road  
Chapel Hill, NC 27516-7177  
919-968-2788 x107 (Office)*

Pursuant to North Carolina General Statute 132, correspondence sent and received from this account is a public record and may be disclosed to third parties.

## MEMORANDUM

**TO:** PAT MALLETT, PLANNER II, ORANGE COUNTY PLANNING & INSPECTIONS DEPARTMENT  
**FROM:** JEFF SCOUTEN, ORANGE COUNTY SOLID WASTE MANAGEMENT  
**SUBJECT:** OAKWOOD SOLAR FARM, LLC PLAN REVIEW COMMENTS – PLANS DATED 5/25/16  
**DATE:** JUNE 17, 2016

---

I have completed my review of the subject plan and I find that the applicant has satisfactorily addressed my comments from the previous review. *As such, I would have no objection to the approval of the plan.*

Thanks for the opportunity to review and comment on this application and let me know if you have any questions or wish to discuss this matter further.

**Patrick R. Mallett**

---

**From:** Sheriff Charles Blackwood  
**Sent:** Monday, July 25, 2016 2:15 PM  
**To:** Patrick R. Mallett  
**Subject:** Re: Oakwood Solar Farm information for your review

I can affirm that it is not my place to govern or approve planning projects. I have no information as to the design or plan of the solar farm nor have I received any complaints about the building of the project one way or the other. If you feel there is a legal issue surrounding the project which brings you or anyone else concern, I'd be happy to listen and offer my opinion and or guidance.

Regards,

Sheriff Blackwood

Sent from my iPhone

On Jul 25, 2016, at 2:08 PM, Patrick R. Mallett <[pmallett@orangecountync.gov](mailto:pmallett@orangecountync.gov)> wrote:

Sheriff Blackwood,

Can you affirm that you have no comments or issues regarding the Oakwood Solar SUP? I just need something for the Staff Comments Attachment for the PB Abstract.  
Thanks!

Very Respectfully,

Patrick R. Mallett, Planner II  
Orange County Planning & Inspections Department

Phone: (919) 245-2577

Fax: (919) 644-3022

E-mail: [pmallett@orangecountync.gov](mailto:pmallett@orangecountync.gov)

Orange County Planning Website: <http://www.orangecountync.gov>

Address:

131 W. Margaret Lane, Suite 201

P.O. Box 8181

Hillsborough, NC 27278

Pursuant to North Carolina General Statute 132, correspondence sent and received from this account is a public record and may be disclosed to third parties.

**From:** Molly Boyle

**Sent:** Tuesday, June 21, 2016 2:39 PM

**To:** Rachel McCook; Michael Harvey; Alan Clapp; Anne Marie Tosco; 'Chuck Edwards'; Craig Benedict; 'D'Angelo Jones'; Howard W. Fleming; James Bryan; Jason Shepherd; Jeff Scouten; Jennifer Geda;

Jocelyn Gentry; John Kase; Kevin Lindley; Michael Burton; Patrick R. Mallett; Peter Sandbeck; Rich Shaw; Sheriff Charles Blackwood; Steve Brantley; Steve J Kaltenbach; Tammy Hicks; Tom Altieri; Max Bushell; Wesley Poole; Michael Rettie; James Baxter; Abigaile Pittman; David Ward; Tina Love  
**Subject:** Oakwood Solar Farm information for your review

Good afternoon, DAC members.

Planning staff requests your feedback on the Special Use Permit documents for the Oakwood Solar Farm (PIN 9835-02-9137). You can access the documents on the T: drive using the following pathway:

T:\Orange County Planning - Development Advisory Committee (DAC) Meeting Folder\June 16, 2016\SU16-00003 Oakwood Solar Farm Class A SUP

Please submit feedback to Rachel and Pat by July 1, 2016. Thank you in advance for your review of this project.

Kind Regards,

**Molly Boyle**  
Planning Technician  
Orange County Planning & Inspections  
(919) 245-2599

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## Patrick R. Mallett

---

**From:** James Bryan  
**Sent:** Monday, July 25, 2016 2:26 PM  
**To:** Patrick R. Mallett; Anne Marie Tosco  
**Subject:** RE: Oakwood Solar Farm information for your review

We don't offer official comments for SUP applications.

For internal reference, we haven't been contacted by any departments (planning or otherwise) about any unusual legal issues being present.

---

**From:** Patrick R. Mallett  
**Sent:** Monday, July 25, 2016 2:08 PM  
**To:** James Bryan; Anne Marie Tosco  
**Subject:** RE: Oakwood Solar Farm information for your review

**Can you affirm that you have no comments or issues regarding the Oakwood Solar SUP? I just need something for the Staff Comments Attachment for the PB Abstract.  
 Thanks!**

Very Respectfully,

Patrick R. Mallett, Planner II  
 Orange County Planning & Inspections Department

Phone: (919) 245-2577  
 Fax: (919) 644-3022  
 E-mail: [pmallett@orangecountync.gov](mailto:pmallett@orangecountync.gov)  
 Orange County Planning Website: <http://www.orangecountync.gov>

Address:  
 131 W. Margaret Lane, Suite 201  
 P.O. Box 8181  
 Hillsborough, NC 27278

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**From:** Molly Boyle  
**Sent:** Tuesday, June 21, 2016 2:39 PM  
**To:** Rachel McCook; Michael Harvey; Alan Clapp; Anne Marie Tosco; 'Chuck Edwards'; Craig Benedict; 'D'Angelo Jones'; Howard W. Fleming; James Bryan; Jason Shepherd; Jeff Scouten; Jennifer Geda; Jocelyn Gentry; John Kase; Kevin Lindley; Michael Burton; Patrick R. Mallett; Peter Sandbeck; Rich Shaw; Sheriff Charles Blackwood; Steve Brantley; Steve J Kaltenbach; Tammy Hicks; Tom Altieri; Max Bushell; Wesley Poole; Michael Rettie; James Baxter; Abigaile Pittman; David Ward; Tina Love  
**Subject:** Oakwood Solar Farm information for your review

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Oakwood Solar Farm Class A SUP

Please submit feedback to Rachel and Pat by July 1, 2016. Thank you in advance for your review of this project.

Kind Regards,

**Molly Boyle**  
Planning Technician  
Orange County Planning & Inspections  
(919) 245-2599

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**Patrick R. Mallett**

---

**From:** Alan Clapp  
**Sent:** Tuesday, July 26, 2016 8:23 AM  
**To:** Patrick R. Mallett; John Kase; David Ward  
**Subject:** RE:

Patrick,

Environmental Health does not have any issues with the Oakwood Solar Farm LLC Class A SUP.

We see that no well or septic systems are needed or will be impacted.

Alan

**Alan Clapp**

Environmental Health Director

Phone: 919.245.2360 / Fax: 919.644.3006

Website: <http://www.co.orange.nc.us/envhlth/index.asp>

Email: [aclapp@orangecountync.gov](mailto:aclapp@orangecountync.gov)



*Improving health. Inspiring change.*



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Please tell us how we are doing by taking this very quick survey. We appreciate your comments.

<https://www.surveymonkey.com/r/ehsurvey2015-2016>

**From:** Patrick R. Mallett  
**Sent:** Monday, July 25, 2016 2:06 PM  
**To:** Alan Clapp; John Kase; David Ward  
**Subject:**

Can one of you send me an e-mail indicating that EH has not significant issues with the Oakwood Solar Farm LLC Class A SUP? I just need something for the file.

Very Respectfully,

Patrick R. Mallett, Planner II

**PLANNING & INSPECTIONS DEPARTMENT**  
**Craig N. Benedict, AICP, Director**

**Administration**  
**(919) 245-2575**  
**(919) 644-3002 (FAX)**  
**www.orangecountync.gov**



**131 W. Margaret Lane**  
**Suite 201**  
**P. O. Box 8181**  
**Hillsborough, NC 27278**



**NEIGHBORHOOD INFORMATION MEETING**  
**OAKWOOD SOLAR, LLC**

*Wednesday, July 27, 2016 – 6:00 pm*  
*Whitted Building*  
*300 W. Tryon Street*

**Meeting Notes**

***In attendance***

- *Michael Harvey, Patrick Mallett, Rachel McCook, and Molly Boyle (Current Planning)*
- *Javier Latre with ESA Renewables, LLC (Applicant)*
- *Brian Quinlan with Calvert Energy (Applicant)*
- *Carl Mace, Sr. of 916 Mace Road (Property owner of PIN 9835-02-9137, the proposed site for Oakwood Solar, LLC)*
- *Sharon Mace of 916 Mace Road (Relative of Carl Mace, Sr.)*
- *Dawn Mace Walters of 922 Mace Road (Relative of Carl Mace, Sr.)*
- *Paul Fredrick of 6510 Hwy 70 (Neighboring property owner to the southeast)*
- *Roger and Sally Ivey of 6432 Woodland Drive (Neighboring property owners to the north)*
- *Kim Piracci (Planning Board member)*

***Introduction***

- Michael Harvey, Current Planning, welcomed attendees to the meeting.
- Patrick Mallett, Current Planning, explained that the Neighborhood Information Meeting (NIM) was designed to be an informal dialogue about the proposed development of a solar array on the Mace property off of US Hwy 70 (PIN 9835-02-9137). The NIM lets neighboring property owners ask questions about the project outside of the formal, legal constraints of a Planning Board meeting or a Board of County Commissioners (BOCC) public meeting.
- Patrick Mallett also explained that the BOCC meeting, which is scheduled for September 21, 2016, is a quasi-judicial process. It is similar to a court proceeding in that evidence is entered into the record, those giving testimony are sworn in, and hear-say is not admissible.

- Patrick Mallett briefly reviewed the documents attendees received via mail and/or at the entrance to the meeting room (e.g., the revised site plan, the site assessment for the property, the meeting schedule for Class A Special Use Permits, and a fact sheet about the Special Use Permit process). The proposed solar array falls under the Class A Special Use Permit (SUP) category.

### ***Presentation from Brian Quinlan with Calvert Energy***

- Calvert Energy and ESA Renewables, LLC are the applicants for this project. Brian Quinlan represented Calvert Energy and gave a PowerPoint presentation about the project.
- Calvert Energy and ESA Renewables, LLC have both been in business for more than 30 years.
- The applicants are leasing 27.3 acres of a 52.1 acre parcel off of US Hwy 70. The parcel belongs to Carl Mace, Sr. of 916 Mace Road, and has been owned by the Mace family for over 50 years. The Mace family runs a business at the southern end of the property along US Hwy 70; there will be an access easement established on this property to the solar farm.
- The Mace family has been trying to figure out what to do with the remainder of the parcel, which is flanked by a chain of ponds and contains wetlands and floodplain. The solar array fits well with the Mace's plan because it is low-impact and will not interfere with their business operation to the south.
- In addition, Brian Quinlan stated the low-impact nature of the solar array project aligns with the current zoning for the property (Rural Residential).
- The project will not require water and sewer.
- Once established, the solar arrays will be a fully functioning system without on-sight personnel needed.
- The leased land will be maintained seasonally, or more often, as needed. The solar panels will be cleaned; water for cleaning will be brought from off-site.
- Patrick Mallett, Current Planning, clarified that the applicants have recorded a variable-width easement to access the leased portion of the property.
- Brian Quinlan, Calvert Energy, added that there will be a six month construction period during which neighbors will see activity. After that, there will be very little traffic to the site.
- Mr. Quinlan then addressed the **general standards** with which the SUP proposals must comply. More specifically, the proposal must maintain and/or enhance the following:
  - **Public health, safety, and general welfare;**
  - **The value of contiguous property; and**
  - **The character and harmony of the area in which the proposal is located.**
- On August 3, 2016, the Planning Board will hear factual evidence and sworn testimony from the applicant and the surrounding property owners (if applicable). The Planning Board will then make **Findings of Fact** (i.e., state if the applicant's proposal meets the required standards) based on the evidence presented. The Planning Board will recommend approval or denial based on these findings, and the decision will be provided to the BOCC during the Public Hearing scheduled for November 21, 2016.
- **Public Health, Safety, and General Welfare:**
  - Mr. Quinlan said all wiring and equipment meets local, state, and federal codes.
  - The site will be fenced (chain-link fence and barbed wire) with a single locked access point.

- The solar arrays will be mounted via direct drive posts without major land disturbance. Panels will be positioned at a fixed tilt (approximately 20-25 degree angle, 2 feet off of the ground and 7-8 feet in height at the highest point). There will be five concrete pads for converters. Construction is expected to take 4-6 months. Stormwater management is practiced during the construction period.
- The solar panels themselves are encapsulated in glass. If the glass is cracked, the chemicals are stable. The EPA has said the panels are even safe enough to landfill.
- The electromagnetic field (EMF) from the solar panels dissipates within 150 feet. Mr. Quinlan noted that the closest home is 400 feet from the site.
- **The Value of Contiguous Property:**
  - Mr. Quinlan said he spoke previously with a realtor, who gave a germane example about a subdivision in Goldsboro, NC. Several homes in the subdivision were already built when a solar farm was established on an adjacent lot. The realtor observed no decreases in property values for the subdivision lots/homes after the solar farm was established.
  - Trees and shrubs not within the buffer areas will be removed during site development, though the applicant will also supplement landscaping to meet the requirements. There is roughly a 20 foot – 35 foot differential to adjacent properties from higher points on site.
- **The Character and Harmony:**
  - Mr. Quinlan said the solar array will create minimal impervious surface coverage, but the project may require some stormwater management. The applicants are working with Erosion Control & Engineering on that.
  - The stream buffers and floodplain on the lot have been surveyed. Mr. Quinlan said those areas will not be disturbed.
  - The applicants said the project will comply with the Type D Land Use Buffer required by the County.
  - Patrick Mallett, Planner II, noted that solar panels will be approximately 20 – 30 ft. above the neighboring properties on an elevated knoll.
  - Mr. Quinlan said the proposed development is low impact. Their traffic study showed that it will yield less than one trip per day.
  - The lease is for 15 years (three 5-year terms).
  - The applicants already have a decommissioning plan in place for 2025. If necessary, the applicants will have the area re-seeded after the solar arrays are removed.

### ***Question and Answer Period***

- Paul Fredrick, a neighboring property owner, asked if the applicants would be lighting the site. The applicants said no.
- Roger Ivey, a neighboring property owner, asked if the applicants had conducted a decibel survey for the solar panels. Javier Latre with ESA renewables explained that the inverters on the solar panels are like transformers. He said the sound dissipates within 150 ft. of the inverters, and the panels are more than 150 ft. from the property lines of the site.
- The applicants, Patrick Mallett, and Mr. Ivey looked at the site plan, and it appears Mr. Ivey's property is at least 1,000 ft. from the inverters. Mr. Latre said he would send Mr. Ivey information showing how far his property is from the inverters.

- Michael Harvey, Current Planning, also explained that the County requires the inverters to be located at the center of the property to help prevent noise from traveling to neighboring properties.
- Mr. Quinlan volunteered to send the noise generation study to any interested parties.
- Mr. Ivey said he was also worried about erosion, but he was confident the County would ensure necessary erosion control.
- Sally Ivey, a neighboring property owner, asked if the solar panels would be visible from her property. Mr. Quinlan said the trees preserved by the Type D Land Use Buffer would screen the solar array from neighboring lots. Patrick Mallett added that the Type D Land Use Buffer will require a mix of canopy trees, understory trees, and shrubs, which will create a better screen. Mr. Latre added that as soon as the site is inspected, the applicant will plant the trees and shrubs as soon as possible so that the vegetation will grow as fast as possible.
- Paul Fredrick asked if the Type D Buffer was standardized. He said he drove past Stroud's Creek Farm, which also has a solar array. He said the screen does not hide the solar array very well. Patrick Mallett, Planner II, said land use buffer requirements are more stringent now than they were when Stroud's Creek Farm got its solar array.
- Current Planning staff noted that once a Special Use Permit (SUP) is approved, the next steps are for the applicant to obtain all necessary permits, including but not limited to building permits, erosion control permits, NCDOT driveway permits, etc. with a pre-construction process. The SUP is tied to the exact plan approved at the Register of Deeds Office.
- Michael Harvey, Current Planning, closed the meeting by reiterating that Current Planning staff is a neutral party in this process. He encouraged neighbors to contact Current Planning with any questions or concerns.
- Current Planning staff will recommend to the Planning Board that this proposal be approved with conditions. Planning staff will not make a recommendation to the Board of County Commissioners until the night of the official public hearing.

**PLANNING & INSPECTIONS DEPARTMENT**  
**Craig N. Benedict, AICP, Director**

**Administration**  
**(919) 245-2575**  
**(919) 644-3002 (FAX)**  
**www.orangecountync.gov**



**131 W. Margaret Lane**  
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**Hillsborough, NC 27278**



**CERTIFICATION OF MAILING – NEIGHBORHOOD INFORMATION**  
**MEETING**

**CLASS A SPECIAL USE PERMIT – SOLAR ARRAY PUBLIC UTILITY**  
**OAKWOOD SOLAR FARM LLC – 6519 US HIGHWAY 70 (PIN 9835-02-9137)**  
**ORANGE COUNTY, NORTH CAROLINA**

I, Patrick Mallett, Planner II with Orange County, North Carolina, DO HEREBY CERTIFY that in accordance with the provisions of Section 2.7 of the Orange County Unified Development Ordinance (UDO) I have mailed, or caused to be mailed, via first class mail a Neighborhood Information Meeting notice.

This notice informed those property owners within 1,000 of the subject property of the processing of a Class A Special Use Permit application, submitted by Oakwood Solar Farm LLC, seeking to develop a Solar Array Public Utility on a parcel of property off of US Highway 70.

The applicant is proposing to develop a solar facility on a 27.3 acre leased portion of the 52.1 acre subject property, further identified utilizing Orange County Parcel Identification Number (PIN) 9835-02-9137, with the remaining 24.8 acres being undeveloped. Access to the proposed array is intended to go through a parcel of property off of US Highway 70 with a PIN of 9835-10-3858.

The owners were identified according to the Tax Records and as required by the UDO.

The mailed notice specified the date, time, place and subject of the neighborhood meeting and provided information on the Special Use Permit review process.

WITNESS my hand, this 1<sup>st</sup> day of July, 2016.

Patrick Mallett  
 Planner II

**PLANNING & INSPECTIONS DEPARTMENT**  
**Craig N. Benedict, AICP, Director**

**Current Planning**  
**(919) 245-2575**  
**(919) 644-3002 (FAX)**  
**www.orangecountync.gov**



**131 W. Margaret Lane**  
**Suite 201**  
**P. O. Box 8181**  
**Hillsborough, NC 27278**



July 1, 2016

**RE: NOTICE OF NEIGHBORHOOD INFORMATION MEETING - Discussion and review of a Special Use Permit (Class A) application proposing development of a Solar Array-Public Utility.**

To Whom It May Concern:

Please be advised the Orange County Planning Department has received a Special Use Permit application (Class A SUP) proposing the development of a *Solar Array-Public Utility* on a 27.3 acre portion (leased acreage) of a 52.1 acre parcel of property located off of US Highway 70. The application was submitted by ESA Renewables, Oakwood Solar Farm LLC, and the owners of the subject property.

The property subject to the proposed development, further identified utilizing Orange County Parcel Identification Number (PIN) 9835-02-9137, is located within the Cheeks Township of Orange County and is zoned:

- Rural Residential (R-1),
- Back Creek Protected Watershed Protection Overlay District, and
- Efland Cheeks Overlay District (ECOD) Pre-designated commercial area.

and is accessible via an access easement through an adjacent property located at 6517 US Highway 70, (PIN) 9835-10-3858. The easement area includes an existing driveway providing access to both 6517 US Highway 70 and the subject parcel. Please refer to the attached Site Assessment map for additional site details.

The application, submitted by ESA Renewables, Oakwood Solar Farm LLC, and the property owners, proposes the development of a commercial solar facility operated and managed by the Oakwood Solar Farm, LLC (an ESA partnership established for the project). This facility proposes to convert sunlight into electricity via ground-mounted Photovoltaic cell solar panels, which will be sold to a power company for the purpose of contributing to the power service grid for the surrounding area. Please see the attached site plans for additional information on the layout of the proposed solar arrays.

A *Solar Array-Public Utility* is classified by the Orange County Unified Development Ordinance (UDO) Section 5.2: *Table of Permitted Uses* as a permitted land use within the R-1 zoning district subject to the issuance of the Class A SUP.

You are receiving this letter because according to Orange County Land Records data you own property within 1,000 of the subject property proposed for development as a *Solar Array-Public Utility*.

***The purpose of this letter is to inform you of the scheduling of a Neighborhood Information Meeting (NIM) for:***

**Date:** Wednesday, July 27, 2016

**Time:** 6:00 p.m. to 8:00 p.m.

**Location:** Whitted Human Services Building  
Meeting Room 230  
300 West Tryon Street  
Hillsborough, NC 27278

The purpose of the NIM is to allow local property owners and other interested parties to discuss/review/ask questions about the project and the permit review process. The applicant will have representatives on hand to review/answer questions about the project while members of the County Planning Department will be available to discuss the Class A SUP permit review process. Staff has included a Special Use Permit Fact Sheet providing information on the permit review process in advance of the NIM.

Please refer to the attached map showing the location of the Whitted Human Services Building and parking area(s).

Copies of the application, including the submitted site plan, can be viewed on the Orange County website at:

[http://www.orangecountync.gov/departments/planning\\_and\\_inspections/index.php](http://www.orangecountync.gov/departments/planning_and_inspections/index.php).

Per the Section 2.7 of the UDO, Class A SUP applications are initially reviewed by the Planning Board, who makes a recommendation on the projects approval and/or denial, and are then reviewed and acted upon by the Orange County Board of Commissioners (BOCC) after the holding of a previously scheduled/advertised public hearing.

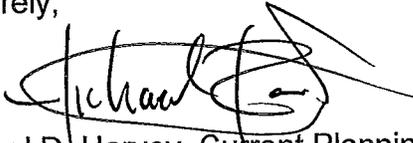
The Planning Board is tentatively slated to review this project at its August 3, 2016 regular meeting. The public hearing for the project is tentatively scheduled for Monday, September 12, 2016.

Please note additional notification of the date/time/location of both the Planning Board meeting and the BOCC public hearing shall be sent out to all property owners within 1,000 feet of the subject property as required under the UDO.

If you require additional assistance, or have questions related to the project or Class A SUP process, please contact a Planning Department staff member at (919) 245-2575.

We look forward to seeing you for the NIM on July 27, 2016 at the Whitted Human Services Building in Hillsborough.

Sincerely,



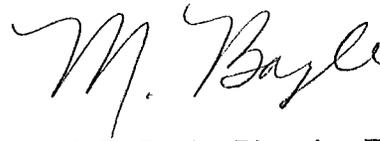
Michael D. Harvey, Current Planning Supervisor



Patrick Mallett, Planner II



Rachel McCook, Planner I



Molly Boyle, Planning Technician

Attachments:

- 1) Site Assessment of the subject property and easement location;
- 2) Site Plans illustrating the proposed solar array-public utility;
- 3) Vicinity Map for the NIM with directions to the Whitted Human Services Building; and
- 4) SUP Fact Sheet.

**PLANNING & INSPECTIONS DEPARTMENT**  
**Craig N. Benedict, AICP, Director**

**Current Planning**  
**(919) 245-2575**  
**(919) 644-3002 (FAX)**  
**www.orangecountync.gov**



**131 W. Margaret Lane**  
**Suite 201**  
**P. O. Box 8181**  
**Hillsborough, NC 27278**



July 1, 2016

**RE: NOTICE OF NEIGHBORHOOD INFORMATION MEETING - Discussion and review of a Special Use Permit (Class A) application proposing development of a Solar Array-Public Utility.**

To Whom It May Concern:

Please be advised the Orange County Planning Department has received a Special Use Permit application (Class A SUP) proposing the development of a *Solar Array-Public Utility* on a 27.3 acre portion (leased acreage) of a 52.1 acre parcel of property located off of US Highway 70. The application was submitted by ESA Renewables, Oakwood Solar Farm LLC, and the owners of the subject property.

The property subject to the proposed development, further identified utilizing Orange County Parcel Identification Number (PIN) 9835-02-9137, is located within the Cheeks Township of Orange County and is zoned:

- Rural Residential (R-1),
- Back Creek Protected Watershed Protection Overlay District, and
- Efland Cheeks Overlay District (ECOD) Pre-designated commercial area.

and is accessible via an access easement through an adjacent property located at 6517 US Highway 70, (PIN) 9835-10-3858. The easement area includes an existing driveway providing access to both 6517 US Highway 70 and the subject parcel. Please refer to the attached Site Assessment map for additional site details.

The application, submitted by ESA Renewables, Oakwood Solar Farm LLC, and the property owners, proposes the development of a commercial solar facility operated and managed by the Oakwood Solar Farm, LLC (an ESA partnership established for the project). This facility proposes to convert sunlight into electricity via ground-mounted Photovoltaic cell solar panels, which will be sold to a power company for the purpose of contributing to the power service grid for the surrounding area. Please see the attached site plans for additional information on the layout of the proposed solar arrays.



**Site Assessment for PIN: 9835-02-9137 for proposed Solar Array Public Utility (Class A Special Use Permit), non-residential**

**Site Data**  
**Zoning:** Rural Residential (R1) and designated 10 Year Transitional Area on Future Land Use Map  
**Acreage:** 52.1 acres

**Overlay Districts:** Back Creek Protected Watershed Overlay District and Efland-Cheeks Hwy 70 Overlay District  
**Deed:** No deed reference found. Legal Reference: 10-E-451.  
**Plat/Legal Description:** N/O Hwy 70 (no plat found)

**Building Setbacks for Special Use Permit (Class A)**  
 100 ft. from all property lines  
 50 ft. Type D Land Use Buffer shall be provided along any portion of the perimeter of the parcel and easements (see UDO, 5.10.3 C (2) (f))  
 Maximum height: 40'

**Notes:**  
 (1) Private Road Justifications, Recorded Declarations, Restrictive Covenants, Bona Fide Farm status, use and building type (e.g. duplex units) will change subdivision and development requirements. (2) 80 ft. stream buffer graphically shown. (3) Floor Area Ratio (FAR) maximum for residential conditional use = 0.58. FAR maximum for non-residential use = 0.088. FAR maximum for non-residential conditional use = 0.100. Required minimum open space ratio = 0.84. Required minimum livability space ratio = 0.75. Required pedestrian/landscape ratio = 0.21.  
 (2) BMP may be required

**Environmental Features:**  
 Streams located on lot. Stream buffer for stream to the east: 80 ft. (Method A). Stream buffer for stream to the west: 65 ft. (Method A). Six water bodies located to the west. Water body buffers: 65 ft. (Method A).

**Slope:** Slope of stream to the east: 8.8%. Slope of stream to the west: 6.4%. Slopes of water bodies to the west: ranging from 2.4% to 6.4%

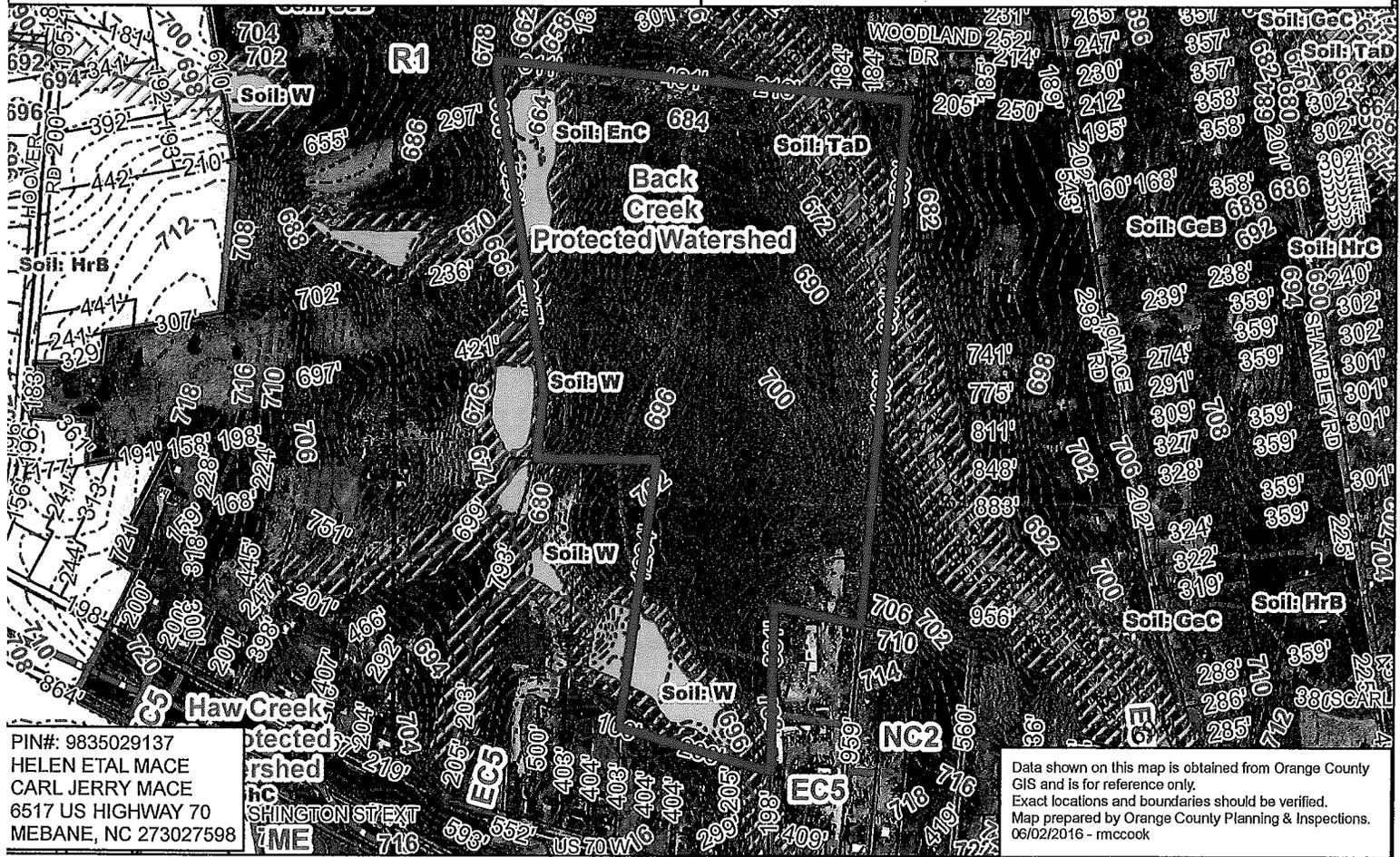
**100 and 500 year Floodplains**

**Base Flood Elevation (BFE) based on FIRM Map: 663**  
**County Freeboard: 665**  
**Minimum Finished Floor Elevation (FFE): 665**  
**Flood Panel: 9835J**

**Impervious Surface Limits: 12% based on UDO (Sec. 4.2.6) - 272,337.12 sq. ft. of allowable impervious surface area**  
**Note:** On-site infiltration of the first inch of stormwater runoff, per UDO, Sec. 4.2.6 for non-residential use

**Land Disturbance Thresholds (Erosion Control)**  
 1) Erosion Control Application/Permit required if disturbing more than 20,000 sq. ft.  
 2) Stormwater Management Application/Permit required if more than 21,780 sq. ft. (1/2 an acre) for commercial structures.  
 \*\*\*Call OC Erosion Control at (919) 245-2586 for more information.

**Date Site Assessment Completed: Updated 05/26/2016**



PIN#: 9835029137  
 HELEN ETAL MACE  
 CARL JERRY MACE  
 6517 US HIGHWAY 70  
 MEBANE, NC 273027598

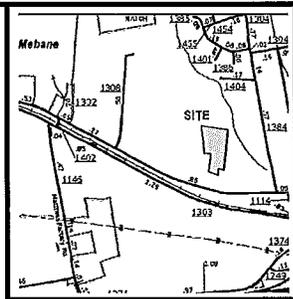
Data shown on this map is obtained from Orange County GIS and is for reference only. Exact locations and boundaries should be verified. Map prepared by Orange County Planning & Inspections. 06/02/2016 - rmccook

— USGS Stream	- - - 2' Contours (NCDOT)	■ City Limits	■ Floodway (Effective 02/02/07)
— Soils Survey Stream	□ Parcels	□ ETJ	■ 500 Year Floodplains (Effective 02/02/07)
▨ Floodplain Buffer 80ft	□ Zoning	••••• Soils	▨ 100 YR Floodplain (Effective 02/02/07)
▨ Stream Buffer 80ft	■ Water Body	■ 100 YR Floodplain (Effective 02/02/07)	— Base Flood Elevation (Symbol)
▨ Water Body Buffer 65ft	□ Watershed	■ FIRM	

LEGEND

EP	EXISTING IRON PIPE	DIE	OVERHEAD POWER
CP	EXISTING CONCRETE	PP	POWER POLE
EA	EXISTING AXLE	LP	LIGHT POLE
ECM	EXISTING CONC MONUMENT	TELE	TELEPHONE PEDESTAL
SR	SET 5/8" REBAR	WV	WATER VALVE
NPS	NO POINT SET	WV	WATER VALVE
EPK	EXISTING POWER RAILON NAIL	SL	SURFACED LAKE
EXDN	EXISTING ROAD NAIL	---	ADJACENT PROPERTY LINE
ERS	EXISTING RAILROAD SPIKE	---	DE LAKE
SRSS	SET RAILROAD SPIKE	---	DITCH
CP	CALCULATED POINT	AS	MEALAND FLAG
R/W	RIGHT OF WAY		
W/L	WINDMILL BUILDING LINE		

NOTES:  
 1. AREA BY COORDINATES  
 2. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT REPORT. GASKINS LAND SURVEYING, P.A. DOES NOT CLAIM THAT ALL MATTERS OF RECORD WHICH MAY OR MAY NOT AFFECT THIS PROPERTY ARE SHOWN HEREON.  
 3. THIS A PARTIAL SURVEY OF THIS PROPERTY. THE PURPOSE OF THIS SURVEY IS TO SHOW THE WETLANDS, PONDS AND THEIR ASSOCIATED BUFFERS. SOME LINES WERE SURVEYED (GEOID READINGS) TO HELP DETERMINE HOW THE DEED DESCRIPTION FITS. OTHER LINES WERE NOT SURVEYED. MAPS FOUND ON RECORD, THIS MAP IS NOT INTENDED TO BE A COMPLETE BOUNDARY SURVEY OF THIS PARCEL.



VICINITY SKETCH (NOT TO SCALE)

WETLAND FLAGS A1-A18

BEARING	LENGTH
N19°43'04"W	17.86
N33°06'00"W	45.90
N06°31'27"W	44.85
N25°45'39"E	23.01
N51°37'65"W	63.85
N51°54'29"W	89.04
N03°41'28"E	59.63
N45°39'46"W	66.06
N38°45'16"W	47.74
N30°13'59"W	66.77
N03°11'08"W	47.62
N11°16'07"W	70.70
N87°13'36"E	64.69
N11°23'33"W	10.12
N03°37'01"E	40.05
S87°23'37"W	11.38
N43°05'48"W	9.13

WETLAND FLAGS A19-A37

BEARING	LENGTH
S15°05'23"W	62.76
S26°08'50"E	34.28
S02°29'07"E	18.22
N75°32'48"E	24.92
S65°47'08"E	23.96
S40°43'35"E	17.76
S23°11'56"E	42.65
S44°18'27"E	46.84
S15°59'44"E	88.63
S41°45'45"W	21.63
S10°56'03"E	47.37
S03°21'21"E	63.03
S05°05'58"W	4.90
S40°23'18"E	25.62
S04°19'53"W	38.25
S15°23'54"W	32.46
S04°19'33"E	21.41
S54°10'20"E	35.35
S07°24'03"W	10.83

WETLAND FLAGS B1-B17

BEARING	LENGTH
N00°13'37"E	44.88
N00°46'33"E	48.38
N09°46'27"E	62.63
N13°45'57"E	36.99
N25°52'09"E	36.06
N26°15'15"E	67.48
N20°05'41"E	74.64
N11°10'06"E	48.00
N05°46'22"W	60.60
N14°45'09"W	39.48
N06°22'18"E	60.87
N10°43'31"W	34.76

WETLAND FLAGS C1-C1 CLOCKWISE

BEARING	LENGTH
S22°30'58"W	18.60
S79°57'23"W	13.22
N49°30'29"W	17.71
S40°50'59"W	27.43
S55°33'02"W	18.24
N14°23'11"W	13.50
N28°41'22"E	24.81
N14°59'06"E	18.74
S87°32'45"E	34.36
N69°05'16"E	13.01
S22°46'18"E	17.95

POINT C TO WETLAND FLAG C1 TIE  
 N40°49'48"W  
 114.91'

POINT C TO WETLAND FLAG A1 TIE  
 N17°09'22"E  
 175.23'

WETLAND FLAG A18 TO A19 TIE  
 S68°43'46"E  
 45.00'

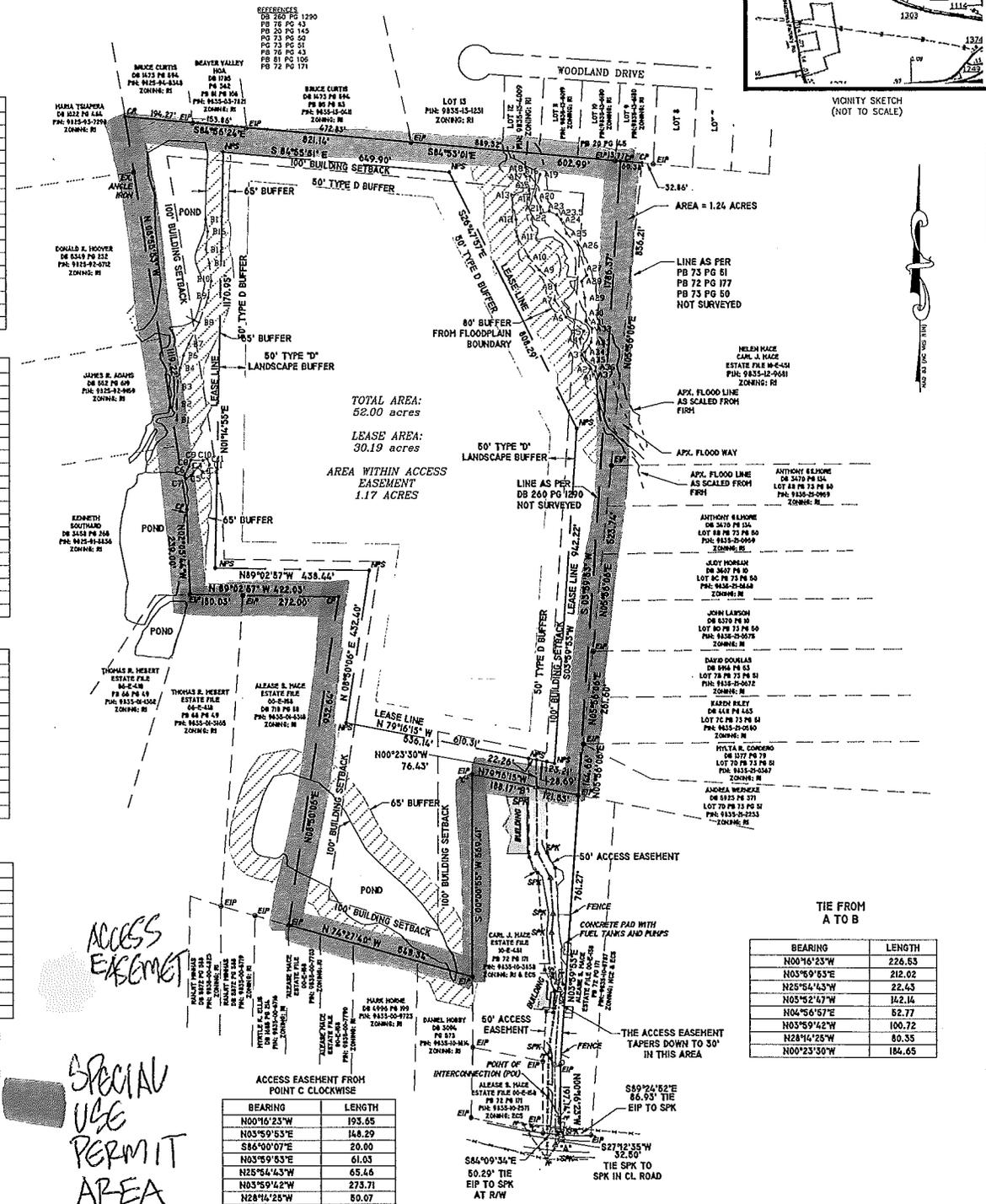
**SPECIAL USE PERMIT AREA**

ACCESS EASEMENT FROM POINT C CLOCKWISE

BEARING	LENGTH
N00°16'23"W	193.65
N03°50'53"E	148.29
S86°00'07"E	20.00
N03°59'53"E	61.03
N25°54'43"W	65.64
N83°59'42"W	273.71
N28°14'28"W	80.07
N00°23'30"W	277.66
S79°16'15"E	50.96
S00°23'30"E	255.32
S28°14'25"E	48.42
S03°59'42"E	328.35
S25°54'43"E	16.08
S03°59'53"W	215.47
S00°16'32"E	197.14
N44°09'34"W	50.29

TIE FROM A TO B

BEARING	LENGTH
N00°16'23"W	226.63
N03°59'53"E	212.02
N25°54'43"W	22.63
N04°56'57"E	162.14
N03°59'42"W	100.72
N28°14'25"W	60.35
N00°23'30"W	184.65



I, KENDALL E. GASKINS CERTIFY THAT THIS SURVEY IS OF AN EXISTING PARCEL OR PARCELS OF LAND AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET.  
 Fall & Alvo  
 KENDALL E. GASKINS L-3824



SURVEY FOR  
**OAKWOOD SOLAR FARM, LLC**  
 6517 U.S. HWY 70, MEBANE NC  
 DEED BOOK  
 TAX PARCEL PIN: 9835-02-9137  
 ORANGE COUNTY - CHECKS TOWNSHIP

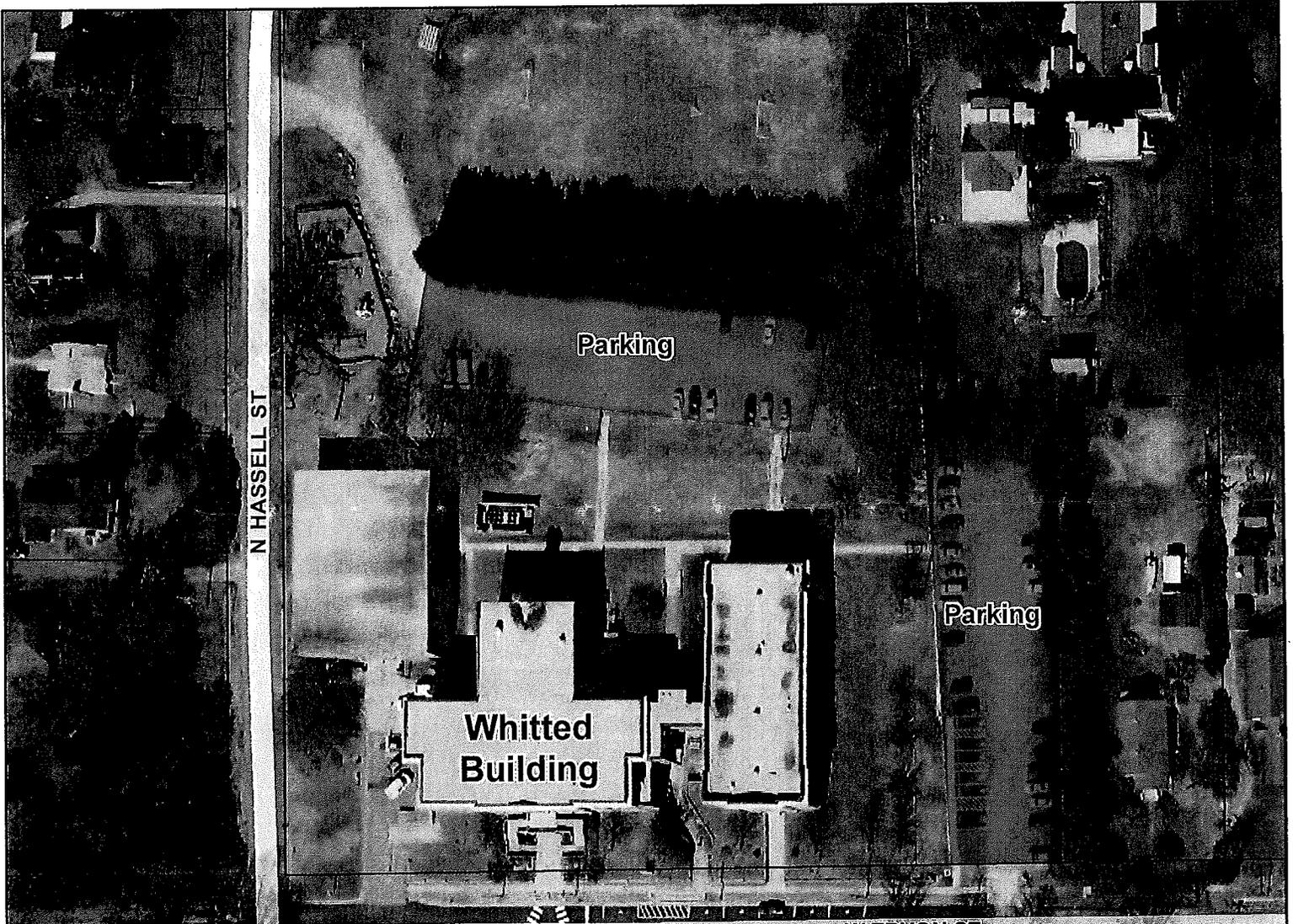
OWNER: JERRY CARL MACE & HELEN MACE ETAL

GASKINS LAND SURVEYING, P.A. PROFESSIONAL LAND SURVEYING Phone: 252-244-5899 Fax: 252-244-5899	SURVEYED: KEG	APPROVED: KEG
	DRAWN: KEG	DATE: 5/3/16

C-3023  
 PO Box 354  
 Weldon, NC 28586

CHECKED: KEG SCALE: 1"=200'

# Whitted Building (300 W. Tryon St.)



1 in = 100 feet  
0 50 Feet

Orange County Planning and Inspections  
Brian Carson (6/28/2016)





# SPECIAL USE PERMIT FACT SHEET

The purpose of this fact sheet is to provide a breakdown of Orange County's Special Use Permit submittal and review process.

The information contained herein provides an explanation on the nature of the permit proceedings, the presentation of evidence, burden of proof, what constitutes testimony and who can present evidence, and your rights with respect to challenging a decision to either approve or reject a SUP application.

## 1. *What is a Special Use Permit?*

A Special Use Permit (SUP) is a permit allowing for the establishment of certain uses, in certain districts, that are considered worthy of additional scrutiny in their proposed location. Such uses typically require special review for design, location, and impact on surrounding properties.

Orange County has 2 different categories of SUP, specifically:

- i. **Class A** reviewed and acted upon by the Board of County Commissioners (BOCC), with a recommendation from the Planning Board, and
- ii. **Class B** reviewed and acted upon by the Orange County Board of Adjustment.

## 2. *What is considered a 'Special Use'?*

A SUP is required for those specific land uses identified within the Orange County Unified Development Ordinance (UDO) Table of Permitted Uses contained within Section 5.2.

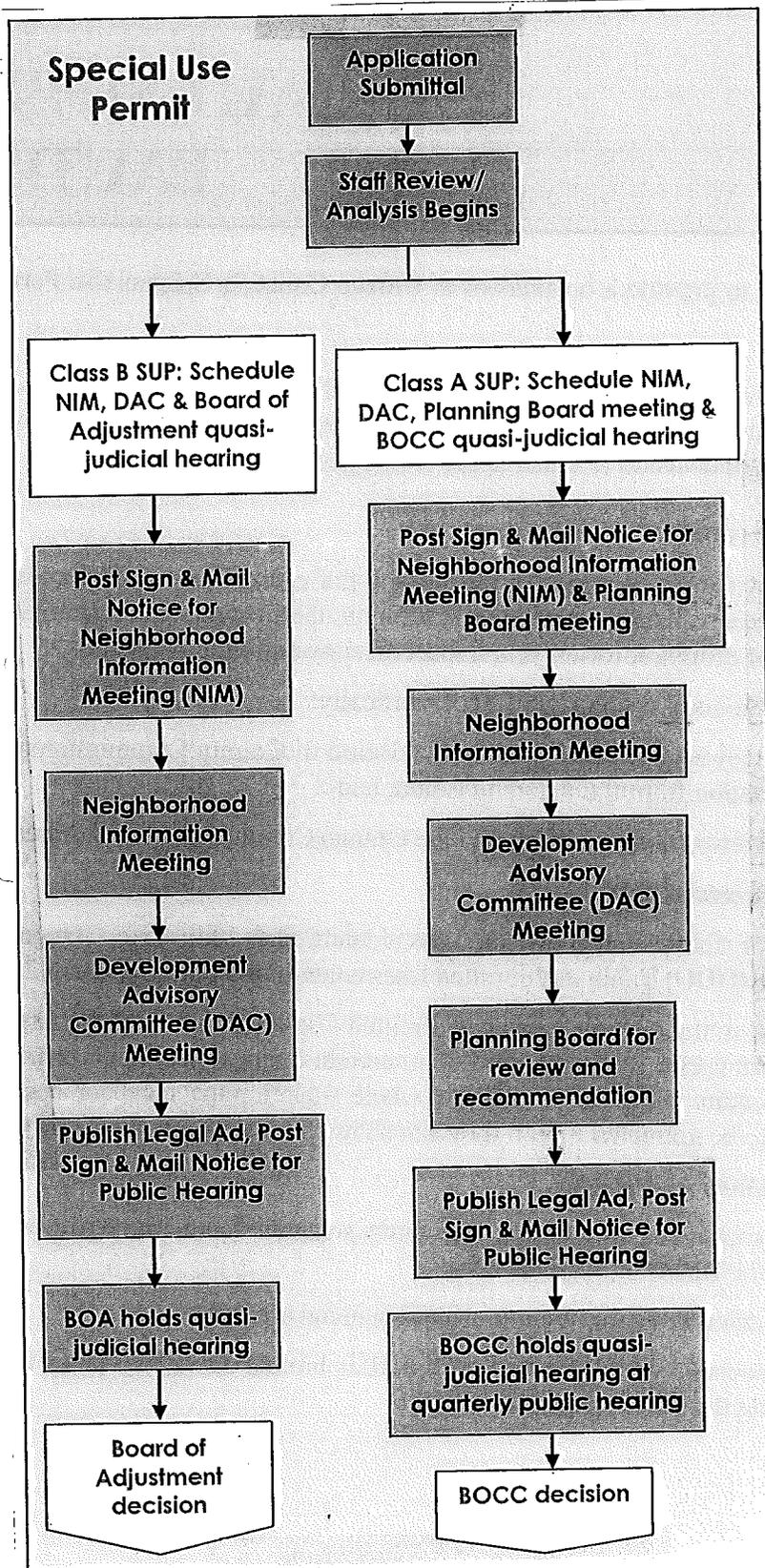
These uses are identified in the UDO's Table of Permitted Uses with an 'A' for Class A SUP and a 'B' for a Class B SUP. Some uses may be permissible in certain districts without restriction (referred to as "uses by right"), but require the SUP in districts where their impact calls for special consideration. Applicants are entitled to be granted a SUP if they can show that specific standards would be met.

## 3. *When are such applications reviewed?*

Review of a SUP application occurs during a previously scheduled and advertised public hearings held by either the BOCC or the Board of Adjustment.

The review of an application is carried out in a quasi-judicial process.

The typical cadence associated with the review of a SUP is broken down in Section 2.7 of the UDO and can be summarized using the following flow chart:



**4. *What does quasi-judicial process mean?***

Quasi-judicial decisions arise in a variety of local government settings.

During a quasi-judicial hearing, the Board (i.e. BOCC or Board of Adjustment) responsible for rendering a decision acts much like a panel of judges. The Board hears factual evidence and sworn testimony presented at the public hearing and then makes a determination on whether the permit can be issued based on the competent, substantial, and material evidence presented.

Put differently a quasi-judicial decision is one that requires the board hearing the matter to find facts and make decisions by applying those facts to the standards in the Unified Development Ordinance.

**5. *Who may speak or present evidence at the public hearing?***

Both individual applicants and those individuals supporting, or opposed to, the application are encouraged to attend. Individuals may represent themselves or be represented by an attorney and they may have expert witnesses testify for them.

The cost for attorneys or expert witnesses is borne by the individual seeking counsel or expert testimony, not the County. The County will not pay for, or reimburse, expenses incurred by an individual in their quest to support or oppose a SUP application.

While not required by State or County regulations, all parties with an interest in a SUP application are strongly advised to have an attorney represent them.

Engineers, architects, real estate agents, planners and other non-attorneys may only appear as expert witnesses; they may not represent an applicant or those opposed to an application:

Only those with standing may speak or present evidence.

**6. *What are the responsibilities of the applicant?***

The applicant bears the ultimate responsibility for producing and submitting competent, substantial, and material evidence for the body reviewing the application to conclude the proposal complies with applicable County regulations.

If they fail to submit evidence demonstrating compliance, the request is denied.

If, however, the applicant proves they comply, and there is insufficient evidence submitted to the board hearing the case demonstrating they do not comply, the applicant is entitled to have the application approved.

**7. *What standards must be met by the applicant?***

All applicants must show compliance with the General Standards for all SUPs, as detailed within Section 5.3.2 of the UDO, and any specific development standards associated within the proposed use.

The General Standards, as contained in Section 5.3.2, read as follows:

(a) *The use will maintain or promote the public health, safety and general welfare, if located where proposed and developed and operated according to the plan as submitted;*

(b) *The use will maintain or enhance the value of contiguous property (unless the use is a public necessity, in which case the use need not maintain or enhance the value of contiguous property); and*

(c) *The location and character of the use, if developed according to the plan submitted, will be in harmony with the area in which it is to be located and the use is in compliance with the plan for the*

*physical development of the County as embodied in these regulations or in the Comprehensive Plan or portion thereof, adopted by the Board of County Commissioners*

8. *How are decisions made?*

Members of the board rendering the decision must make their decision solely on the competent, material and substantial evidence presented at the hearing, both for and against an application.

Members cannot consider information obtained through independent research or undisclosed *ex parte* communications, meaning members cannot have private discussions with individuals who support or object to a specific application.

9. *What exactly is ex-parte communication and why is it not allowed?*

Persons affected by a decision have the legal right to hear all of the information presented to members of a board who will be rendering a decision on an SUP application, specifically they have a right to know all of the "facts" being considered.

Therefore members of the decision-making body are not allowed to discuss the case or gather evidence outside of the hearing (what the courts term *ex parte* communication). Only facts presented to the full board at the hearing may be considered.

This is an important point to remember when such applications are being reviewed. Members of the board rendering the decision are prohibited from discussing the matter or receiving comment on a proposal.

These members are not trying to be rude or unsympathetic to your concerns. They are prohibited from engaging in the conversation in the first place as they are required to guarantee an impartial hearing where the 'facts' are weighed as they are presented as to whether or not an application should be granted.

10. *You previously indicated decisions are based on evidence. Does this mean those presenting evidence at a SUP hearing have to be under oath?*

In a word, yes. All testimony, including from County staff, offered during the public hearing where a SUP is reviewed must be under oath.

All persons wishing to speak will be given a reasonable time in which to be heard, however groups are encouraged to select a spokesperson to speak for the group in order to avoid repetitive testimony.

11. *Can people just speak to offer their opinion on the application?*

Inflammatory, irrelevant, repetitive and incompetent testimony and hearsay is not permitted and the chairman of the board hearing the matter has the right to limit and restrict such comments during the public hearing.

For more information please refer to Section 2.7.7 (D) of the UDO.

12. *What constitutes 'competent, substantial, and material evidence' allowing for the approval or a denial of a SUP?*

Breaking down what constitutes evidence can best be summarized as follows:

- i. **Competent evidence:** legally admissible under the rules of evidence unless admitted without objection, or appears to be sufficiently trustworthy and is admitted under such circumstances that it is reasonable for the decision-making body to rely upon it. Evidence that can be subjected to cross-examination, inspection, explanation and rebuttal (i.e. expert testimony).

For example a realtor who has professional experience and accreditation can offer an opinion if a specific project will or will not impact the value of adjacent property. An individual with no background in the field cannot offer a 'competent' opinion on the

subject. In this case it would not be considered as 'competent' evidence and would be inadmissible.

- ii. Substantial evidence: evidence that which a 'reasonable mind' would regard as sufficiently supporting a specific result.

Would this persuade the average person to make a certain conclusion? Does it do more than speculate?

- iii. Material evidence: evidence that is relevant to the issue being considered.

For example if a board is reviewing an application for a kennel (i.e. a place where dogs/cats are housed and cared for a period of time) an individual who is opposed may submit documentation denoting noise complaints from other kennels throughout Orange County. This could be construed as 'material evidence'.

Documentation denoting animals have died in kennels throughout the county and, as a result, this specific application should be denied is not relevant to the case at hand as it has no specific relationship to what is being proposed. This would be deemed immaterial evidence and would not be admissible.

As a general rule, anyone with knowledgeable information (i.e. relevant) to the case may provide factual information, but only experts may provide opinion testimony.

Even expert testimony must be competent (i.e. the expert has qualifications relevant to the issue) and material before the decision-making board can rely on it.

Hearsay evidence is testimony that the witness does not know of his or her own personal knowledge, including that which someone else told the witness and the use or introduction of signed petitions and letters.

The board may only hear testimony that focuses on the applicable standards and criteria established in the UDO. Unless they are a qualified expert, witnesses are not competent to testify about the impact of a proposed land use on the value of nearby property, the danger to public safety resulting from increases in traffic or other matters that require special training or expertise like the level of noise that will be generated.

### 13. *Can conditions be imposed on a SUP?*

Generally, the board hearing the application may attach conditions to the approval of an SUP as it relates to compliance with applicable standards. For example, a condition may require the applicant to increase the size of a required setback or land use buffer in order to ensure the project complies with that specific standard as detailed within the UDO. The Board cannot impose conditions addressing an issue not related to an existing standard such as establishing hours of operation, color of buildings, etc.

Conditions cannot require the applicant to take action with regard to a piece of property that is not a part of the application being considered, and conditions cannot require the alteration of a special use permit previously issued to a third party.

### 14. *Is there a record of the proceedings?*

Complete records must be kept of the hearings. Detailed minutes must be kept noting the identity of witnesses and giving a complete summary of their testimony. Any exhibits presented are retained by the board and become a part of the file on that case. An audio recording of the hearing is also made.

### 15. *How are parties notified of the decision?*

The board rendering a decision on the application is required to make a formal decision on the application (i.e. approve or deny) in writing and shall be based on the determination of facts and their application to the specific standards for the particular use and the general standards contained in the

UDO. This includes providing specific details on the board's conclusions on each applicable standard for a given SUP. Even if the application is denied, there is an obligation to make a detailed finding identifying the evidence utilized to deny the application.

The written decision must be signed and becomes effective upon filing with the Planning Department. A copy of the written decision must be delivered to the applicant, property owner, and others as required by State law.

*16. Are decisions on SUP applications subject to further review?*

Yes. Decisions of the BOCC or Board of Adjustment on a SUP application are subject to by the Superior Court. Appeal applications must be filed within 30 days with the court from the date the decision is made available. Please refer to NCGS 160A-393 and Section 2.12.5 (A) of the UDO for additional information.







Patrick Mallett: The portions I believe that are being currently used the Mace commercial operations will be removed, cleared out, and dealt with.

Patricia Roberts: Why don't we put solar panels on top of buildings? We have a big storage building facility, why not put those on top

Javier Gorbe: In some states it's more favorable to do those types of installations. Those states have the possibility of use... electricity. When you have states that the utility has too much control then the utilities ban anybody else to sell electricity so they don't have competition. So in the state of North Carolina you cannot sell electricity.

Patricia Roberts: So what do you do with this electricity?

Javier Gorbe: You have to give it back to the grid... You cannot sell to a customer. You cannot sell to commercial building. You cannot sell to a farmer. You have to sell it back to the grid and the rules to do that are in the state rules and regulations.

Patrick Mallett: Those are typically used to power the building they're on, or the near area versus this type of facility that throws the power in with the grid system.

Patricia Roberts: I have solar panels on my house and Duke Power does not... It's all in their favor, and summertime we do okay. The wintertime, they may even charge you money to have to come read your meter.

Patrick Mallett: From a legal perspective, I believe, your power goes to the grid and you get a credit.

Kim Piracci: It's my understanding that if you've put a solar array on the ground you can put it on the optimal space. If it's on the building it might be sub-optimal.

Javier Gorbe: You have some other problems to put them on the building, so if the building is from the 1990's or earlier there are regulations that are less strict than now. So the buildings don't meet the actual code so you cannot put anything on the roof because they don't meet the local standards anyway. And you can still do solar, but the way you do solar is more complicated.

Kim Piracci: 5 megawatts; can you put that in terms of how many houses it could run?

Javier Gorbe: Depending on the power of the house I can't say. But, we will generate, here, 1,450 kilowatt hours each kilowatt that we stow.

Michael Harvey: I just wanted to state the our ordinance doesn't preclude the placement of solar panels on top of building roofs, but again it has to handle load. We would encourage it but the building has to be able to handle the load of panels.

Patricia Roberts: So there's rows in between these, why not have them plant grapes or something?

Javier Gorbe: It's about liability. You can really do anything between the panels, and again, North Carolina is one of the best places to have a good layer of grass between the panels. Normally this is an investment so to plant anything there, normally we don't go that route because it's a liability issue.

Lisa Stuckey: Chapel Hill just recently had a big push to get solar panels on top of peoples houses and several hundred people did.

Paul Guthrie: Where is the connection going to be to the grid?

Javier Gorbe: There is an existing line here, running through 70 and this is the entrance to the site and the line is parallel to the road.

Paul Guthrie: What extent will there need to be construction activity in making that connection?

Javier Gorbe: The line comes up to here and then goes this way, up to the site. We will have to do a new line. But, from here to the road is up to Duke to decide how they want to refurbish the line, if they have to or put any new equipment.

Paul Guthrie: Will there need to be any extensive use of land that's not in that drawing, it's a different ownership is the reason I'm asking?

Javier Gorbe: No, the connection has fuses and protection equipment like you can have in your house. But, it's not extensive.

Michael Harvey: Paul, let me just add that we asked a similar question that Duke indicated to us that they would not have to alter their existing utility lines in the area to accommodate this project. It would be a higher gauge utility line but it would be just a utility line like you see a regular power line.

Lydia Wegman: I have a couple of questions. Have any of the neighbors or nearby residences expressed concern about this?

Javier Gorbe: We had a community meeting last week and what they were wanting to know was the noise level, and I think we addressed that. We had another call from somebody that didn't want to give a name, and it was the question so we talked and addressed that.

Patrick Mallett: In addition to material Rachel and Molly spent a lot effort putting together a neighborhood informational meeting. It's 4 pages sort of outlining the general discussion. I would say the vast majority of the discussion was, " Can I see it? Can I hear it?". The general principle, once you go 150 feet away and the distance here is over 500 feet, roughly. The residences are thousands of feet away. The closest residence here called and asked. Once I walked the gentleman through the mechanics and understanding that it's on the other side of the pond, I think he was satisfied with concerns about noise and sight. There was another residence over in this general area here that had some questions about some earthwork that was being done over here; I explained that it had nothing to do with the request from the solar facility. They all seemed to be satisfied. And these Minutes will be entered into the record at the public hearing, along with all the application materials.

Lydia Wegman: And Javier, you mentioned that a site-specific assessment was going to be done, appraisal. Was that the Kirkland one?

Javier Gorbe: Yes, that's already done.

Lydia Wegman: And can you just explain to me again, what your North Carolina experience is. Are you actually running solar arrays now in this state?

Javier Gorbe: Yes, so, ESA came here in 2010 and we are a U.S. company. We just met a farmer that wanted to do solar in North Carolina and we established doing solar in North Carolina in 2010, there were no companies doing solar at the time. Since then we have build around 10 sites in North Carolina, and have been operating for many years. Now, we have around 35 sites that we are developing that haven't been built yet.

Lydia Wegman: And you work with ESA? Is that an independent company or is that owned by another company?

Javier Gorbe: Yes, ma'am. And it's an independent private company. It's independent but the stakeholders are Spanish and American.

Craig Benedict: My understanding, there's an ESA USA and an ESA Spain.

Lydia Wegman: Is ESA USA a subsidiary of ESA Spain. Is ESA Spain the stakeholder who own ESA USA?

Javier Gorbe: ESA Renewables is owned by ESA USA, it's an American company. And ESA Spain, I, and another stakeholder own that company.

Tony Blake: I have one more question, this is a lease arrangement and it's a 15-year lease on this land, and is there an automatic renewal?

Javier Gorbe: Correct... It's not automatic; it's a 5-year renewal after that.

Lydia Wegman: I saw in your slides that you're planning to do maintenance between May and September. And I'll just note that in North Carolina you might need to do maintenance between March and November. There's a lot of growth that occurs in early spring around here.

Javier Gorbe: Right. Normally we modify that per site but we tend not to do the maintenance in the winter just because the temperatures and sometimes it's less productive than doing it in the summer. We tend to cut the grass during the summer and between those we do the maintenance to make sure that everything works correctly.

Craig Benedict: Earlier slides you mentioned for every dollar invested there's \$1.93 that comes back in revenue. Is there any more information in your packet somewhere that shows where that came from?

Javier Gorbe: I'm not the best person to talk about financial numbers but I can certainly address that in the future and send you the information, if that's okay.

Craig Benedict: I know that for a certain period they're not taxed fully. So, it would just be interesting to see the stuff that's behind that.

Patricia Roberts: I do think they get a break on Orange County Property Taxes too.

Javier Gorbe: The difference is that when you produce electricity from a conventional point of view the .. drop from outside the country or outside the state. In this case the solar panels; the only thing they do is produce energy and they are here providing it so they tax them; they have a grade but their revenue between conventional power and renewables is much bigger.

Patricia Roberts: Where are the solar panels made?

Javier Gorbe: They are made everywhere. One of the companies that was American made was bought by a Chinese company. There is only one company that if you really want to buy American that meets all the criteria. I believe it's called BAA, By American Act. And there is only one company in the whole of the U.S. and that company has 400 workers. If you buy those panels you are not able to do solar in North Carolina. The difference in pricing doesn't allow you to do solar. So those panels are made for residents because they are high end, they can get more radiation when they are not in the optimal angle and they have more power per square foot to allow residences that don't have a big roof.

Lydia Wegman: Any other questions? I think that's all we have right now Javier, thank you.

*Patrick Mallett went over attachment 4.*

Kim Piracci: I have a question about the sign, or more of a statement. There's too much information on the sign. You're driving by and you can't really read what the sign says. So I didn't know if there's any way of making...

Patrick Mallett: The sign has to contain what, why, and where.

*Patrick Mallett continued reviewing attachment 4.*

Tony Blake: And this would still apply at the end of the 15 years or whenever the lease is terminated?

Patrick Mallett: As long as it's there.

*Michael Harvey went over recommendations and conditions that are included in the packet.*

Patrick Mallett: Just two quick notes. So as we pointed out in the neighborhood information meeting this is the SUP part of the process, which has 3 subparts to it. If approved the applicant would then move on to the next step. The next step is they have to submit a site plan that's reviewed for zoning compliance and then used with construction drawings that are reviewed for submittal of a storm water permit and erosion control permits. In this case, the erosion control and storm water folks have looked at this site and said, "Because of the amount of area they're using and the potential protection of environmental features, the site could probably qualify for a low impact design. Which means they can take care of runoff nutrient removal without injecting manmade ponds, temporary driveways.

Lydia Wegman: Michael, is there any cutting down of existing trees?

Michael Harvey: Other than what is already logged, no.

*Patrick Mallett showed where the trees would be preserved.*

*Michael Harvey went over the rest of the conditions.*

Lydia Wegman: Thank you. Any further questions?

Laura Nicholson: Is there anybody else here for this that wants to speak up?

*No one came forward.*

**MOTION** by Tony Blake to recommend approval of the Class A SUP to promote the development of the solar array in accordance with the section 2.7 SUP and section 5.9.6 Solar Array Public Utility of the Orange County UDO with conditions 1-11. Seconded by Patricia Roberts.

**VOTE: UNANIMOUS**

**MOTION** by Tony Blake that the use will maintain or promote public health safety and general welfare if located where proposed and developed and operated according to the plan as submitted. Seconded by Laura Nicholson.

**VOTE: UNANIMOUS**

**MOTION** by Tony Blake the use will maintain or enhance the value of contiguous property, unless the use is in a public necessity in which case the use need not maintain or enhance the value of contiguous properties. Seconded by Patricia Roberts.

**VOTE: UNANIMOUS**

**MOTION** by Tony Blake that the location in character for the use being developed according to the plan will be in harmony with the area in which it is being located, and the use is in compliance with the plan for the physical development of the County as embodied in these regulations in the comprehensive plan or portion thereof adopted by the BOCC. Seconded by Patricia Roberts.

**VOTE: UNANIMOUS**

**PLANNING & INSPECTIONS DEPARTMENT**  
**Craig N. Benedict, AICP, Director**

**Administration**  
**(919) 245-2575**  
**(919) 644-3002 (FAX)**  
**www.orangecountync.gov**



**131 W. Margaret Lane**  
**Suite 201**  
**P. O. Box 8181**  
**Hillsborough, NC 27278**



**CERTIFICATION OF MAILING**

**CLASS A SPECIAL USE PERMIT (SUP) – SOLAR FACILITY**  
**OAKWOOD SOLAR FARM LLC / ESA RENEWABLES**

I, Patrick R. Mallett, Planner II with the Orange County , North Carolina Planning Department , DO HEREBY CERTIFY that in accordance with the provisions of Section 2.7.6 of the Orange County Unified Development Ordinance (UDO) I have mailed, or have caused to be mailed via first class mail, a Notice of Public Hearing regarding the processing of a Class A Special Use Permit Application submitted by Oakwood Solar Farm LLC / ESA Renewables to develop a solar facility-public utility on a 27.3 acre leased portion of a 52.1 acre property, further identified utilizing Orange County Parcel Identification Number (PIN) 9835-02-9137 owned by the Mace family. Access to the proposed array is intended to go through a parcel of property off of US Highway 70, also owned by the Mace family, with a PIN of 9835-10-3858.

The owners were identified according to the Tax Records and as required by the UDO.

The mailed notice specified the date, time, place and subject of the Public Hearing.

WITNESS my hand, this 25<sup>th</sup> day of August, 2016.

Patrick R. Mallett  
 Planner II

**PLANNING & INSPECTIONS DEPARTMENT**  
**Craig N. Benedict, AICP, Director**

**Current Planning**  
**(919) 245-2575**  
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August 24, 2016

**RE: NOTICE OF BOARD OF COUNTY COMMISSIONERS MEETING --**

**Public Hearing and review of a Special Use Permit (Class A) application proposing development of a Solar Array-Public Utility.**

To Whom It May Concern:

As you may know, the Orange County Planning Department has received a Special Use Permit application (Class A SUP) proposing the development of a *Solar Array-Public Utility* on a 27.3 acre portion (leased acreage) of a 52.1 acre parcel of property located off of US Highway 70. The application was submitted by ESA Renewables, Oakwood Solar Farm LLC, and the owners of the subject property.

*Project Background:*

The property subject to the proposed development, further identified utilizing Orange County Parcel Identification Number (PIN) 9835-02-9137, is located within the Cheeks Township of Orange County and is zoned:

- Rural Residential (R-1),
- Back Creek Protected Watershed Protection Overlay District, and
- Efland Cheeks Overlay District (ECOD) Pre-designated commercial area.

The property is accessible via an access easement through an adjacent property located at 6519 US Highway 70, (PIN) 9835-10-3858. The easement area includes an existing driveway providing access to both 6519 US Highway 70 and the subject parcel. Please refer to the attached Site Assessment map for additional site details.

The application proposes the development of a commercial solar facility operated and managed by the Oakwood Solar Farm, LLC (an ESA Renewables partnership with the property owners established for the project). This facility proposes to convert sunlight into electricity via ground-mounted Photovoltaic cell solar panels, which will be sold to a power company for the purpose of contributing to the power service grid for the surrounding area. Please see the attached site plans for additional information on the layout of the proposed solar arrays.

The Orange County Unified Development Ordinance (UDO) Section 5.2: *Table of Permitted Uses* classifies a *Solar Array-Public Utility* as a permitted land use within the R-1 zoning district subject to the issuance of the Class A SUP.

Per Section 2.7 of the UDO, Class A SUP applications are reviewed by the Planning staff and then presented to Orange County Planning Board. The Planning Board then makes a recommendation to approve or deny the application and provides this recommendation to the Orange County Board of County Commissioners (BOCC) for consideration at the scheduled Public hearing. *This meeting was held on August 3, 2016, and the Planning Board voted unanimously to recommend approval of the Class A SUP request.*

The Orange County BOCC will review and conduct the required Public Hearing for this Class A SUP for a Solar Array-Public Utility at its meeting on Monday, September 12, 2016. All adjacent property owners within 1,000 feet of the subject parcel and other members of the public are invited to attend this Public Hearing. As a property owner within 1,000 feet of the subject property, you have the right to address the Board of County commissioners (BOCC) concerning this request.

The Public Hearing to review this case and vote on the request is scheduled for **Monday September 12, 2016 at 7:00 p.m. in Orange County Whitted Human Services Center Complex, 300 West Tryon Street, Hillsborough, NC 27278.**

It should be remembered that the review of all SUP applications are carried out in a *quasi-judicial* format, meaning that decisions relating to the approval or denial of an application are based solely on the sworn testimony of all parties involved with the case, both those for and against an application, as well as the review of competent material and substantial evidence submitted during the public hearing.

While County regulations and State law do not require that parties be represented by an attorney, it may be in your best interests to secure legal counsel to represent your interests at the hearing. Further, the applicant has the burden of establishing, by the submission of competent material and substantial evidence, the existence of facts and conditions that demonstrate the projects compliance with the various requirements and standards detailed within the Orange County Unified Development Ordinance (UDO). Those opposing approval of the application shall have the burden of establishing, also through the submission of competent material and substantial evidence, the specific manner in which the proposal does not satisfy the requirements for approval of the application.

As previously indicated, the BOCC shall render a decision based only on the sworn testimony of all parties and on the competent material and substantial evidence submitted during the hearing.

The full text of the application, plans and submitted materials for this item may be obtained under the "News and Updates" link via:  
[http://www.orangecountync.gov/departments/planning\\_and\\_inspections/index.php](http://www.orangecountync.gov/departments/planning_and_inspections/index.php).

The agenda for the September 12<sup>th</sup> BOCC Public Hearing can be obtained under the "Agendas" link via:  
[http://www.orangecountync.gov/departments/board\\_of\\_county\\_commissioners/agendas.php](http://www.orangecountync.gov/departments/board_of_county_commissioners/agendas.php).

If you have any questions concerning this request, please contact us at (919) 245-2575.

Sincerely,



Michael D. Harvey, AICP, CFM, CZO  
Current Planning Supervisor, Planner III



Patrick R. Mallett  
Planner II

Attachments:

- 1) Site Assessment of the subject property and easement location;
- 2) Site Plans illustrating the proposed solar array-public utility;
- 3) SUP Fact Sheet; and
- 4) Vicinity Map with directions to Orange County Whitted Human Services Center Complex.

CC: Craig Benedict, Orange County Planning Director; and  
File.

Site Assessment for PIN: 9835-02-9137 for proposed Solar Array  
Public Utility (Class A Special Use Permit), non-residential

**Site Data**

Zoning: Rural Residential (R1) and designated 10 Year  
Transitional Area on Future Land Use Map  
Acreage: 52.1 acres

Overlay Districts: Back Creek Protected Watershed Overlay  
District and Efland-Cheeks Hwy 70 Overlay District  
Deed: No deed reference found. Legal Reference: 10-E-451.  
Plat/Legal Description: N/O Hwy 70 (no plat found)

**Building Setbacks for Special Use Permit (Class A)**

100 ft. from all property lines  
50 ft. Type D Land Use Buffer shall be provided along any portion  
of the perimeter of the parcel and easements  
(see UDO, 5.10.3 C (2) (f))  
Maximum height: 40'

**Notes:**

(1) Private Road Justifications, Recorded Declarations,  
Restrictive Covenants, Bona Fide Farm status, use and building  
type (e.g. duplex units) will change subdivision and development  
requirements. (2) 80 ft. stream buffer graphically shown. (3) Floor  
Area Ratio (FAR) maximum for residential conditional use = 0.58.  
FAR maximum for non-residential use = 0.088. FAR maximum for  
non-residential conditional use = 0.100. Required minimum open  
space ratio = 0.84. Required minimum livability space ratio =  
0.75. Required pedestrian/landscape ratio = 0.21.  
(2) BMP may be required

**Environmental Features:**

Streams located on lot. Stream buffer for stream to the east:  
80 ft. (Method A). Stream buffer for stream to the west: 65 ft.  
(Method A). Six water bodies located to the west. Water body  
buffers: 65 ft. (Method A).

Slope: Slope of stream to the east: 8.8%. Slope of stream to the  
west: 6.4%. Slopes of water bodies to the west: ranging from  
2.4% to 6.4%

**100 and 500 year Floodplains**

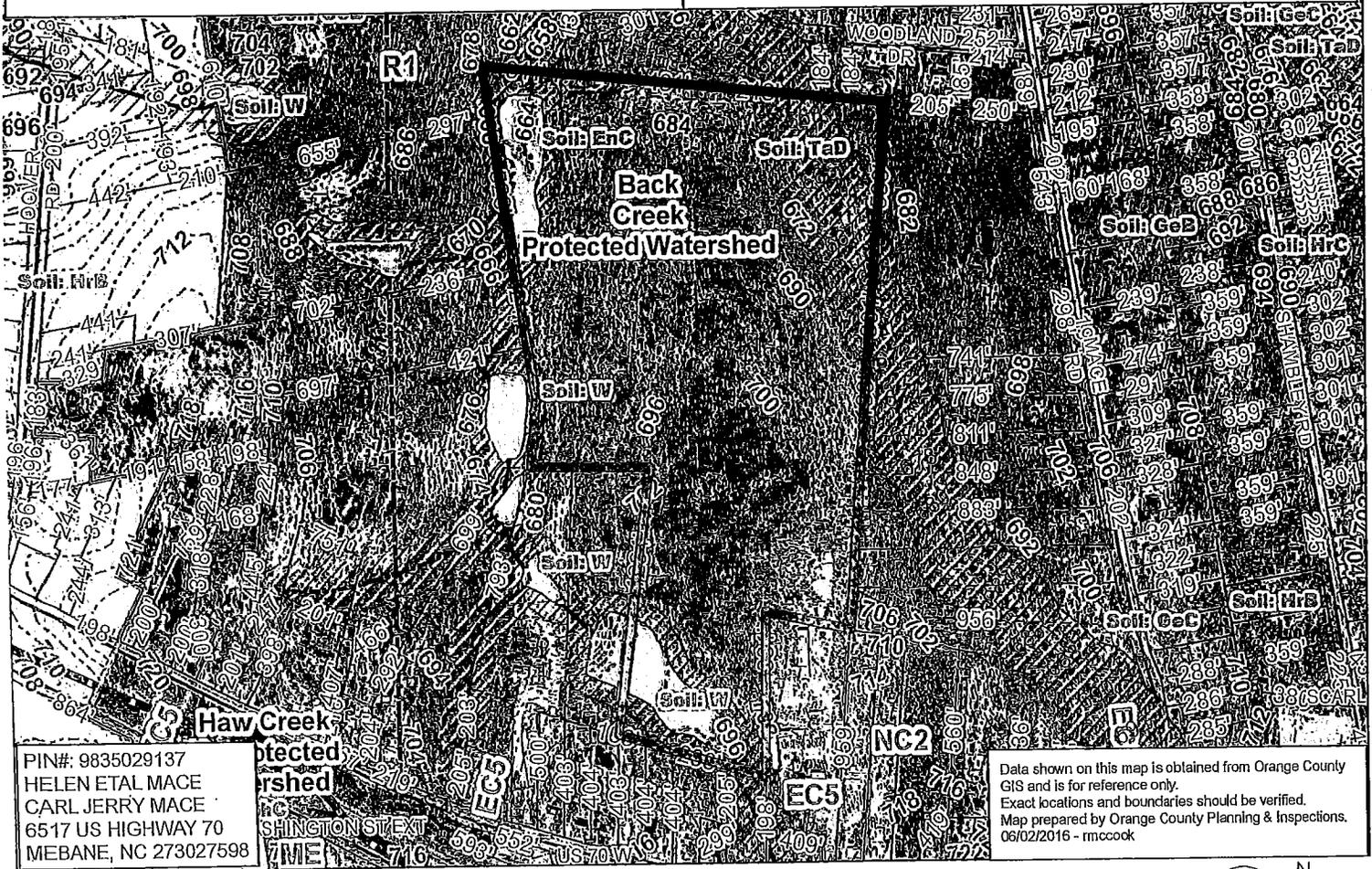
Base Flood Elevation (BFE) based on FIRM Map: 663  
County Freeboard: 665  
Minimum Finished Floor Elevation (FFE): 665  
Flood Panel: 9835J

Impervious Surface Limits: 12% based on UDO (Sec. 4.2.6) -  
272,337.12 sq. ft. of allowable impervious surface area  
Note: On-site infiltration of the first inch of stormwater runoff, per  
UDO, Sec. 4.2.6 for non-residential use

**Land Disturbance Thresholds (Erosion Control)**

1) Erosion Control Application/Permit required if disturbing more  
than 20,000 sq. ft.  
2) Stormwater Management Application/Permit required if more  
than 21,780 sq. ft. (1/2 an acre) for commercial structures.  
\*\*\*Call OC Erosion Control at (919) 245-2586 for more  
information.

Date Site Assessment Completed: Updated 05/26/2016



PIN#: 9835029137  
HELEN ETAL MACE  
CARL JERRY MACE  
6517 US HIGHWAY 70  
MEBANE, NC 273027598

— USGS Stream	- - - 2' Contours (NCDOT)	■ City Limits	□ Floodway (Effective 02/02/07)
— Soils Survey Stream	□ Parcels	□ ETJ	□ 500 Year Floodplains (Effective 02/02/07)
▨ Floodplain Buffer 80ft	□ Zoning	■ Soils	▨ 100 YR Floodplain (Effective 02/02/07)
▨ Stream Buffer 80ft	□ Water Body	■ 100 YR Floodplain (Effective 02/02/07)	— Base Flood Elevation (Symbol)
▨ Water Body Buffer 65ft	■ Watershed	■ FIRM.	







# SPECIAL USE PERMIT FACT SHEET

The purpose of this fact sheet is to provide a breakdown of Orange County's Special Use Permit submittal and review process.

The information contained herein provides an explanation on the nature of the permit proceedings, the presentation of evidence, burden of proof, what constitutes testimony and who can present evidence, and your rights with respect to challenging a decision to either approve or reject a SUP application.

## 1. *What is a Special Use Permit?*

A Special Use Permit (SUP) is a permit allowing for the establishment of certain uses, in certain districts, that are considered worthy of additional scrutiny in their proposed location. Such uses typically require special review for design, location, and impact on surrounding properties.

Orange County has 2 different categories of SUP, specifically:

- i. **Class A** reviewed and acted upon by the Board of County Commissioners (BOCC), with a recommendation from the Planning Board, and
- ii. **Class B** reviewed and acted upon by the Orange County Board of Adjustment.

## 2. *What is considered a 'Special Use'?*

A SUP is required for those specific land uses identified within the Orange County Unified Development Ordinance (UDO) Table of Permitted Uses contained within Section 5.2.

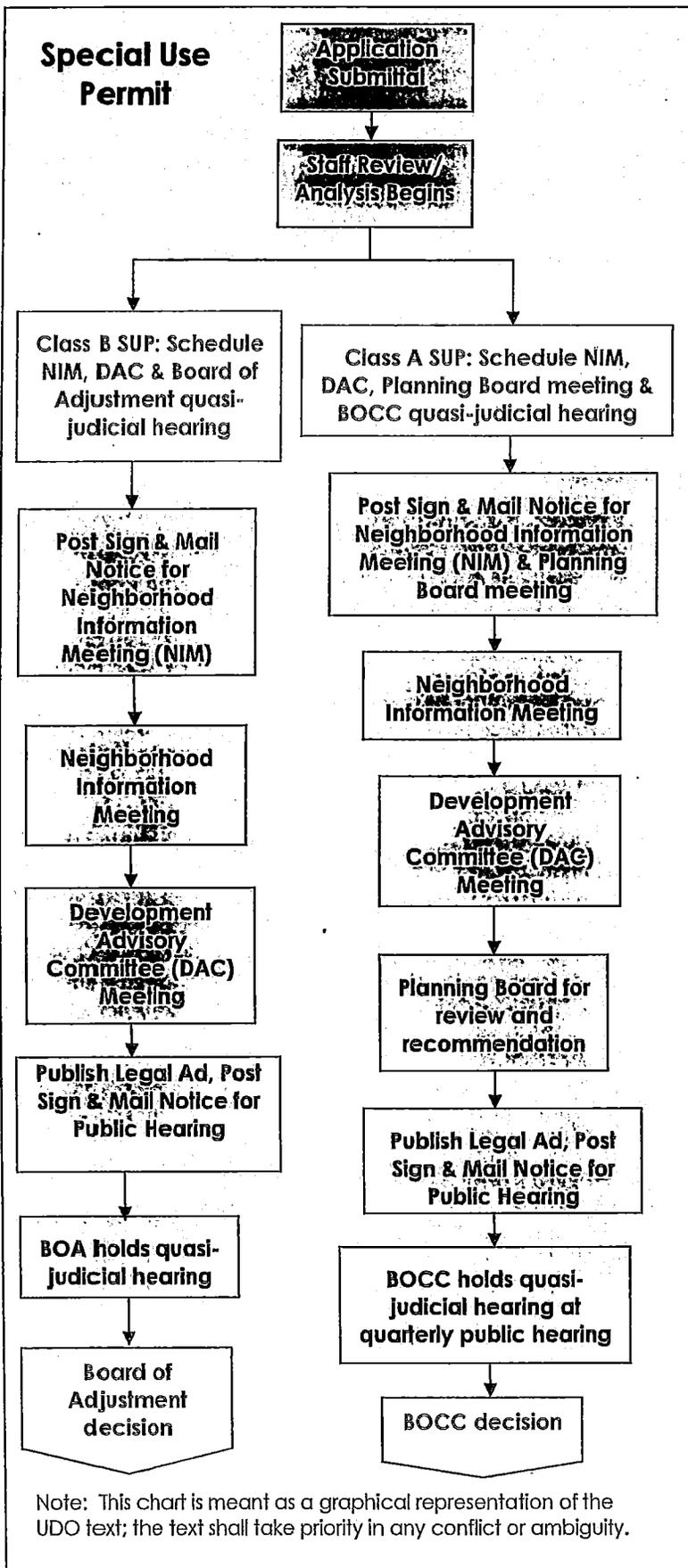
These uses are identified in the UDO's Table of Permitted Uses with an 'A' for Class A SUP and a 'B' for a Class B SUP. Some uses may be permissible in certain districts without restriction (referred to as "uses by right"), but require the SUP in districts where their impact calls for special consideration. Applicants are entitled to be granted a SUP if they can show that specific standards would be met.

## 3. *When are such applications reviewed?*

Review of a SUP application occurs during a previously scheduled and advertised public hearings held by either the BOCC or the Board of Adjustment.

The review of an application is carried out in a quasi-judicial process.

The typical cadence associated with the review of a SUP is broken down in Section 2.7 of the UDO and can be summarized using the following flow chart:



**4. *What does quasi-judicial process mean?***

Quasi-judicial decisions arise in a variety of local government settings.

During a quasi-judicial hearing, the Board (i.e. BOCC or Board of Adjustment) responsible for rendering a decision acts much like a panel of judges. The Board hears factual evidence and sworn testimony presented at the public hearing and then makes a determination on whether the permit can be issued based on the competent, substantial, and material evidence presented.

Put differently a quasi-judicial decision is one that requires the board hearing the matter to find facts and make decisions by applying those facts to the standards in the Unified Development Ordinance.

**5. *Who may speak or present evidence at the public hearing?***

Both individual applicants and those individuals supporting, or opposed to, the application are encouraged to attend. Individuals may represent themselves or be represented by an attorney and they may have expert witnesses testify for them.

The cost for attorneys or expert witnesses is borne by the individual seeking counsel or expert testimony, not the County. The County will not pay for, or reimburse, expenses incurred by an individual in their quest to support or oppose a SUP application.

While not required by State or County regulations, all parties with an interest in a SUP application are strongly advised to have an attorney represent them.

Engineers, architects, real estate agents, planners and other non-attorneys may only appear as expert witnesses; they may not represent an applicant or those opposed to an application.

Only those with standing may speak or present evidence.

**6. *What are the responsibilities of the applicant?***

The applicant bears the ultimate responsibility for producing and submitting competent, substantial, and material evidence for the body reviewing the application to conclude the proposal complies with applicable County regulations.

If they fail to submit evidence demonstrating compliance, the request is denied.

If, however, the applicant proves they comply, and there is insufficient evidence submitted to the board hearing the case demonstrating they do not comply, the applicant is entitled to have the application approved.

**7. *What standards must be met by the applicant?***

All applicants must show compliance with the General Standards for all SUPs, as detailed within Section 5.3.2 of the UDO, and any specific development standards associated within the proposed use.

The General Standards, as contained in Section 5.3.2, read as follows:

(a) *The use will maintain or promote the public health, safety and general welfare, if located where proposed and developed and operated according to the plan as submitted;*

(b) *The use will maintain or enhance the value of contiguous property (unless the use is a public necessity, in which case the use need not maintain or enhance the value of contiguous property); and*

(c) *The location and character of the use, if developed according to the plan submitted, will be in harmony with the area in which it is to be located and the use is in compliance with the plan for the*

*physical development of the County as embodied in these regulations or in the Comprehensive Plan or portion thereof, adopted by the Board of County Commissioners*

**8. *How are decisions made?***

Members of the board rendering the decision must make their decision solely on the competent, material and substantial evidence presented at the hearing, both for and against an application.

Members cannot consider information obtained through independent research or undisclosed *ex parte* communications, meaning members cannot have private discussions with individuals who support or object to a specific application.

**9. *What exactly is ex-parte communication and why is it not allowed?***

Persons affected by a decision have the legal right to hear all of the information presented to members of a board who will be rendering a decision on an SUP application, specifically they have a right to know all of the "facts" being considered.

Therefore members of the decision-making body are not allowed to discuss the case or gather evidence outside of the hearing (what the courts term *ex parte* communication). Only facts presented to the full board at the hearing may be considered.

This is an important point to remember when such applications are being reviewed. Members of the board rendering the decision are prohibited from discussing the matter or receiving comment on a proposal.

These members are not trying to be rude or unsympathetic to your concerns. They are prohibited from engaging in the conversation in the first place as they are required to guarantee an impartial hearing where the 'facts' are weighed as they are presented as to whether or not an application should be granted.

**10. *You previously indicated decisions are based on evidence. Does this mean those presenting evidence at a SUP hearing have to be under oath?***

In a word, yes. All testimony, including from County staff, offered during the public hearing where a SUP is reviewed must be under oath.

All persons wishing to speak will be given a reasonable time in which to be heard, however groups are encouraged to select a spokesperson to speak for the group in order to avoid repetitive testimony.

**11. *Can people just speak to offer their opinion on the application?***

Inflammatory, irrelevant, repetitive and incompetent testimony and hearsay is not permitted and the chairman of the board hearing the matter has the right to limit and restrict such comments during the public hearing.

For more information please refer to Section 2.7.7 (D) of the UDO.

**12. *What constitutes 'competent, substantial, and material evidence' allowing for the approval or a denial of a SUP?***

Breaking down what constitutes evidence can best be summarized as follows:

- i. **Competent evidence:** legally admissible under the rules of evidence unless admitted without objection, or appears to be sufficiently trustworthy and is admitted under such circumstances that it is reasonable for the decision-making body to rely upon it. Evidence that can be subjected to cross-examination, inspection, explanation and rebuttal (i.e. expert testimony).

For example a realtor who has professional experience and accreditation can offer an opinion if a specific project will or will not impact the value of adjacent property. An individual with no background in the field cannot offer a 'competent' opinion on the

subject. In this case it would not be considered as 'competent' evidence and would be inadmissible.

- ii. Substantial evidence: evidence that which a 'reasonable mind' would regard as sufficiently supporting a specific result.

Would this persuade the average person to make a certain conclusion? Does it do more than speculate?

- iii. Material evidence: evidence that is relevant to the issue being considered.

For example if a board is reviewing an application for a kennel (i.e. a place where dogs/cats are housed and cared for a period of time) an individual who is opposed may submit documentation denoting noise complaints from other kennels throughout Orange County. This could be construed as 'material evidence':

Documentation denoting animals have died in kennels throughout the county and, as a result, this specific application should be denied is not relevant to the case at hand as it has no specific relationship to what is being proposed. This would be deemed immaterial evidence and would not be admissible.

As a general rule, anyone with knowledgeable information (i.e. relevant) to the case may provide factual information, but only experts may provide opinion testimony.

Even expert testimony must be competent (i.e. the expert has qualifications relevant to the issue) and material before the decision-making board can rely on it.

Hearsay evidence is testimony that the witness does not know of his or her own personal knowledge, including that which someone else told the witness and the use or introduction of signed petitions and letters.

The board may only hear testimony that focuses on the applicable standards and criteria established in the UDO. Unless they are a qualified expert, witnesses are not competent to testify about the impact of a proposed land use on the value of nearby property, the danger to public safety resulting from increases in traffic or other matters that require special training or expertise like the level of noise that will be generated.

### 13. *Can conditions be imposed on a SUP?*

Generally, the board hearing the application may attach conditions to the approval of an SUP as it relates to compliance with applicable standards. For example, a condition may require the applicant to increase the size of a required setback or land use buffer in order to ensure the project complies with that specific standard as detailed within the UDO. The Board cannot impose conditions addressing an issue not related to an existing standard such as establishing hours of operation, color of buildings, etc.

Conditions cannot require the applicant to take action with regard to a piece of property that is not a part of the application being considered, and conditions cannot require the alteration of a special use permit previously issued to a third party.

### 14. *Is there a record of the proceedings?*

Complete records must be kept of the hearings: Detailed minutes must be kept noting the identity of witnesses and giving a complete summary of their testimony. Any exhibits presented are retained by the board and become a part of the file on that case. An audio recording of the hearing is also made.

### 15. *How are parties notified of the decision?*

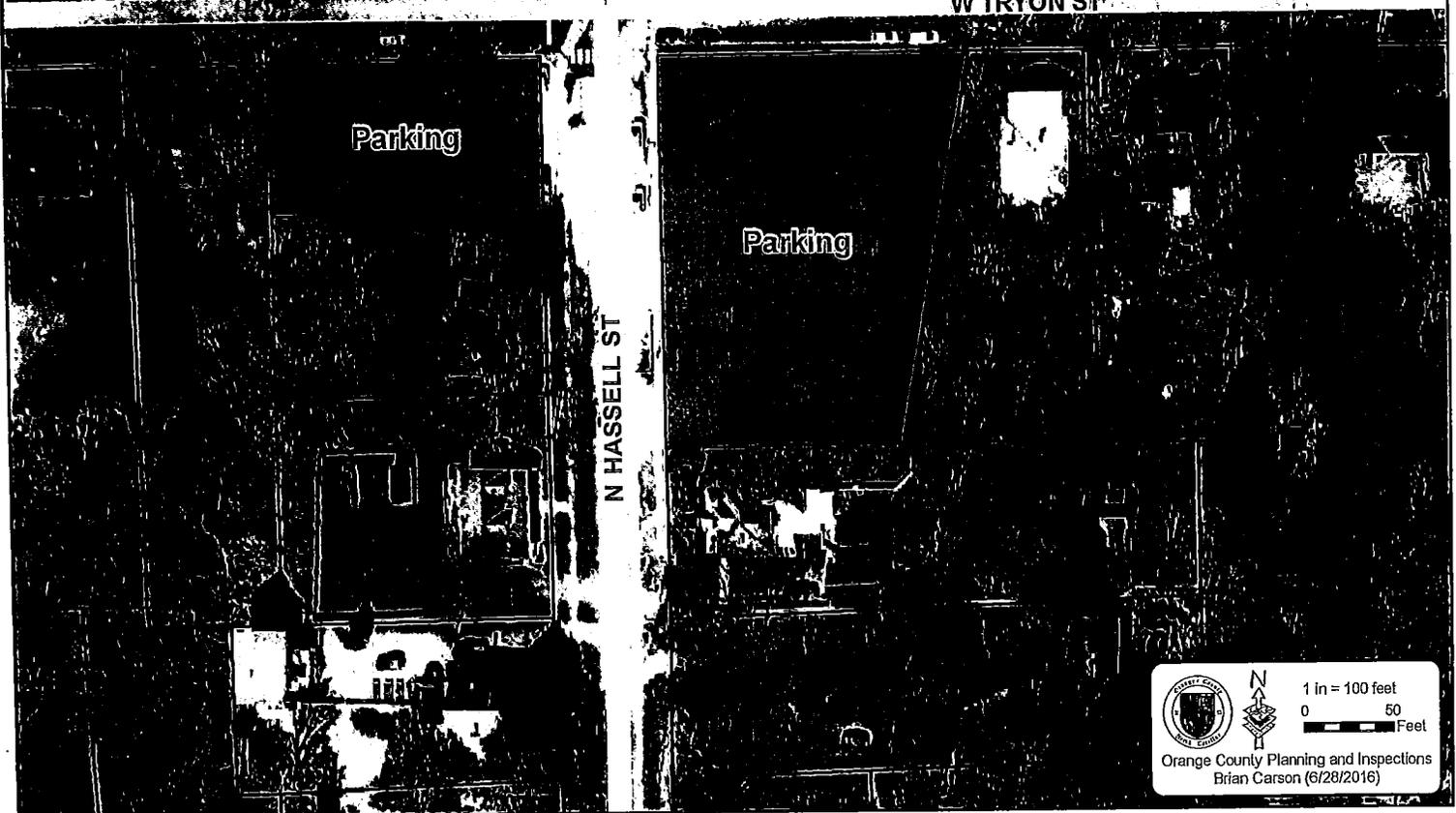
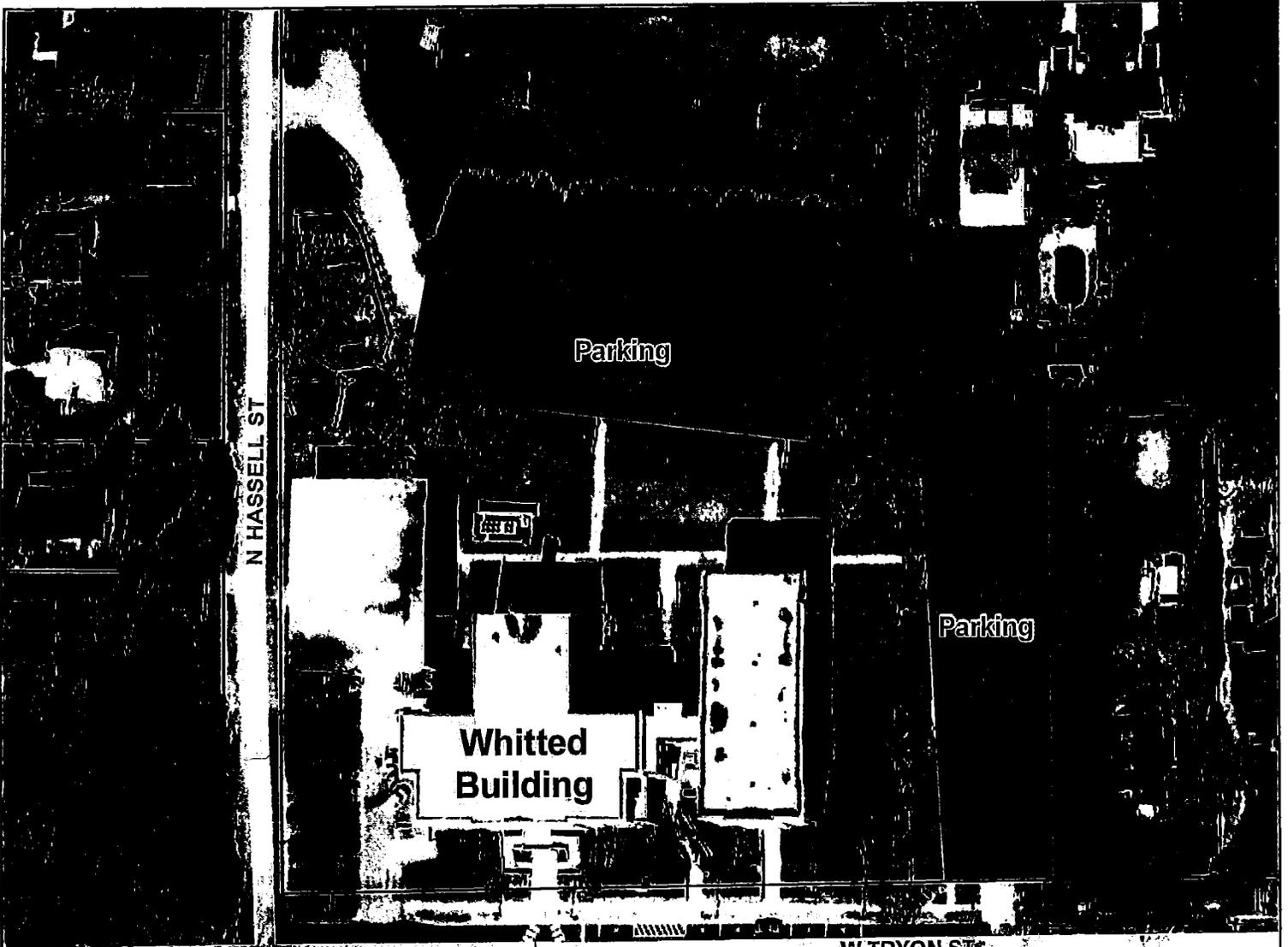
The board rendering a decision on the application is required to make a formal decision on the application (i.e. approve or deny) in writing and shall be based on the determination of facts and their application to the specific standards for the particular use and the general standards contained in the

UDO. This includes providing specific details on the board's conclusions on each applicable standard for a given SUP. Even if the application is denied, there is an obligation to make a detailed finding identifying the evidence utilized to deny the application.

The written decision must be signed and becomes effective upon filing with the Planning Department. A copy of the written decision must be delivered to the applicant, property owner, and others as required by State law.

*16. Are decisions on SUP applications subject to further review?*

Yes. Decisions of the BOCC or Board of Adjustment on a SUP application are subject to by the Superior Court. Appeal applications must be filed within 30 days with the court from the date the decision is made available. Please refer to NCGS 160A-393 and Section 2.12.5 (A) of the UDO for additional information.



1 in = 100 feet  
0 50 Feet

Orange County Planning and Inspections  
Brian Carson (6/28/2016)

RONALD AND NANCY POTEAT  
619 MACE RD  
MEBANE, NC 27302-8826

MELINDA A BROWN  
5602 E SHORE DR  
GREENSBORO, NC 27406

JOHNNY EDWARD HARRISON  
6610 FOX TRL  
MEBANE, NC 27302-8518

KEITH BUCKLEY AND MARI TROSCLAIR  
627 CHICKEN BRIDGE RD  
PITTSBORO, NC 27312

HERMAN ALLEN LLOYD  
6900 BOWMAN RD  
MEBANE, NC 27302-7282

RALPH D KESSLER  
2008 S MEBANE ST, #2002-H  
BURLINGTON, NC 27215

JAMES AND BRANDI ROWLEY  
6310 PERRY RD  
MEBANE, NC 27302

TERESA CRITTENTON  
702 MACE RD  
MEBANE, NC 27302

BRUCE AND SARA CURTIS  
2342 CASTLEROCK FARM RD  
PITTSBORO, NC 27312-9649

BRENDA AND JOHN LEMAIRE  
6606 FOX TRL  
MEBANE, NC 27302-8518

MALCOLM K GENTRY  
6408 FOX TRAIL  
MEBANE, NC 27302

JAMES AND NANCY STRADER  
600 MILDRED CT  
MEBANE, NC 27302

BRIAN TODD WOOD  
606 SHAMBLEY RD  
MEBANE, NC 27302

MARIA TSIAPERA  
1051 BURNING TREE DR  
CHAPEL HILL, NC 27517-5657

JOAN M LINGENFELTER  
604 MACE RD  
MEBANE, NC 27302-8826

HELEN AND CARL MACE  
6517 US HIGHWAY 70  
MEBANE, NC 27302-7598

BEAVER VALLEY HOMEOWNERS ASSOC  
2342 CASTLEROCK FARM RD  
PITTSBORO, NC 27312

JESSIE AND VIVIAN WYNN  
605 MACE RD  
MEBANE, NC 27302

CHARLES M WHITE  
2126 WESTERN PARK LN  
HILLSBOROUGH, NC 27278

ROBERT AND MARGARET KEPNER  
4012 BRANCHWOOD DR  
DURHAM, NC 27705

CHARLIE T TRUSTEE PATTERSON  
703 HEATHER RD  
BURLINGTON, NC 27215-6205

BETSY J RHODES  
418 MACE RD  
MEBANE, NC 27302

PAMELA H CLEMONS  
600 MACE RD  
MEBANE, NC 27302

ROGER AND SALLY IVEY  
6432 WOODLAND DR  
MEBANE, NC 27302-7008

JUDY A MORGAN  
322 MACE RD  
MEBANE, NC 27302

KIMBERLY SCOTT  
624 MACE RD  
MEBANE, NC 27302

JOYCE J KIRK  
6412 FOX TR  
MEBANE, NC 27302

RANELLE AND DAVID DOUGLAS  
300 MACE RD  
MEBANE, NC 27302

JOANN HOPKINS  
746 HANNER RD  
BURLINGTON, NC 27217-1800

LESLIE N PORTER  
514 SHAMBLEY RD  
MEBANE, NC 27302

PAUL S WYNN  
515 MACE RD  
MEBANE, NC 27302-8825

HERMAN AND CONNIE KING  
6614 FOX TRL  
MEBANE, NC 27302-8518

MYLTA R CORDERO  
218 MACE RD  
MEBANE, NC 27302

DALE G DAVIS  
2189 GIFFORD DR  
HAW RIVER, NC 27258

ALEASE S MACE  
6517 US HIGHWAY 70  
MEBANE, NC 27302-7598

MYRLE K ELLIS  
6707 US 70 W  
MEBANE, NC 27302

HOLY TRINITY ORTHODOX CHURCH  
6803 US 70  
MEBANE, NC 27302

MARK J HORNE  
6623 US 70 W  
MEBANE, NC 27302

MICHAEL P SWAIM  
PO BOX 178  
EFLAND, NC 27243

ANTHONY SCOTT GILMORE  
7005 EBENEZER CHURCH RD  
RALEIGH, NC 27612

KENNETH AND FAYE SOUTHARD  
6911 US 70 W  
MEBANE, NC 27302-8531

MICHAEL CATO FOSTER  
306 MACE RD  
MEBANE, NC 27302-8823

MARY L BUCKHALTER  
6502 FOX TR  
MEBANE, NC 27302

ROGER A THURMAN, JR.  
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PO BOX 983  
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HENRY AND MARY COPELAND  
1221 BUCKHORN RD  
MEBANE, NC 27302-8090

WALTER JOSEPH BRIGHT  
601 PONDEROSA TRL  
MEBANE, NC 27302-8522

WILLIAM E and BRENDA F TUCKER  
602 SHAMBLEY RD  
MEBANE, NC 27302-8573

LATISHA WATFORD  
P O BOX 536  
EFLAND, NC 27243

NELLIE L JONES  
6501 US HWY 70  
MEBANE, NC 27302

US DEPT. OF AGRICULTURE  
1520 MARKET ST  
DEFAULT MGMT FC 214  
ST LOUIS, MO 63166

GUY D JANNEY, JR.  
79 POINDEXTER RD  
ROXBORO, NC 27574

BULLDOG INVESTMENT PROPERTIES,  
LLC  
500 HOOVER RD  
MEBANE, NC 27602-3346

MARK AND JOAN WILSON  
6615 US 70 W  
MEBANE, NC 27302-7599

PAUL AND MICHAEL WYNN  
424 FERNANDO ST  
DURHAM, NC 27703-2511

JAMES A SALAMON  
510 SHAMBLEY RD  
MEBANE, NC 27302-8572

DONNA RAE DILLINGHAM  
506 SHAMBLEY RD  
MEBANE, NC 27302

HOWARD C AND ELLEM M OVERSON  
1597 NORTHFIELD DR  
GRAHAM, NC 27253

KELLY G VERNER  
401 MACE RD  
MEBANE, NC 27302

MARSELLINE A HOLLEY  
6710 E WASHINGTON ST EXT  
MEBANE, NC 27302-8272

L AND L OF NC INC  
5100 INVERNESS DR  
DURHAM, NC 27712

CYNTHIA G LAWS  
5100 INVERNESS DR  
DURHAM, NC 27712

HARRY AND PEGGY JAMES  
6422 WOODLAND DR  
MEBANE, NC 27302-7008

JOHN W LAWSON  
314 MACE RD  
MEBANE, NC 27302

SNC PROPERTIES LLC  
PO BOX 487  
EFLAND, NC 27243

THOMAS AND MICHAEL HEBERT  
6815 US 70  
MEBANE, NC 27302

MARIA L NAJERA  
6725 US 70 W  
MEBANE, NC 27302

CASEY AND EMILY ELLIS  
321 MACE RD  
MEBANE, NC 27302

LARRY R HOWELL  
236 IROQUOIS  
LAS CRUCES, NM 88007

JACQUELINE E BOYDEN  
225 MACE RD  
MEBANE, NC 27302

JIMMY AND BARBARA WHALEY  
6919 US 70 W  
MEBANE, NC 27302

KAMAL ROWHANI  
500 UMSTEAD DR  
APT F203  
CHAPEL HILL, NC 27516

IGLESIA DEL DIOS DE ISRAEL  
4517 HOLLAND RD  
GREENSBORO, NC 27405

STEVEN M HIPPS  
7001 US 70  
MEBANE, NC 27302

MACK AND MARIE MURDOCK  
6619 US 70 W  
MEBANE, NC 27302

DANIEL AND KAREN HOBBY  
6611 US 70 W  
MEBANE, NC 27302-7599

CONCRETE SUPPLY CO LLC  
PO BOX 5247  
CHARLOTTE, NC 28225

JENNIFER J CECIL  
6417 US 70  
MEBANE, NC 27302-7597

C JERRY AND JACQUELINE MACE  
P O BOX 127  
MEBANE, NC 27302-0127

FRANCES P LOFTIS  
6600 US 70 W  
MEBANE, NC 27302-7599

ROBERT L WYNN  
6514 US 70 W  
MEBANE, NC 27302

JAMES E COOK  
6622 US 70 W  
MEBANE, NC 27302

FRANKLIN ROOSEVELT COSTNER  
6516 US 70 W  
MEBANE, NC 27302

GARY LOUIS HILL, SR.  
6919 US 70 W  
MEBANE, NC 27302

HERMAN AND DEBORAH BULLINS  
620 MACE RD  
MEBANE, NC 27302

ANN CRAWFORD  
616 MACE RD  
MEBANE, NC 27302-8826

LAMECO ROGERS  
P O BOX 1112  
MEBANE, NC 27302-1112

CAROL A NICHOLS  
519 MACE RD  
MEBANE, NC 27302-8825

KAREN D RILEY  
222 MACE RD  
MEBANE, NC 27302

HERMAN AND DIANE LLOYD  
6900 BOWMAN RD  
MEBANE, NC 27302-7282

JASON AND SHEILA BRIGHT  
600 PONDEROSA TR  
MEBANE, NC 27302

BEVERLY CAROL BURCH  
6427 WOODLAND DR  
MEBANE, NC 27302-7008

BETTY M HALL  
523 MACE RD  
MEBANE, NC 27302-8825

MICHAEL A RUDDER  
6431 WOODLAND DR  
MEBANE, NC 27302

OLIVIA P TYRE  
413 MACE RD  
MEBANE, NC 27302-8824

STEVE EDWARD DOBY  
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EFLAND, NC 27243

IRENE H WHALEY  
PO BOX 421  
MEBANE, NC 27302-0421

ANN SYKES  
PO BOX 183  
MEBANE, NC 27302

JAMES W EVANS  
223 MACE RD  
MEBANE, NC 27302

AUSTIN T SEIFTS  
212 MACE RD  
MEBANE, NC 27302

SALLY F WYNN  
6915 US 70 W  
MEBANE, NC 27302

CONSTANCE P GLISSON  
6903 US HWY 70  
MEBANE, NC 27302

SCOTT A EARNST  
6711 US 70 W  
MEBANE, NC 27302

ANNA HARRIS  
608 MACE RD  
MEBANE, NC 27302-8826

LENA F SKENES  
6602 FOX TRL  
MEBANE, NC 27302-8518

RJR PROPERTIES  
PO BOX 784  
GRAHAM, NC 27253

WINTERSTONE INC  
550 OLD PEACHTREE RD  
SUWANEE, GA 30024-2934

TERESA OLIVER  
613 MACE RD  
MEBANE, NC 27302

THEO SMITH, SR.  
6413 FOX TRL  
MEBANE, NC 27302

ZACHARY AND EMILY MCCOY  
421 MACE RD  
MEBANE, NC 27302

JIMMIE AND SYLVIA SLAUGHTER  
6408 WOODLAND DR  
MEBANE, NC 27302

JOSEPH AND SUE DIXON  
224 HARDEN ST  
BURLINGTON, NC 27215-7514

MLVP LLC  
150 PROVIDENCE RD  
STE 100B  
CHAPEL HILL, NC 27514

JOAN B HURLEY  
601 MACE RD  
MEBANE, NC 27302-8826

RANJIT MINHAS  
2040 WEBSTER GROVE DR  
MEBANE, NC 27302

WAYNE AND DARRELL AREHART  
PO BOX 731  
CARRBORO, NC 27510

WILLIAM D WESTBROOK, SR.  
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MEBANE, NC 27302

EDNA MAE TUCKER  
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BRENDA W MERRITT  
PO BOX 887  
MEBANE, NC 27302

PAUL J FREDRICK  
300 S FOURTH ST  
MEBANE, NC 27302

DONALD AND PAMELA HOOVER  
305 HOOVER RD  
MEBANE, NC 27302

CARL J MACE  
916 MACE RD  
MEBANE, NC 27302-0127

JAMES ROBERT ADAMS  
5572 NC 119 SOUTH  
MEBANE, NC 27302

WILLIAM PATTERSON FAMILY TRUST  
415 HOOVER RD  
MEBANE, NC 27302-8540

## Attachment 8

**FINDINGS OF THE ORANGE COUNTY BOARD OF COMMISSIONERS  
PERTAINING TO A REQUEST SUBMITTED BY  
OAKWOOD SOLAR FARM SOLAR LLC / ESA RENEWABLES AND  
MR. CARL AND HELEN MACE, ETAL  
REQUESTING A CLASS A SPECIAL USE PERMIT  
TO CONSTRUCT A SOLAR ARRAY-PUBLIC UTILITY  
ON A PARCEL OF PROPERTY OFF OF US HIGHWAY 70  
FURTHER IDENTIFIED UTILIZING ORANGE COUNTY  
PARCEL IDENTIFICATION NUMBER (PIN)  
9835-02-9137.**

As required under Section 5.2 *Table of Permitted Uses* of the Orange County Unified Development Ordinance (UDO), a Class A Special Use Permit is required for the development of a solar facility. Such permits shall comply with general and specific standards as set forth in Section(s) 5.3.2 and 5.9.6 of the UDO.

Section 5.3.2 (A) (2) of the UDO requires written findings certifying compliance with the following:

- (1) The use will maintain or promote the public health, safety and general welfare, if located where proposed and developed and operated according to the plan as submitted;
- (2) The use will maintain or enhance the value of contiguous property (unless the use is a public necessity, in which case the use need not maintain or enhance the value of contiguous property); and
- (3) The location and character of the use, if developed according to the plan submitted, will be in harmony with the area in which it is to be located and the use is in compliance with the plan for the physical development of the County as embodied in these regulations or in the Comprehensive Plan, or portion thereof, adopted by the Board of County Commissioners;

In addition, the Board shall make findings certifying that the application is compliant with the following specific standards:

- (1) Specific standards for the submission of Special Use Permit applications as outlined within Section(s) 2.2 and 2.7 of the UDO,
- (2) Section 5.3.2 (B) relating to the method and adequacy of the provision of:
  - a. Sewage disposal facilities,
  - b. The adequacy of police, fire, and rescue squad protection, and
  - c. The adequacy of vehicular access to the site and traffic conditions around the site
- (3) Specific regulations governing the development of school as set forth in Section 5.9.6 of the UDO,
- (4) The general findings outlined within Section 5.3.2 (A) (2).

Listed below are the findings of the Orange County Planning Board and staff regarding the application in question. The findings have been presented by Article and requirement to assist the Board of County Commissioners (BOCC) in its deliberations.

REQUIREMENT	UDO	SUPPORTING EVIDENCE	Planning Board / Staff Recommendation	BOCC FINDINGS
<b>APPLICATION COMPONENTS</b>				
Proper forms	2.2	Application and supporting documents (Attachment 1)	Yes	
Fees paid	2.2.4(D)	Staff Comments during August 3, 2016 Planning Board	Yes	
Full description of use <ul style="list-style-type: none"> <li>• Location</li> <li>• Appearance</li> <li>• Operational characteristics</li> </ul>	2.7.3(B)(1)	Application and supporting documents (Attachment 1)	Yes	
Owner Information	2.7.3(B)(2)	Application (Attachment 1)	Yes	
Information Needed for Use Standards	2.7.3(B)(3)	Application and supporting documents (Attachment 1)	Yes	
Site Plans	2.7.3(B)(4)	Site Plan (Attachment 2)	Yes	
Preliminary Subdivision Plat (if necessary)	2.7.3(B)(5)	No subdivision proposed: Survey of access easement was provided.	N/A	
List of Parcels within 1,000 feet	2.7.3(B)(6)	Application and supporting documents (Attachment 1)	Yes	
Elevations of all Structures	2.7.3(B)(7)	No structures (i.e. buildings) are being proposed. Elevation of solar arrays and fence provided with site plan (Attachments 1 and 2)	Yes	
Environmental Assessment (or EIS) <ul style="list-style-type: none"> <li>• Topography</li> <li>• Drainage issues</li> <li>• Natural or Cultural resources</li> <li>• Mining</li> <li>• Hazardous Wastes</li> <li>• Wastewater treatment</li> <li>• Water usage</li> </ul>	2.7.3(B)(8)	Application and supporting documents – including EA and Phase I Environmental Assessment (Attachment 1)	Yes	
Method of Debris Disposal	2.7.3(B)(9)	Application and site plan (Attachments 1 and 2)	Yes	
Development Schedule	2.7.3(B)(10)	Application – Narrative (Attachment 1)	Yes	
Extended Vesting Request	2.7.3(B)(11)	Not requested by applicant	N/A	

REQUIREMENT	UDO	SUPPORTING EVIDENCE	Planning Board / Staff Recommendation	BOCC FINDINGS
<b>NOTIFICATION REQUIREMENTS</b>				
Public Notice <ul style="list-style-type: none"> <li>• Date</li> <li>• Time</li> <li>• Place</li> </ul>	2.7.5(a)	Staff testimony and Attachment 7	Yes	
Published in Newspaper <ul style="list-style-type: none"> <li>• Two successive weeks</li> <li>• First notice at least ten days prior but no more than twenty-five days prior</li> </ul>	2.7.5(b)	Staff testimony Public Hearing as part of BOCC September 12, 2016 Quarterly Public Hearing. Add was sent to newspapers on August 26, 2016 and was run consistent with UDO requirements.	Yes	
Sign Posting on Property (at least 10 days prior)	2.7.5(c)	Staff testimony	Yes	
Mailed Notice <ul style="list-style-type: none"> <li>• First Class Mail</li> <li>• All adjacent property owners (within 1,000 ft.)</li> <li>• Not less than fifteen days prior</li> </ul>	2.7.5(d)	Staff testimony and Attachment 7	Yes	

REQUIREMENT	UDO	SUPPORTING EVIDENCE	Planning Board / Staff Recommendation	BOCC FINDINGS
<b>SPECIFIC STANDARDS</b>				
<p><b>Waste Disposal</b> Method and adequacy of provision for sewage disposal facilities, solid waste and water service.</p>	5.3.2(B)(1)	<p>Staff Testimony / Attachment 4</p> <p>Both Environmental Health and Solid Waste have indicated they have no concerns. As there are no structures (i.e. office) there will be no septic system on the property.</p> <p>Conditions are recommended to require Solid Waste Permit as part of development process.</p>	Yes	
<p><b>Safety</b> Method and adequacy of police, fire and rescue squad protection.</p>	5.3.2(B)(2)	<p>Staff Testimony / Attachment 4</p> <p>Orange County Emergency Service staff and the Sheriff's office have indicated the project can be served.</p>	Yes	
<p><b>Vehicle Access</b> Method and adequacy of vehicle access to the site and traffic conditions around the site.</p>	5.3.2(B)(3)	<p>Staff Testimony / Attachment 4</p> <p>There will not be an appreciable traffic increase in the area associated with the development of the solar array.</p> <p>The applicant shall be required to obtain a new driveway permit through NC DOT.</p> <p>The proposed access easement to US Highway 70 will be recorded prior to development.</p>	Yes	

REQUIREMENT	UDO	SUPPORTING EVIDENCE	Planning Board / Staff Recommendation	BOCC FINDINGS
<b>STANDARDS for Solar Array – Public Utility</b>				
<b>Site Plan</b> A site plan prepared in accordance with Section 2.5 of and 5.9.6 (C) (1) inclusive of UDO	5.9.6 (C) (1) (a) through (d)	Application, Applicant Testimony, Staff Testimony, and Site Plan.  Site plan provides elevations for proposed arrays, fencing and landscaping.  The application, EA and Phase I Environmental contain required soils information and reports (Attachment 1)	Yes	
<b>Standards of Evaluation</b>				
On-site utility and transmission lines placed underground when feasible	5.9.6 (C) (2) (a)	Application, Applicant Testimony, Staff Testimony, and Site Plan (Attachments 1 and 2).	Yes	
Height of array shall not exceed 40 ft.	5.9.6 (C) (2) (b)	Application, Applicant Testimony, Staff Testimony, and Site Plan (Attachments 1 and 2).	Yes	
Individual arrays shall be designed and located to prevent reflective glare toward inhabited buildings on adjacent property and rights-of-way.	5.9.6 (C) (2) (c)	Application, Applicant Testimony, Staff Testimony, and Site Plan (Attachments 1 and 2).	Yes	
Warning signs concerning voltage.	5.9.6 (C) (2) (d)	Application, Applicant Testimony, Staff Testimony, and Site Plan (Attachments 1 and 2).	Yes	
Mechanical equipment and arrays shall be enclosed by a minimum 8 ft. high fence and screening per Section 6.8 of UDO.	5.9.6 (C) (2) (e)	Application, Applicant Testimony, Staff Testimony, and Site Plan (Attachments 1 and 2).	Yes	
Proof of liability insurance – minimum of \$500,000.00 per occurrence.	5.9.6 (C) (2) (f)	Application and Applicant Testimony (Attachment 1).	Yes	
Type D land use buffer around perimeter of project	5.9.6 (C) (2) (g)	Application, Applicant Testimony, Staff Testimony, and Site Plan (Attachments 1 and 2).	Yes	
Decommissioning of solar facility	5.9.6 (C) (3) (a) through (f) inclusive	Application, Applicant Testimony, Staff Testimony, and Site Plan (Attachments 1 and 2).  Applicant acknowledges requirement and agreed to the condition in the event the use of the site as a solar array – public utility is ceased.	Yes	

REQUIREMENT	UDO	SUPPORTING EVIDENCE	Planning Board / Staff Recommendation	BOCC FINDINGS
<b>SPECIFIC STANDARDS</b>				
In accordance with Section 5.3.2 (A) (2), the Board of County Commissioners shall also consider the following general conditions before the application for a Special Use can be approved.				
<b>NOTE:</b> The Following represents the recommendation of the Planning Board and staff based on the information available prior to the public hearing				
The use ( <b>will / will not</b> ) maintain or promote the public health, safety and general welfare, if located where proposed and developed and operated according to the plan as submitted.	Section 5.3.2 (A) (2) (a)	Application package and testimony from applicant and their subject matter experts on how the project complied with the UDO.	The use <b>Will</b> maintain ...	
The use ( <b>will / will not</b> ) maintain or enhance the value of contiguous property (unless the use is a public necessity, in which case the use need not maintain or enhance the value of contiguous property).	Section 5.3.2 (A) (2) (b)	Application package and testimony from applicant and their subject matter experts on how the project complied with the UDO.	The use <b>Will</b> maintain ...	
The location and character of the use, if developed according to the plan submitted, ( <b>will / will not</b> ) be in harmony with the area in which it is to be located and the use is in compliance with the plan for the physical development of the County as embodied in these regulations or in the Comprehensive Plan, or portion thereof, adopted by the Board of County Commissioners.	Section 5.3.2 (A) (2) (c)	Application package and testimony from applicant and their subject matter experts on how the project complied with the UDO.	The location and character of the use, if developed according to the plan submitted <b>Will</b> be ...	

**RECOMMENDATION:**

Neither the Planning Board or staff have received any comments from local residents and property owners indicating they do not believe the proposed facility complies with the provisions of Section 5.3.2 (A) (2) inclusive. These standards include maintaining or promoting the public health, safety, and general welfare; maintaining or enhancing the value of contiguous property; the use being in harmony with the area in which it is to be located; and the use being in compliance with the general plan for the physical development of the County.

Planning Board and staff have reviewed the application, the site plan, and all supporting documentation and have found that the applicant **complies** with the specific standards and required regulations as outlined within the UDO with respect to the submittal of required information for the project.

Provided the Board of County Commissioners (BOCC) finds in the affirmative on the specific and general standards as detailed herein, and no evidence is entered into the record demonstrating the applicant has either:

- a. Failed to meet their burden of proof that the project complies with the specific development standards for a solar array – public utility; or
- b. Fails to comply with the general standards detailed within Section 5.3.2 (A) (2) of the UDO

the BOCC could approve the application. In the event that the BOCC makes an affirmative finding, the Planning Board and staff recommends the attachment of the following conditions:

1. The applicant shall place the area of the property encumbered by the SFHA Overlay District, including required stream/floodplain buffers, into a Conservation Easement. This easement shall be recorded within 180 days from approval of the application.
2. The applicant shall cause a formal and detailed landscape and tree preservation plan to be submitted and approved by the Orange County Planning Department within 180 days from the approval of this Special Use Permit. This plan shall also incorporate the preservation of environmentally sensitive areas such as jurisdictional streams, wetlands and floodplain.
3. The applicant shall cause a plat to be submitted recording all lease, access, utility and conservation easements on the subject area.
4. The applicant complete and submit a formal application to the Orange County Inspections Department requesting authorization to commence construction of the proposed solar array. The application, including all applicable fees, shall be submitted within 180 days from the approval of the Special Use Permit.
5. The Orange County Fire Marshal's office shall review and approve the final site plan, as part of the normal building permit review process, and that any and all modifications be made to address fire code issues and access prior to the issuance of the permit authorizing the commencement of land disturbing activities.
6. The applicant shall provide a detailed, scaled, map to the Orange County Fire Marshal's office and the Efland Volunteer Fire Department denoting the location of all storage areas for batteries, master cut-off switches, and other similar devices to ensure the protection of emergency responders in the event of a catastrophic incident on the property. This map shall be submitted prior to the issuance of a Certificate of Occupancy by the County allowing for operation of the facility to commence.
7. The applicant shall submit a Solid Waste Management application for the project within

180 days from the approval of the Special Use Permit.

8. Prior to the commencement of land disturbing activity, the applicant shall submit all necessary stormwater, grading plans, and erosion control applications to the Orange County Erosion Control Division for review and processing. These applications shall be submitted within 180 days from the issuance of the SUP.
9. The applicant shall submit the approved site plan and a driveway permit to NC DOT for review and comment within 180 days from the issuance of the SUP and provide planning staff with a copy of the issued permit.
10. The Special Use Permit will automatically expire within 12 months from the date of approval if the use has not commenced or construction has not commenced or proceeded unless a timely application for extension of this time limit is approved by the BOCC.
11. If any condition of this Special Use Permit shall be held invalid or void, then this Special Use Permit shall be void in its entirety and of no effect.

**ORANGE COUNTY  
BOARD OF COMMISSIONERS**

**QUARTERLY PUBLIC HEARING ACTION AGENDA ITEM ABSTRACT**

**Meeting Date:** September 12, 2016

**Action Agenda  
Item No.**   D.1  

**SUBJECT:** Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan Map Amendment

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**DEPARTMENT:** Planning and Inspections

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**ATTACHMENT(S):**

1. Amendment Outline Form – Hillsborough/Orange County Joint Land Use Plan Amendments
  2. Resolution Amending the Hillsborough/Orange County Joint Land Use Plan
  3. Excerpt of Approved July 6, 2016 Ordinance Review Committee Notes
  4. Excerpt of Draft August 3, 2016 Planning Board Minutes
- 

**INFORMATION CONTACT: (919)**

Tom Altieri, Planner III, 245-2579  
Craig Benedict, Planning Director, 245-2575

**PURPOSE:** To hold a public hearing on a Town of Hillsborough and Orange County initiated map amendment to the Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan (a.k.a. Joint Land Use Plan). This amendment involves five parcels (200.8 total acres) south of Interstate 40 in the vicinity of Old Highway 86.

**BACKGROUND:** The County is currently working on plans to invest approximately \$1.5 million to extend water and sewer infrastructure within the Hillsborough Economic Development District (EDD). Amendments to the Joint Land Use Plan (JLUP) map are proposed to better promote economic development opportunities in the area and help preserve planned sewer capacities for non-single-family residential uses. The amendments clarify the intent for primarily non-residential mixtures of uses within this EDD. Amendments to the JLUP need to be approved by the Town and County governing boards and the processes are running concurrently. An interlocal utility service agreement between Orange County and Hillsborough is also being prepared for the October 2016 regular Board of County Commissioners (BOCC) meeting that will have linkage to the JLUP and further describe desired land uses within the Hillsborough EDD.

The Amendment Outline Form in [Attachment 1](#) provides additional information, including the details of the proposed map amendment.

County Planning staff held a Public Information Meeting on July 26 to explain the proposed amendments affecting the Hillsborough EDD. Five interested persons attended the meeting.

On July 21, 2016, the Town of Hillsborough Planning Board unanimously recommended approval of the proposed amendment to the Town Board of Commissioners. The Town Board is expected to take action on September 12.

Summary of Amendment Process:

County Amendment Outline Form Approved	April 19
Hillsborough Planning Board voted to schedule hearing	June 16
County Planning Board info item	July 6
Hillsborough Town Board public hearing	July 21
County Public Information Meeting	July 26
County Planning Board recommendation	August 3
Hillsborough Planning Board recommendation	August 18
Hillsborough Town Board action	September 12
<b>County BOCC public hearing (possible action)</b>	<b>September 12</b>

Orange County is also proposing amendments to its Unified Development Ordinance (UDO), which is not part of the joint planning construct, that pertain to the Hillsborough Economic Development District. These UDO text amendments, as well as related Zoning Atlas (map) amendments, are also on tonight's September 12 public hearing agenda.

Planning Director's Recommendation: The Planning Director recommends **approval** of the proposed Town of Hillsborough/Orange County JLUP map amendment.

Planning Board Recommendation: At its August 3, 2016 meeting, the Board voted 7-1 to **recommend approval** of the proposed amendment. Draft minutes from this meeting are included in Attachment 4. Agenda materials from the August 3, 2016 Planning Board meeting can be viewed at: <http://www.orangecountync.gov/8.3.16PlanningBoardAgendaPacket.pdf>. Additionally, the Ordinance Review Committee (ORC), a subcommittee of the Planning Board, reviewed the proposed amendment at its July 6 meeting and approved notes from this meeting are included in Attachment 3.

**FINANCIAL IMPACT:** There is no financial impact associated with receiving this information. Processing of the amendment will not create the need for additional funding for the provision of County services. Existing Planning staff included in the Departmental staffing budget will accomplish the work required.

**SOCIAL JUSTICE IMPACT:** The following Orange County Social Justice Goal is applicable to this agenda item:

**GOAL: ENSURE ECONOMIC SELF-SUFFICIENCY**

The creation and preservation of infrastructure, policies, programs and funding necessary for residents to provide shelter, food, clothing and medical care for themselves and their dependents.

**RECOMMENDATION(S):** The Administration recommends the Board:

1. Receive the proposed amendment to the Joint Land Use Plan map and Planning Board recommendation as detailed in this abstract and attachments.
2. Conduct the public hearing and accept comment on the proposed amendment.
3. Close the public hearing. (Note that, because this is a legislative decision, additional comments at a later date are permitted).
4. Decide on one of the following options:
  - a. Adopt the proposed amendment by approving the Resolution (Attachment 2).
  - b. Defer a decision to a later BOCC regular meeting date.
  - c. Refer the item back to the Planning Board for a specific purpose.
  - d. Deny the proposed amendment.

# COMPREHENSIVE PLAN / FUTURE LAND USE MAP AND UNIFIED DEVELOPMENT ORDINANCE (UDO) AMENDMENT OUTLINE

Other-2016-01

**Town of Hillsborough/Orange County Central Orange Coordinated Area  
Land Use Plan Amendments, South of Interstate 40 in the Vicinity of Old  
Highway 86**

---

## A. AMENDMENT TYPE

### Map Amendments

- Future Land Use Map:  
From:  
To:
- Zoning Map:  
From:  
To:
- Other: Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan (a.k.a. Joint Land Use Plan) Amendments - This amendment consists of map changes to five parcels south of Interstate 40 in the vicinity of Old Highway 86.

### Text Amendments

- Comprehensive Plan Text:  
Section(s):
- UDO Text:
  - UDO General Text Changes
  - UDO Development Standards
  - UDO Development Approval Processes
 Section(s):
- Other:

## B. RATIONALE

### 1. Purpose/Mission

The County is currently working on plans to invest approximately \$1.5 million to

extend water and sewer infrastructure within the Hillsborough Economic Development District (EDD). Amendments to the Joint Land Use Plan are proposed to better promote economic development opportunities in the area and help preserve planned sewer capacities for non-single-family residential uses. Amendments to the Joint Land Use Plan need to be approved by the Town and County governing boards. Orange County is also proposing amendments to its Unified Development Ordinance, which is not part of the joint planning construct, that pertain to the Hillsborough Economic Development District.

## 2. Analysis

### Proposed Changes

This amendment consists of map changes (See Attachment 1.1) to five parcels as follows:

<u>Parcel Pin #</u>	<u>Acres</u>	<u>From</u>	<u>To</u>
9863936843	4.15	Suburban Office Complex	Employment
9863718857	88.52	Suburban Office Complex	Employment
9863916573	59.53	Suburban Office Complex	Employment
9873014031	14.0	Suburban Office Complex	Employment
	Sub-Total 166.2		
9873202388	34.6	Mixed Residential Neighborhood	Suburban Office Complex
	Total 200.8		

Following are the definitions of the respective joint Land Use Plan Future Land Use Classifications:

Suburban Office Complex - These areas provide opportunities to for office and employment enterprises which do not rely on walk-in customers or have a manufacturing component. Businesses may be large or small but will generally arrange themselves in a campus setting with limited walkability and supporting services. Developments of this type should be kept small in nature to limit the peak transportation impact and limited vitality.

Employment - These areas include a wide range of business, light industrial, office, research and development, along with related/support services uses including restaurants, small scale retail and convenience shopping/services. Buildings and uses will be sited to limit the visual impact of service and warehousing operations, while still providing convenience for business functionality. These areas are in prime locations with good access to major road networks (where capacity exists or is planned) and rail if needed and should be reserved for high return employment generating uses.

*Mixed Residential Neighborhood* - The dominant land use in any proposed development is expected to be residential based on square footage of proposed structures. Developments may contain a single or variety of dwelling types and densities or may integrate a variety of supportive commercial, public and semi-public uses and open or public space. Small developments that provide only supportive non-residential land uses in an infill arrangement serving more than 50 dwelling units in a walkable manner may also be considered.

Background

The Joint Land Use Plan (See Attachment 1.2) was adopted by the Town and County Boards in 2013. This is the first amendment proposal that has been brought forward since that time.

Links to Additional Background Documents:

Hillsborough and Orange County Strategic Growth Plan (2006)-

[http://www.orangecountync.gov/document\\_center/PlanningInspections/Hillsborough and Orange County Strategic Growth Plan.pdf](http://www.orangecountync.gov/document_center/PlanningInspections/Hillsborough_and_Orange_County_Strategic_Growth_Plan.pdf)

Hillsborough-Orange Interlocal Land Management Agreement (2009)-

[http://www.orangecountync.gov/document\\_center/PlanningInspections/Hillsborough Orange Interlocal Land Management Agreement.pdf](http://www.orangecountync.gov/document_center/PlanningInspections/Hillsborough_Orange_Interlocal_Land_Management_Agreement.pdf)

Joint Resolution Amending the Hillsborough-Orange Interlocal Land Management Agreement (2014)-

[http://www.orangecountync.gov/document\\_center/PlanningInspections/Joint Resolution Amending the Hillsborough Orange Interlocal Land Management Agreement1.pdf](http://www.orangecountync.gov/document_center/PlanningInspections/Joint_Resolution_Amending_the_Hillsborough_Orange_Interlocal_Land_Management_Agreement1.pdf)

**3. Comprehensive Plan Linkage (i.e. Principles, Goals and Objectives)**

**Objective ED-1.5:**

Identify barriers to development of desirable businesses and local businesses, and mitigate these barriers.

**Objective ED-2.1:**

Encourage compact and higher density development in areas served by water and sewer. (See also Land Use Objective LU-1.1 and Water and Wastewater Objective WW-5.)

**Objective ED-2.5:**

Identify lands suitable to accommodate the expansion and growth of commercial and industrial uses in the County.

**Objective ED-2.7:**

Select industrial sites in Economic Development Areas based on present and planned supporting systems, such as public water and sewer, access to adequate highway, rail, or public transportation infrastructures, and minimize detrimental environmental or negative social outcomes. (See also Water and Wastewater

Objective WW-15.)

**Land Use Goal 1:** Fiscally and environmentally responsible, sustainable growth, consistent with the provision of adequate services and facilities and a high quality of life.

**Objective LU-1.1:**

Coordinate the location of higher intensity / high density residential and non-residential development with existing or planned locations of public transportation, commercial and community services, and adequate supporting infrastructure (i.e., water and sewer, high-speed internet access, streets, and sidewalks), while avoiding areas with protected natural and cultural resources. This could be achieved by increasing allowable densities and creating new mixed-use zoning districts where adequate public services are available. (See also Economic Development Objectives ED-2.1, ED-2.3, ED-2.10, and Water and Wastewater Objective WW-2.)

**Land Use Goal 4:** Land development regulations, guidelines, techniques and/or incentives that promote the integrated achievement of all Comprehensive Plan goals.

**4. New Statutes and Rules**

N/A

## C. PROCESS

**1. TIMEFRAME/MILESTONES/DEADLINES**

- a. BOCC Authorization to Proceed

April 19, 2016

- b. Quarterly Public Hearing

September 12, 2016

- c. BOCC Updates/Checkpoints

July 6, 2016 – Planning Board ORC (Ordinance Review Committee)(BOCC receives agenda)

August 3, 2016 – Planning Board Meeting for Recommendation (BOCC receives agenda)

- d. Other

**2. PUBLIC INVOLVEMENT PROGRAM**

**Mission/Scope:** Public Hearing process consistent with NC State Statutes and Orange County ordinance requirements. Additionally, a public information meeting was held on July 26 and covered all three related potential items (modifications to the Joint Land Use Plan, a related rezoning action, and the proposed text amendments).

## a. Planning Board Review:

July 6, 2016 – Ordinance Review Committee (ORC) – Approved notes are included in Attachment 3.

August 3, 2016 – Recommended approval - Substantial discussion, including public comment that encompassed all three related items but was related primarily to the proposed rezoning action, occurred at the Planning Board meeting. Interested persons are encouraged to read the draft Planning Board Minutes in Attachment 4. Six people attended the Planning Board meeting for the three related Hillsborough EDD items.

## b. Advisory Boards:

Economic Development Advisory Board

(Sent via e-mail on July 11 because the EDAB does not meet again until September. To date, no questions or comments pertaining to the Joint Land Use Plan map amendment received)

## c. Local Government Review:

Orange County and Town of Hillsborough staffs have coordinated to prepare and recommend the amendments contained herein.

July 21, 2016 – Town of Hillsborough Public Hearing – No residents spoke or submitted comments

August 18, 2016 – Town Planning Board unanimously recommended approval

September 12, 2016 – Town Board of Commissioners Action

## d. Notice Requirements

Consistent with NC State Statutes and Orange County requirements.

## e. Outreach:

General Public: A public information meeting (PIM) that covered all three related items (modifications to the joint Land Use Plan with the Town of Hillsborough, a related rezoning action, and the proposed text amendments) was held on July 26, 2016. Notices regarding the PIM and Planning Board meetings were mailed to affected and adjacent (1,000-foot boundary) property owners on July 11. Five people attended the PIM. Signs for the related rezoning advertising the Planning Board meeting were posted in the area affected by the proposed amendments on July 21.

Notices regarding the Public Hearing for the related rezoning action were mailed to affected and adjacent (1,000-foot boundary) property owners on August 26. Signs for the related rezoning advertising the Public Hearing were posted

in the area affected by the proposed amendments on August 30.

Small Area Plan Workgroup:

Other:

**3. FISCAL IMPACT**

Consideration and approval will not create the need for additional funding for the provision of County services. Costs for the mailings and required legal advertisement will be paid from FY2016-17 Departmental funds budgeted for this purpose. Existing Planning staff included in the Departmental staffing budget will accomplish the work required to process this amendment.

**D. AMENDMENT IMPLICATIONS**

Staff is proposing to amend future land uses to allow for a broader range of uses and higher intensities so that the County can better promote this area to economic development prospects and help preserve planned sewer capacities for non-single-family residential uses. Also See Sections B.1 and C.2 of this Amendment Outline.

**E. SPECIFIC AMENDMENT LANGUAGE**

N/A

**Primary Staff Contact:**

Tom Altieri and Craig Benedict

Planning & Inspections Department

919-245-2575

[taltieri@orangecountync.gov](mailto:taltieri@orangecountync.gov)

or [cbenedict@orangecountync.gov](mailto:cbenedict@orangecountync.gov)

# Town of Hillsborough/Orange County Central Orange Coordinated Area

Attachment 1.1

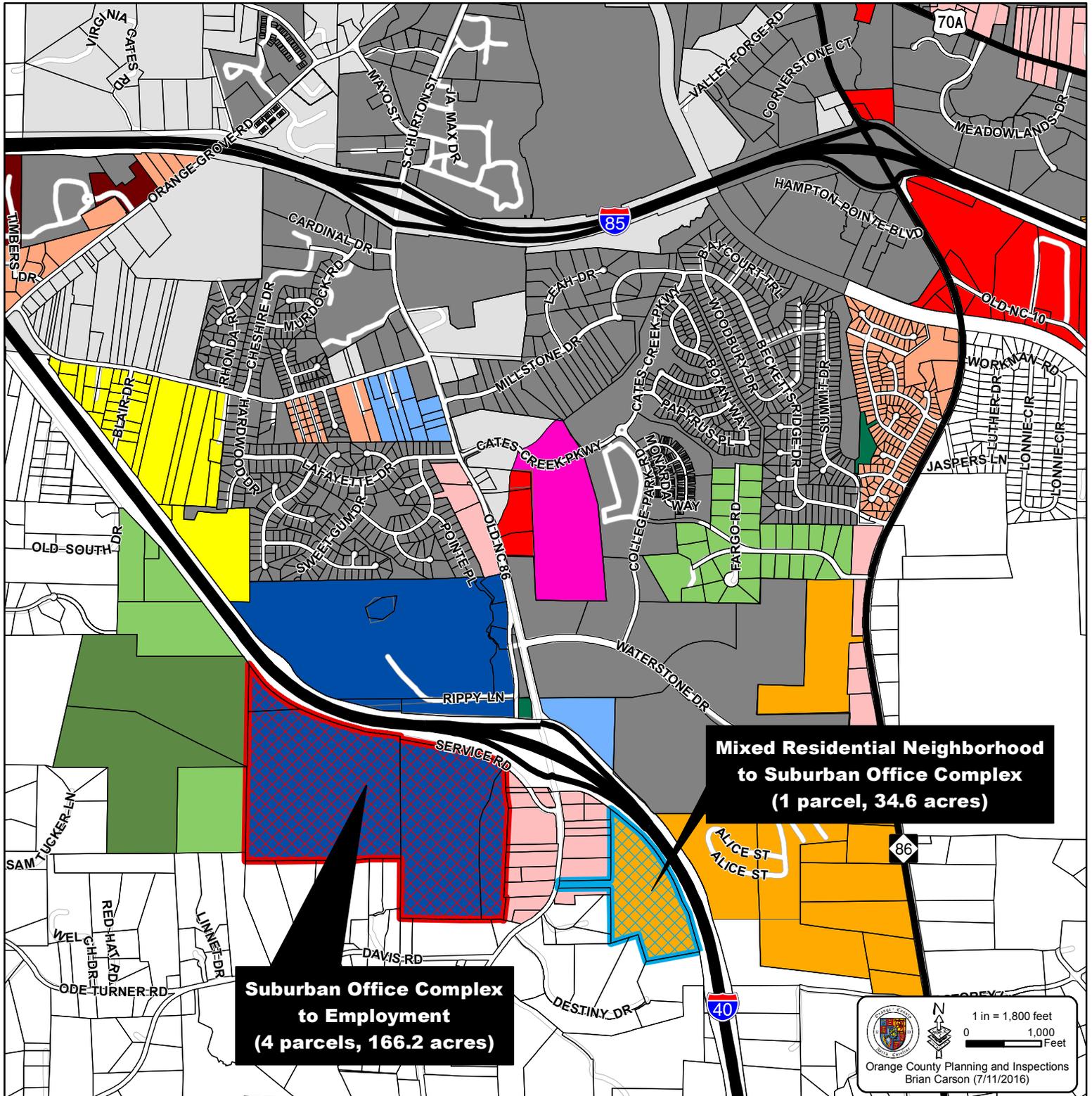
## Land Use Plan Proposed Amendments

Attachment 1.1

### Proposed Amendments

- From Mixed Residential
- Neighborhood to Suburban Office Complex
- From Suburban Office Complex to Employment

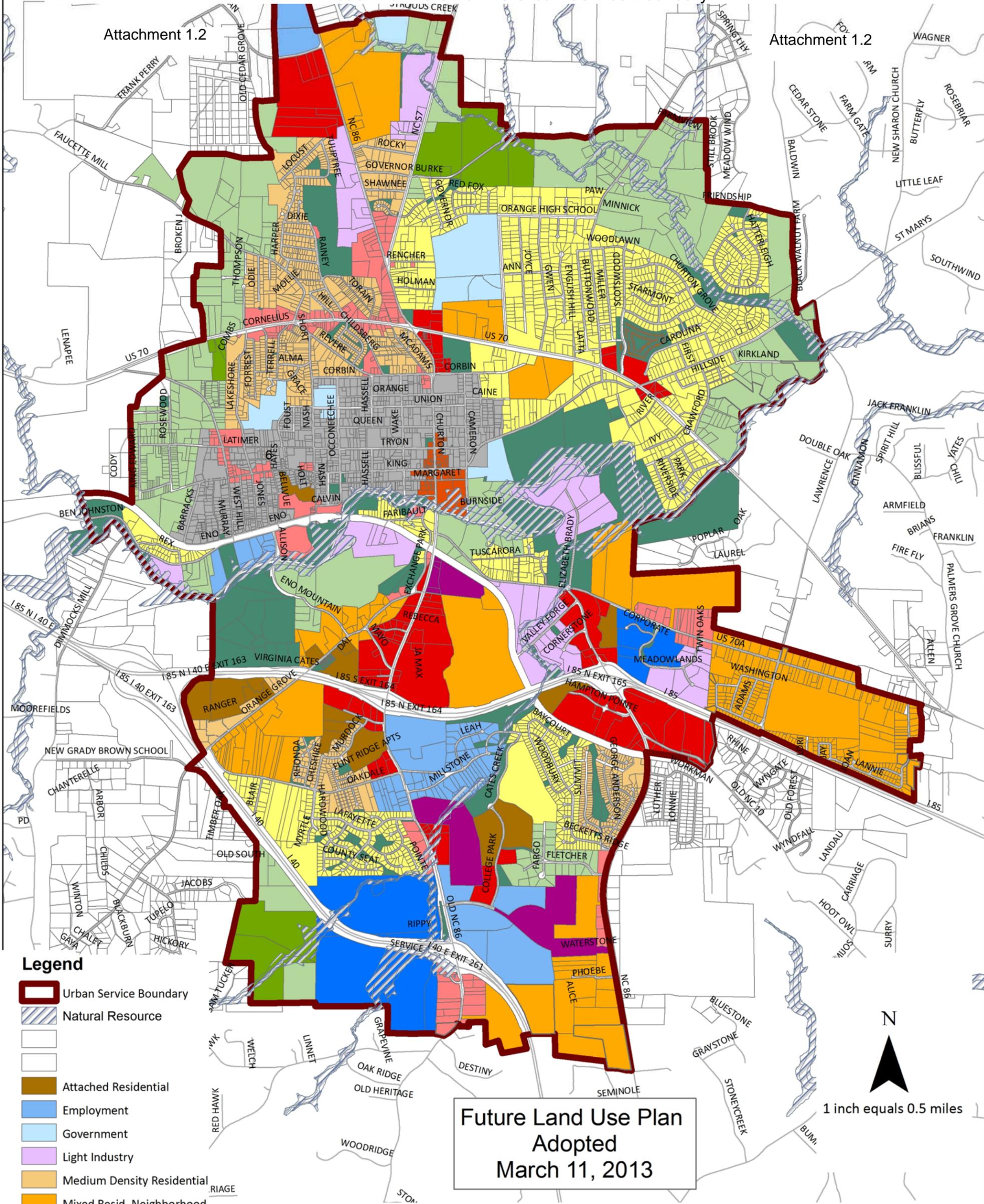
- |               |                         |                        |                 |
|---------------|-------------------------|------------------------|-----------------|
| City Limit    | Medium Density Res.     | Neighborhood Mixed Use | Retail Service  |
| ETJ           | Mixed Res. Neighborhood | Permanent Open Space   | Small Lot Res.  |
| Attached Res. | Employment              | Rural Living           | Suburban Office |
| Employment    | Mixed Use               |                        | Working Farm    |



Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan  
Areas Within the Town's Urban Service Boundary

Attachment 1.2

Attachment 1.2



**Legend**

- Urban Service Boundary
- Natural Resource
- Attached Residential
- Employment
- Government
- Light Industry
- Medium Density Residential
- Mixed Resid. Neighborhood
- Mixed Use
- Neighborhood Mixed Use
- Permanent Open Space
- Rural Living
- Retail Service
- Small Lot Residential
- Suburban Office
- Town Center
- Urban Neighborhood
- WorkingFarm

The **Urban Services Boundary** indicates the limits of Hillsborough water and sewer service consistent with an Inter-local Agreement with Orange County, OWASA, Chapel Hill, Carrboro, and Hillsborough. Future Land Uses would be used by Hillsborough and Orange County as the basis for approving zoning designations on colored parcels and those within the boundary, consistent with the Inter-local Agreement between Orange County and Hillsborough.

Areas **outside** the Urban Services Boundary **with** a Future Land Use designation are due to the boundary crossing a parcel. Areas **outside** the Urban Services Boundary with current utility service from the Town of Hillsborough **will retain service**.

# Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan

Staff Note: When this Land Use Plan is implemented through Orange County 2030 Comprehensive Plan amendments, staff will add an introductory section to replace the first two paragraphs below that describes the joint planning construct and linkage to the Hillsborough/Orange Interlocal Agreement.

## Hillsborough, NC Future Land Use Plan

The Future Land Use Plan is composed of a map showing Future Land Use Designations and a brief text detailing those designations and how they align with zoning districts listed in the Hillsborough Unified Development Ordinance. Together, the map and text constitute the Future Land Use Plan for the Town of Hillsborough and lands within its jurisdiction. The Plan is adopted as a component of the Hillsborough Comprehensive Plan and is subject to amendments following the procedure established in the Unified Development Ordinance.

Nothing in this document limits the Hillsborough Town Board of Commissioners authority to regulate land use within its jurisdiction. Future Land Use Designations are not a guarantee that land will remain zoned in any particular use district, and are subject to the availability of infrastructure, including but not limited to water, sanitary sewer, and streets necessary to support designated or proposed uses.

### Future Land Use Classifications

**Natural Resource.** These areas are unique natural areas or environmental sensitive areas. The primary designation is for the 100-year flood zones along the Eno River and Cates Creek. The Eno River floodplain is a natural area of national significance. This designation does not follow parcel boundaries and overlays other designations listed here.

**Permanent Open Space.** These areas are intended for long-term use as open space, parks, or natural areas that protect scenic, historic, cultural, and environmentally valued lands. They include lands that are permanently protected, though not necessarily publicly owned or accessible, through private conservation easements or other private conservation measures, and publicly held park or conservation lands. **Zoning Districts: Agricultural-Residential; Protected Watershed & Protected Watershed Critical Area**

**Working Farm.** These areas reflect existing agricultural use in locations where continued agricultural use is desirable for the foreseeable future. **Zoning Districts: Agricultural-Residential; R-40**

**Rural Living.** These areas reflect existing very-low density residential uses with densities below 0.5 dwelling units per acre (~~at least a 2-acre minimum lot size~~) that occurs in areas without public water and sewer service, in locations where continued low-intensity use without public water and sewer is desirable for the foreseeable future. **Zoning Districts: Agricultural-Residential; Protected Watershed & Protected Watershed Critical Area; R-40**

**Small Lot Residential Neighborhood.** These areas provide opportunities for a lower density than pre-WWII or neo-traditional neighborhood living. These areas include detached single-family residential uses in post-WWII subdivision developments which range in density from 0.5 dwelling units per acre to 3 dwelling units per acre. **Zoning Districts: R-10; R-15; R-20; Entranceway Special Use; Mixed Residential Special Use; Residential Special Use**

**Medium-Density Residential.** These areas include existing and future areas for development of more dense residential neighborhoods that provide a diversity of housing types and housing options. Areas include single-family detached units, mobile homes, townhouses, duplexes, condominiums, apartments, senior housing, and other multi-family dwelling units. Housing densities should range from 3-8 dwelling units per acre. Other types of uses that may occur are schools, parks, and other public facilities. **Zoning Districts: R-10; R-15; R-20; Multi-Family; Mobile Home Park; Entranceway Special Use; Mixed Residential Special Use; Multi-Family Special Use; Residential Special Use**

**Attached Residential Neighborhoods.** These areas include existing and future areas for the development of dwelling units at more than 8 units per acre, which generally implies attached dwelling units. This designation may also be used for unique residential settings like retirement villages or nursing homes. **Zoning Districts: Multi-Family; Multi-family Special Use; Entranceway Special Use; Mixed Residential Special Use; Residential Special Use**

**Mixed Residential.** The dominant land use in any proposed development is expected to be residential based on square footage of proposed structures. Developments may contain a single or variety of dwelling types and densities or may integrate a variety of supportive commercial, public and semi-public uses and open or public space. Small developments that provide only supportive non-residential land uses in an infill arrangement serving more than 50 dwelling units in a walkable manner may also be considered. **Zoning Districts: R-10; R-15; R-20; Neighborhood Business; Multi-Family; Multi-family Special Use; Entranceway Special Use; Mixed Residential Special Use; Residential Special Use; Special Design Special Use**

**Urban Neighborhood** Established residential neighborhoods that pre-date traditional zoning and land use regulation. Lot sizes and building types are varied and generally developed on a grid street pattern. The predominant type is generally low density single family housing with occasional business, government, park, church or school uses. Infill and redevelopment projects should enhance the unique character of the surrounding neighborhood and be of consistent scale and appearance. The opportunity to increase the residential density in a compatible manner is encouraged. **Zoning Districts: R-10; R-15; R-20; Neighborhood Business Special Use; Residential Special Use**

**Education.** These areas are currently developed as public schools and their use is not anticipated to change. **Zoning Districts: Office Institutional**

**Employment areas.** These areas include a wide range of business, light industrial, office, research and development, along with related/support services uses including restaurants, small scale retail and convenience shopping/services. Buildings and uses will be sited to limit the visual impact of service and warehousing operations, while still providing convenience for business functionality. These areas are in prime locations with good access to major road networks (where capacity exists or is planned) and rail if needed and should be reserved for high return employment generating uses. **Zoning Districts: High Intensity Commercial; Business Park; Economic Development District; Light Industrial, General Industrial; Entranceway Special Use; Special Design Special Use**

**Light Industrial.** The Industrial classification is applied to areas that currently support industrial uses or lands that could accommodate a variety of industrial establishments which employ high environmental quality standards and have minimal impacts on adjacent uses. These areas incorporate larger tracts of land because of their nature and function. Industrial developments should provide shared access, and have a coordinated design and a planned layout. **Zoning Districts: High Intensity Commercial; Business Park; Economic Development District; Light Industrial, General Industrial**

**Mixed Use.** These areas a full range of uses well mixed, both vertically and horizontally, much like a downtown or village center. Multi-story buildings are the norm and will generally contain a vertical mix of uses. Uses are expected to be roughly balanced between residential, retail, office, service, public and semi-public uses. Public open space of both urban and green space is also expected to off-set the intensity of development. **Zoning Districts: R-10; Multi-family; Office Institutional; High Intensity Commercial; Multi-family Special Use; Residential Special Use; Special Design Special Use**

**Neighborhood Mixed Use.** These areas provide opportunities for goods and services that residents of the district and surrounding neighborhoods need on a daily basis. Lots with this designation will front on an

arterial or collector street and back up to single family neighborhoods. Buildings and uses will generally be in scale with the surrounding neighborhoods and be walkable as well as providing vehicular access. Sites may be single use or, mixed use, may incorporate residential uses or may be solely residential at a higher density than the adjacent neighborhood. **Zoning Districts: R-10; Multi-family; Neighborhood Business; Neighborhood Business Special Use; Central Commercial; Central Commercial Special Use; Multi-Family Special Use; Residential Special Use**

**Retail Services.** These areas focus on retail and commercial uses. They should be located near residential and employment areas to provide good access to commerce and personal services. Retail areas can have a range of characteristics depending on their primary markets. The larger scale regional draws are more automobile-oriented and draw people from throughout the region. These areas should be located near interstate access, and they may include larger scale stores like “big boxes”, warehouse clubs, and large specialty retailers. Smaller, accessory uses can also locate in these areas to provide convenience shopping and include restaurants and smaller specialty retailers; often located on out-parcels or in smaller shopping centers. **Zoning Districts: Neighborhood Business; Neighborhood Business Special Use; Central Commercial; Central Commercial Special Use; General Commercial; High Intensity Commercial; Entranceway Special Use; Special Design Special Use**

**Suburban Office Complex.** These areas provide opportunities to for office and employment enterprises which do not rely on walk-in customers or have a manufacturing component. Businesses may be large or small but will generally arrange themselves in a campus setting with limited walkability and supporting services. Developments of this type should be kept small in nature to limit the peak transportation impact and limited vitality. **Zoning Districts: Limited Office; Office Institutional; Business Park; Economic Development District; Entranceway Special Use; Special Design Special Use**

**Town Center.** This area incorporates the historic structures, civic uses, commercial opportunities, and the active pedestrian environment that is the downtown core of Hillsborough. The core commercial areas are to be preserved and enhanced over the long-term and should provide mixed-use opportunities that combine second-floor residential units with ground floor commercial, office, or institutional uses. **Zoning Districts: R-20; Office Institutional; Central Commercial; Central Commercial Special Use**

**RESOLUTION # RES-2016-056****RESOLUTION AMENDING THE TOWN OF HILLSBOROUGH/ORANGE COUNTY  
CENTRAL ORANGE COORDINATED AREA LAND USE PLAN**

**WHEREAS**, Orange County and the Town of Hillsborough worked cooperatively to prepare a Strategic Growth Plan Report (dated November 2006) that called for preparation of an Interlocal Agreement for areas surrounding the Town of Hillsborough; and

**WHEREAS**, a Hillsborough-Orange Interlocal Land Management Agreement was approved (dated June 2009 and amended May 2014) and called for preparation of a joint land use plan; and

**WHEREAS**, North Carolina Session Law 1987-233 authorizes Orange County and its municipalities to engage in joint planning programs; and

**WHEREAS**, the joint Central Orange Coordinated Area (COCA) Land Use Plan for areas within the Town's Urban Service Area was approved by the Town of Hillsborough and Orange County (March and November 2013, respectively); and

**WHEREAS**, in accordance with the provisions of the Hillsborough-Orange Interlocal Land Management Agreement, the joint COCA Land Use Plan may be amended when agreed to by both parties; and

**WHEREAS**, the Orange County Planning Board has reviewed the proposed amendment to the joint COCA Land Use Plan and recommended approval; and

**WHEREAS**, the amendment to the joint COCA Land Use Plan was heard at the September 12, 2016 Quarterly Public Hearing; and

**WHEREAS**, the Board finds that the amendment to the joint COCA Land Use Plan will further carry out the intent and purpose of joint planning and is consistent with the goals and objectives of the Orange County 2030 Comprehensive Plan;

**NOW THEREFORE BE IT RESOLVED** by the Orange County Board of Commissioners that the amendment to the joint Town of Hillsborough-Orange County Central Orange Coordinated Area Land Use Plan is hereby approved as provided in the attached document.

**Adopted by Orange County:**

This the \_\_\_\_ day of \_\_\_\_\_, 2016.

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Earl McKee, Chair  
Orange County Board of Commissioners

---

Donna Baker  
Clerk to the Orange County Board of  
Commissioners

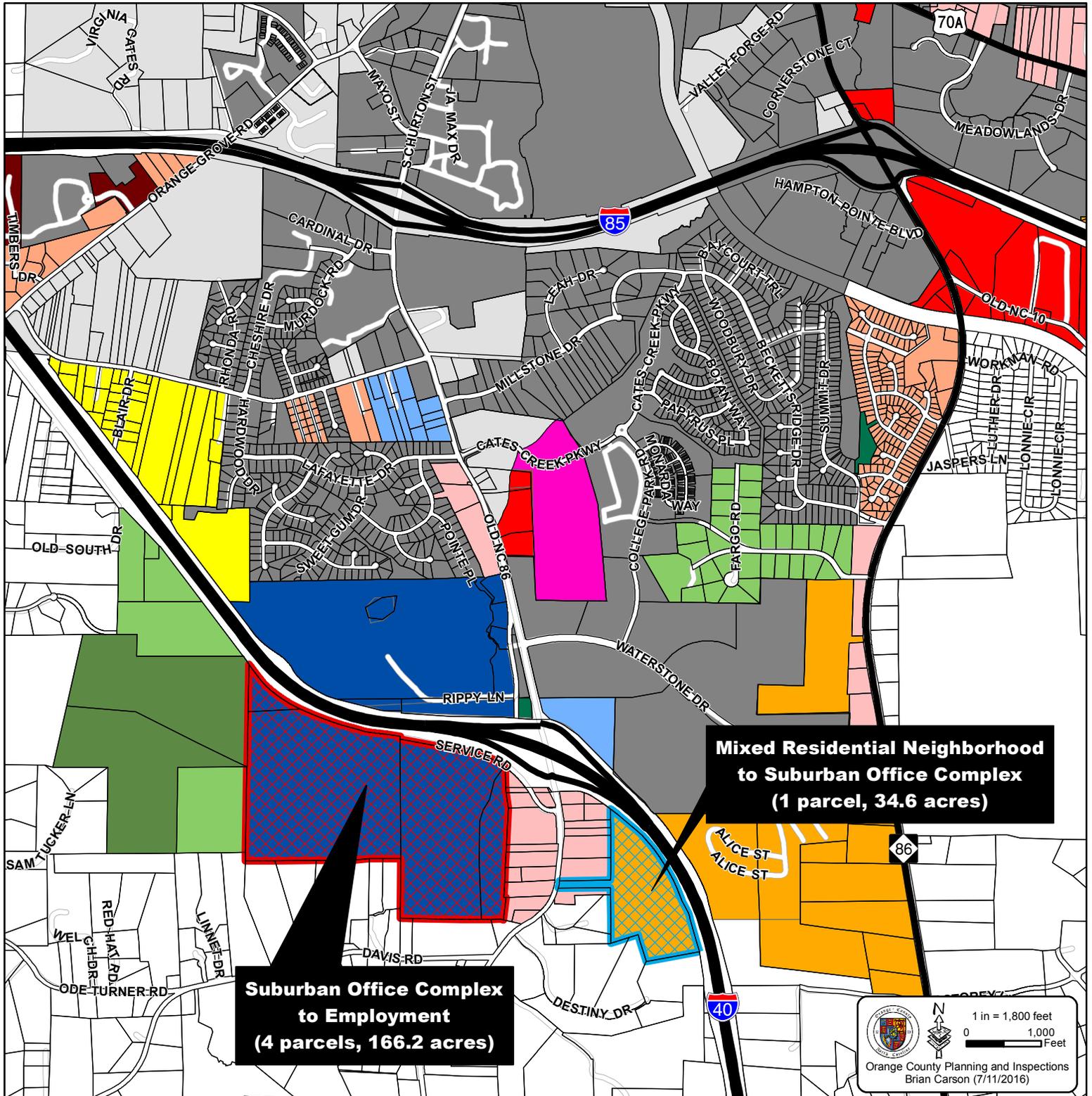
County Seal:

# Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan Proposed Amendments

**Proposed Amendments**

- From Mixed Residential
- Neighborhood to Suburban Office Complex
- From Suburban Office Complex to Employment

- |               |                         |                        |                 |
|---------------|-------------------------|------------------------|-----------------|
| City Limit    | Medium Density Res.     | Neighborhood Mixed Use | Retail Service  |
| ETJ           | Mixed Res. Neighborhood | Permanent Open Space   | Small Lot Res.  |
| Attached Res. | Employment              | Rural Living           | Suburban Office |
| Mixed Use     |                         |                        | Working Farm    |



**Suburban Office Complex to Employment  
(4 parcels, 166.2 acres)**

**Mixed Residential Neighborhood to Suburban Office Complex  
(1 parcel, 34.6 acres)**

Attachment 3

Excerpt of Notes

SUMMARY NOTES
ORANGE COUNTY PLANNING BOARD
JULY 6, 2016
ORDINANCE REVIEW COMMITTEE

NOTE: A quorum is not required for Ordinance Review Committee meetings.

MEMBERS PRESENT: Lydia Wegman-At-Large Chapel Hill Township (Chair); Tony Blake, Bingham Township Representative (Vice-Chair); Paul Guthrie, At-Large Chapel Hill Township; Maxecine Mitchell, At-Large Bingham Township; Kim Piracci, At-Large; Buddy Hartley, Little River Township Representative;

STAFF PRESENT: Craig Benedict, Planning Director; Tom Altieri, Current Planning Supervisor; Perdita Holtz, Planning Systems Supervisor; Ashley Moncado, Special Projects Planner; Meredith Pucci Administrative Assistant;

AGENDA ITEM 1: CALL TO ORDER

Lydia Wegman called meeting to order.

\*\*\*\*\*

AGENDA ITEM 4: TOWN OF HILLSBOROUGH/ORANGE COUNTY CENTRAL ORANGE COORDINATED AREA LAND USE PLAN AMENDMENT

To receive information about an upcoming Land Use Plan amendment involving five parcels south of Interstate 40 in the vicinity of Old Highway 86. Amendments are proposed to better promote economic development opportunities in the area and help preserve planned sewer capacities for non-single-family residential uses.

Presenter: Tom Altieri, Comprehensive Planning Supervisor

Tom Altieri delivered presentation.

Tony Blake: Is this change being driven by the landowners or by the County or by the town?

Craig Benedict: There will be an interlocal agreement that will probably refer to these changes that occur here that says, "As long as you redevelop consistent with this joint land use plan then please feel free to use this public water and sewer system." So the commissioners, probably in September, will be seeing a draft of this interlocal agreement that if the County puts "x" amount of dollars into public water and sewer that they'll use it for, primarily, non-residential economic development purposes. This is kind of a pre-requisite to that impending public water and sewer extension.

Lydia Wegman: So they're not disturbed at losing the mixed residential...

Craig Benedict: No, because along the frontage of South Churton and Old 86 it's still there.

Tom Altieri: So I'll just add that the agreement that Craig mentioned, that is the last bullet in the PowerPoint here, and it is an important component. The group mentioned "annexation" and the text and zoning amendments that are being made to the UDO, those are within the County's UDO. In the case of an annexation, a development would occur under the town's land develop ordinance. So it is that type of an agreement that would outline under what conditions annexation might occur, its timing, if there were a component of, let's say, this entire Hillsborough economic development district is approximately 500 acres, potentially what percentage of that might be developed for non-residential uses versus residential? An agreement could address. So that's where the County could receive that official handshake from the town on the ratio between residential and non-residential development in the area.

54 Craig Benedict: Orange County has met with Hillsborough Staff, both engineering division and planning division, to  
55 discuss this over the last six months or so, so they're in line with what's suggested. We put a lot of these things on  
56 the map just three years ago or so, and we're learning. So here is our first amendment coming forward. They're  
57 working on some interchange improvements on I-85 and South Churton so that's a few years from now. And that will  
58 be a dramatic design.

59  
60 Tony Blake: By the way, I always saw in the plan for Orange Grove Road to not stop at Churton Street and go  
61 straight across. Is that ever going to happen?

62  
63 Craig Benedict: Yes. We're moving that forward through the prioritization process, and it's probably just off this map.

64  
65 *Craig Benedict explained where it was on the map and the details of the proposed transportation improvement.*

66  
67 \*\*\*\*\*

Excerpt of Draft Minutes for  
the three related Hillsborough  
EDD items

**MINUTES**  
**ORANGE COUNTY PLANNING BOARD**  
**AUGUST 3, 2016**  
**REGULAR MEETING**

**MEMBERS PRESENT:** Lydia Wegman (Chair), Cheeks Township Representative; Paul Guthrie, At-Large Chapel Hill Township; Buddy Hartley, Little River Township Representative; Tony Blake (Vice-Chair), Bingham Township Representative; Lisa Stuckey, Chapel Hill Township Representative; Patricia Roberts, Cheeks Township Representative; Laura Nicholson, Eno Township Representative; Kim Piracci, At-Large;

**MEMBERS ABSENT:** Andrea Rohrbacher, At-Large Chapel Hill Township; Maxecine Mitchell, At-Large Bingham Township;

**STAFF PRESENT:** Craig Benedict, Planning Director; Michael Harvey, Current Planning Supervisor; Perdita Holtz, Planning Systems Coordinator; Ashley Moncado, Special Projects Planner; Patrick Mallett, Planner II; Rachel McCook, Planner I; Molly Boyle, Planning Technician; Meredith Pucci, Administrative Assistant II.

**OTHERS PRESENT:** Sharon Mace; Dan Way; Austin Seifts; Annie Seifts; Nathan Robinson; Chris Cole; Franklin Garland; Jimmy Garland; Javier Latre Gorge; George Horton; Jim Parker.

**AGENDA ITEM 1: CALL TO ORDER AND ROLL CALL**

Tony Blake called the meeting to order.

**AGENDA ITEM 2: INFORMATIONAL ITEMS**  
a) Planning Calendar for August and September

Lydia Wegman arrived and assumed chair duties.

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**Agenda Item 8: Town of Hillsborough/ Orange County Central Orange Coordinated Area Land Use Plan Amendment** To make a recommendation to the BOCC on a Land Use Plan amendment involving five parcels south of Interstate 40 in the vicinity of Old Highway 86.

- Four parcels totaling approximately 166.2 acres are proposed to be changed from "Suburban Office Complex" to "Employment".
- One parcel totaling 34.58 acres is proposed to be changed from "Mixed Residential Neighborhood" to "Suburban Office Complex".

This item is scheduled for the September 12, 2016 quarterly public hearing.  
**Presenter: Perdita Holtz, Planning Systems Coordinator**

*Perdita Holtz presented.*

Lisa Stuckey: What is on these parcels now?

Perdita Holtz: They're undeveloped.

Patricia Roberts: As an interstate exit, is there any plan for gas stations?

Perdita Holtz: That's not really envisioned with these parcels. That's not to say in the future something couldn't happen on other parcels.

Craig Benedict: If you could show the map, there's some areas that were not effecting change that would allow those types is uses.

Patricia Roberts: What is the pink on the map?

Perdita Holtz: It's neighborhood mixed use.

Patricia Roberts: So if somebody wanted to put a gas station they would have to get a SUP?

Perdita Holtz: It would depend on the zoning and the zoning of those parcels are EDH-2. So I would need to look up and see.

Lisa Stuckey: Would it be allowed in employment?

Perdita Holtz: Well the land use classification is just the general thing; it's the zoning that's going to allow or disallow a particular use.

Paul Guthrie: Where is the water line going?

Perdita Holtz: The sewer line is currently in the vicinity of Cornwallis Hills and it would be coming down through here, under the interstate where the sewer line is. The water line actually exists on Old 86 right now.

Paul Guthrie: And the sewer line, I assume, will be using the outflow structure that serves the hospital as well?

Craig Benedict: That's correct. When the hospital was built the sewer came closer to the parcels to the south. Part of our capital improvement initiative is to assist in economic development in this area by bringing it underneath the interstate, which is a high-end effort. We want to ensure that before we bring utilities to the south we'll be in agreement with Hillsborough that says we provide these economic development infrastructure incentives that we will have primarily non-residential uses that have tax based employment.

Paul Guthrie: And if I remember correct, the elevations are such that at least until you get to Old 86 you would have flow into the Hillsborough system for sewers, correct?

Craig Benedict: That's correct. The sewer shed is where it flows downhill and there's a ridgeline roughly at Davis Road that flows north all the way into their system. So there's a water and sewer boundary map that guides a lot of our decisions about where you can more easily put public water/sewer versus not, and it shows this area as going towards Hillsborough.

Paul Guthrie: I assume that Hillsborough has the water pumping capacity for drinking water to also go to that same area?

Craig Benedict: Yes, they do. And part of the inter-local agreement will be somewhat of a reservation of water and sewer capacity for this area, to ensure that if we escorted economic development and they'll say "how much water does the water and sewer purveyor treatment operate?" and we have to have a good idea of what it is. Even with Hillsborough there are limitations. There's sometimes users that have a very large amount of water usage and sewage and we have to gauge. So we do have that in mind, that there is capacity for treatment and water.

Paul Guthrie: One last question. Existing owners of residential properties- when and if those water systems are in place would they be eligible to connect?

Craig Benedict: They would be able to. The design for the system to bring it south of the interstate would be enough to accommodate all the growth in that area.

Lydia Wegman: Okay, let me turn to the public.

Chris Cole (member of the public): My name's Chris Cole, I live right about there. A couple of things; First of all, I wanted to make you aware that according to the town officials there is no plan to extend water and sewer south of 40 at this point. Of course, everything's subject to change but there is no plan in place. Second, if you could back up one slide... Employment, and this is in your packets, includes manufacturing. I just wanted to point out a couple of items that would be considered permissible, if this were zoned for manufacturing. Rendering a new by-product processing, poultry processing, seafood product, preparation and packaging, leather and hide tanning and finishing, asphalt paving mixture and block manufacturing, chemical manufacturing, explosives manufacturing, fertilizer manufacturing. That's all the kinds of things that would be permissible changing this zoning to employment. And, a lot of stuff that would be really good but, as a person who lives here I'm worried about my water and I'm worried about my air. Thank you.

Franklin Garland - Garland Truffles (member of the public): I pretty much expressed my opinion last week when I was here. I have a worse problem than him. I received a letter from you guys that said that I wasn't going to be affected somehow. And I was told that's a legal term. How am I not going to be affected? Now, when Cedar Ridge High School went in there I was told I'm not going to be affected. I'm affected. You should see the traffic on Orange Grove now. When I-40 was put in there, I was told I'm not going to be affected. I have trucks rolling down there all night long, motorcycles and everything. So there's not such thing as not being affected. It's a legal term, so I don't understand how I'm not going to be affected in this. I don't particularly want --- plant down there. I mean someone can do that. Who exactly wants this property? There's wet lines down there. A good portion of this is in a flood plain. So somebody's influencing somebody in this planning commission out here, to say we want to put something in that place. Somebody has something in mind. I don't know who it is. I know when the transfer facility was being placed out there the study that was done at the time said the number one prime location for the transfer facility, right here, that was the number one site until we spoke up and said that's in the flood plain. I mean how can somebody who got paid 5 million dollars to do research on this and find this a number one site for this. That's possibly the worst environmental site to put a garbage facility. Because somebody put a garbage dump next to my property. On top of it, it's in the flood plain. That's the first thing I want to say, is this even suitable? So someone obviously wants this property for commercial development. Now, let me clarify something; I have mixed feelings about this. I live next door. I'm a farmer. I have an orchard, a successful nursery out there. I'm a resident. It's going to affect this residence, a lot. At the same time you guys decide to approve this, my land value goes up. I'm on prime land. The whole property... if I want to get out of here. I've built my own house, I live there, I put up the whole farm and a whole industry in this country. That gets affected by turning this into a manufacturing facility. Which is exactly where it's going, it's not offices that are going to go there. There's somebody that wants to put manufacturing in there. Otherwise, they wouldn't change it. And I would really like to know who it is. I find it very disturbing. That's going to change my taxes, there's going to be water and sewer there, which I could care less. I don't want city water. There are a lot of people on the opposite side of this out here. And again, mixed feelings. You're going to run a water line there because it's going to have to go up I-40 and I'm going to have to be paying city taxes, which you guys want that. I'm on the outskirts of the city; I don't want to do that. That's why I live there to begin with. That's why I bought rural property when I did, back in 1975. I like my privacy. I don't want some plant or some office building next to me. Now, offer me the right amount of money then go right to it. So, I'm not saying but... this is something you guys need to take into consideration. Somebody is pushing for this, and who is that? This doesn't just happen. It's not a convenient place to develop. It doesn't have water, it doesn't have sewer, it has to go through the interstate to do that, it's limited capacity to get to that point, it's not going to come for free, and on top of that a good deal of it is wetland. It's on a flood plain. To me that's saying something else is going on around here. And somebody has self-interest in this. There's really no need for it out there. There's better use to it. Make it protected wilderness. Because that's what it is right now. There could be a better application. Or a little park or something. And I know that there's good economic development out there but it's really poor land.

Nathan Robinson- (member of the public): My name's Nathan Robinson, and we have a property that's located just here on the south, right by Davis Road. So it's about a 13-acre parcel and I understand the purpose of what this

proposed amendment is intended to do if they extend the sewer and water down there. I recognize that the bigger picture is really to make these southern quadrants on the south of 40 generate more capacity and make sure there's a water tap. I think it's a good idea. I don't know if you have a map anywhere where the rural buffer zone is; do you have that map?... So if you come off of 40, obviously those are the parcels you're talking about, this is the Davis Road and, I think you two gentlemen were speaking back and forth, the flow of the watershed this way goes south and this way goes north. These properties right here. The conversations about the gas stations were relevant because I think it seems if there was a 10-year transition zone the use of these properties is intended not to be residential anymore. I think that was said in the beginning, that there are parts of this area that are envisioned to be non-residential. As a result what's going to happen, and what I would really encourage you guys to participate in, is you're going to be left with some orphaned properties along the bottom here. And these orphaned properties, currently, are zoned R1. And those R1 properties have water coming already and it makes sense to fill out this quadrant to encompass those types of uses. It makes sense from the watershed area to include those into the zoning amendment. If that was to be the purpose... I did a little bit of learning about this and the learning I understood is it typically when you have these type of zonings and bunt up against a rural buffer zone that they are all included in one same use that was your solution for --- otherwise you'd have a manufacturing type usage that bunts in --- residential, and it just messes up uses of property. So, I think my objective is to make sure that the uses of these properties down here, I know that we have other neighbors who are along here and I know they've been approached for their property to be purchased for a large roadway to come through here. So I know there is the development of these properties and it isn't going to be without some flow of traffic for commercial uses. I think if you do look down the road 10 years from now, I think then you guys are thinking right but this area and these quadrants are going to be commercial and so I request to you guys to include these properties here and don't orphan these off. Particularly as they naturally flow into the economic development zone that you guys are intending to create here.

Lydia Wegman: So you're asking for an expansion?

Nathan Robinson: I would say to extend it down here, naturally. So that as the rural buffer doesn't end, that the use of this property flows through without creating these little R1's right in the middle.

Lydia Wegman: Ok, thank you.

Perdita Holtz: Including the area between the EDD and Rural Buffer wouldn't be possible with this amendment because the Water and Sewer Planning, Boundary, and Management Agreement would have to be amended to designate the area as primary service area, but it's something we can keep in mind for the future.

Craig Benedict: Chair, just what we can do for the audience and for the Board, all these questions are being written down and we'll have our thoughts moving forward to both the Commissioners for something such as suggested we would engage Hillsborough. It's part of their growth area. And as Perdita mentioned, the transition area that we are talking about; the transition means going from a rural to an urban transition. Where the public water and sewer go and where it cannot go. So, we'll make recommendations as we are starting to see the growth potential with the hospital, bringing sewer closer to this area. Maybe it is time to re-engage with Hillsborough again. It's been 12 plus years since we designated development to say what's happening to the south and our uses and areas. So we will be answering all the questions that are coming up tonight.... We can give some brief answers tonight but as an outcome of what we're hearing tonight if it directly affects the amendments we'll of course make some recommendations. Some may come back to you; some may be for future projects.

Lydia Wegman: Well, that's what I'm wondering. In light of what we've heard, you're still asking for us to make a recommendation to the BOCC tonight even though we won't have the answers to some of these questions?

Craig Benedict: Once we've gone through all of them I can give you the ones that we can answer now.

Lydia Wegman: Does anyone else from the public want to speak this evening?

Tony Blake: I have some more questions... Who is driving the rezoning here? Is this a joint effort by Hillsborough and the County?

Perdita Holtz: The Land Use plan is a joint Hillsborough-Orange County plan.

Tony Blake: But there's no specific property owner that's saying, I want this re-zoning?

Perdita Holtz: Right, this is a County initiated rezoning.

Tony Blake: And Brantley doesn't have anybody in the hopper for development or anything like that?

Perdita Holtz: We have been talking about rezoning these parcels for many months. As you know this isn't something that just happens in a month in Orange County. And I do believe that once people found out that land is available and the County might be interested that that has generated interest among people. And people are going out and seeing what's possible.

Tony Blake: I agree, I just wanted to clear the air and make sure there wasn't a horse or a cart that was out of place here. I just wanted to make sure that we fully understood from the Planning Board perspective.

Perdita Holtz: Our Economic Development staff has interest in marketing this property.

Franklin Garland: It's a really odd place.. Like, why this? I can't understand it. I'm just curious what initiated this particular parcel?

Tony Blake: Well I spoke to Steve Brantley about this sort of thing a year or two ago, back when the tax was put in for economic development and asked him what were the attractive places, and he mentioned these places, a while ago. I just wanted to make sure that my understanding hadn't changed.

Chris Cole: So no one has expressed interest in having these rezoned, outside the County? Has anyone expressed an interest in having these rezoned outside the County staff?

Perdita Holtz: Not that I'm aware of.

Lisa Stuckey: I have a question. Would you take the little light and show us where the Hillsborough EDD is, and it's my understanding it's been there since at least the early 80's. I mean this is not a new initiative, this is something that's been designated for a while.

Perdita Holtz: The Hillsborough EDD, it's kind of a scattered thing. It's not as cohesive as the other two that are all contiguous but it's along Old 86 here, it's all the purple lands. Waterstone used to be County EDD land, and then Hillsborough annexed it so now it's part of Hillsborough and it's shown as gray. And then there's some parcels up here near the Wal-Mart, and there's a couple parcels here zoned EDH2 and then also along New 86, in the vicinity of Waterstone.

Lisa Stuckey: So since at least 1994 this has been clearly identified as economic development land, prior to that it was Commercial Transition.

Perdita Holtz: Yes, there have been no changes in the boundaries of the EDDs.

Lisa Stuckey: So if people had investigated they would have known that Hillsborough and the County have been envisioning this land for economic development sometime in the future.

Perdita Holtz: That would be correct.

Franklin Garland: The question here is if people had investigated, not if they would have been notified. No one was notified. I've been there since 1975. No one was notified. And that would make more sense. Let me explain something, you say I'm not affected because --- and I got notified because I'm within 1,000 feet. Well 1,000 feet I can walk back and forth ten times in this room and that's 1,000 feet. So I am affected. But I wasn't notified.

Lisa Stuckey: My question was simply whether this land had been identified for Economic Development for many decades.

Craig Benedict: On both the Orange County land use map and on our zoning map and also on the Hillsborough-County joint land use map we do note where there are flood zones and we restrict development in there. So you can see that, so yes, part of that 160 acres is encumbered by a flood plain and we recognize that and no development can occur there. But there are other lands that would be available.

Perdita Holtz: I'm wondering if it might be helpful since these 3 items are inter-related to go on and do the presentation on the second and third items because it might answer some of the questions and then we'll wait to act on each of them until after the presentations. Would that be helpful?

Lydia Wegman: Yes, I do. Thank you.

**MOTION** [later in the evening, after all three related items had been presented] by Lydia Wegman. Seconded by Lisa Stuckey.

**VOTE: 7-1 OPPOSED- GUTHRIE**

Paul Guthrie: I am uncertain, which is why I voted no.

Lydia Wegman: I am voting in favor because I think there is a benefit to diversify land use.

**Agenda Item 9:**        **Unified Development Ordinance (UDO) Text Amendment:** To make a recommendation to the BOCC on government-initiated amendments to the text of the UDO that would modify existing regulations that pertain to the Hillsborough Economic Development District. This item is scheduled for the September 12, 2016 quarterly public hearing  
**Presenter:** Perdita Holtz, Planning Systems Coordinator

*Perdita Holtz presented item.*

Lisa Stuckey: So you're going to allow apartments but not single family or duplexes? Why?

Perdita Holtz: Well because the purpose of the EDDs is to promote non-residential uses. Multi family, although it is residential, it is actually taxed differently than single family residential. It's considered more of a commercial use so there is some diversification of the tax base that occurs with multi family.

Lisa Stuckey: I think I read some place that there is a worry that if you permit single family that the land will actually get eaten up by that. That there's a tendency for subdivisions.

Craig Benedict: Part of the Waterstone development, it's called planned development, part of the County plan was more non-residential and over the years the market, because of the recession, the non-residential component was more muted and after the recession faster residential growth comes back so some conversions were made there. So residential is easier and so it's good that these areas were preserved. EDH3 now allows single family. We had a proposal, some of the Board members may remember, that some of these lands were going to be part of Hillsborough's extra territorial jurisdiction. Mainly the ones north of I-40. And they were going to afix their zoning category to it and they were going to consciously say which areas were going to be residential and non-residential. They didn't do that because part of the cooperative agreement didn't go forward. That's why we're here 2 years later saying, well we need to put a zoning category on it that fits exactly, as close to possible, what the intent of our

Economic Development District. Mixed use as we mentioned is supportive of non-residential, jobs, employment, multi-family does have a good mix. But it's true, single family chews up more land and creates more fiscal impacts and costs than the non-residential.

Lisa Stuckey: And I think the sort of philosophical thing about this sort of siloing residential versus non, that people are separated from their jobs and they have to commute and that has a bad impact on our quality of life when you pull things apart like that. That comes with it's own set of problems.

Craig Benedict: One other thing that was mentioned a little bit earlier was how these categories and things evolve over time about how you use zoning. And zoning 10, 20, 30 years ago was very siloed. This is manufacturing. This is retail. This is office. And you saw from our amendments that went through the last 3 or 4 months that we have these categories such as office, research, and manufacturing. They put them all in one building. This EDH4 and EDH5 that we're looking at is one of those combined districts where somebody can come in and do office and some assembly and some R&D and we're also suggesting some retail so that if you have the jobs they don't have to go too far to go to a restaurant or bank. And really even thought this will probably be developed in these little zones, this whole area of all 4 quadrants of the interchange is going to be mixed use. We don't need to mix it completely on every parcel but somebody living in a multi family on the south side can easily get over to the hospital if they were working there.

Tony Blake: This is why RTP's putting in all the residential.

Craig Benedict: That's correct.

Lisa Stuckey: That's the flip of it.

Craig Benedict: That's the conventional zoning ideas back in the 60s.

Tony Blake: So just to talk directly to the first gentleman's concerns, this would not preclude a Gorilla Manufacturing or an asphalt plant or anything like that. There are other components to the UDO that would address those. But this particular zone would not prevent it.

Perdita Holtz: You mean the EDH5 zone?

Tony Blake: Yes.

Perdita Holtz: They could theoretically be located in EDH5, but practically, with all the development standards that the UDO contains, it's not likely.

Craig Benedict: This isn't in the UDO but this is in the practice that all cities and counties are doing in the region. There's demand for quality growth and our Commissioners and Economic Development Department targets industries and if it's the appropriate industries that give us the tax base and the high paying jobs, there's incentives. Jobs or businesses that are not fulfilling that targeted market are not likely to get incentives and therefore the pressure for them to locate here is lessened. Meaning that some of those higher intensity uses that are listed in that manufacturing category, we're not going to be escorting those in with incentive packages.

Lisa Stuckey: There's also small businesses that it seems to me that some of what you were just talking about would really... that there's not much land that's available right now to do this kind of construction in Orange County, really.

Craig Benedict: That's correct. There are not too many interchanges and everyone that we have, besides the one in North Chapel Hill, New Hope Church interchange- nothing can happen there. And this is within proximity of our University even. And there are other Economic Development zones in Efland and Buckhorn. Very prime. The developers and businesses that are looking for properties in Orange County, they are surprised that there's still available land at some of these interchanges. Why hasn't it developed in the past? There hasn't been good zoning

there or infrastructure. And so we are trying to prepare the appropriate places where there's good transportation access also.

Chris Cole: Can I make one comment? Lisa... She raises the fact that there are not many opportunities to put a manufacturing facility in Orange County, and that's true. And I'd like to point out that businesses are aware of that too and sometimes they go out and pay a premium... 12 years ago, maybe, next to Euro Sport, someone purchased an option on land to put an asphalt plant next door to them. It cost the town of Hillsborough \$300,000 to make them go away. They supposedly weren't allowed to do that there either.

Craig Benedict: We're familiar with the lawsuit.

Tony Blake: But that, I believe, was addressed in the zoning. There was a hole in the zoning that allowed that to happen. If my understanding... But I believe that's been closed since.

*Perdita Holtz continued presentation.*

**MOTION** [later in the evening, after all three related items had been presented] by Buddy Hartley to approve the Statement of Consistency. Seconded by Tony Blake.

**VOTE: 7-1 OPPOSED- GUTHRIE**

**MOTION** [later in the evening, after all three related items had been presented] by Buddy Hartley to approve the amendment package. Seconded by Laura Nicholson.

**VOTE: 7-1 OPPOSED- GUTHRIE**

*Paul Guthrie opposed because he is uncertain.*

**Agenda Item 10: Zoning Atlas Amendment-** To make a recommendation to the BOCC on government-initiated amendments to the Zoning Atlas that would rezone:

- Four parcels totaling approximately 166.2 acres and 17.05 acres of Interstate right-of-way from EDH-3 (Economic Development Hillsborough Limited Office with Residential [current name]) to EDH-5 (Economic Development Hillsborough Research and manufacturing [proposed name]). The parcels are located immediately south of Interstate 40 and west of Old Highway 86.
- One parcel totaling 34.58 acres and 8.92 acres of Interstate right-of-way from EDH-2 (Economic Development Hillsborough Limited Office) to EDH-4 (Economic Development Hillsborough Office / Retail [proposed name]). The parcel is located immediately south of Interstate 40 and east of Old Highway 86.

This item is scheduled for the September 12, 2016 quarterly public hearing.

**Presenter:** Perdita Holtz, Planning Systems Coordinator

Perdita Holtz presented.

Nathan Robinson (member of the public): In terms of the recognition that's coming for those areas, they're existing residential now, they come down just south on Old 86; would there be a way to include the zoning that needs to be consistent with this action so that this process doesn't have to be repeated in the future?

Perdita Holtz: There is not a way to include it at this time. And we've mentioned to you about the water and sewer boundary agreement that in order to be 10 year transition area the water and sewer boundary agreement would need to be revised, the County's land use plan would need to be revised, and then ultimately zoning would need to be applied. And the thing that would need to happen first would be water and sewer management boundary agreement adjustments. And that requires the approval of the five signatory parties.

Craig Benedict: And what we do if there's comments that come from the public, in the future public hearing on September 12<sup>th</sup> the Commissioners can say, " Craig and Staff, can you provide a report about how this would be

accomplished". It doesn't mean they'd want us to proceed or not, and to come up with what departments are involved, what maps have to change, and we give that back to them on what we call a future amendment outline. An outline of how'd we'd get it done and that we involved Hillsborough, etcetera. And then we bring that back to them and the public's available to talk at those meetings, also. And they say please proceed or not proceed. It is an overlapping, multi layer process, as Perdita said.

Perdita Holtz: What happens here does get presented at the public hearing, and the Minutes for this meeting are included, so the BOCC will be aware that that's something that you brought up.

Nathan Robinson: Okay, because we literally just bought the property 6 months ago. We literally were playing with the plans to put single-family residences here. And just for the sake of everyone else, we have spoken with Perdita and Craig. So we had to modify our plans based on what the wave of the future is. We get that, and that's cool but as we modify we don't want to get stuck between a hard decisions if say this is going to stay R1 forever. Because then we feel like we're going to get stuck with our only use being our one usage, but that's not what the whole quadrant is tending toward.

Lydia Wegman: Thank you.

Franklin Garland: I have a quick question. How hard is it to get land use changed? I mean, my farm is for sale. But I've been approached by people that want it for commercial property.

Perdita Holtz: It requires the same type of process that we're going through now. If you wanted to do it as an individual...

Franklin Garland: But the same thing as Nathan's, it's like being between a rock and a hard place.

Perdita Holtz: Any property owner can apply to amend any of these documents. The land use plan, the zoning map, the UDO. In order to have the County do a County initiated action it's something that we can potentially talk about. I can tell you that a County initiated amendment will take more than a year.

Lydia Wegman: Thank you. Do you have any discussion?

Paul Guthrie: I'm still unsure exactly. I would comment that I think if we can avoid stacking so many of these things on a meeting at one time, I understand there were reasons for that, it would be helpful. After 200 pages of material of which was changed at least twice and reading it, coming here and then having 2 hours of discussion, I still feel uncomfortable. And I'm not sure exactly, when you ask for my vote, I'm not sure what I'm going to do. It's not that I'm for or against, I'm just not sure in my own mind exactly what the best option is given all of the variables that are involved. So I just want to state that.

Kim Piracci: I'm just clarifying a question, all these changes are being driven by the desire to increase the tax base; is that correct?

Perdita Holtz: They're being pursued to diversify the tax base, not necessarily increase it.

Tony Blake: In other words, to have the County less reliant on residential housing taxes, and have a little more diversity in the base. In case there's changes in the economy you have less of an impact.

Craig Benedict: And the underlying analysis is non-residential property pays more taxes than it costs in services. So there's a little bonus there. And residential, in most cases, costs more than what we get in tax, unless it's a real expensive house. So Orange County is overly reliant on their residential property owners to provide those services that everybody loves. And that's for schools, that's for social services and health services. So our comprehensive plan which is how to promote growth in the right areas and match the uses to their locations. This has been for 40 years, an area at an interchange. We knew that it was coming that we needed to preserve and promote it for primarily non-residential uses. That's why one of the recommendations here was to bring down the single family

potential since it's happening everywhere else, that there are limited areas that are prime, and interest from the non-residential development sector that they're looking for. And they've looked at interchanges. They look at visibility on the interstate and interchange and infrastructure. It wasn't until we got that quarter sales tax, part of it going to schools, part of it going to promote economic development, that we start putting infrastructure out there, so what prompts this whole process is there's been a lot of work done from Efland back to Mebane with infrastructure, we have something on the edge of Durham that's underway, and this has been the last area. And what has slowed us down a little bit was not wanting to put a million dollars of infrastructure in and have it turn to residential. Residential now is in EDH3 is by right. There's been some interest in the development community to do something out there. They may use EDH3 or 4 or 5, or they may come in with a master plan development which would be an additional zoning and they might have to go through this process again. But at least this will be a guide of what can be done out there. And if they go through that conditional zoning district process there's public meetings, what uses exactly go out there, so the 41 pages that Perdita listed will be there.

Lydia Wegman: Are there comments? I'll just say with Paul, I'm a little uncertain about how exactly to proceed, as well but your recommendation is important.

**MOTION** by Lisa Stuckey to approve the Statement of Consistency. Seconded by Tony Blake.  
**VOTE: 7-1 OPPOSED- GUTHRIE**

**MOTION** by Laura Nicholson to recommend approval of the amendments to the Orange County zoning atlas. Seconded by Buddy Hartley.  
**VOTE: 7-1 OPPOSED- GUTHRIE**

*Paul Guthrie opposed because he was uncertain.*

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**ORANGE COUNTY  
BOARD OF COMMISSIONERS  
QUARTERLY PUBLIC HEARING ACTION AGENDA ITEM ABSTRACT**  
**Meeting Date:** September 12, 2016

**Action Agenda  
Item No.   D.2**

**SUBJECT:** Unified Development Ordinance (UDO) Text Amendments – Hillsborough Economic Development District

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**DEPARTMENT:** Planning and Inspections

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**ATTACHMENT(S):**

1. Comprehensive Plan and Unified Development Ordinance (UDO) Amendment Outline Form
2. Statement of Consistency
3. Proposed Ordinance
4. Table of EDH Zoning Districts and Purpose Statements, Summary of Proposed Amendments to Table of Permitted Uses, and Excerpt of Table of Permitted Uses
5. Map of Hillsborough EDD
6. Excerpt of Approved July 6, 2016 Ordinance Review Committee Notes
7. Excerpt of Draft August 3, 2016 Planning Board Minutes
8. NAICS Codes

**INFORMATION CONTACT: (919)**

Perdita Holtz, Planner III, 245-2578  
Craig Benedict, Director, 245-2575

**PURPOSE:** To hold a public hearing on Planning Director initiated text amendments to the Unified Development Ordinance (UDO) that would modify some development standards, types of permitted uses, and use standards within the Hillsborough Economic Development District (EDD).

**BACKGROUND:** In order to better promote economic development opportunities in the Hillsborough Economic Development District (EDD), the Planning Director is suggesting UDO text amendments to modify some development standards, types of permitted uses, and use standards. Plans for County investment in water and sewer infrastructure to parcels south of Interstate 40 and in the vicinity of Old Highway 86 are underway and these UDO text amendments focus on this geographic area in conjunction with a related, separate proposed rezoning action.

Attachment 1 contains additional information and analysis regarding this amendment. Proposed text amendment language can be found in Attachment 3 within a “track changes” format. Attachment 4 contains information summarizing some aspects of the proposed amendments. The map in Attachment 5 shows the extent of the Hillsborough EDD. Attachment 8 is the NAICS (North American Industry Classification System) code list; it is included because uses only in the Hillsborough EDD are regulated by NAICS sectors. Planning and Attorney’s office staffs will continue to analyze the unique use of the NAICS system for permitted use consistency and changes necessary due to judicial decisions.

Planning staff held a Public Information Meeting on July 26 to explain the proposed amendments affecting the Hillsborough EDD. Five interested persons attended the meeting.

The Planning Department and Economic Development Departments have reviewed and discussed these amendments and find they further joint goals.

Planning Director's Recommendation: The Planning Director recommends **approval** of the Statement of Consistency, indicating the amendments are reasonable and in the public interest, contained in Attachment 2 and proposed amendment package contained in Attachment 3.

Planning Board Recommendation: At its August 3, 2016 meeting, the Board voted 7-1 to **recommend approval** of the Statement of Consistency and the amendment package. Draft minutes from this meeting and the signed Statement of Consistency are included in Attachment 7. Agenda materials from the August 3, 2016 Planning Board meeting can be viewed at: <http://www.orangecountync.gov/8.3.16PlanningBoardAgendaPacket.pdf>.

Additionally, the Ordinance Review Committee (ORC), a subcommittee of the Planning Board, reviewed the proposed amendments at its July 6 meeting and approved notes from this meeting are included in Attachment 6.

Following the August 3rd Planning Board meeting, County Attorney staff completed their review of the proposed text amendments. As a result of the review, edits were made to the proposed amendments. The edits made after the August 3rd meeting are identified with yellow highlighting in Attachment 3. Due to these edits, Planning staff will present the proposed amendments for a second review and recommendation at the September 7, 2016 Planning Board meeting. Planning staff will present a summary of the Planning Board's discussion and recommendation for the BOCC at the September Quarterly Public Hearing. Agenda materials from the September 7, 2016 Planning Board meeting can be viewed at: <http://www.orangecountync.gov/SeptemberPlanningBoardPacket.pdf>.

**FINANCIAL IMPACT:** Consideration and approval will not create the need for additional funding for the provision of County services. Costs for the required legal advertisement will be paid from FY2016-17 Departmental funds budgeted for this purpose. Existing Planning staff included in the Departmental staffing budget will accomplish the work required to process this amendment.

**SOCIAL JUSTICE IMPACT:** The following Orange County Social Justice Goal is applicable to this agenda item:

- **GOAL: ENSURE ECONOMIC SELF-SUFFICIENCY**  
The creation and preservation of infrastructure, policies, programs and funding necessary for residents to provide shelter, food, clothing and medical care for themselves and their dependents.

**RECOMMENDATION(S):** The Administration recommends the Board:

1. Receive the proposed amendments to the UDO as detailed in this abstract and attachments.
2. Conduct the public hearing and accept comment on the proposed amendments.
3. Close the public hearing. (Note that, because this is a legislative decision, additional comments at a later date are permitted).

4. Decide on one of the following options:
  - a. Adopt the proposed amendments by approving the Statement of Consistency (Attachment 2) and Ordinance (Attachment 3).
  - b. Defer a decision to a later BOCC regular meeting date.
  - c. Refer the item back to the Planning Board for a specific purpose.
  - d. Deny the proposed amendments. (Note: Section 2.2.8 *Effect of Denial on Subsequent Applications* of the UDO states that no application for the same or similar amendment may be submitted for a period of one year. The one year period begins on the date of denial.)

# COMPREHENSIVE PLAN / FUTURE LAND USE MAP AND UNIFIED DEVELOPMENT ORDINANCE (UDO) AMENDMENT OUTLINE

UDO / Zoning-2016-02

## Text Modifications to Regulations Pertaining to the Hillsborough Economic Development District

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### A. AMENDMENT TYPE

#### Map Amendments

Future Land Use Map:

From:

To:

Zoning Map:

From:

To:

Other:

#### Text Amendments

Comprehensive Plan Text:

Section(s):

UDO Text:

UDO General Text Changes

UDO Development Standards

UDO Development Approval Processes

Section(s): Section 3.7 – Economic Development Districts

Section 5.2.2 – Table of Permitted Uses – Economic Development Districts

Section 5.5 – Standards for Residential Uses

Section 5.6 – Standards for Commercial Uses

Section 6.7.5 – Additional Standards for MPD-CZ; Specific Standards for Hillsborough EDD

Other:

## B. RATIONALE

### 1. Purpose/Mission

In order to better promote economic development opportunities in the Hillsborough Economic Development District (EDD), the Planning Director is suggesting consideration of UDO text amendments to modify development standards, types of permitted uses, and use standards.

### 2. Analysis

Text modifications to existing standards that regulate development in the Hillsborough EDD would aid the County in promoting economic development opportunities within the EDD. Plans for County investment in water and sewer infrastructure to parcels south of Interstate 40 and in the vicinity of Old Highway 86 are underway and these UDO text amendments focus on this geographic area. Funding for the infrastructure expansion is from Article 46 sales tax money which is to be used for economic development purposes.

The proposed text amendments would allow for more projects, including mixed development projects, to be permitted “by-right”, subject to all applicable standards contained within the UDO. The amendments would also remove single-family and duplex residential uses as by-right permitted uses within the Hillsborough EDD. This action would preserve expected water and sewer capacity within the EDD for non-residential uses. Additionally, multi-family uses would be permitted by-right only if the use is a small part of a mixed-use development project. Residential-only projects or projects exceeding the proposed multi-family square footage limitation could potentially be permitted in the Hillsborough EDD if approved as an MPD-CZ or Conditional Use District.

Retail uses are proposed to be added as by-right permitted uses in the EDH-4 and EDH-5 zoning districts. Currently, no lands are zoned EDH-4 or EDH-5. Retail uses would be permitted by-right only if they are part of a mixed use development project and would be subject to square footage limitations. Stand-alone retail uses could potentially be permitted in the Hillsborough EDD if approved as an MPD-CZ or Conditional Use District.

Other modifications to the Table of Permitted Uses (Section 5.2.2) have been proposed and are included in the amendment package in Attachment 3. Additionally, Attachment 4 includes a summary of proposed amendments to the Table of Permitted Uses.

### 3. Comprehensive Plan Linkage (i.e. Principles, Goals and Objectives)

#### Objective ED-1.5:

Identify barriers to development of desirable businesses and local businesses, and mitigate these barriers.

#### Objective ED-2.1:

Encourage compact and higher density development in areas served by water and

sewer. (See also Land Use Objective LU-1.1 and Water and Wastewater Objective WW-5.)

**Objective ED-2.5:**

Identify lands suitable to accommodate the expansion and growth of commercial and industrial uses in the County.

**Objective ED-2.7:**

Select industrial sites in Economic Development Areas based on present and planned supporting systems, such as public water and sewer, access to adequate highway, rail, or public transportation infrastructures, and minimize detrimental environmental or negative social outcomes. (See also Water and Wastewater Objective WW-15.)

**Land Use Goal 1:** Fiscally and environmentally responsible, sustainable growth, consistent with the provision of adequate services and facilities and a high quality of life.

**Objective LU-1.1:**

Coordinate the location of higher intensity / high density residential and non-residential development with existing or planned locations of public transportation, commercial and community services, and adequate supporting infrastructure (i.e., water and sewer, high-speed internet access, streets, and sidewalks), while avoiding areas with protected natural and cultural resources. This could be achieved by increasing allowable densities and creating new mixed-use zoning districts where adequate public services are available. (See also Economic Development Objectives ED-2.1, ED-2.3, ED-2.10, and Water and Wastewater Objective WW-2.)

**Land Use Goal 4:** Land development regulations, guidelines, techniques and/or incentives that promote the integrated achievement of all Comprehensive Plan goals.

**4. New Statutes and Rules**

N/A

## C. PROCESS

**1. TIMEFRAME/MILESTONES/DEADLINES**

- a. BOCC Authorization to Proceed

April 19, 2016

- b. Quarterly Public Hearing

September 12, 2016

- c. BOCC Updates/Checkpoints

July 6, 2016 – Planning Board ORC (Ordinance Review Committee) (BOCC receives agenda)

August 3, 2016 – Planning Board Meeting for Recommendation (BOCC receives

agenda)  
September 7, 2016 – Planning Board Meeting for Recommendation on edits made after August 3 meeting (BOCC received agenda)

d. Other

**2. PUBLIC INVOLVEMENT PROGRAM**

**Mission/Scope:** Public Hearing process consistent with NC State Statutes and Orange County ordinance requirements. Additionally, a public information meeting (PIM) was held on July 26, 2016. The PIM covered all three related items scheduled for the September QPH (modifications to the joint plan with the Town of Hillsborough, a related rezoning action, and the proposed text amendments).

a. Planning Board Review:

July 6, 2016 – Ordinance Review Committee (ORC) – Approved Notes are included in Attachment 6.  
August 3, 2016 – Recommendation – Substantial discussion, including public comment that encompassed all three related items but was related primarily to the proposed rezoning action, occurred at the Planning Board meeting. Interested persons are encouraged to read the draft Planning Board Minutes in Attachment 7. Six people attended the Planning Board meeting for the three related Hillsborough EDD items.  
September 7, 2016 – Recommendation on edits made after August 3 meeting

b. Advisory Boards:

Economic Development Advisory Board  
(Sent via e-mail on July 11 because the EDAB does not meet again until September. To date, one question pertaining to whether hotels would still be allowed in the EDD was asked and answered )

c. Local Government Review:

Staff has worked jointly with the Town of Hillsborough’s staff on the three related items.

d. Notice Requirements

Consistent with NC State Statutes – legal ad prior to public hearing

e. Outreach:

General Public: A public information meeting (PIM) that covered all three related items (modifications to the joint plan with the Town of Hillsborough, a related rezoning action, and the proposed

text amendments) was held on July 26, 2016. Notices regarding the PIM and Planning Board meetings were mailed to affected and adjacent (1,000-foot boundary) property owners on July 11. Five people attended the PIM. Signs for the related rezoning advertising the Planning Board meeting were posted in the area affected by the proposed amendments on July 21.

Notices regarding the Public Hearing for the related rezoning action were mailed to affected and adjacent (1,000-foot boundary) property owners on August 26. Signs for the related rezoning advertising the Public Hearing were posted in the area affected by the proposed amendments on August 30.

Small Area Plan Workgroup:

Other:

**3. FISCAL IMPACT**

Consideration and approval will not create the need for additional funding for the provision of county services. Costs for the mailing and required legal advertisement will be paid from FY2016-17 Departmental funds budgeted for this purpose. Existing Planning staff included in the Departmental staffing budget will accomplish the work required to process this amendment.

**D. AMENDMENT IMPLICATIONS**

Staff is proposing to modify existing regulations that apply to the Hillsborough EDD so that the County can better promote the EDD, particularly the portion of the EDD south of I-40 in the vicinity of Old Highway 86, for economic development purposes.

**E. SPECIFIC AMENDMENT LANGUAGE**

See Attachment 3.

**Primary Staff Contact:**

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 919-245-2575  
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 or [cbenedict@orangecountync.gov](mailto:cbenedict@orangecountync.gov)

**STATEMENT OF CONSISTENCY  
OF A PROPOSED UNIFIED DEVELOPMENT ORDINANCE TEXT AMENDMENT  
WITH THE ADOPTED ORANGE COUNTY 2030 COMPREHENSIVE PLAN**

Orange County has initiated an amendment to the Unified Development Ordinance (UDO) to modify some development standards, types of permitted uses, and use standards within the Hillsborough Economic Development District (EDD).

The Board of County Commissioners finds:

- a. The requirements of Section 2.8 of the UDO have been deemed complete; and,
- b. Pursuant to Sections 1.1.5, and 1.1.7 of the UDO and to Section 153A-341 of the North Carolina General Statutes, the Board finds sufficient documentation within the record denoting that the amendment **is consistent** with the adopted 2030 Comprehensive Plan.
  1. The amendment is consistent with applicable plans because it supports the following 2030 Comprehensive Plan goals and objectives:

**Objective ED-1.5:**

Identify barriers to development of desirable businesses and local businesses, and mitigate these barriers.

**Objective ED-2.1:**

Encourage compact and higher density development in areas served by water and sewer. (See also Land Use Objective LU-1.1 and Water and Wastewater Objective WW-5.)

**Objective ED-2.5:**

Identify lands suitable to accommodate the expansion and growth of commercial and industrial uses in the County.

**Objective ED-2.7:**

Select industrial sites in Economic Development Areas based on present and planned supporting systems, such as public water and sewer, access to adequate highway, rail, or public transportation infrastructures, and minimize detrimental environmental or negative social outcomes. (See also Water and Wastewater Objective WW-15.)

**Land Use Goal 1:** Fiscally and environmentally responsible, sustainable growth, consistent with the provision of adequate services and facilities and a high quality of life.

**Objective LU-1.1:**

Coordinate the location of higher intensity / high density residential and non-residential development with existing or planned locations of public transportation, commercial and community services, and adequate supporting infrastructure (i.e., water and sewer, high-speed internet access, streets, and sidewalks), while avoiding areas with protected natural and cultural resources. This could be achieved by increasing allowable densities and creating new mixed-use zoning districts where adequate public services are available. (See also Economic Development Objectives ED-2.1, ED-2.3, ED-2.10, and Water and Wastewater Objective WW-2.)

**Land Use Goal 4:** Land development regulations, guidelines, techniques and/or incentives that promote the integrated achievement of all Comprehensive Plan goals.

- c. The amendment is reasonable and in the public interest because it:
  - 1. Assists Orange County in promoting the Hillsborough EDD to economic development prospects.
  - 2. Continues to protect adjacent and nearby land uses by implementing new, and maintaining a myriad of existing, development standards in the County's UDO.

The Board of County Commissioners hereby adopts this Statement of Consistency and findings expressed herein.

\_\_\_\_\_  
Earl McKee, Chair

\_\_\_\_\_  
Date

Ordinance #: ORD-2016-029

**AN ORDINANCE AMENDING  
THE ORANGE COUNTY UNIFIED DEVELOPMENT ORDINANCE**

WHEREAS, Orange County has initiated an amendment to the Unified Development Ordinance (UDO) to modify some development standards, types of permitted uses, and use standards within the Hillsborough Economic Development District (EDD) in order to better promote the Hillsborough EDD to economic development prospects, and

WHEREAS, the proposal has been found to be consistent with the 2030 Orange County Comprehensive Plan, and

WHEREAS, the requirements of Section 2.8 of the UDO have been deemed complete, and

WHEREAS, the Orange County Planning Board has recommended approval of the proposed text amendments, and

WHEREAS, the County has held the required public hearing and has found the proposed text amendment is consistent with the goals and policies of the adopted Comprehensive Plan.

BE IT ORDAINED by the Board of Commissioners of Orange County that the Orange County Unified Development Ordinance is hereby amended as depicted in the attached pages.

BE IT FURTHER ORDAINED THAT this ordinance be placed in the book of published ordinances and that this ordinance is effective upon its adoption.

Upon motion of Commissioner \_\_\_\_\_, seconded by Commissioner \_\_\_\_\_, the foregoing ordinance was adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

I, Donna S. Baker, Clerk to the Board of Commissioners for Orange County, DO HEREBY CERTIFY that the foregoing is a true copy of so much of the proceedings of said Board at a meeting held on \_\_\_\_\_, 2016 as relates in any way to the adoption of the foregoing and that said proceedings are recorded in the minutes of the said Board.

WITNESS my hand and the seal of said County, this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

SEAL

\_\_\_\_\_  
Clerk to the Board of Commissioners

## Amendment Package to Revise Regulations Pertaining to the Hillsborough Economic Development District

### Notes

The pages that follow contain amendments to the Unified Development Ordinance (UDO) text to revise various regulations that pertain to the Hillsborough Economic Development District (EDD). The modifications are being proposed in order to aid the County in better promoting economic development opportunities within the Hillsborough EDD.

The following color coding is used in this amendment package:

**Red Text:** Denotes new, proposed text, that staff is suggesting be added to the UDO.

**Red Strikethrough Text:** Denotes existing text that staff is proposing be deleted from the UDO.

**\***: Denotes an existing asterisk in Section 5.2, Table of Permitted Uses, that staff is suggesting be deleted.

**Yellow Highlighted Text:** Denotes revisions made after the August 3<sup>rd</sup> Planning Board meeting.

**Green Highlighting:** Denotes changes in automatic alpha or numeric lists that are difficult to indicate in the text due to the "Styling" properties of the master Microsoft Word document.

Some of the proposed changes utilize footnotes to provide a brief explanation as to rationale. Users are reminded that these excerpts are part of a much larger document (the UDO) that regulates land use and development in Orange County. The full UDO is available online at: <http://orangecountync.gov/planning/Ordinances.asp>

Please note that the page numbers in this amendment packet may or may not necessarily correspond to the page numbers in the adopted UDO because adding text may shift all of the text/sections downward.

Some text on the following pages has a large "X" through it to denote that these sections are not part of the amendments under consideration. The text is shown only because in the full UDO it is on the same page as text proposed for amendment. Text with a large "X" is not proposed for deletion; proposed deletions are shown in **red-strikethrough** text.

<h1 style="margin: 0;">EDH-2</h1> <h2 style="margin: 0;">ECONOMIC DEVELOPMENT HILLSBOROUGH LIMITED OFFICE</h2>	<b>DIMENSIONAL STANDARDS</b>							
	Lot size, min./max., ( <del>acres</del> square feet)	<del>2-5</del> 30,000 <sup>1</sup>						
Lot Width, min. (feet)	200							
<b>PURPOSE</b>								
<p>The purpose of the Economic Development Hillsborough Limited Office (EDH-2) District is to provide locations for low intensity office uses and supporting services in the designated Hillsborough Economic Development District. The district may contain limited commercial uses within employment centers or where vehicular access is provided internally to the development.</p>	Front Setback, from ROW, min. (feet)	50						
<b>APPLICABILITY</b>								
<p>This district will usually be applied where the following conditions exist:</p> <ol style="list-style-type: none"> <li>This district will be applied in the Hillsborough Economic Development District.</li> <li>This district shall only be applied where water and sewer are available at the site or are to be made available to the site as part of the development approval process.</li> </ol>	Side Setback, min. (feet)	20 [1]						
	Corner Setback, min. (feet)	50 [1] [2]						
	Rear Setback, min. (feet)	40 [1]						
	Height, max. (feet)	60 [3]						
<p><b>DIMENSIONAL STANDARDS NOTES:</b>                  [1] Required side and rear setbacks adjacent to residentially zoned land shall be equal to the required side or rear setback of the adjacent residential district.                  [2] Any corner lot having an abutting interior lot on its side street shall observe a front yard setback from both streets provided, however, that this requirement does not reduce the width suitable for a building on said lot to less than 25 feet. (See graphic in Section 6.2.7).                  [3] Two feet of additional height shall be allowed for one foot increase of the required front and side setbacks.                  [4] R = residential, NR = non-residential, CU = conditional use</p>	Floor Area Ratio, max.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">R-CU [4]</td> <td style="text-align: center;">.45</td> </tr> <tr> <td style="text-align: center;">NR</td> <td style="text-align: center;">.50</td> </tr> <tr> <td style="text-align: center;">NR-CU</td> <td style="text-align: center;">.50</td> </tr> </table>	R-CU [4]	.45	NR	.50	NR-CU	.50
	R-CU [4]	.45						
	NR	.50						
	NR-CU	.50						
	Required Open Space Ratio, min.	.55						
	Required Livability Space Ratio, min.	R-CU	.50					
Gross Land Area, min./max (square feet)	none							
Required Pedestrian/Landscape Ratio, min.	NR NR-CU	.05						
<b>EDH-2 DISTRICT SPECIFIC DEVELOPMENT STANDARDS</b>								
1. Uses shall be restricted to those indicated for the EDH-2 District in Section 5.2, unless a Conditional Use (CU) or								

<sup>1</sup> In order to promote economic development opportunities, Staff is suggesting removing the 5 acre maximum lot size and lowering the minimum lot size to 30,000 square feet (0.69 acres). A 2-acre minimum lot size for projects that must be located on public water and sewer (see #2 under Applicability) is relatively large.

	MPD-CZ District is approved (see Section 3.8). Additionally, non-residential uses are restricted based on the Watershed Protection Overlay District in which the property is located. Refer to Section 4.2.3 for land use restrictions. Uses Permitted by Right require the approval of a Site Plan as outlined in Section 2.5.
2.	Development projects unable to meet all Standards required for Site Plan approval may be submitted as a Conditional Use District or as a MPD-CZ (see Section 3.8).
3.	The impervious surface limit in this district is 50%. Other requirements for impervious surface are located in Sections 4.2.5 and 4.2.6.
4.	For lots outside of a Watershed Protection Overlay District (see Section 4.2), the minimum usable lot area for lots that utilize ground absorption wastewater systems shall be 30,000 square feet for parcels between 40,000 square feet and 1.99 acres in size; zoning lots two acres and greater in size shall have a minimum usable lot area of at least 40,000 square feet.
5.	Development within the zoning district shall be subject to all applicable use standards detailed in Article 5 and all applicable development standards detailed in Article 6 of this Ordinance. See Sections 6.2.5 and 6.2.6 if more than one principal use or principal structure is proposed on a non-residential zoning lot.
6.	Residential uses are not permitted in this district.
7.	<del>A structure or structures exceeding 20,000 square feet cumulatively on one zoning lot shall only be approved through a Special Use Permit, Class A process regardless of use.</del>
8.	<del>All zoning lots greater than 2.0 acres shall only be approved through a Special Use Permit, Class A process regardless of use.<sup>2</sup></del>
9.	Any nonresidential use within two hundred feet of a residential subdivision a lot smaller than 2 acres in size with an existing dwelling unit shall require a Special Use Permit, Class A. <sup>3</sup>
10.	<del>Direct driveway access to an arterial or major collector shall be prohibited. A frontage or service road shall be dedicated and constructed to provide access along all arterials or major collectors. Direct driveway access to an arterial or major collector shall be limited to shared driveways, limited access streets, or marginal access streets except where such a driveway and/or street would a) cross a stream and require a no-rise certification from the NC Department of Public Safety National Flood Insurance Program or, b) be located on a slope greater than 15%, or c) disturb natural areas as identified in the Inventory of Natural Areas and Wildlife Habitats of Orange County, NC.<sup>4</sup></del>
11.	No drive through facilities may be constructed in this district.
12.	A justification for any deviation to development standards must state a public benefit or purpose.
13.	All parcels shall provide for interconnectivity between parking areas if determined necessary by Planning staff.
14.	Subdivisions proposing private roads are subject to larger setbacks and minimum lot sizes than those listed in the Dimensional and Ratio Standards. Refer to Section 7.8.4 for additional requirements. Refer to Section 7.8.5 for private road standards.
15.	Proposed subdivisions shall follow the procedures outlined in Section 2.16.
16.	See Section 5.3.2(C) for standards for uses requiring a Class A Special Use Permit.

<sup>2</sup> In order to promote economic development opportunities, Staff is suggesting deletion of standards 7 and 8 which require a Class A Special Use Permit for projects above a certain size. Staff notes that standard #9 is suggested to remain in place; this standard requires a Class A Special Use Permit for any nonresidential use located within 200-feet of an existing residential use on a smaller lot size. Typically, SUPs are used to require that a specific type of use (e.g., utility substations or wireless communication towers) be required to prove, in a quasi-judicial setting, that the use will meet the standards found in Section 5.3.2 of the UDO. It is unusual to require any use that reaches a certain size or that is located on a lot smaller or larger than a certain size be required to obtain a SUP. **It should be noted the deletion of standards 7 and 8 will cause the automatic renumbering of the remainder of the list below 8 (e.g., existing #9 will become #7 if 7 and 8 are deleted, and so on).**

<sup>3</sup> The Attorney's office has advised that the term "residential subdivision" is vague and should be revised to a more definitive standard, particularly since the idea in #9 is proposed to be applied to EDH-3. The lot size suggested (2 acres or smaller) is being suggested because the vast majority of existing residential uses near EDH zoning boundaries are located on lots smaller than 2 acres in size. It should also be noted that Section 6.8.12(C) requires additional landscaped buffers at the perimeter of the EDDs and adjacent to interstates and certain roadways.

<sup>4</sup> Staff is suggesting revised language because existing language provides no by-right flexibility to the requirement for frontage (or backage) roads in cases where site features might warrant flexibility in the requirement. The terms limited access street and marginal access street are existing terms and definitions in the UDO. Additionally, staff will bring an Amendment Outline Form to the BOCC after the summer break to receive authorization to develop an Access Management Plan for Hillsborough EDD. Section 2.5.3(V) of the UDO requires that site plan be in compliance with adopted access management plans; having an adopted access management plan will allow staff to require that parcels reserve access easements for future connectivity.

<h1 style="margin: 0;">EDH-3</h1> <h2 style="margin: 0;">ECONOMIC DEVELOPMENT HILLSBOROUGH <del>LIMITED</del> OFFICE WITH RESIDENTIAL<sup>5</sup></h2>		DIMENSIONAL STANDARDS					
PURPOSE		Lot size, min./max., (acres)	<del>2-5</del> [1] <sup>6</sup>				
<p>The purpose of the Economic Development Hillsborough <del>Limited</del> Office with Residential (EDH-3) District is to provide locations for low to moderate intensity office uses and supporting services in the designated Hillsborough Economic Development District. The district may contain <del>low to moderate density</del> multi-family residential uses (<del>4-8</del> 6-12 units per acre)<sup>7</sup>.</p>		Lot Width, min. (feet)	200				
		Front Setback, from ROW, min. (feet)	50				
APPLICABILITY		Side Setback, min. (feet)	20 [2]				
<p>This district will usually be applied where the following conditions exist:</p> <ol style="list-style-type: none"> <li>This district will be applied in the Hillsborough Economic Development District.</li> <li>This district shall only be applied where water and sewer are available at the site or are to be made available to the site as part of the development approval process. <del>EXCEPTION: Single-family lots located south of I 40 may use ground absorption septic systems on minimum size lots of 40,000 square feet provided at least 33% of the tract is preserved as open space.</del></li> </ol>		Corner Setback, min. (feet)	50 [2] [3]				
		Rear Setback, min. (feet)	40 [2]				
		Height, max. (feet)	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">R [4]</td> <td style="text-align: center;">35 [5] [6]</td> </tr> <tr> <td style="text-align: center;">NR</td> <td style="text-align: center;">60 [5]</td> </tr> </table>	R [4]	35 [5] [6]	NR	60 [5]
R [4]	35 [5] [6]						
NR	60 [5]						
<p>DIMENSIONAL STANDARDS NOTES:<sup>8</sup>                  [1] <del>Resultant single family lot sizes shall be a minimum of 7,500 square feet and a maximum of 14,000 square feet if connected to public sewer.</del>                  [2] Required side and rear setbacks adjacent to residentially zoned land shall be equal to the required side or rear setback of the</p>		Floor Area Ratio, max.	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">R-CU [4] NR</td> <td style="text-align: center;">.50 .60</td> </tr> <tr> <td style="text-align: center;">NR-CU</td> <td style="text-align: center;">.55 .65<sup>10</sup></td> </tr> </table>	R-CU [4] NR	.50 .60	NR-CU	.55 .65 <sup>10</sup>
		R-CU [4] NR	.50 .60				
NR-CU	.55 .65 <sup>10</sup>						
		Required Open Space Ratio, min.	.50				

<sup>5</sup> Staff is suggesting a change in the name of this district, as indicated. As proposed revisions in Section 5.2 show, staff is recommending that single-family and two-family dwellings be removed as permitted uses in this district. As such, references on this page to these types of residential uses are being shown for deletion.

<sup>6</sup> In order to promote economic development opportunities, Staff is suggesting removing the 5 acre maximum lot size and lowering the minimum lot size to 1 acre. A 2-acre minimum lot size for projects that must be located on public water and sewer (see #2 under Applicability) is relatively large.

<sup>7</sup> This is the existing density stipulated in Section 5.2 for multi-family residential in the Hillsborough EDD. Staff is recommending that single-family and duplex residential uses be removed as a permitted use in this district and that multi-family uses would be permitted only as a small component of a multi-use development (see proposed Section 5.5.10)

<sup>8</sup> Removal of [1] will cause subsequent renumbering and updates to the relevant note number in the table to the right.

adjacent residential district. <b>3</b> Any corner lot having an abutting interior lot on its side street shall observe a front yard setback from both streets provided, however, that this requirement does not reduce the width suitable for a building on said lot to less than 25 feet. (See graphic in Section 6.2.7). <b>4</b> R = Residential uses; NR = Non-residential uses. <b>5</b> Two feet of additional height shall be allowed for one foot increase of the required front and side setbacks. <b>6</b> Multi-family structures shall be limited to a <del>two</del> <b>three</b> -story maximum. <sup>9</sup>	Required Livability Space Ratio, min.	R-CU	.45
	Gross Land Area, min./max. (square feet)	none	
	Required Pedestrian/Landscape Ratio, min.	NR NR-CU	.05

**EDH-3 DISTRICT SPECIFIC DEVELOPMENT STANDARDS**

1. Uses shall be restricted to those indicated for the EDH-3 District in Section 5.2, unless a Conditional Use (CU) or MPD-CZ District is approved (see Section 3.8). Additionally, non-residential uses are restricted based on the Watershed Protection Overlay District in which the property is located. Refer to Section 4.2.3 for land use restrictions. Uses Permitted by Right require the approval of a Site Plan as outlined in Section 2.5.
2. Development projects unable to meet all Standards required for Site Plan approval may be submitted as a Conditional Use District or as a MPD-CZ (see Section 3.8).
- ~~3. Parcels existing as of April 17, 2001 containing cumulatively more than 2 acres shall only be developed through a MPD-CZ process or after obtaining a Special Use Permit, Class A approval.<sup>11</sup>~~
- 4.** The impervious surface limit in this district is 50%. Other requirements for impervious surface are located in Sections 4.2.5 and 4.2.6.
- 5.** For lots outside of a Watershed Protection Overlay District (see Section 4.2), the minimum usable lot area for lots that utilize ground absorption wastewater systems shall be 30,000 square feet for parcels between 40,000 square feet and 1.99 acres in size; zoning lots two acres and greater in size shall have a minimum usable lot area of at least 40,000 square feet.
- 6.** Development within the zoning district shall be subject to all applicable use standards detailed in Article 5 and all applicable development standards detailed in Article 6 of this Ordinance. See Sections 6.2.5 and 6.2.6 if more than one principal use or principal structure is proposed on a non-residential zoning lot.
- 7.** The residential density permitted on a given parcel is based on the Watershed Protection Overlay District in which the property is located. Refer to Section 4.2.4 for a breakdown of the allowable density (i.e., the number of individual dwellings that can be developed on a parcel of property).
- ~~8. Single family uses shall adhere to the requirements for Flexible Development Subdivisions in Section 7.13.<sup>12</sup>~~
- ~~9. Duplex and multi-family uses shall be connected to a public water and public sewer system.<sup>13</sup>~~
- ~~10. A structure or structures exceeding 20,000 square feet cumulatively on one zoning lot shall only be approved through a Special Use Permit, Class A process regardless of use.~~
- 11.** ~~All zoning lots greater than 2.0 acres shall only be approved through a Special Use Permit, Class A process regardless of use.~~ Any nonresidential use within two hundred feet of a property line of an existing dwelling unit located on a lot smaller than 2 acres in size shall require a Special Use Permit, Class A.<sup>14</sup>

<sup>10</sup> Staff is suggesting increases in Floor Area Ratios (FAR) in this district. The suggested ratios are in keeping with the FAR allowed within the higher-intensity districts that can be applied to lands within the Commercial-Industrial Transition Activity Nodes (CITAN)

<sup>9</sup> Staff is suggesting that multi-family structures be allowed to be three stories tall rather than two. Three stories has become fairly typical in the region for this type of residential product.

<sup>11</sup> Staff is suggesting removal of this standard in order to better promote economic development opportunities. **It should be noted the deletion of standards 3, 8, 9, and 10 and insertion of #13 will cause the automatic renumbering of the list (e.g., existing #4 will become #3, and so on).**

<sup>12</sup> Because single-family residential uses are being proposed for removal as a permitted use in this zoning district, this standard would be obsolete.

<sup>13</sup> All development in this zoning district would be required to be connected to public water and sewer (see #2 in Applicability section), so this standard would be obsolete.

<sup>14</sup> In order to promote economic development opportunities, Staff is suggesting deletion of standards 10 and 11 which require a Class A Special Use Permit for projects above a certain size. However, in order to promote protection of existing residential subdivisions (which are specifically designated in existing language in EDH-2), Staff is suggesting that the new language in #11 be added.

12. No drive through facilities may be constructed in this district.
13. Direct driveway access to an arterial or major collector shall be limited to shared driveways, limited access streets, or marginal access streets except where such a driveway and/or street would a) cross a stream and require a no-rise certification from the NC Department of Public Safety National Flood Insurance Program ~~or~~, b) be located on a slope greater than 15%, or c) disturb natural areas as identified in the Inventory of Natural Areas and Wildlife Habitats of Orange County, NC.<sup>15</sup>
14. A justification for any deviation to development standards must state a public benefit or purpose.
15. All parcels shall provide for interconnectivity between parking areas if determined necessary by Planning staff.
16. Subdivisions proposing private roads are subject to larger setbacks and minimum lot sizes than those listed in the Dimensional and Ratio Standards. Refer to Section 7.8.4 for additional requirements. Refer to Section 7.8.5 for private road standards.
17. Proposed subdivisions shall follow the procedures outlined in Section 2.16.
18. See Section 5.3.2(C) for standards for uses requiring a Class A Special Use Permit.

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<sup>15</sup> Staff is suggesting the addition of this standard because it is generally good planning practice to minimize the number of curb cuts along major roadways. This language is identical to the proposed language for the EDH-2, 4, and 5 districts. Insertion of this standard causes the automatic renumbering of remaining standards (e.g., existing #13 became #14, and so on).

<h1 style="margin: 0;">EDH-4</h1> <h2 style="margin: 0;">ECONOMIC DEVELOPMENT HILLSBOROUGH OFFICE / RETAIL</h2>	<b>DIMENSIONAL STANDARDS</b>		
	Lot size, min., (acres)	4 <sup>1</sup> <sup>16</sup>	
Lot Width, min. (feet)	<del>300</del> 200		
<b>PURPOSE</b>			
<p>The purpose of the Economic Development Hillsborough Office / Retail (EDH-4) District is to provide locations for high intensity office uses and supporting <b>retail and services uses</b> in the designated Hillsborough Economic Development District.</p> <p>The district is intended to be located on large areas <b>as part of a cohesive development plan</b> and may contain <b>limited</b> commercial uses within employment centers.</p>	Front Setback, from ROW, min. (feet)	50	
<b>APPLICABILITY</b>			
<p>This district will usually be applied where the following conditions exist:</p> <ol style="list-style-type: none"> <li>This district will be applied in the Hillsborough Economic Development District.</li> <li>This district shall only be applied where water and sewer are available at the site or are to be made available to the site as part of the development approval process.</li> </ol>	Side Setback, min. (feet)	20 [1]	
	Corner Setback, min. (feet)	50 [1] [2]	
	Rear Setback, min. (feet)	40 [1]	
	Height, max. (feet)	60 [3]	
<p><b>DIMENSIONAL STANDARDS NOTES:</b></p> <p>[1] Required side and rear setbacks adjacent to residentially zoned land shall be equal to the required side or rear setback of the adjacent residential district.</p> <p>[2] Any corner lot having an abutting interior lot on its side street shall observe a front yard setback from both streets provided, however, that this requirement does not reduce the width suitable for a building on said lot to less than 25 feet. (See graphic in Section 6.2.7).</p> <p>[3] Two feet of additional height shall be allowed for one foot increase of the required front and side setbacks.</p> <p>[4] R = residential, NR = non-residential, CU = conditional use</p>	Floor Area Ratio, max.	R-CU[4] NR	.65
		NR-CU	.75
	Required Open Space Ratio, min.	.40	
	Required Livability Space Ratio, min.	R-CU	.45
	Gross Land Area, min./max. (square feet)	none	
	Required Pedestrian/Landscape Ratio, min.	NR NR-CU	.05
<b>EDH-4 DISTRICT SPECIFIC DEVELOPMENT STANDARDS</b>			
<ol style="list-style-type: none"> <li>Uses shall be restricted to those indicated for the EDH-4 District in Section 5.2, unless a Conditional Use (CU) or MPD-CZ District is approved (see Section 3.8). Additionally, non-residential uses are restricted based on the</li> </ol>			

<sup>16</sup> In order to promote economic development opportunities, Staff is suggesting lowering the minimum lot size to 1 acre. A 4-acre minimum lot size for projects that must be located on public water and sewer (see #2 under Applicability) is relatively large.

- Watershed Protection Overlay District in which the property is located. Refer to Section 4.2.3 for land use restrictions. Uses Permitted by Right require the approval of a Site Plan as outlined in Section 2.5.
2. Development projects unable to meet all Standards required for Site Plan approval may be submitted as a Conditional Use District or as a MPD-CZ (see Section 3.8).
  3. The impervious surface limit in this district is 50%. Other requirements for impervious surface are located in Sections 4.2.5 and 4.2.6.
  4. For lots outside of a Watershed Protection Overlay District (see Section 4.2), the minimum usable lot area for lots that utilize ground absorption wastewater systems shall be 30,000 square feet for parcels between 40,000 square feet and 1.99 acres in size; zoning lots two acres and greater in size shall have a minimum usable lot area of at least 40,000 square feet.
  5. Development within the zoning district shall be subject to all applicable use standards detailed in Article 5 and all applicable development standards detailed in Article 6 of this Ordinance. See Sections 6.2.5 and 6.2.6 if more than one principal use or principal structure is proposed on a non-residential zoning lot.
  6. Residential uses are not permitted in this district.
  7. All outparcels within this district shall have internal access to the development.
  8. No drive through facilities may be constructed in this district.
  9. **Direct driveway access to an arterial or major collector shall be limited to shared driveways, limited access streets, or marginal access streets except where such a driveway and/or street would a) cross a stream and require a no-rise certification from the NC Department of Public Safety National Flood Insurance Program or, b) be located on a slope greater than 15%, or c) disturb natural areas as identified in the Inventory of Natural Areas and Wildlife Habitats of Orange County, NC.**<sup>17</sup>
  10. Justification for any deviation to development standards must state a public benefit or purpose.
  11. All parcels shall provide for interconnectivity between parking areas if determined necessary by Planning staff.
  12. Subdivisions proposing private roads are subject to larger setbacks and minimum lot sizes than those listed in the Dimensional and Ratio Standards. Refer to Section 7.8.4 for additional requirements. Refer to Section 7.8.5 for private road standards.
  13. Proposed subdivisions shall follow the procedures outlined in Section 2.16.
  14. See Section 5.3.2(C) for standards for uses requiring a Class A Special Use Permit.

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<sup>17</sup> Staff is suggesting the addition of this standard because it is generally good planning practice to minimize the number of curb cuts along major roadways. This language is identical to the proposed language for the EDH-2, 3, and 5 districts. Insertion of this standard causes the automatic renumbering of remaining standards (e.g., existing #9 became #10, and so on).

<h1 style="margin: 0;">EDH-5</h1> <h2 style="margin: 0;">ECONOMIC DEVELOPMENT HILLSBOROUGH OFFICE/FLEX RESEARCH AND MANUFACTURING</h2>	DIMENSIONAL STANDARDS			
	Lot size, min., (acres)	4 2 <sup>18</sup>		
Lot Width, min. (feet)	<del>300</del> 200			
PURPOSE	<p>The purpose of the Economic Development Hillsborough Office/Flex Research and Manufacturing (EDH-5) District is to provide locations for a wide range of research, assembling, fabricating and light manufacturing activities, and such ancillary industrial activities as warehousing and distribution in the designated Hillsborough Economic Development District.</p> <p>Some commercial services are also permitted <del>accessory to industrial development</del> if they are part of a cohesive development plan that is predominantly comprised of permitted non-residential uses and provided all access is provided internally. The district is established to provide locations for research and industrial development which have little or no impact on adjoining properties.</p>			
<p>The purpose of the Economic Development Hillsborough Office/Flex Research and Manufacturing (EDH-5) District is to provide locations for a wide range of research, assembling, fabricating and light manufacturing activities, and such ancillary industrial activities as warehousing and distribution in the designated Hillsborough Economic Development District.</p> <p>Some commercial services are also permitted <del>accessory to industrial development</del> if they are part of a cohesive development plan that is predominantly comprised of permitted non-residential uses and provided all access is provided internally. The district is established to provide locations for research and industrial development which have little or no impact on adjoining properties.</p>				
APPLICABILITY	Side Setback, min. (feet)	20 [1]		
<p>This district will usually be applied where the following conditions exist:</p> <ol style="list-style-type: none"> <li>This district will be applied in the Hillsborough Economic Development District.</li> <li>This district shall only be applied where water and sewer are available at the site or are to be made available to the site as part of the development approval process.</li> </ol>	Corner Setback, min. (feet)	50 [1] [2]		
	Rear Setback, min. (feet)	40 [1]		
	Height, max. (feet)	40 [3]		
	Floor Area Ratio, max.	R-CU [4] NR	.65	
<p><b>DIMENSIONAL STANDARDS NOTES:</b></p> <p>[1] Required side and rear setbacks adjacent to residentially zoned land shall be equal to the required side or rear setback of the adjacent residential district.</p> <p>[2] Any corner lot having an abutting interior lot on its side street shall observe a front yard setback from both streets provided, however, that this requirement does not reduce the width suitable for a building on said lot to less than 25 feet. (See graphic in Section 6.2.7).</p> <p>[3] Two feet of additional height shall be allowed for one foot increase of the required front and side setbacks.</p> <p>[4] R = residential, NR = non-residential, CU = conditional use</p>	NR-CU	.75		
	Required Open Space Ratio, min.	.40		
	Required Livability Space Ratio, min.	R-CU	.45	
	Gross Land Area, min./max. (square feet)	none		
	Required Pedestrian/Landscape Ratio, min.	NR NR-CU	.05	

<sup>18</sup> In order to promote economic development opportunities, Staff is suggesting lowering the minimum lot size to 2 acres. A 4-acre minimum lot size for projects that must be located on public water and sewer (see #2 under Applicability) is relatively large.

**EDH-5 DISTRICT SPECIFIC DEVELOPMENT STANDARDS**

1. Uses shall be restricted to those indicated for the EDH-5 District in Section 5.2, unless a Conditional Use (CU) or MPD-CZ District is approved (see Section 3.8). Additionally, non-residential uses are restricted based on the Watershed Protection Overlay District in which the property is located. Refer to Section 4.2.3 for land use restrictions. Uses Permitted by Right require the approval of a Site Plan as outlined in Section 2.5.
2. Development projects unable to meet all Standards required for Site Plan approval may be submitted as a Conditional Use District or as a MPD-CZ (see Section 3.8).
3. The impervious surface limit in this district is 50%. Other requirements for impervious surface are located in Sections 4.2.5 and 4.2.6.
4. For lots outside of a Watershed Protection Overlay District (see Section 4.2), the minimum usable lot area for lots that utilize ground absorption wastewater systems shall be 30,000 square feet for parcels between 40,000 square feet and 1.99 acres in size; zoning lots two acres and greater in size shall have a minimum usable lot area of at least 40,000 square feet.
5. Development within the zoning district shall be subject to all applicable use standards detailed in Article 5 and all applicable development standards detailed in Article 6 of this Ordinance. See Sections 6.2.5 and 6.2.6 if more than one principal use or principal structure is proposed on a non-residential zoning lot.
6. Residential uses are not permitted in this district.
7. No drive through facilities may be constructed in this district.
8. Direct driveway access to an arterial or major collector shall be limited to shared driveways, limited access streets, or marginal access streets except where such a driveway and/or street would a) cross a stream and require a no-rise certification from the NC Department of Public Safety National Flood Insurance Program **or**, b) be located on a slope greater than 15%, or c) disturb natural areas as identified in the Inventory of Natural Areas and Wildlife Habitats of Orange County, NC.<sup>19</sup>
9. A justification for any deviation to development standards must state a public benefit or purpose.
10. All parcels shall provide for interconnectivity between parking areas if determined necessary by Planning staff.
11. Subdivisions proposing private roads are subject to larger setbacks and minimum lot sizes than those listed in the Dimensional and Ratio Standards. Refer to Section 7.8.4 for additional requirements. Refer to Section 7.8.5 for private road standards.
12. Proposed subdivisions shall follow the procedures outlined in Section 2.16.
13. See Section 5.3.2(C) for standards for uses requiring a Class A Special Use Permit.

<sup>19</sup> Staff is suggesting the addition of this standard because it is generally good planning practice to minimize the number of curb cuts along major roadways. This language is identical to the proposed language for the EDH-2, 3, and 4 districts. Insertion of this standard causes the automatic renumbering of remaining standards (e.g., existing #8 became #9, and so on).

**5.2.2 Table of Permitted Uses – Economic Development Districts**

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS									
* = PERMITTED USE    A = CLASS A SPECIAL USE    B = CLASS B SPECIAL USE    C = CONDITIONAL USE (REZONING & CLASS A SUP)									
USE TYPE	GENERAL USE ZONING DISTRICTS								
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD				
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>									
<b>AGRICULTURAL USES</b>									
Animal hospital/veterinarian	C#	C#		*					
Kennel, Class I		C#		*					
Kennel, Class II		B		B					
<b>CONSTRUCTION</b>									
Building contractors		*		*					
Construction (Sector 23) (Hillsborough EDD only; all activities must be wholly within building) <sup>21</sup>									*
Plumbing, heating, electrical, and similar trade contractors		*		*					
<b>FINANCE</b>									
Banks, savings and loans, and credit unions	*	*	*	*					
Credit agencies and institutions	*	*	*	*					
Finance & Insurance (Sector 52)					*	*		*	*
Insurance carriers and agents	*	*	*	*					
Real estate agents and brokers	*	*	*	*					
Security and commodity brokers, and investment offices	*	*	*	*					

<sup>20</sup> Staff suggests adding clarifying language as to what “Sector X” refers to when referencing the rows that pertain to the Hillsborough EDD zoning districts.

<sup>21</sup> In the amendment version the Planning Board reviewed on Aug. 3, this language was suggested for deletion. Due to subsequent comments from the Attorney’s office, staff is suggesting the language remain as is because of concerns related to the recent *Byrd v. Franklin County* judicial decision. This language may be modified at a later date as staff is currently working on comprehensive amendments to the Tables of Permitted Uses to address the outcome of the referenced judicial decision.

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS									
* = PERMITTED USE    A = CLASS A SPECIAL USE    B = CLASS B SPECIAL USE    C = CONDITIONAL USE (REZONING & CLASS A SUP)									
USE TYPE	GENERAL USE ZONING DISTRICTS								
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD				
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>									
<b>GOVERNMENT USES</b>									
Governmental facilities and office buildings (Including solid waste collection centers)	*	*	*	*	*	*	*	*	*
Governmental protective services (Police and fire stations, rescue squads, and volunteer fire departments)	*	*	*	*	*	*	*	*	*
Parks, public and non-profit	*	*	*	*	*	*	*	*	*
Public Administration (Sector 92)									*
<b>INFORMATION</b>									
Information (Sector 51)								*	*
<b>MANUFACTURING, ASSEMBLY &amp; PROCESSING</b>									
Manufacturing (Sector 31-33) ( Hillsborough EDD only; all activities must be wholly within building) <sup>22</sup>									*
Electronic Equipment (see listing below)									
• Communications equipment		*		*					
• Electric lighting and wiring equipment		*		*					
• Electric transmission and distribution		*		*					
• Electrical industrial apparatus		*		*					
• Electronic components and accessories		*		*					
• Household appliances		*		*					
• Radio and television receiving equipment		*		*					

<sup>22</sup> In the amendment version the Planning Board reviewed on Aug 3, this language was suggested for deletion. Due to subsequent comments from the Attorney’s office, staff is suggesting the language remain as is because of concerns related to the recent *Byrd v. Franklin County* judicial decision. This language may be modified at a later date as staff is currently working on comprehensive amendments to the Tables of Permitted Uses to address the outcome of the referenced judicial decision.

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS										
* = PERMITTED USE	A = CLASS A SPECIAL USE		B = CLASS B SPECIAL USE		C = CONDITIONAL USE (REZONING & CLASS A SUP)					
USE TYPE	GENERAL USE ZONING DISTRICTS									
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD					
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5	
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>										
Fabricated Metal Products (see listing below)										
• Cutlery and hand tools		*		*						
• Fabricated structural metal products		*		*						
• Heating equipment, except electric and warm air; and plumbing fixture		*		*						
• Metal cans and shipping containers		*		*						
• Nuts, bolts, screws, rivets, and washers		*		*						
Food Products (see listing below)										
• Bakery		*		*						
• Bottling plants		*		*						
• Dairy		*		*						
• Miscellaneous food preparation; e.g., coffee roasting, condiments, confectionary products, etc.		*		*						
Industrial Machinery (see listing below)										
• Engines and turbines		*		*						
• Farm/garden machinery and equipment		*		*						
• General industrial machinery and equipment; e.g., purification equipment, ball and roller bearings, etc.		*		*						
• Metalworking machinery and equipment		*		*						
• Office, computing, and accounting machines		*		*						
• Special industrial machinery; e.g., textile machinery		*		*						
Instruments (see listing below)										
• Measuring, analyzing, and controlling instruments		*		*						

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS										
* = PERMITTED USE    A = CLASS A SPECIAL USE    B = CLASS B SPECIAL USE    C = CONDITIONAL USE (REZONING & CLASS A SUP)										
USE TYPE	GENERAL USE ZONING DISTRICTS									
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD					
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5	
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>										
• Photographic, medical, and optical goods		*		*						
• Watches and clocks		*		*						
Paper Products (see listing below)										
• Converted paper and paperboard products		*		*						
• Paperboard containers and boxes		*		*						
Furniture and Fixtures (see listing below)										
• Household and office furniture		*		*						
• Miscellaneous furniture and fixtures		*		*						
Pharmaceutical Products		*		*						
Printing and Publishing Establishments		*		*						
Rubber and Plastic Products (see listing below)										
• Miscellaneous plastic products; e.g., plastic pipe, packaging materials, etc.		*		*						
• Rubber and plastic footwear		*		*						
• Rubber and plastic hose and belting		*		*						
Stone, Glass, Clay, and Concrete Products (see listing below)										
• Cut stone products		C#		C#						
• Flat glass		*		*						
• Glass and glassware		*		*						
• Pottery and related products		*		*						
Transportation Equipment (see listing below)										
• Miscellaneous transportation equipment; e.g., motor vehicle components		*		*						
• Motorcycles, bicycles, and parts		*		*						

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS									
* = PERMITTED USE    A = CLASS A SPECIAL USE    B = CLASS B SPECIAL USE    C = CONDITIONAL USE (REZONING & CLASS A SUP)									
USE TYPE	GENERAL USE ZONING DISTRICTS								
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD				
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>									
Miscellaneous Manufacturing Industries (see listing below)									
• Jewelry and silverware		*		*					
• Miscellaneous manufacturing industries; e.g., costume jewelry, novelties, buttons, etc.		*		*					
• Musical instruments		*		*					
• Pen, pencils, office, and artist supplies		*		*					
• Toys, sporting, and athletic goods		*		*					
<b>RECREATION</b>									
Arts, Entertainment & Recreation (Sector 71)								*	
<b>RESIDENTIAL</b>									
Dwelling, single-family			*				* <sup>23</sup>		
Dwelling, two-family			*				*		
Dwelling, multi-family (6-12 units per acre in the Hillsborough EDD)			*				*	*	
Dwelling, multi-family (6+ units per acre as part of mixed use development; maximum of 25% of development square footage)	*								
Dwelling, multi-family (6+ units per acre)	C#								
Dwelling, mobile home (For replacement of existing mobile home)			*						

<sup>23</sup> Staff is suggesting removing single-family residential and two-family (e.g., duplex) uses as permitted uses within the Hillsborough EDD. This is being suggested in order to promote lands within the EDD predominantly for non-residential uses (multi-family uses would be permitted in the indicated districts but subject to the proposed use-specific standards in Section 5.5.10 which limits the scope of the use and requires that, in order to be permitted by-right, they be part of an overall development plan that includes other permitted use(s) as the dominant use. Stand-alone multi-family development could potentially still be permitted within the Hillsborough EDD through either the MPD-CZ process or as a Conditional Use District.

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS									
* = PERMITTED USE    A = CLASS A SPECIAL USE    B = CLASS B SPECIAL USE    C = CONDITIONAL USE (REZONING & CLASS A SUP)									
USE TYPE	GENERAL USE ZONING DISTRICTS								
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD				
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>									
Temporary mobile home (For occupancy during construction of permanent residential unit and for 30 days after issuance of Certificate of Occupancy) Temporary Use of a Residential Mobile Home <sup>24</sup>			*				*		
<b>RETAIL</b>									
Farm equipment sales	C#	C#		*					
Motor vehicle service station	C#	C#		*					
Motor vehicles, new and used, sales and rental	C#	C#		*					
Nightclubs, bars, and pubs (Only as accessory use to hotel, motel or restaurant)	*	*		*					
Restaurants (carry-out and general) when located in a service building, court or plaza, retail store, or enclosed mall consisting of multiple uses	*	*		*					
Restaurants (carry-out and general) in a separate, free-standing building	*	C#		*					
Restaurants (drive-in) in a separate, free-standing building	C#	C#		*					
Retail Trade (Sectors 44, 45; excluding Subsector 454 Non-store retailers) <del>(Only Hillsborough EDD through Conditional Use District or MPD-CZ)</del> <sup>25</sup>								*	*

<sup>24</sup> Staff is suggesting renaming this use type to be consistent with the title used in Section 5.4.4 which contains the standards for this use type. Additionally, staff suggests deleting the use from EDH-3 since only multi-family uses are suggested for EDH-3.

<sup>25</sup> Staff is suggesting that retail trade be permitted in EDH-4 and EDH-5, subject to the proposed standards in Section 5.6.16 which limit the scope of retail uses allowed by-right and requires they be part of an overall development plan that includes other permitted use(s) as the dominant use. As is currently the situation, retail trade would be permitted as a stand-alone use in the Hillsborough EDD only if a CUD or MPD-CZ is approved.

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS									
* = PERMITTED USE    A = CLASS A SPECIAL USE    B = CLASS B SPECIAL USE    C = CONDITIONAL USE (REZONING & CLASS A SUP)									
USE TYPE	GENERAL USE ZONING DISTRICTS								
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD				
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>									
Retail trade, sales and rental of durable and convenience goods, merchandise, and equipment, including mail order houses, in a separate, free-standing building	*	C#		*					
Retail trade, sales and rental of durable and convenience goods, merchandise, and equipment, including mail order houses, when located in a service building, court or plaza, or enclosed mall consisting of multiple uses.	*	*		*					
<b>SERVICES</b>									
Accommodation and Food Service (Sector 72) <del>(Eating and drinking establishments are permitted only as accessory use to hotel, or motel or restaurant; Hillsborough EDD only)</del> <sup>26</sup>						*		*	* <sup>27</sup>
Administrative & Support Services (Sector 561)					*	*	*	*	*
Art/photographic studios	*	C#	*	*					
Assembly facility - 300 or more person capacity		C#		*					
Assembly facility - less than 300 person capacity		C#		*					
Beauty and barber shops	*	*	*	*					
Churches	*	*	*	*					
Clubs and lodges, and social, fraternal, and union clubhouses	C#	C#	C#	C#					
Community center	A	A	A	A					
Day care facility	B	B	*	*					
Educational Services (Sector 61)									
Funeral homes	C#	C#		*					

<sup>26</sup> Staff is suggesting this language be moved to Section 5.6.17 since the standards section is a more appropriate place for standards.

<sup>27</sup> Section 5.6.17 contains standards that would be permit this use in EDH-5 only if it is limited in scope and part of an overall development plan.

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS									
* = PERMITTED USE    A = CLASS A SPECIAL USE    B = CLASS B SPECIAL USE    C = CONDITIONAL USE (REZONING & CLASS A SUP)									
USE TYPE	GENERAL USE ZONING DISTRICTS								
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD				
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>									
Golf driving and practice ranges		*		*					
Health Care & Social Assistance (Sector 62)					*	*	*	*	*
Health services, including doctors and dentists offices, and medical and dental laboratories	*	*	*	*					
Hotels and motels	*	C#		*	*	*	*		
Indoor theaters	*	C#		*	*	*	*		
Large day care home		B	*	*					
Laundry, dry cleaning, and shoe repair services	*	C#	*	*					
Libraries	*	C#	*	*					
Management of Companies & Enterprises (Sector 53)					*	*	*	*	*
Motor vehicle maintenance and repair (body shop)		C#		*					
Other offices and personal services; e.g., attorneys, watch and jewelry repair, computer programming and data processing, employment and travel agencies, advertising agencies, and accounting, engineering, architectural, and surveying offices	*	*	*	*					
Professional, Scientific & Technical Services (Sector 54)					*	*	*	*	*
Recreational facilities	B	*	B	*					
Repair service, electronic and appliance	C#	C#	*	*					
Research facility		*		*					
Schools, dance, art, and music	*	C#	*	*					
Schools, elementary, middle, and high	A	A	*						
Schools, vocational	C#	C#		*					
Other Services (Hillsborough EDD only)					*		*	*	*

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS									
* = PERMITTED USE    A = CLASS A SPECIAL USE    B = CLASS B SPECIAL USE    C = CONDITIONAL USE (REZONING & CLASS A SUP)									
USE TYPE	GENERAL USE ZONING DISTRICTS								
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD				
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>									
<b>TRANSPORTATION</b>									
Bus terminals and garages		C#		*					
Postal and parcel delivery services		*		*					
Rail/bus passenger shelter	*	*	*	*				*	
Surface and structure parking as principal use (When associated with a local or regional transportation goal such as mass transit or park-and-ride)		*		*				*	
Transportation and Warehousing (Sector 48, 49)									*
<b>WHOLESALE TRADE</b>									
Wholesale Trade (Sector 42)									*
Durable Goods (see listing below)									*
• Automotive parts and supplies (In an enclosed building)		*		*					
• Electrical goods		*		*					
• Furniture and home furnishings		*		*					
• Hardware, plumbing, and heating equipment and supplies		*		*					
• Lumber and other construction materials		*		*					
• Machinery, equipment, and supplies		*		*					
• Sporting, recreational, photographic, and hobby goods; toys and supplies		*		*					
Non-Durable Goods (see listing below)									
• Apparel and piece goods		*		*					
• Beer, wine, and distilled alcoholic beverages		*		*					
• Groceries and related products		*		*					

TABLE OF PERMITTED USES – ECONOMIC DEVELOPMENT DISTRICTS									
* = PERMITTED USE    A = CLASS A SPECIAL USE    B = CLASS B SPECIAL USE    C = CONDITIONAL USE (REZONING & CLASS A SUP)									
USE TYPE	GENERAL USE ZONING DISTRICTS								
	BUCKHORN EDD		ENO EDD		HILLSBOROUGH EDD				
	EDB-1	EDB-2	EDE-1	EDE-2	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
# Shall be noted on Zoning Atlas as “Zoning District” – CU (e.g., EDB-2-CU) Note: The Hillsborough EDD utilizes Sector Numbers as Defined in the North American Industry Classification System (NAICS) <sup>20</sup>									
• Paper and paper products		*		*					
• Pharmaceuticals and cosmetics		*		*					
<b>MISCELLANEOUS</b>									
Accessory uses	*	*	*	*	*	*	*	*	* <sup>28</sup>
Electric, Gas, and Liquid Fuel Transmission lines	B	B	B	B					
Elevated water storage tank (Permitted as accessory use without Special Use Permit)	B	B		B				*	*
Historic buildings for non-residential/mixed use	A	A	A	A					
Public utility stations and sub-stations, switching stations, and telephone exchanges	A	A	A	A				*	*
Radio and television transmitting and receiving towers	B	B		B					*
Solar Array – Large Facility	B	B	B	B					
Solar Array – Public Utility	A	A	A	A					
Storage and warehousing, inside building		*		*					
Storage of goods, outdoors (Accessory only and subject to screening) <sup>29</sup>		*		*					
Water and sanitary sewer pumping stations	*	*	*	*				*	*

<sup>28</sup> Accessory uses are supposed to be allowed in all zoning districts. Staff believes it was an oversight to not allow them in the EDH districts and is suggesting making this correction.

<sup>29</sup> In the amendment version the Planning Board reviewed on August 3, this language was suggested for deletion. Due to subsequent comments from the Attorney’s office, staff is suggesting the language remain as is because of concerns related to the recent Byrd v. Franklin County judicial decision. This language may be modified at a later date as staff is currently working on comprehensive amendments to the Tables of Permitted Uses to address the outcome of the referenced judicial decision.

- (e) A temporary custodial care unit shall be required to connect to water, wastewater, and electric utilities serving the principal structure on the property.
- (f) The Orange County Health Department, or the agency that provides sanitary sewer and water services, shall approve water and wastewater disposal facilities.
- (g) All applicable state and local approvals and permits shall be procured including, but not limited to, a zoning compliance permit, building permits, and health department approval.
- (h) Approval of the application shall not exceed one year. Annual renewal shall require a new application and recertification from a licensed physician stating the necessity of direct care.
- (i) Any approved temporary custodial care unit shall be removed no later than 180 days after the time the mentally or physically impaired person(s) is no longer receiving care or is in need of assistance. If the structure is needed for a different impaired person, the temporary custodial care unit may continue to be used, subject to the requirements of this Ordinance.
- (j) The caregiver shall allow inspections of the property by the County at times convenient to the caregiver, during reasonable hours, and upon prior notice for compliance purposes.
- (k) A permit for a temporary custodial care unit may be revoked by the Planning Director due to failure of the applicant to comply with any of the above provisions.

### 5.5.10 Multi-Family<sup>30</sup>

#### (A) Standards for EDH-3 and EDH-4 Zoning Districts

- (1) Multi-family uses are permitted in the EDH-3 and EDH-4 zoning districts only in accordance with the following standards:
  - (a) The multi-family use is part of an overall site plan that includes at least one other permitted Principal Use.
    - (i) The other permitted Principal Use(s) must be established prior to, or concurrent with, the multi-family use(s).
  - (b) The square footage of the structure(s), or portion of structures, to be utilized for multi-family dwellings does not exceed 25% of the total square footage of all structures included on the overall site plan.
  - (c) The square footage of the structure(s), or portion of structures, to be utilized for uses that are subject to square footage restrictions in the pertinent zoning district(s), as detailed in Article 5 of this Ordinance, does not exceed 50% of the total square footage of all structures included on the overall site plan.
    - (a) The site plan must identify the square footage of each building by type of use.
    - (b) A permitted Principal Use must be established on at least 50% of the total square footage of structures on the site.

<sup>30</sup> These standards are being proposed in order to allow for some by-right mixed-use projects in the Hillsborough EDD while ensuring the scope of the overall project is not predominantly multi-family residential. Projects that contain a greater percentage of multi-family residential could still be permitted through the MPD-CZ or CUD process.

(c) Multi-family dwellings shall not exceed 25% of the total square footage of all structures on the site.<sup>31</sup>

## SECTION 5.6: STANDARDS FOR COMMERCIAL USES

### 5.6.1 Nightclubs, Bars and Pubs

#### (A) General Standards for Evaluation

- (1) Buildings for nightclubs, bars and pubs shall not be located within 200 feet of a residence.

### 5.6.2 Massage Business

#### (A) General Standards for Evaluation

- (1) Must comply with the Ordinance for the Control of Massage and Massage Establishments
- (2) The submittal of construction plans for all existing and proposed buildings housing the massage business. The construction plans shall include floor plans and cross sections showing the proposed use of all portions of such buildings.
- (3) For existing buildings, certification by the Orange County Building Inspector that the structure(s) complies with the North Carolina Building Code and all related construction codes.

### 5.6.3 Garden Center

#### (A) General Standards for Evaluation

- (1) Outdoor display and storage of goods will be permitted.
- (2) Outdoor storage of bulk goods shall be located to the rear or side of the primary building and screened on three sides by an eight foot high opaque wall or fence.
- (3) Outdoor storage for bulk goods shall be limited to 1,500 square feet per acre of the zoning lot.

### 5.6.4 Junkyards

#### (A) Standards for Class A Special Use Permit

##### (1) Submittal Requirements –

In addition to the information required by Section 2.7, the following information shall be supplied as part of the application for approval of this use:

- (a) Detailed plans and specifications for the site screening proposed.
- (b) Description of type and number of motorized machines to be employed upon site.
- (c) Indicate on the site plan the extent of area to be used for the storage of junked or wrecked motor vehicles

##### (2) Standards for Evaluation -

- (a) The site shall be screened from adjacent property by a minimum of an eight foot high solid fence or equal, uninterrupted except for required vehicle access points.

<sup>31</sup> Attorney's office staff has suggested the replacement language in (a), (b), and (c). It accomplishes the same intent as the previously proposed language.

- (a) The amount of water anticipated to be used on a daily, weekly, monthly, and annual basis by regulated uses located on the parcel (e.g., water usage by bona fide farm uses is not required to be included);
- (b) An analysis of the amount of groundwater withdrawal considered to be safe and sustainable in the immediate vicinity; and
- (c) An analysis of whether other wells in the vicinity of the proposed use are expected to be affected by withdrawals made by the proposed use.

#### 5.6.15 Sexually Oriented Businesses

##### (A) Submittal Requirements

- (1) In addition to the site plan submittal criteria detailed within Section 2.5 of this Ordinance the applicant shall submit proof a license has been issued allowing for the operation of a sexually oriented business in accordance with Chapter 8 of the Orange County Code of Ordinances.

##### (B) Standards of Evaluation

- (1) Sexually oriented business(es) shall not be located in any building, or portion thereof, that is:
  - (a) Within 1,000 feet of an existing sexually oriented business.
  - (b) Within 1,000 feet of a:
    - (i) Residential land use including any open space established as part of the residential subdivision approval process,
    - (ii) Church and/or place of worship,
    - (iii) School (public, private, or specialty),
    - (iv) Public or private library,
    - (v) State licensed child care facility, or
    - (vi) Public park or recreational facility.
  - (c) Measurement shall be made in a straight line, without regard to the intervening structures or objects, from the nearest portion of the building or structure used as the part of the premises where a sexually oriented business is conducted to the nearest portion of a building, structure, or open space area of a use listed above.

#### 5.6.16 Retail Trade (Sectors 44, 45, ~~excluding subsector 454~~<sup>32</sup> of the North American Industry Classification System [NAICS])<sup>33</sup>

##### (A) Standards for EDH-4 and EDH-5 Zoning Districts

- (1) Retail Trade uses are permitted in the EDH-4 and EDH-5 zoning districts only in accordance with the following standards:
  - ~~(a) The retail trade use(s) is part of an overall site plan that includes at least one other permitted Principal Use.~~
  - ~~(i) The other permitted Principal Use(s) must be established prior~~

<sup>32</sup> The version of the amendments the Planning Board reviewed included this language but did not include standard (2). The language was revised based on comments made by the Attorney's office; the intent of the language is unchanged.

<sup>33</sup> These standards are being proposed in order to allow for some by-right mixed-use projects in the Hillsborough EDD while ensuring the scope of the overall project is not predominantly retail trade. Projects that contain a greater percentage of retail trade could still be permitted through the MPD-CZ or CUD process.

~~to, or concurrent with, the retail trade use(s).~~

~~(b) The square footage of structures(s), or portion of structures, to be utilized for retail trade use(s) does not exceed 25% of the total square footage of all structures included on the overall site plan.~~

~~(c) The square footage of structures(s), or portion of structures, to be utilized for uses that are subject to square footage restrictions in the pertinent zoning district(s), as detailed in Article 5 of this Ordinance, does not exceed 50% of the total square footage of all structures included on the overall site plan.~~

~~(a) The site plan must identify the square footage of each building by type of use.~~

~~(b) A permitted Principal Use must be established on at least 50% of the total square footage of structures on the site.~~

~~(c) Retail Trade uses shall not exceed 25% of the total square footage of all structures on the site.<sup>34</sup>~~

~~(2) Uses that are classified as Subsector 454 of the North American Industry Classification System [NAICS]) are prohibited in the EDH-4 and EDH-5 zoning districts.~~

#### 5.6.17 Accommodation and Food Service (Sector 72 of the North American Industry Classification System [NAICS])

##### ~~(A) Standards for EDH-2 and EDH-4 Zoning Districts<sup>35</sup>~~

~~(1) ~~Eating and drinking establishments~~ Food Services and Drinking Places<sup>36</sup> (subsector 722 of the NAICS) are not permitted within these zoning districts except as an accessory use to a hotel or motel.~~

##### ~~(B) Standards for EDH-5 Zoning District<sup>37</sup>~~

~~(1) Accommodation and Food Service uses are permitted in the EDH-5 zoning districts only in accordance with the following standards:~~

~~(a) The accommodation and food service use(s) is part of an overall site plan that includes at least one other permitted Principal Use.~~

~~(i) The other permitted Principal Use(s) must be established prior to, or concurrent with, the accommodation and food service use(s).~~

~~(b) The square footage of the structure(s), or portion of structures, to be utilized for accommodation and food service use(s) does not exceed~~

<sup>34</sup> Attorney's office staff has suggested the replacement language in (a), (b), and (c). It accomplishes the same intent as the previously proposed language.

<sup>35</sup> This restriction currently exists within the Table of Permitted Uses (Section 5.2.2). Staff has determined that the use-specific standards section is a more appropriate place for the standard. Subsequent to the Planning Board's August 3rd recommendation, the Attorney's office suggested deletion of this language regarding accessory uses because, by definition, accessory uses are allowed in all zoning classifications, provided the permitted Principal Use can demonstrate that a proposed accessory use meets the definition of accessory use in Article 10. This revised standard would continue to prohibit stand-alone food service and drinking places but would allow such uses as accessory uses to principal uses for which a food service and drinking place is a customary and ancillary use.

<sup>36</sup> Language updated to use exact term in the NAICS listing.

<sup>37</sup> These standards are being proposed in order to allow for some by-right mixed-use projects in the Hillsborough EDD while ensuring the scope of the overall project is not predominantly hotels and restaurants. Projects that contain a greater percentage of accommodation and food service uses could still be permitted through the MPD-CZ or CUD process.

25% of the total square footage of all structures included on the overall site plan.

(c) The square footage of the structures(s), or portion of structures, to be utilized for uses that are subject to square footage restrictions in the pertinent zoning district(s), as detailed in Article 5 of this Ordinance, does not exceed 50% of the total square footage of all structures included on the overall site plan.

(a) The site plan must identify the square footage of each building by type of use.

(b) A permitted Principal Use must be established on at least 50% of the total square footage of structures on the site.

(c) Accommodation and Food Service uses shall not exceed 25% of the total square footage of all structures on the site.<sup>38</sup>

## SECTION 5.7: STANDARDS FOR RECREATIONAL USES

### 5.7.1 Recreational Uses as Accessory Uses

#### (A) Residential Land Uses

In addition to the requirements contained within this Ordinance, recreational uses developed as an accessory use to a residence shall abide by the following:

##### (1) General Standards

- (a) Accessory recreational uses shall not be open to the public or serve as a recreation amenity for other lots.
- (b) Amenities, equipment, and/or facilities intended for spectators such as bleachers or public address systems shall not be permitted.
- (c) Outdoor sports field lighting, as detailed within Section 6.11, shall be prohibited.

##### (2) Specific Standards

- (a) Motor Cross and Go-Kart Tracks
  - (i) All tracks and/or paths shall be located a minimum of 100 feet from a property line.
  - (ii) A track or path shall not cross over active septic fields.
  - (iii) A Type B Land Use Buffer, as detailed in Section 6.8, shall be required around the portion of the property where the track is located.

#### (B) Non-residential Land Uses

In addition to the requirements contained within this Ordinance, recreational uses developed as an accessory use to a non-residential land use shall abide by the following:

- (1) Uses shall not constitute Recreational Facilities.

### 5.7.2 Recreational Facilities

#### (A) General Standards of Evaluation

- (1) The standards included herein shall be applied to recreational facilities as a principal use of property.

<sup>38</sup> Attorney's office staff has suggested the replacement language in (a), (b), and (c). It accomplishes the same intent as the previously proposed language.

**(C) Development Standards**

**(1) Dimensional Requirements**

- (a) There are no minimum lot sizes within the MPD-CZ district; However, the Master Plan will set forth the individual lot setbacks in accordance with the General Dimensional Requirements established herein.

TABLE 6.7.5.C: SPECIFIC STANDARDS FOR HILLSBOROUGH EDD									
ZONING DISTRICT	MINIMUM ZONING LOT		MINIMUM SETBACKS					MAXIMUM IMPERVIOUS SURFACE COVER (%)	MAXIMUM HEIGHT (FEET)
	AREA (ACRE)	WIDTH (FEET)	FRONT (FEET)	REAR (FEET)	SIDE				
					ONE SIDE (FEET)	COMBINED (FEET)	STREET (FEET)		
MPD-CZ	-	200	60	40	20	40	40	50	60

- (b) Single-family and duplex residential uses following the flexible development guidelines established in Section 7.13 of this Ordinance, may reduce the minimum setbacks by 50% and the lot width by 60%.

**(2) Internal Access**

- (a) All outparcels within the MPD-CZ district shall have internal access to the development.
- (b) All parcels shall provide for interconnectivity between parking areas if determined necessary by staff.

- (3) No drive through facilities may be constructed in this district.
- (4) Consideration of lower cost and affordable housing shall be incorporated into any mixed use development.
- (5) A justification for any deviation to development standards must state a public benefit or purpose.

**(D) Plan Approvals**

- (1) If a MPD-CZ rezoning application is approved with a Master Plan, the approval does not obviate the need to obtain a Class A Special Use Permit or site plan approval for the individual “pods”/lots shown on the Master Plan in accordance with the provisions of this Ordinance.
- (2) ~~Tracts over 2.0 acres and/or structure(s) totaling cumulatively over 20,000 square feet on one zoning lot require a Class A Special Use Permit approved in accordance with the provisions of this Ordinance. Otherwise, the site plan may be approved in accordance with Section 2.5 of this Ordinance. A Class A Special Use Permit shall be required if any nonresidential use is located within two hundred feet of a property line of an existing dwelling unit located on a lot smaller than 2 acres in size. See Section 5.3.2(C) for standards for uses requiring a Class A Special Use Permit.~~<sup>39</sup>

<sup>39</sup> In order to promote economic development opportunities in the Hillsborough EDD, Staff is suggesting deletion of language that requires a Class A Special Use Permit for projects above a certain size. However, in keeping with how the EDH general use zoning districts operate, staff is suggesting that a MPD-CZ project within the Hillsborough EDD be required to obtain a Class A Special Use Permit if any nonresidential use located within 200-feet of existing dwellings on smaller sized lots.

**Hillsborough Economic Development District**

**Existing and Proposed Zoning Districts and Purpose Statements**

<b>Existing Zoning District Name</b>	<b>Existing Purpose Statement</b>	<b>Proposed Zoning District Name</b>	<b>Proposed Purpose Statement</b>
<p>EDH-1 Economic Development Hillsborough Linear Office</p>	<p>The purpose of the Economic Development Hillsborough Linear Office (EDH-1) District is to provide locations for low to moderately intense medical, professional, administrative and government office on small to mid-sized sites in the designated Hillsborough Economic Development District.</p> <p>The district is intended to be located on the periphery of established residential areas and along major and minor thoroughfares. The district is established to provide convenient locations for offices, the size and operating characteristics of which require limited parking and which generate little traffic.</p> <p>Standards are designed so that this district may serve as a transitional land use between residential districts and higher, more intense land uses.</p>	<p>No Amendments Proposed</p>	<p>No Amendments Proposed</p>
<p>EDH-2 Economic Development Hillsborough Limited Office</p>	<p>The purpose of the Economic Development Hillsborough Limited Office (EDH-2) District is to provide locations for low intensity office uses and supporting services in the designated Hillsborough Economic Development District. The district may contain limited commercial uses within employment centers or where vehicular access is provided internally to the development.</p>	<p>No Amendments Proposed</p>	<p>No Amendments Proposed</p>
<p>EDH-3 Economic Development Hillsborough Limited Office with Residential</p>	<p>The purpose of the Economic Development Hillsborough Limited Office with Residential (EDH-3) District is to provide locations for low intensity office uses and supporting services in the designated Hillsborough Economic Development District. The district may contain low to moderate density residential uses (1-8 units per acre).</p>	<p>EDH-3 Economic Development Hillsborough Office</p>	<p>The purpose of the Economic Development Hillsborough Office (EDH-3) District is to provide locations for low to moderate intensity office uses and supporting services in the designated Hillsborough Economic Development District. The district may contain multi-family residential uses (6-12 units per acre).</p>

<b>Existing Zoning District Name</b>	<b>Existing Purpose Statement</b>	<b>Proposed Zoning District Name</b>	<b>Proposed Purpose Statement</b>
EDH-4 Economic Development Hillsborough Office	The purpose of the Economic Development Hillsborough Office (EDH-4) District is to provide locations for high intensity office uses and supporting services in the designated Hillsborough Economic Development District. The district is intended to be located on large areas and may contain limited commercial uses within employment centers.	EDH-4 Economic Development Hillsborough Office / Retail	The purpose of the Economic Development Hillsborough Office / Retail (EDH-4) District is to provide locations for high intensity office uses and supporting retail and service uses in the designated Hillsborough Economic Development District.  The district is intended to be located on large areas as part of a cohesive development plan and may contain commercial uses within employment centers.
EDH-5 Economic Development Hillsborough Office/Flex	The purpose of the Economic Development Hillsborough Office/Flex (EDH-5) District is to provide locations for a wide range of assembling, fabricating and light manufacturing activities, and such ancillary industrial activities as warehousing and distribution in the designated Hillsborough Economic Development District.  Some commercial services are also permitted accessory to industrial development provided all access is provided internally. The district is established to provide locations for industrial development which have little or no impact on adjoining properties.	EDH-5 Economic Development Hillsborough Research and Manufacturing	The purpose of the Economic Development Hillsborough Research and Manufacturing (EDH-5) District is to provide locations for a wide range of research, assembling, fabricating and light manufacturing activities, and such ancillary industrial activities as warehousing and distribution in the designated Hillsborough Economic Development District.  Some commercial services are also permitted if they are part of a cohesive development plan that is predominantly comprised of permitted non-residential uses and provided all access is provided internally. The district is established to provide locations for research and industrial development which have little or no impact on adjoining properties.

### Summary of Proposed Amendments to Table of Permitted Uses

Use Type Proposed for Amendemnt	Description of Proposed Amendment
Finance & Insurance	Add to EDH-5
Information	Add to EDH-5
Manufacturing	Add to EDH-5
Dwelling, single-family	Delete from EDH-3
Dwelling, two-family	Delete from EDH-3
Dwelling, multi-family	Add to EDH-4 (limit scope to 25% of a project, if by-right)
Temporary Use of a Residential Mobile Home	Delete from EDH-3
Retail Trade	Add to EDH-4 and EDH-5 (limit scope to 25% of a project, if by-right)
Accommodation and Food Service	Add to EDH-5 (limit scope to 25% of a project, if by-right)
Administrative & Support Services	Add to EDH-5
Health Care & Social Assistance	Add to EDH-5
Management of Companies & Enterprises	Add to EDH-5
Professional, Scientific & Technical Services	Add to EDH-5
Other Services	Add to EDH-5
Wholesale Trade	Add to EDH-5
Accessory Uses	Add to EDH-1, EDH-2, EDH-3, EDH-4, and EDH-5 (this is a “clean-up” as accessory uses are supposed to be allowed in all zoning districts)

Excerpt of Table of Permitted Uses (Section 5.2.2 of UDO)  
to show only the Hillsborough EDD Zoning Districts

Red Text = proposed for addition  
Red Strikethrough = proposed for deletion

* = PERMITTED USE	HILLSBOROUGH EDD				
USE TYPE	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
<b>CONSTRUCTION</b>					
Construction (Sector 23) (Hillsborough EDD only; all activities must be wholly within building)					*
<b>FINANCE</b>					
Finance & Insurance (Sector 52)	*	*		*	*
<b>GOVERNMENT USES</b>					
Governmental facilities and office buildings (Including solid waste collection centers)	*	*	*	*	*
Governmental protective services (Police and fire stations, rescue squads, and volunteer fire departments)	*	*	*	*	*
Parks, public and non-profit	*	*	*	*	*
Public Administration (Sector 92)					*
<b>INFORMATION</b>					
Information (Sector 51)				*	*
<b>MANUFACTURING, ASSEMBLY &amp; PROCESSING</b>					
Manufacturing (Sector 31-33) ( Hillsborough EDD, only; all activities must be wholly within building)					*
<b>RECREATION</b>					
Arts, Entertainment & Recreation (Sector 71)				*	
<b>RESIDENTIAL</b>					
Dwelling, single-family			<del>*</del> <sup>1</sup>		

<sup>1</sup> Staff is suggesting removing single-family residential and two-family (e.g., duplex) uses as permitted uses within the Hillsborough EDD. This is being suggested in order to promote lands within the EDD predominantly for non-residential uses (multi-family uses would be permitted in the indicated districts but subject to the proposed use-specific standards in Section 5.5.10 which limits the scope of the use and requires that, in order to be permitted by-right, they be part of an overall development plan that includes other permitted use(s) as the dominant use. Stand-alone multi-family development could potentially still be permitted within the Hillsborough EDD through either the MPD-CZ process or as a Conditional Use District.

Excerpt of Table of Permitted Uses (Section 5.2.2 of UDO)  
to show only the Hillsborough EDD Zoning Districts

Red Text = proposed for addition  
Red Strikethrough = proposed for deletion

* = PERMITTED USE	HILLSBOROUGH EDD				
USE TYPE	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
Dwelling, two-family			*		
Dwelling, multi-family (6-12 units per acre in the Hillsborough EDD)			*	*	
<del>Temporary mobile home (For occupancy during construction of permanent residential unit and for 30 days after issuance of Certificate of Occupancy)</del> Temporary Use of a Residential Mobile Home <sup>2</sup>			*		
<b>RETAIL</b>					
Retail Trade (Sectors 44, 45; excluding Subsector 454 Non-store retailers) <del>(Only Hillsborough EDD through Conditional Use District or MPD-CZ)</del> <sup>3</sup>				*	*
<b>SERVICES</b>					
Accommodation and Food Service (Sector 72) <del>(Eating and drinking establishments are permitted only as accessory use to hotel, or motel or restaurant; Hillsborough EDD only)</del> <sup>4</sup>		*		*	* <sup>5</sup>
Administrative & Support Services (Sector 561)	*	*	*	*	*
Health Care & Social Assistance (Sector 62)	*	*	*	*	*
Hotels and motels	*	*	*		
Indoor theaters	*	*	*		
Management of Companies & Enterprises (Sector 53)	*	*	*	*	*
Professional, Scientific & Technical Services (Sector 54)	*	*	*	*	*

<sup>2</sup> Staff is suggesting renaming this use type to be consistent with the title used in Section 5.4.4 which contains the standards for this use type. Additionally, staff suggests deleting the use from EDH-3 since only multi-family uses are suggested for EDH-3.

<sup>3</sup> Staff is suggesting that retail trade be permitted in EDH-4 and EDH-5, subject to the proposed standards in Section 5.6.16 which limit the scope of retail uses allowed by-right and requires they be part of an overall development plan that includes other permitted use(s) as the dominant use. As is currently the situation, retail trade would be permitted as a stand-alone use in the Hillsborough EDD only if a CUD or MPD-CZ is approved.

<sup>4</sup> Staff is suggesting this language be moved to Section 5.6.17 since the standards section is a more appropriate place for standards.

<sup>5</sup> Section 5.6.17 contains standards that would permit this use in EDH-5 only if it is limited in scope and part of an overall development plan.

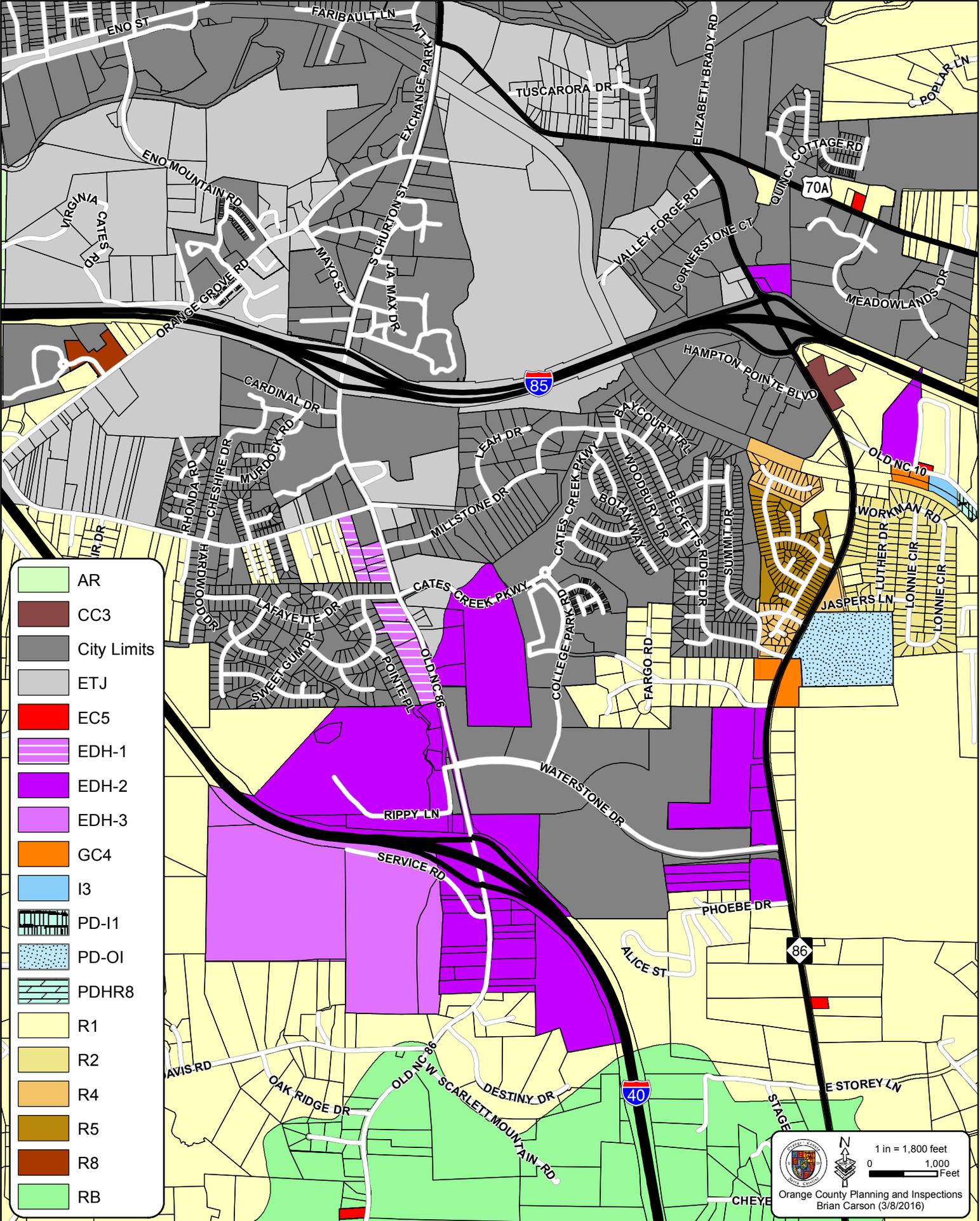
Excerpt of Table of Permitted Uses (Section 5.2.2 of UDO)  
to show only the Hillsborough EDD Zoning Districts

Red Text = proposed for addition  
Red Strikethrough = proposed for deletion

* = PERMITTED USE	HILLSBOROUGH EDD				
USE TYPE	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5
Other Services (Hillsborough EDD only)	*		*	*	*
<b>TRANSPORTATION</b>					
Rail/bus passenger shelter				*	
Surface and structure parking as principal use (When associated with a local or regional transportation goal such as mass transit or park- and-ride)				*	
Transportation and Warehousing (Sector 48, 49)					*
<b>WHOLESALE TRADE</b>					
Wholesale Trade (Sector 42)					*
Durable Goods (see listing below)					*
<b>MISCELLANEOUS</b>					
Accessory uses	*	*	*	*	* <del>6</del>
Elevated water storage tank (Permitted as accessory use without Special Use Permit)				*	*
Public utility stations and sub-stations, switching stations, and telephone exchanges				*	*
Radio and television transmitting and receiving towers					*
Water and sanitary sewer pumping stations				*	*

<sup>6</sup> Accessory uses are supposed to be allowed in all zoning districts. Staff believes it was an oversight to not allow them in the EDH districts and is suggesting making this correction.

# Attachment 5 - Current Hillsborough Economic Development District Zoning



- AR
- CC3
- City Limits
- ETJ
- EC5
- EDH-1
- EDH-2
- EDH-3
- GC4
- I3
- PD-11
- PD-OI
- PDHR8
- R1
- R2
- R4
- R5
- R8
- RB

1 in = 1,800 feet  
 0 1,000 Feet

Orange County Planning and Inspections  
 Brian Carson (3/8/2016)

Excerpt of Notes

SUMMARY NOTES  
ORANGE COUNTY PLANNING BOARD  
JULY 6, 2016  
ORDINANCE REVIEW COMMITTEE

NOTE: A quorum is not required for Ordinance Review Committee meetings.

**MEMBERS PRESENT:** Lydia Wegman-At-Large Chapel Hill Township (Chair); Tony Blake, Bingham Township Representative (Vice-Chair); Paul Guthrie, At-Large Chapel Hill Township; Maxecine Mitchell, At-Large Bingham Township; Kim Piracci, At-Large; Buddy Hartley, Little River Township Representative;

**STAFF PRESENT:** Craig Benedict, Planning Director; Tom Altieri, Current Planning Supervisor; Perdita Holtz, Planning Systems Supervisor; Ashley Moncado, Special Projects Planner; Meredith Pucci Administrative Assistant;

**AGENDA ITEM 1: CALL TO ORDER**

*Lydia Wegman called meeting to order.*

\*\*\*\*\*

**AGENDA ITEM 3: UNIFIED DEVELOPMENT ORDINANCE (UDO) TEXT AMENDMENTS – HILLSBOROUGH ECONOMIC DEVELOPMENT DISTRICT (EDD)**

To review and comment upon proposed amendments to the UDO that would modify existing regulations that pertain to the Hillsborough EDD.

**Presenter:** Perdita Holtz, Planning Systems Coordinator

*Perdita Holtz delivered presentation.*

Lydia Wegman: What is the difference between EDH-2, 3, 4 and 5?

Perdita Holtz: The types of uses that are allowed, the development standards that are on the table - lot sizes, floor area ratios, that kind of stuff. And there is an EDH-1 also, but we're not proposing any changes to that district.

*Perdita Holtz continued presentation.*

Lydia Wegman: Is there any downside, as far as not requiring a Class A SUP, for people who live near it?

Perdita Holtz: Well there could be, it depends on a person's point-of-view. As you know the Special Use Permit (SUP) process is pretty involved and when people find out that they need to hire an attorney to represent them they often have a problem with that.

Craig Benedict: Perdita, is the EDH-1, which we're not suggesting to change, closer to the residential areas now?

Perdita Holtz: I don't think that provision is in EDH-1 but I'm not 100% sure.

Paul Guthrie: The area that we're talking about borders the interstate, at least South side, and one of the things that highways with that kind of traffic and in that type of terrain have a tendency to do is have lower air quality. Is there any consideration in any of this in the permitting process check through that what proposes to be built there will not aggravate the air quality standards in the area surrounding?

Perdita Holtz: There are performance standards in Article 6 of the UDO and air quality standards are one of the performance standards that projects have to meet. So they would still have to meet those.

56 *Perdita Holtz continued presentation.*

57  
58 Tony Blake: Is there a distinction between wholesale and retail?

59  
60 Perdita Holtz: Yes.

61  
62 Tony Blake: Is there a reason why wholesale is not included in the retail section here?

63  
64 Perdita Holtz: It's not included in the retail section because wholesale is a completely different use type. The Hillsborough EDD uses what's called NAICS numbers to classify uses, and that's something that was done quite some time ago now.

65  
66  
67  
68 Tony Blake: I was just wondering why wholesale was excluded from EDH-4 and 5.

69  
70 Perdita Holtz: Wholesale is on page 38 of the packet, it is being proposed for EDH-5.

71  
72 *Perdita Holtz continued presentation.*

73  
74 Craig Benedict: Just to add on, one of the things mentioned earlier, a discussion that we planned to bring public water and sewer under the interstate and those monies for that come from Article 46 sales tax which is just allocated for economic development purposes. So, part of what we're doing here is to set up a land use program for, primarily, non-residential uses so when we use the money for public water or sewer it matches that. We don't want to spend economic development monies for tax base and jobs and have it turned to single family residential which, in some cases, the way the plan is now may allow that. We're being a little bit more prescriptive, we know Hillsborough has recently approved some large residential projects within their jurisdiction so it's not like we're excluding residential, but in an area with interstate access and visibility we're priming it for economic development uses.

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81  
82  
83 Tony Blake: Is there a requirement for the property owners to connect to this water and sewer or is it just being kind of laid in there?

84  
85  
86 Craig Benedict: Yeah, it's just going to be laid in there. We're not going to touch every parcel that's in there. We're just going to get it under the interstate, which would take a developer a year and a half to two years and when we show a piece of property on the south side of the interstate they say, "Where's the sewer?" and just getting it to the south side and having somebody be able to tie into that with their own sewer extension might take four to six months - the time it would take them to build the building.

87  
88  
89  
90  
91 Tony Blake: Are you planning when you wrote this sewer in to run fiber optics and stuff?

92  
93  
94 Craig Benedict: Presently not.

95  
96 Lydia Wegman: And this is all outside of the rural buffer, right?

97  
98 Perdita Holtz: Yes. It's all within the primary service area for water and sewer.

99  
100 Lydia Wegman: Is there a percentage like no more than 25% could be multi-family?

101  
102 Perdita Holtz: Yes.

103  
104 *Perdita Holtz continued presentation.*

105  
106 Tony Blake: So that's the plan, to extend the service road or come off of that service road somewhere?

107  
108 Perdita Holtz: Yes, and likely improve the service road.

109  
110 Tony Blake: Have you had any contact with the people around this area about the re-zoning?

111  
112 Perdita Holtz: We are sending out notices next Monday and there's going to be a public information meeting on the  
113 26<sup>th</sup> of this month.  
114  
115 Craig Benedict: Also, we've been in contact with the 166-acre parcel, the present zoning on that now is being  
116 marketed so they're familiar with our process to change the zoning. These zoning amendments would facilitate a  
117 better development program.  
118  
119 Perdita Holtz: So the next steps I just mentioned we're planning on holding the public information meeting on July  
120 26<sup>th</sup> 6:00-7:30 in this room. That meeting will cover the three related topics, which are the joint land use plan  
121 amendments that Tom's going to talk about; these text amendments; and the re-zoning that I've just showed you, I  
122 think there's six parcels total. We are doing mailed notices. It's going to be a combined notice, for both the public  
123 information meeting and the August Planning Board meeting to the affected parcels and the property within 1,000  
124 feet of those parcels that are proposed for re-zoning and we're also going to be posting signs in the affected area.  
125  
126 Maxecine Mitchell: That's good because I just met someone up near the Tanger Mall because they thought they were  
127 on the other side of 40/85 and they didn't attend the information meeting and now their property is commercial but  
128 they don't have water and sewer over there and they didn't understand all that, so please make sure the people  
129 understand that they might want to come and find out what's going on.  
130  
131 Perdita Holtz: I mentioned that these 3 topics are scheduled for the Planning Board meeting next month on August  
132 3<sup>rd</sup> for recommendation and the quarterly public hearing is scheduled for September 12<sup>th</sup>.  
133  
134 Tony Blake: Two more questions. I'm reading on the DOT site that they're planning on widening I-40 from the hill on  
135 up; are you aware of that and will they need more land?  
136  
137 Perdita Holtz: I believe they already have right of way for everything.  
138  
139 Tony Blake: Is Hillsborough planning to annex this area?  
140  
141 Perdita Holtz: Not anytime soon because it would have to be a voluntary annexation, the property owner would have  
142 to apply for annexation.  
143  
144 Tony Blake: Also one more question; I've noticed that Alamance County, Mebane have created a free trade zone, or  
145 a foreign trade zone or something like that. Is there a provision in this to do that sort of trade zone if a foreign  
146 company wanted to locate here?  
147  
148 Craig Benedict: We have no special provisions within our zoning code for that. That is not a zoning issue; that is a  
149 policy and tax issue... For example, if a developer came in and wanted to do an industrial park then that would be  
150 part of a tax incentive program.  
151  
152 Kim Piracci: When you were talking about the 20,000 square foot thing and you were going to get rid of that and it  
153 was difficult, is that going away? Is it being moved to 40,000?  
154  
155 Perdita Holtz: Well, the way zoning works is that you have legislative decisions where you have by-right things and  
156 then you have quasi-judicial decisions. SUPs are quasi-judicial decisions and you haven't experienced one yet but  
157 you will next month. They are fairly complicated and there are a lot of limitations on who can say what and when and  
158 things like this. And there are lawyers on all sides. We are suggesting doing away with the SUP requirement for any  
159 type of developments on two acre or larger lots. It would still be subject to all of the other criteria that are in the UDO,  
160 which is fairly extensive.  
161  
162 Tony Blake: But only in these zones, right?  
163  
164 Perdita Holtz: Right.  
165

166 Craig Benedict: Just to add, SUP's are typically associated with certain uses that, based on their nature, need  
167 additional review. So let's say, an asphalt mixing plant will still be a SUP. The criteria that we had in here was unique,  
168 it was based on an acre size and not on the use and was based on the square footage of a building size. Which a  
169 20,000 square foot medical building probably doesn't have the same scrutiny that a 20,000 square foot different use.  
170 But if it is a 20,000 corporate asphalt mixing plant it still has to go through the SUP process. So we're getting rid of  
171 two criteria that were based on acreage and square footage, which are not your normal SUP criteria. So we're going  
172 back to more of a conventional standardization of why you have a special use, and that's usually because the  
173 operation might have glare, noise, a lot of traffic, that type of stuff will put you in a SUP category.  
174

175 Lydia Wegman: Just for the record, I'm not comfortable with the elimination of the Class A SUP. It still makes me  
176 uncomfortable... So I would just suggest that you provide a little further explanation about why that makes sense. I  
177 understand why it makes sense from a development standpoint but why it's not going to be harmful.  
178

179 Perdita Holtz: Well these areas that would be zoned, EDH-3, 4 and 5 are not near residences.  
180

181 Lydia Wegman: Ok.  
182

183 Craig Benedict: The two amendments she was talking about with the zoning, some are called text amendments and  
184 that's everything that she's doing with EDH-3 and changes the uses and the floor area ratios; all those are  
185 considered text amendments. And the other type of zoning amendment changes is a map amendment. That's where  
186 you're actually going from EDH-2 and making it EDH-3. So that's how they're separate.  
187

188 \*\*\*\*\*

Excerpt of Draft Minutes for  
the three related Hillsborough  
EDD items

**MINUTES**  
**ORANGE COUNTY PLANNING BOARD**  
**AUGUST 3, 2016**  
**REGULAR MEETING**

**MEMBERS PRESENT:** Lydia Wegman (Chair), Cheeks Township Representative; Paul Guthrie, At-Large Chapel Hill Township; Buddy Hartley, Little River Township Representative; Tony Blake (Vice-Chair), Bingham Township Representative; Lisa Stuckey, Chapel Hill Township Representative; Patricia Roberts, Cheeks Township Representative; Laura Nicholson, Eno Township Representative; Kim Piracci, At-Large;

**MEMBERS ABSENT:** Andrea Rohrbacher, At-Large Chapel Hill Township; Maxecine Mitchell, At-Large Bingham Township;

**STAFF PRESENT:** Craig Benedict, Planning Director; Michael Harvey, Current Planning Supervisor; Perdita Holtz, Planning Systems Coordinator; Ashley Moncado, Special Projects Planner; Patrick Mallett, Planner II; Rachel McCook, Planner I; Molly Boyle, Planning Technician; Meredith Pucci, Administrative Assistant II.

**OTHERS PRESENT:** Sharon Mace; Dan Way; Austin Seifts; Annie Seifts; Nathan Robinson; Chris Cole; Franklin Garland; Jimmy Garland; Javier Latre Gorge; George Horton; Jim Parker.

**AGENDA ITEM 1: CALL TO ORDER AND ROLL CALL**

Tony Blake called the meeting to order.

**AGENDA ITEM 2: INFORMATIONAL ITEMS**  
a) Planning Calendar for August and September

Lydia Wegman arrived and assumed chair duties.

\*\*\*\*\*

**Agenda Item 8: Town of Hillsborough/ Orange County Central Orange Coordinated Area Land Use Plan Amendment** To make a recommendation to the BOCC on a Land Use Plan amendment involving five parcels south of Interstate 40 in the vicinity of Old Highway 86.

- Four parcels totaling approximately 166.2 acres are proposed to be changed from "Suburban Office Complex" to "Employment".
- One parcel totaling 34.58 acres is proposed to be changed from "Mixed Residential Neighborhood" to "Suburban Office Complex".

This item is scheduled for the September 12, 2016 quarterly public hearing.  
**Presenter: Perdita Holtz, Planning Systems Coordinator**

*Perdita Holtz presented.*

Lisa Stuckey: What is on these parcels now?

Perdita Holtz: They're undeveloped.

Patricia Roberts: As an interstate exit, is there any plan for gas stations?

Perdita Holtz: That's not really envisioned with these parcels. That's not to say in the future something couldn't happen on other parcels.

Craig Benedict: If you could show the map, there's some areas that were not effecting change that would allow those types is uses.

Patricia Roberts: What is the pink on the map?

Perdita Holtz: It's neighborhood mixed use.

Patricia Roberts: So if somebody wanted to put a gas station they would have to get a SUP?

Perdita Holtz: It would depend on the zoning and the zoning of those parcels are EDH-2. So I would need to look up and see.

Lisa Stuckey: Would it be allowed in employment?

Perdita Holtz: Well the land use classification is just the general thing; it's the zoning that's going to allow or disallow a particular use.

Paul Guthrie: Where is the water line going?

Perdita Holtz: The sewer line is currently in the vicinity of Cornwallis Hills and it would be coming down through here, under the interstate where the sewer line is. The water line actually exists on Old 86 right now.

Paul Guthrie: And the sewer line, I assume, will be using the outflow structure that serves the hospital as well?

Craig Benedict: That's correct. When the hospital was built the sewer came closer to the parcels to the south. Part of our capital improvement initiative is to assist in economic development in this area by bringing it underneath the interstate, which is a high-end effort. We want to ensure that before we bring utilities to the south we'll be in agreement with Hillsborough that says we provide these economic development infrastructure incentives that we will have primarily non-residential uses that have tax based employment.

Paul Guthrie: And if I remember correct, the elevations are such that at least until you get to Old 86 you would have flow into the Hillsborough system for sewers, correct?

Craig Benedict: That's correct. The sewer shed is where it flows downhill and there's a ridgeline roughly at Davis Road that flows north all the way into their system. So there's a water and sewer boundary map that guides a lot of our decisions about where you can more easily put public water/sewer versus not, and it shows this area as going towards Hillsborough.

Paul Guthrie: I assume that Hillsborough has the water pumping capacity for drinking water to also go to that same area?

Craig Benedict: Yes, they do. And part of the inter-local agreement will be somewhat of a reservation of water and sewer capacity for this area, to ensure that if we escorted economic development and they'll say "how much water does the water and sewer purveyor treatment operate?" and we have to have a good idea of what it is. Even with Hillsborough there are limitations. There's sometimes users that have a very large amount of water usage and sewage and we have to gauge. So we do have that in mind, that there is capacity for treatment and water.

Paul Guthrie: One last question. Existing owners of residential properties- when and if those water systems are in place would they be eligible to connect?

Craig Benedict: They would be able to. The design for the system to bring it south of the interstate would be enough to accommodate all the growth in that area.

Lydia Wegman: Okay, let me turn to the public.

Chris Cole (member of the public): My name's Chris Cole, I live right about there. A couple of things; First of all, I wanted to make you aware that according to the town officials there is no plan to extend water and sewer south of 40 at this point. Of course, everything's subject to change but there is no plan in place. Second, if you could back up one slide... Employment, and this is in your packets, includes manufacturing. I just wanted to point out a couple of items that would be considered permissible, if this were zoned for manufacturing. Rendering a new by-product processing, poultry processing, seafood product, preparation and packaging, leather and hide tanning and finishing, asphalt paving mixture and block manufacturing, chemical manufacturing, explosives manufacturing, fertilizer manufacturing. That's all the kinds of things that would be permissible changing this zoning to employment. And, a lot of stuff that would be really good but, as a person who lives here I'm worried about my water and I'm worried about my air. Thank you.

Franklin Garland - Garland Truffles (member of the public): I pretty much expressed my opinion last week when I was here. I have a worse problem than him. I received a letter from you guys that said that I wasn't going to be affected somehow. And I was told that's a legal term. How am I not going to be affected? Now, when Cedar Ridge High School went in there I was told I'm not going to be affected. I'm affected. You should see the traffic on Orange Grove now. When I-40 was put in there, I was told I'm not going to be affected. I have trucks rolling down there all night long, motorcycles and everything. So there's not such thing as not being affected. It's a legal term, so I don't understand how I'm not going to be affected in this. I don't particularly want --- plant down there. I mean someone can do that. Who exactly wants this property? There's wet lines down there. A good portion of this is in a flood plain. So somebody's influencing somebody in this planning commission out here, to say we want to put something in that place. Somebody has something in mind. I don't know who it is. I know when the transfer facility was being placed out there the study that was done at the time said the number one prime location for the transfer facility, right here, that was the number one site until we spoke up and said that's in the flood plain. I mean how can somebody who got paid 5 million dollars to do research on this and find this a number one site for this. That's possibly the worst environmental site to put a garbage facility. Because somebody put a garbage dump next to my property. On top of it, it's in the flood plain. That's the first thing I want to say, is this even suitable? So someone obviously wants this property for commercial development. Now, let me clarify something; I have mixed feelings about this. I live next door. I'm a farmer. I have an orchard, a successful nursery out there. I'm a resident. It's going to affect this residence, a lot. At the same time you guys decide to approve this, my land value goes up. I'm on prime land. The whole property... if I want to get out of here. I've built my own house, I live there, I put up the whole farm and a whole industry in this country. That gets affected by turning this into a manufacturing facility. Which is exactly where it's going, it's not offices that are going to go there. There's somebody that wants to put manufacturing in there. Otherwise, they wouldn't change it. And I would really like to know who it is. I find it very disturbing. That's going to change my taxes, there's going to be water and sewer there, which I could care less. I don't want city water. There are a lot of people on the opposite side of this out here. And again, mixed feelings. You're going to run a water line there because it's going to have to go up I-40 and I'm going to have to be paying city taxes, which you guys want that. I'm on the outskirts of the city; I don't want to do that. That's why I live there to begin with. That's why I bought rural property when I did, back in 1975. I like my privacy. I don't want some plant or some office building next to me. Now, offer me the right amount of money then go right to it. So, I'm not saying but... this is something you guys need to take into consideration. Somebody is pushing for this, and who is that? This doesn't just happen. It's not a convenient place to develop. It doesn't have water, it doesn't have sewer, it has to go through the interstate to do that, it's limited capacity to get to that point, it's not going to come for free, and on top of that a good deal of it is wetland. It's on a flood plain. To me that's saying something else is going on around here. And somebody has self-interest in this. There's really no need for it out there. There's better use to it. Make it protected wilderness. Because that's what it is right now. There could be a better application. Or a little park or something. And I know that there's good economic development out there but it's really poor land.

Nathan Robinson- (member of the public): My name's Nathan Robinson, and we have a property that's located just here on the south, right by Davis Road. So it's about a 13-acre parcel and I understand the purpose of what this

proposed amendment is intended to do if they extend the sewer and water down there. I recognize that the bigger picture is really to make these southern quadrants on the south of 40 generate more capacity and make sure there's a water tap. I think it's a good idea. I don't know if you have a map anywhere where the rural buffer zone is; do you have that map?... So if you come off of 40, obviously those are the parcels you're talking about, this is the Davis Road and, I think you two gentlemen were speaking back and forth, the flow of the watershed this way goes south and this way goes north. These properties right here. The conversations about the gas stations were relevant because I think it seems if there was a 10-year transition zone the use of these properties is intended not to be residential anymore. I think that was said in the beginning, that there are parts of this area that are envisioned to be non-residential. As a result what's going to happen, and what I would really encourage you guys to participate in, is you're going to be left with some orphaned properties along the bottom here. And these orphaned properties, currently, are zoned R1. And those R1 properties have water coming already and it makes sense to fill out this quadrant to encompass those types of uses. It makes sense from the watershed area to include those into the zoning amendment. If that was to be the purpose... I did a little bit of learning about this and the learning I understood is it typically when you have these type of zonings and bunt up against a rural buffer zone that they are all included in one same use that was your solution for --- otherwise you'd have a manufacturing type usage that bunts in --- residential, and it just messes up uses of property. So, I think my objective is to make sure that the uses of these properties down here, I know that we have other neighbors who are along here and I know they've been approached for their property to be purchased for a large roadway to come through here. So I know there is the development of these properties and it isn't going to be without some flow of traffic for commercial uses. I think if you do look down the road 10 years from now, I think then you guys are thinking right but this area and these quadrants are going to be commercial and so I request to you guys to include these properties here and don't orphan these off. Particularly as they naturally flow into the economic development zone that you guys are intending to create here.

Lydia Wegman: So you're asking for an expansion?

Nathan Robinson: I would say to extend it down here, naturally. So that as the rural buffer doesn't end, that the use of this property flows through without creating these little R1's right in the middle.

Lydia Wegman: Ok, thank you.

Perdita Holtz: Including the area between the EDD and Rural Buffer wouldn't be possible with this amendment because the Water and Sewer Planning, Boundary, and Management Agreement would have to be amended to designate the area as primary service area, but it's something we can keep in mind for the future.

Craig Benedict: Chair, just what we can do for the audience and for the Board, all these questions are being written down and we'll have our thoughts moving forward to both the Commissioners for something such as suggested we would engage Hillsborough. It's part of their growth area. And as Perdita mentioned, the transition area that we are talking about; the transition means going from a rural to an urban transition. Where the public water and sewer go and where it cannot go. So, we'll make recommendations as we are starting to see the growth potential with the hospital, bringing sewer closer to this area. Maybe it is time to re-engage with Hillsborough again. It's been 12 plus years since we designated development to say what's happening to the south and our uses and areas. So we will be answering all the questions that are coming up tonight.... We can give some brief answers tonight but as an outcome of what we're hearing tonight if it directly affects the amendments we'll of course make some recommendations. Some may come back to you; some may be for future projects.

Lydia Wegman: Well, that's what I'm wondering. In light of what we've heard, you're still asking for us to make a recommendation to the BOCC tonight even though we won't have the answers to some of these questions?

Craig Benedict: Once we've gone through all of them I can give you the ones that we can answer now.

Lydia Wegman: Does anyone else from the public want to speak this evening?

Tony Blake: I have some more questions... Who is driving the rezoning here? Is this a joint effort by Hillsborough and the County?

Perdita Holtz: The Land Use plan is a joint Hillsborough-Orange County plan.

Tony Blake: But there's no specific property owner that's saying, I want this re-zoning?

Perdita Holtz: Right, this is a County initiated rezoning.

Tony Blake: And Brantley doesn't have anybody in the hopper for development or anything like that?

Perdita Holtz: We have been talking about rezoning these parcels for many months. As you know this isn't something that just happens in a month in Orange County. And I do believe that once people found out that land is available and the County might be interested that that has generated interest among people. And people are going out and seeing what's possible.

Tony Blake: I agree, I just wanted to clear the air and make sure there wasn't a horse or a cart that was out of place here. I just wanted to make sure that we fully understood from the Planning Board perspective.

Perdita Holtz: Our Economic Development staff has interest in marketing this property.

Franklin Garland: It's a really odd place.. Like, why this? I can't understand it. I'm just curious what initiated this particular parcel?

Tony Blake: Well I spoke to Steve Brantley about this sort of thing a year or two ago, back when the tax was put in for economic development and asked him what were the attractive places, and he mentioned these places, a while ago. I just wanted to make sure that my understanding hadn't changed.

Chris Cole: So no one has expressed interest in having these rezoned, outside the County? Has anyone expressed an interest in having these rezoned outside the County staff?

Perdita Holtz: Not that I'm aware of.

Lisa Stuckey: I have a question. Would you take the little light and show us where the Hillsborough EDD is, and it's my understanding it's been there since at least the early 80's. I mean this is not a new initiative, this is something that's been designated for a while.

Perdita Holtz: The Hillsborough EDD, it's kind of a scattered thing. It's not as cohesive as the other two that are all contiguous but it's along Old 86 here, it's all the purple lands. Waterstone used to be County EDD land, and then Hillsborough annexed it so now it's part of Hillsborough and it's shown as gray. And then there's some parcels up here near the Wal-Mart, and there's a couple parcels here zoned EDH2 and then also along New 86, in the vicinity of Waterstone.

Lisa Stuckey: So since at least 1994 this has been clearly identified as economic development land, prior to that it was Commercial Transition.

Perdita Holtz: Yes, there have been no changes in the boundaries of the EDDs.

Lisa Stuckey: So if people had investigated they would have known that Hillsborough and the County have been envisioning this land for economic development sometime in the future.

Perdita Holtz: That would be correct.

Franklin Garland: The question here is if people had investigated, not if they would have been notified. No one was notified. I've been there since 1975. No one was notified. And that would make more sense. Let me explain something, you say I'm not affected because --- and I got notified because I'm within 1,000 feet. Well 1,000 feet I can walk back and forth ten times in this room and that's 1,000 feet. So I am affected. But I wasn't notified.

Lisa Stuckey: My question was simply whether this land had been identified for Economic Development for many decades.

Craig Benedict: On both the Orange County land use map and on our zoning map and also on the Hillsborough-County joint land use map we do note where there are flood zones and we restrict development in there. So you can see that, so yes, part of that 160 acres is encumbered by a flood plain and we recognize that and no development can occur there. But there are other lands that would be available.

Perdita Holtz: I'm wondering if it might be helpful since these 3 items are inter-related to go on and do the presentation on the second and third items because it might answer some of the questions and then we'll wait to act on each of them until after the presentations. Would that be helpful?

Lydia Wegman: Yes, I do. Thank you.

**MOTION** [later in the evening, after all three related items had been presented] by Lydia Wegman. Seconded by Lisa Stuckey.

**VOTE: 7-1 OPPOSED- GUTHRIE**

Paul Guthrie: I am uncertain, which is why I voted no.

Lydia Wegman: I am voting in favor because I think there is a benefit to diversify land use.

**Agenda Item 9:**        **Unified Development Ordinance (UDO) Text Amendment:** To make a recommendation to the BOCC on government-initiated amendments to the text of the UDO that would modify existing regulations that pertain to the Hillsborough Economic Development District. This item is scheduled for the September 12, 2016 quarterly public hearing  
**Presenter:** Perdita Holtz, Planning Systems Coordinator

*Perdita Holtz presented item.*

Lisa Stuckey: So you're going to allow apartments but not single family or duplexes? Why?

Perdita Holtz: Well because the purpose of the EDDs is to promote non-residential uses. Multi family, although it is residential, it is actually taxed differently than single family residential. It's considered more of a commercial use so there is some diversification of the tax base that occurs with multi family.

Lisa Stuckey: I think I read some place that there is a worry that if you permit single family that the land will actually get eaten up by that. That there's a tendency for subdivisions.

Craig Benedict: Part of the Waterstone development, it's called planned development, part of the County plan was more non-residential and over the years the market, because of the recession, the non-residential component was more muted and after the recession faster residential growth comes back so some conversions were made there. So residential is easier and so it's good that these areas were preserved. EDH3 now allows single family. We had a proposal, some of the Board members may remember, that some of these lands were going to be part of Hillsborough's extra territorial jurisdiction. Mainly the ones north of I-40. And they were going to afix their zoning category to it and they were going to consciously say which areas were going to be residential and non-residential. They didn't do that because part of the cooperative agreement didn't go forward. That's why we're here 2 years later saying, well we need to put a zoning category on it that fits exactly, as close to possible, what the intent of our

Economic Development District. Mixed use as we mentioned is supportive of non-residential, jobs, employment, multi-family does have a good mix. But it's true, single family chews up more land and creates more fiscal impacts and costs than the non-residential.

Lisa Stuckey: And I think the sort of philosophical thing about this sort of siloing residential versus non, that people are separated from their jobs and they have to commute and that has a bad impact on our quality of life when you pull things apart like that. That comes with it's own set of problems.

Craig Benedict: One other thing that was mentioned a little bit earlier was how these categories and things evolve over time about how you use zoning. And zoning 10, 20, 30 years ago was very siloed. This is manufacturing. This is retail. This is office. And you saw from our amendments that went through the last 3 or 4 months that we have these categories such as office, research, and manufacturing. They put them all in one building. This EDH4 and EDH5 that we're looking at is one of those combined districts where somebody can come in and do office and some assembly and some R&D and we're also suggesting some retail so that if you have the jobs they don't have to go too far to go to a restaurant or bank. And really even thought this will probably be developed in these little zones, this whole area of all 4 quadrants of the interchange is going to be mixed use. We don't need to mix it completely on every parcel but somebody living in a multi family on the south side can easily get over to the hospital if they were working there.

Tony Blake: This is why RTP's putting in all the residential.

Craig Benedict: That's correct.

Lisa Stuckey: That's the flip of it.

Craig Benedict: That's the conventional zoning ideas back in the 60s.

Tony Blake: So just to talk directly to the first gentleman's concerns, this would not preclude a Gorilla Manufacturing or an asphalt plant or anything like that. There are other components to the UDO that would address those. But this particular zone would not prevent it.

Perdita Holtz: You mean the EDH5 zone?

Tony Blake: Yes.

Perdita Holtz: They could theoretically be located in EDH5, but practically, with all the development standards that the UDO contains, it's not likely.

Craig Benedict: This isn't in the UDO but this is in the practice that all cities and counties are doing in the region. There's demand for quality growth and our Commissioners and Economic Development Department targets industries and if it's the appropriate industries that give us the tax base and the high paying jobs, there's incentives. Jobs or businesses that are not fulfilling that targeted market are not likely to get incentives and therefore the pressure for them to locate here is lessened. Meaning that some of those higher intensity uses that are listed in that manufacturing category, we're not going to be escorting those in with incentive packages.

Lisa Stuckey: There's also small businesses that it seems to me that some of what you were just talking about would really... that there's not much land that's available right now to do this kind of construction in Orange County, really.

Craig Benedict: That's correct. There are not too many interchanges and everyone that we have, besides the one in North Chapel Hill, New Hope Church interchange- nothing can happen there. And this is within proximity of our University even. And there are other Economic Development zones in Efland and Buckhorn. Very prime. The developers and businesses that are looking for properties in Orange County, they are surprised that there's still available land at some of these interchanges. Why hasn't it developed in the past? There hasn't been good zoning

there or infrastructure. And so we are trying to prepare the appropriate places where there's good transportation access also.

Chris Cole: Can I make one comment? Lisa... She raises the fact that there are not many opportunities to put a manufacturing facility in Orange County, and that's true. And I'd like to point out that businesses are aware of that too and sometimes they go out and pay a premium... 12 years ago, maybe, next to Euro Sport, someone purchased an option on land to put an asphalt plant next door to them. It cost the town of Hillsborough \$300,000 to make them go away. They supposedly weren't allowed to do that there either.

Craig Benedict: We're familiar with the lawsuit.

Tony Blake: But that, I believe, was addressed in the zoning. There was a hole in the zoning that allowed that to happen. If my understanding... But I believe that's been closed since.

*Perdita Holtz continued presentation.*

**MOTION** [later in the evening, after all three related items had been presented] by Buddy Hartley to approve the Statement of Consistency. Seconded by Tony Blake.

**VOTE: 7-1 OPPOSED- GUTHRIE**

**MOTION** [later in the evening, after all three related items had been presented] by Buddy Hartley to approve the amendment package. Seconded by Laura Nicholson.

**VOTE: 7-1 OPPOSED- GUTHRIE**

*Paul Guthrie opposed because he is uncertain.*

**Agenda Item 10: Zoning Atlas Amendment-** To make a recommendation to the BOCC on government-initiated amendments to the Zoning Atlas that would rezone:

- Four parcels totaling approximately 166.2 acres and 17.05 acres of Interstate right-of-way from EDH-3 (Economic Development Hillsborough Limited Office with Residential [current name]) to EDH-5 (Economic Development Hillsborough Research and manufacturing [proposed name]). The parcels are located immediately south of Interstate 40 and west of Old Highway 86.
- One parcel totaling 34.58 acres and 8.92 acres of Interstate right-of-way from EDH-2 (Economic Development Hillsborough Limited Office) to EDH-4 (Economic Development Hillsborough Office / Retail [proposed name]). The parcel is located immediately south of Interstate 40 and east of Old Highway 86.

This item is scheduled for the September 12, 2016 quarterly public hearing.

**Presenter:** Perdita Holtz, Planning Systems Coordinator

Perdita Holtz presented.

Nathan Robinson (member of the public): In terms of the recognition that's coming for those areas, they're existing residential now, they come down just south on Old 86; would there be a way to include the zoning that needs to be consistent with this action so that this process doesn't have to be repeated in the future?

Perdita Holtz: There is not a way to include it at this time. And we've mentioned to you about the water and sewer boundary agreement that in order to be 10 year transition area the water and sewer boundary agreement would need to be revised, the County's land use plan would need to be revised, and then ultimately zoning would need to be applied. And the thing that would need to happen first would be water and sewer management boundary agreement adjustments. And that requires the approval of the five signatory parties.

Craig Benedict: And what we do if there's comments that come from the public, in the future public hearing on September 12<sup>th</sup> the Commissioners can say, " Craig and Staff, can you provide a report about how this would be

accomplished". It doesn't mean they'd want us to proceed or not, and to come up with what departments are involved, what maps have to change, and we give that back to them on what we call a future amendment outline. An outline of how'd we'd get it done and that we involved Hillsborough, etcetera. And then we bring that back to them and the public's available to talk at those meetings, also. And they say please proceed or not proceed. It is an overlapping, multi layer process, as Perdita said.

Perdita Holtz: What happens here does get presented at the public hearing, and the Minutes for this meeting are included, so the BOCC will be aware that that's something that you brought up.

Nathan Robinson: Okay, because we literally just bought the property 6 months ago. We literally were playing with the plans to put single-family residences here. And just for the sake of everyone else, we have spoken with Perdita and Craig. So we had to modify our plans based on what the wave of the future is. We get that, and that's cool but as we modify we don't want to get stuck between a hard decisions if say this is going to stay R1 forever. Because then we feel like we're going to get stuck with our only use being our one usage, but that's not what the whole quadrant is tending toward.

Lydia Wegman: Thank you.

Franklin Garland: I have a quick question. How hard is it to get land use changed? I mean, my farm is for sale. But I've been approached by people that want it for commercial property.

Perdita Holtz: It requires the same type of process that we're going through now. If you wanted to do it as an individual...

Franklin Garland: But the same thing as Nathan's, it's like being between a rock and a hard place.

Perdita Holtz: Any property owner can apply to amend any of these documents. The land use plan, the zoning map, the UDO. In order to have the County do a County initiated action it's something that we can potentially talk about. I can tell you that a County initiated amendment will take more than a year.

Lydia Wegman: Thank you. Do you have any discussion?

Paul Guthrie: I'm still unsure exactly. I would comment that I think if we can avoid stacking so many of these things on a meeting at one time, I understand there were reasons for that, it would be helpful. After 200 pages of material of which was changed at least twice and reading it, coming here and then having 2 hours of discussion, I still feel uncomfortable. And I'm not sure exactly, when you ask for my vote, I'm not sure what I'm going to do. It's not that I'm for or against, I'm just not sure in my own mind exactly what the best option is given all of the variables that are involved. So I just want to state that.

Kim Piracci: I'm just clarifying a question, all these changes are being driven by the desire to increase the tax base; is that correct?

Perdita Holtz: They're being pursued to diversify the tax base, not necessarily increase it.

Tony Blake: In other words, to have the County less reliant on residential housing taxes, and have a little more diversity in the base. In case there's changes in the economy you have less of an impact.

Craig Benedict: And the underlying analysis is non-residential property pays more taxes than it costs in services. So there's a little bonus there. And residential, in most cases, costs more than what we get in tax, unless it's a real expensive house. So Orange County is overly reliant on their residential property owners to provide those services that everybody loves. And that's for schools, that's for social services and health services. So our comprehensive plan which is how to promote growth in the right areas and match the uses to their locations. This has been for 40 years, an area at an interchange. We knew that it was coming that we needed to preserve and promote it for primarily non-residential uses. That's why one of the recommendations here was to bring down the single family

potential since it's happening everywhere else, that there are limited areas that are prime, and interest from the non-residential development sector that they're looking for. And they've looked at interchanges. They look at visibility on the interstate and interchange and infrastructure. It wasn't until we got that quarter sales tax, part of it going to schools, part of it going to promote economic development, that we start putting infrastructure out there, so what prompts this whole process is there's been a lot of work done from Efland back to Mebane with infrastructure, we have something on the edge of Durham that's underway, and this has been the last area. And what has slowed us down a little bit was not wanting to put a million dollars of infrastructure in and have it turn to residential. Residential now is in EDH3 is by right. There's been some interest in the development community to do something out there. They may use EDH3 or 4 or 5, or they may come in with a master plan development which would be an additional zoning and they might have to go through this process again. But at least this will be a guide of what can be done out there. And if they go through that conditional zoning district process there's public meetings, what uses exactly go out there, so the 41 pages that Perdita listed will be there.

Lydia Wegman: Are there comments? I'll just say with Paul, I'm a little uncertain about how exactly to proceed, as well but your recommendation is important.

**MOTION** by Lisa Stuckey to approve the Statement of Consistency. Seconded by Tony Blake.  
**VOTE: 7-1 OPPOSED- GUTHRIE**

**MOTION** by Laura Nicholson to recommend approval of the amendments to the Orange County zoning atlas. Seconded by Buddy Hartley.  
**VOTE: 7-1 OPPOSED- GUTHRIE**

*Paul Guthrie opposed because he was uncertain.*

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**2012 NAICS 2012 NAICS US Title  
US Code**

**NOTE: The Sector Number is the First Two Digits of the Code  
Primary Sector Headings Are in Gray Blocks**

11	Agriculture, Forestry, Fishing and Hunting
111	Crop Production
1111	Oilseed and Grain Farming
11111	Soybean Farming
111110	Soybean Farming
11112	Oilseed (except Soybean) Farming
111120	Oilseed (except Soybean) Farming
11113	Dry Pea and Bean Farming
111130	Dry Pea and Bean Farming
11114	Wheat Farming
111140	Wheat Farming
11115	Corn Farming
111150	Corn Farming
11116	Rice Farming
111160	Rice Farming
11119	Other Grain Farming
111191	Oilseed and Grain Combination Farming
111199	All Other Grain Farming
1112	Vegetable and Melon Farming
11121	Vegetable and Melon Farming
111211	Potato Farming
111219	Other Vegetable (except Potato) and Melon Farming
1113	Fruit and Tree Nut Farming
11131	Orange Groves
111310	Orange Groves
11132	Citrus (except Orange) Groves
111320	Citrus (except Orange) Groves
11133	Noncitrus Fruit and Tree Nut Farming
111331	Apple Orchards
111332	Grape Vineyards
111333	Strawberry Farming
111334	Berry (except Strawberry) Farming
111335	Tree Nut Farming
111336	Fruit and Tree Nut Combination Farming
111339	Other Noncitrus Fruit Farming
1114	Greenhouse, Nursery, and Floriculture Production
11141	Food Crops Grown Under Cover
111411	Mushroom Production
111419	Other Food Crops Grown Under Cover
11142	Nursery and Floriculture Production
111421	Nursery and Tree Production
111422	Floriculture Production
1119	Other Crop Farming
11191	Tobacco Farming
111910	Tobacco Farming
11192	Cotton Farming
111920	Cotton Farming
11193	Sugarcane Farming

111930	Sugarcane Farming
11194	Hay Farming
111940	Hay Farming
11199	All Other Crop Farming
111991	Sugar Beet Farming
111992	Peanut Farming
111998	All Other Miscellaneous Crop Farming
112	Animal Production and Aquaculture
1121	Cattle Ranching and Farming
11211	Beef Cattle Ranching and Farming, including Feedlots
112111	Beef Cattle Ranching and Farming
112112	Cattle Feedlots
11212	Dairy Cattle and Milk Production
112120	Dairy Cattle and Milk Production
11213	Dual-Purpose Cattle Ranching and Farming
112130	Dual-Purpose Cattle Ranching and Farming
1122	Hog and Pig Farming
11221	Hog and Pig Farming
112210	Hog and Pig Farming
1123	Poultry and Egg Production
11231	Chicken Egg Production
112310	Chicken Egg Production
11232	Broilers and Other Meat Type Chicken Production
112320	Broilers and Other Meat Type Chicken Production
11233	Turkey Production
112330	Turkey Production
11234	Poultry Hatcheries
112340	Poultry Hatcheries
11239	Other Poultry Production
112390	Other Poultry Production
1124	Sheep and Goat Farming
11241	Sheep Farming
112410	Sheep Farming
11242	Goat Farming
112420	Goat Farming
1125	Aquaculture
11251	Aquaculture
112511	Finfish Farming and Fish Hatcheries
112512	Shellfish Farming
112519	Other Aquaculture
1129	Other Animal Production
11291	Apiculture
112910	Apiculture
11292	Horses and Other Equine Production
112920	Horses and Other Equine Production
11293	Fur-Bearing Animal and Rabbit Production
112930	Fur-Bearing Animal and Rabbit Production
11299	All Other Animal Production
112990	All Other Animal Production
113	Forestry and Logging
1131	Timber Tract Operations
11311	Timber Tract Operations
113110	Timber Tract Operations
1132	Forest Nurseries and Gathering of Forest Products
11321	Forest Nurseries and Gathering of Forest Products

113210	Forest Nurseries and Gathering of Forest Products
1133	Logging
11331	Logging
113310	Logging
114	Fishing, Hunting and Trapping
1141	Fishing
11411	Fishing
114111	Finfish Fishing
114112	Shellfish Fishing
114119	Other Marine Fishing
1142	Hunting and Trapping
11421	Hunting and Trapping
114210	Hunting and Trapping
115	Support Activities for Agriculture and Forestry
1151	Support Activities for Crop Production
11511	Support Activities for Crop Production
115111	Cotton Ginning
115112	Soil Preparation, Planting, and Cultivating
115113	Crop Harvesting, Primarily by Machine
115114	Postharvest Crop Activities (except Cotton Ginning)
115115	Farm Labor Contractors and Crew Leaders
115116	Farm Management Services
1152	Support Activities for Animal Production
11521	Support Activities for Animal Production
115210	Support Activities for Animal Production
1153	Support Activities for Forestry
11531	Support Activities for Forestry
115310	Support Activities for Forestry
<b>21</b>	<b>Mining, Quarrying, and Oil and Gas Extraction</b>
211	Oil and Gas Extraction
2111	Oil and Gas Extraction
21111	Oil and Gas Extraction
211111	Crude Petroleum and Natural Gas Extraction
211112	Natural Gas Liquid Extraction
212	Mining (except Oil and Gas)
2121	Coal Mining
21211	Coal Mining
212111	Bituminous Coal and Lignite Surface Mining
212112	Bituminous Coal Underground Mining
212113	Anthracite Mining
2122	Metal Ore Mining
21221	Iron Ore Mining
212210	Iron Ore Mining
21222	Gold Ore and Silver Ore Mining
212221	Gold Ore Mining
212222	Silver Ore Mining
21223	Copper, Nickel, Lead, and Zinc Mining
212231	Lead Ore and Zinc Ore Mining
212234	Copper Ore and Nickel Ore Mining
21229	Other Metal Ore Mining
212291	Uranium-Radium-Vanadium Ore Mining
212299	All Other Metal Ore Mining
2123	Nonmetallic Mineral Mining and Quarrying
21231	Stone Mining and Quarrying
212311	Dimension Stone Mining and Quarrying

212312	Crushed and Broken Limestone Mining and Quarrying
212313	Crushed and Broken Granite Mining and Quarrying
212319	Other Crushed and Broken Stone Mining and Quarrying
21232	Sand, Gravel, Clay, and Ceramic and Refractory Minerals Mining and Quarrying
212321	Construction Sand and Gravel Mining
212322	Industrial Sand Mining
212324	Kaolin and Ball Clay Mining
212325	Clay and Ceramic and Refractory Minerals Mining
21239	Other Nonmetallic Mineral Mining and Quarrying
212391	Potash, Soda, and Borate Mineral Mining
212392	Phosphate Rock Mining
212393	Other Chemical and Fertilizer Mineral Mining
212399	All Other Nonmetallic Mineral Mining
213	Support Activities for Mining
2131	Support Activities for Mining
21311	Support Activities for Mining
213111	Drilling Oil and Gas Wells
213112	Support Activities for Oil and Gas Operations
213113	Support Activities for Coal Mining
213114	Support Activities for Metal Mining
213115	Support Activities for Nonmetallic Minerals (except Fuels) Mining
<b>22</b>	<b>Utilities</b>
221	Utilities
2211	Electric Power Generation, Transmission and Distribution
22111	Electric Power Generation
221111	Hydroelectric Power Generation
221112	Fossil Fuel Electric Power Generation
221113	Nuclear Electric Power Generation
221114	Solar Electric Power Generation
221115	Wind Electric Power Generation
221116	Geothermal Electric Power Generation
221117	Biomass Electric Power Generation
221118	Other Electric Power Generation
22112	Electric Power Transmission, Control, and Distribution
221121	Electric Bulk Power Transmission and Control
221122	Electric Power Distribution
2212	Natural Gas Distribution
22121	Natural Gas Distribution
221210	Natural Gas Distribution
2213	Water, Sewage and Other Systems
22131	Water Supply and Irrigation Systems
221310	Water Supply and Irrigation Systems
22132	Sewage Treatment Facilities
221320	Sewage Treatment Facilities
22133	Steam and Air-Conditioning Supply
221330	Steam and Air-Conditioning Supply
<b>23</b>	<b>Construction</b>
236	Construction of Buildings
2361	Residential Building Construction
23611	Residential Building Construction
236115	New Single-Family Housing Construction (except For-Sale Builders)
236116	New Multifamily Housing Construction (except For-Sale Builders)
236117	New Housing For-Sale Builders
236118	Residential Remodelers
2362	Nonresidential Building Construction

23621	Industrial Building Construction
236210	Industrial Building Construction
23622	Commercial and Institutional Building Construction
236220	Commercial and Institutional Building Construction
237	Heavy and Civil Engineering Construction
2371	Utility System Construction
23711	Water and Sewer Line and Related Structures Construction
237110	Water and Sewer Line and Related Structures Construction
23712	Oil and Gas Pipeline and Related Structures Construction
237120	Oil and Gas Pipeline and Related Structures Construction
23713	Power and Communication Line and Related Structures Construction
237130	Power and Communication Line and Related Structures Construction
2372	Land Subdivision
23721	Land Subdivision
237210	Land Subdivision
2373	Highway, Street, and Bridge Construction
23731	Highway, Street, and Bridge Construction
237310	Highway, Street, and Bridge Construction
2379	Other Heavy and Civil Engineering Construction
23799	Other Heavy and Civil Engineering Construction
237990	Other Heavy and Civil Engineering Construction
238	Specialty Trade Contractors
2381	Foundation, Structure, and Building Exterior Contractors
23811	Poured Concrete Foundation and Structure Contractors
238110	Poured Concrete Foundation and Structure Contractors
23812	Structural Steel and Precast Concrete Contractors
238120	Structural Steel and Precast Concrete Contractors
23813	Framing Contractors
238130	Framing Contractors
23814	Masonry Contractors
238140	Masonry Contractors
23815	Glass and Glazing Contractors
238150	Glass and Glazing Contractors
23816	Roofing Contractors
238160	Roofing Contractors
23817	Siding Contractors
238170	Siding Contractors
23819	Other Foundation, Structure, and Building Exterior Contractors
238190	Other Foundation, Structure, and Building Exterior Contractors
2382	Building Equipment Contractors
23821	Electrical Contractors and Other Wiring Installation Contractors
238210	Electrical Contractors and Other Wiring Installation Contractors
23822	Plumbing, Heating, and Air-Conditioning Contractors
238220	Plumbing, Heating, and Air-Conditioning Contractors
23829	Other Building Equipment Contractors
238290	Other Building Equipment Contractors
2383	Building Finishing Contractors
23831	Drywall and Insulation Contractors
238310	Drywall and Insulation Contractors
23832	Painting and Wall Covering Contractors
238320	Painting and Wall Covering Contractors
23833	Flooring Contractors
238330	Flooring Contractors
23834	Tile and Terrazzo Contractors
238340	Tile and Terrazzo Contractors

23835	Finish Carpentry Contractors
238350	Finish Carpentry Contractors
23839	Other Building Finishing Contractors
238390	Other Building Finishing Contractors
2389	Other Specialty Trade Contractors
23891	Site Preparation Contractors
238910	Site Preparation Contractors
23899	All Other Specialty Trade Contractors
238990	All Other Specialty Trade Contractors
31-33	Manufacturing
311	Food Manufacturing
3111	Animal Food Manufacturing
31111	Animal Food Manufacturing
311111	Dog and Cat Food Manufacturing
311119	Other Animal Food Manufacturing
3112	Grain and Oilseed Milling
31121	Flour Milling and Malt Manufacturing
311211	Flour Milling
311212	Rice Milling
311213	Malt Manufacturing
31122	Starch and Vegetable Fats and Oils Manufacturing
311221	Wet Corn Milling
311224	Soybean and Other Oilseed Processing
311225	Fats and Oils Refining and Blending
31123	Breakfast Cereal Manufacturing
311230	Breakfast Cereal Manufacturing
3113	Sugar and Confectionery Product Manufacturing
31131	Sugar Manufacturing
311313	Beet Sugar Manufacturing
311314	Cane Sugar Manufacturing
31134	Nonchocolate Confectionery Manufacturing
311340	Nonchocolate Confectionery Manufacturing
31135	Chocolate and Confectionery Manufacturing
311351	Chocolate and Confectionery Manufacturing from Cacao Beans
311352	Confectionery Manufacturing from Purchased Chocolate
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing
31141	Frozen Food Manufacturing
311411	Frozen Fruit, Juice, and Vegetable Manufacturing
311412	Frozen Specialty Food Manufacturing
31142	Fruit and Vegetable Canning, Pickling, and Drying
311421	Fruit and Vegetable Canning
311422	Specialty Canning
311423	Dried and Dehydrated Food Manufacturing
3115	Dairy Product Manufacturing
31151	Dairy Product (except Frozen) Manufacturing
311511	Fluid Milk Manufacturing
311512	Creamery Butter Manufacturing
311513	Cheese Manufacturing
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing
31152	Ice Cream and Frozen Dessert Manufacturing
311520	Ice Cream and Frozen Dessert Manufacturing
3116	Animal Slaughtering and Processing
31161	Animal Slaughtering and Processing
311611	Animal (except Poultry) Slaughtering
311612	Meat Processed from Carcasses

311613	Rendering and Meat Byproduct Processing
311615	Poultry Processing
3117	Seafood Product Preparation and Packaging
31171	Seafood Product Preparation and Packaging
311710	Seafood Product Preparation and Packaging
3118	Bakeries and Tortilla Manufacturing
31181	Bread and Bakery Product Manufacturing
311811	Retail Bakeries
311812	Commercial Bakeries
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing
31182	Cookie, Cracker, and Pasta Manufacturing
311821	Cookie and Cracker Manufacturing
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour
31183	Tortilla Manufacturing
311830	Tortilla Manufacturing
3119	Other Food Manufacturing
31191	Snack Food Manufacturing
311911	Roasted Nuts and Peanut Butter Manufacturing
311919	Other Snack Food Manufacturing
31192	Coffee and Tea Manufacturing
311920	Coffee and Tea Manufacturing
31193	Flavoring Syrup and Concentrate Manufacturing
311930	Flavoring Syrup and Concentrate Manufacturing
31194	Seasoning and Dressing Manufacturing
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing
311942	Spice and Extract Manufacturing
31199	All Other Food Manufacturing
311991	Perishable Prepared Food Manufacturing
311999	All Other Miscellaneous Food Manufacturing
312	Beverage and Tobacco Product Manufacturing
3121	Beverage Manufacturing
31211	Soft Drink and Ice Manufacturing
312111	Soft Drink Manufacturing
312112	Bottled Water Manufacturing
312113	Ice Manufacturing
31212	Breweries
312120	Breweries
31213	Wineries
312130	Wineries
31214	Distilleries
312140	Distilleries
3122	Tobacco Manufacturing
31223	Tobacco Manufacturing
312230	Tobacco Manufacturing
313	Textile Mills
3131	Fiber, Yarn, and Thread Mills
31311	Fiber, Yarn, and Thread Mills
313110	Fiber, Yarn, and Thread Mills
3132	Fabric Mills
31321	Broadwoven Fabric Mills
313210	Broadwoven Fabric Mills
31322	Narrow Fabric Mills and Schiffli Machine Embroidery
313220	Narrow Fabric Mills and Schiffli Machine Embroidery
31323	Nonwoven Fabric Mills
313230	Nonwoven Fabric Mills

31324	Knit Fabric Mills
313240	Knit Fabric Mills
3133	Textile and Fabric Finishing and Fabric Coating Mills
31331	Textile and Fabric Finishing Mills
313310	Textile and Fabric Finishing Mills
31332	Fabric Coating Mills
313320	Fabric Coating Mills
314	Textile Product Mills
3141	Textile Furnishings Mills
31411	Carpet and Rug Mills
314110	Carpet and Rug Mills
31412	Curtain and Linen Mills
314120	Curtain and Linen Mills
3149	Other Textile Product Mills
31491	Textile Bag and Canvas Mills
314910	Textile Bag and Canvas Mills
31499	All Other Textile Product Mills
314994	Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills
314999	All Other Miscellaneous Textile Product Mills
315	Apparel Manufacturing
3151	Apparel Knitting Mills
31511	Hosiery and Sock Mills
315110	Hosiery and Sock Mills
31519	Other Apparel Knitting Mills
315190	Other Apparel Knitting Mills
3152	Cut and Sew Apparel Manufacturing
31521	Cut and Sew Apparel Contractors
315210	Cut and Sew Apparel Contractors
31522	Men's and Boys' Cut and Sew Apparel Manufacturing
315220	Men's and Boys' Cut and Sew Apparel Manufacturing
31524	Women's, Girls', and Infants' Cut and Sew Apparel Manufacturing
315240	Women's, Girls', and Infants' Cut and Sew Apparel Manufacturing
31528	Other Cut and Sew Apparel Manufacturing
315280	Other Cut and Sew Apparel Manufacturing
3159	Apparel Accessories and Other Apparel Manufacturing
31599	Apparel Accessories and Other Apparel Manufacturing
315990	Apparel Accessories and Other Apparel Manufacturing
316	Leather and Allied Product Manufacturing
3161	Leather and Hide Tanning and Finishing
31611	Leather and Hide Tanning and Finishing
316110	Leather and Hide Tanning and Finishing
3162	Footwear Manufacturing
31621	Footwear Manufacturing
316210	Footwear Manufacturing
3169	Other Leather and Allied Product Manufacturing
31699	Other Leather and Allied Product Manufacturing
316992	Women's Handbag and Purse Manufacturing
316998	All Other Leather Good and Allied Product Manufacturing
321	Wood Product Manufacturing
3211	Sawmills and Wood Preservation
32111	Sawmills and Wood Preservation
321113	Sawmills
321114	Wood Preservation
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing
32121	Veneer, Plywood, and Engineered Wood Product Manufacturing

321211	Hardwood Veneer and Plywood Manufacturing
321212	Softwood Veneer and Plywood Manufacturing
321213	Engineered Wood Member (except Truss) Manufacturing
321214	Truss Manufacturing
321219	Reconstituted Wood Product Manufacturing
3219	Other Wood Product Manufacturing
32191	Millwork
321911	Wood Window and Door Manufacturing
321912	Cut Stock, Resawing Lumber, and Planing
321918	Other Millwork (including Flooring)
32192	Wood Container and Pallet Manufacturing
321920	Wood Container and Pallet Manufacturing
32199	All Other Wood Product Manufacturing
321991	Manufactured Home (Mobile Home) Manufacturing
321992	Prefabricated Wood Building Manufacturing
321999	All Other Miscellaneous Wood Product Manufacturing
322	Paper Manufacturing
3221	Pulp, Paper, and Paperboard Mills
32211	Pulp Mills
322110	Pulp Mills
32212	Paper Mills
322121	Paper (except Newsprint) Mills
322122	Newsprint Mills
32213	Paperboard Mills
322130	Paperboard Mills
3222	Converted Paper Product Manufacturing
32221	Paperboard Container Manufacturing
322211	Corrugated and Solid Fiber Box Manufacturing
322212	Folding Paperboard Box Manufacturing
322219	Other Paperboard Container Manufacturing
32222	Paper Bag and Coated and Treated Paper Manufacturing
322220	Paper Bag and Coated and Treated Paper Manufacturing
32223	Stationery Product Manufacturing
322230	Stationery Product Manufacturing
32229	Other Converted Paper Product Manufacturing
322291	Sanitary Paper Product Manufacturing
322299	All Other Converted Paper Product Manufacturing
323	Printing and Related Support Activities
3231	Printing and Related Support Activities
32311	Printing
323111	Commercial Printing (except Screen and Books)
323113	Commercial Screen Printing
323117	Books Printing
32312	Support Activities for Printing
323120	Support Activities for Printing
324	Petroleum and Coal Products Manufacturing
3241	Petroleum and Coal Products Manufacturing
32411	Petroleum Refineries
324110	Petroleum Refineries
32412	Asphalt Paving, Roofing, and Saturated Materials Manufacturing
324121	Asphalt Paving Mixture and Block Manufacturing
324122	Asphalt Shingle and Coating Materials Manufacturing
32419	Other Petroleum and Coal Products Manufacturing
324191	Petroleum Lubricating Oil and Grease Manufacturing
324199	All Other Petroleum and Coal Products Manufacturing

325	Chemical Manufacturing
3251	Basic Chemical Manufacturing
32511	Petrochemical Manufacturing
325110	Petrochemical Manufacturing
32512	Industrial Gas Manufacturing
325120	Industrial Gas Manufacturing
32513	Synthetic Dye and Pigment Manufacturing
325130	Synthetic Dye and Pigment Manufacturing
32518	Other Basic Inorganic Chemical Manufacturing
325180	Other Basic Inorganic Chemical Manufacturing
32519	Other Basic Organic Chemical Manufacturing
325193	Ethyl Alcohol Manufacturing
325194	Cyclic Crude, Intermediate, and Gum and Wood Chemical Manufacturing
325199	All Other Basic Organic Chemical Manufacturing
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing
32521	Resin and Synthetic Rubber Manufacturing
325211	Plastics Material and Resin Manufacturing
325212	Synthetic Rubber Manufacturing
32522	Artificial and Synthetic Fibers and Filaments Manufacturing
325220	Artificial and Synthetic Fibers and Filaments Manufacturing
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
32531	Fertilizer Manufacturing
325311	Nitrogenous Fertilizer Manufacturing
325312	Phosphatic Fertilizer Manufacturing
325314	Fertilizer (Mixing Only) Manufacturing
32532	Pesticide and Other Agricultural Chemical Manufacturing
325320	Pesticide and Other Agricultural Chemical Manufacturing
3254	Pharmaceutical and Medicine Manufacturing
32541	Pharmaceutical and Medicine Manufacturing
325411	Medicinal and Botanical Manufacturing
325412	Pharmaceutical Preparation Manufacturing
325413	In-Vitro Diagnostic Substance Manufacturing
325414	Biological Product (except Diagnostic) Manufacturing
3255	Paint, Coating, and Adhesive Manufacturing
32551	Paint and Coating Manufacturing
325510	Paint and Coating Manufacturing
32552	Adhesive Manufacturing
325520	Adhesive Manufacturing
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing
32561	Soap and Cleaning Compound Manufacturing
325611	Soap and Other Detergent Manufacturing
325612	Polish and Other Sanitation Good Manufacturing
325613	Surface Active Agent Manufacturing
32562	Toilet Preparation Manufacturing
325620	Toilet Preparation Manufacturing
3259	Other Chemical Product and Preparation Manufacturing
32591	Printing Ink Manufacturing
325910	Printing Ink Manufacturing
32592	Explosives Manufacturing
325920	Explosives Manufacturing
32599	All Other Chemical Product and Preparation Manufacturing
325991	Custom Compounding of Purchased Resins
325992	Photographic Film, Paper, Plate, and Chemical Manufacturing
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing
326	Plastics and Rubber Products Manufacturing

3261	Plastics Product Manufacturing
32611	Plastics Packaging Materials and Unlaminated Film and Sheet Manufacturing
326111	Plastics Bag and Pouch Manufacturing
326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing
326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing
32612	Plastics Pipe, Pipe Fitting, and Unlaminated Profile Shape Manufacturing
326121	Unlaminated Plastics Profile Shape Manufacturing
326122	Plastics Pipe and Pipe Fitting Manufacturing
32613	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing
326130	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing
32614	Polystyrene Foam Product Manufacturing
326140	Polystyrene Foam Product Manufacturing
32615	Urethane and Other Foam Product (except Polystyrene) Manufacturing
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing
32616	Plastics Bottle Manufacturing
326160	Plastics Bottle Manufacturing
32619	Other Plastics Product Manufacturing
326191	Plastics Plumbing Fixture Manufacturing
326199	All Other Plastics Product Manufacturing
3262	Rubber Product Manufacturing
32621	Tire Manufacturing
326211	Tire Manufacturing (except Retreading)
326212	Tire Retreading
32622	Rubber and Plastics Hoses and Belting Manufacturing
326220	Rubber and Plastics Hoses and Belting Manufacturing
32629	Other Rubber Product Manufacturing
326291	Rubber Product Manufacturing for Mechanical Use
326299	All Other Rubber Product Manufacturing
327	Nonmetallic Mineral Product Manufacturing
3271	Clay Product and Refractory Manufacturing
32711	Pottery, Ceramics, and Plumbing Fixture Manufacturing
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing
32712	Clay Building Material and Refractories Manufacturing
327120	Clay Building Material and Refractories Manufacturing
3272	Glass and Glass Product Manufacturing
32721	Glass and Glass Product Manufacturing
327211	Flat Glass Manufacturing
327212	Other Pressed and Blown Glass and Glassware Manufacturing
327213	Glass Container Manufacturing
327215	Glass Product Manufacturing Made of Purchased Glass
3273	Cement and Concrete Product Manufacturing
32731	Cement Manufacturing
327310	Cement Manufacturing
32732	Ready-Mix Concrete Manufacturing
327320	Ready-Mix Concrete Manufacturing
32733	Concrete Pipe, Brick, and Block Manufacturing
327331	Concrete Block and Brick Manufacturing
327332	Concrete Pipe Manufacturing
32739	Other Concrete Product Manufacturing
327390	Other Concrete Product Manufacturing
3274	Lime and Gypsum Product Manufacturing
32741	Lime Manufacturing
327410	Lime Manufacturing
32742	Gypsum Product Manufacturing
327420	Gypsum Product Manufacturing

3279	Other Nonmetallic Mineral Product Manufacturing
32791	Abrasive Product Manufacturing
327910	Abrasive Product Manufacturing
32799	All Other Nonmetallic Mineral Product Manufacturing
327991	Cut Stone and Stone Product Manufacturing
327992	Ground or Treated Mineral and Earth Manufacturing
327993	Mineral Wool Manufacturing
327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing
331	Primary Metal Manufacturing
3311	Iron and Steel Mills and Ferroalloy Manufacturing
33111	Iron and Steel Mills and Ferroalloy Manufacturing
331110	Iron and Steel Mills and Ferroalloy Manufacturing
3312	Steel Product Manufacturing from Purchased Steel
33121	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel
331210	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel
33122	Rolling and Drawing of Purchased Steel
331221	Rolled Steel Shape Manufacturing
331222	Steel Wire Drawing
3313	Alumina and Aluminum Production and Processing
33131	Alumina and Aluminum Production and Processing
331313	Alumina Refining and Primary Aluminum Production
331314	Secondary Smelting and Alloying of Aluminum
331315	Aluminum Sheet, Plate, and Foil Manufacturing
331318	Other Aluminum Rolling, Drawing, and Extruding
3314	Nonferrous Metal (except Aluminum) Production and Processing
33141	Nonferrous Metal (except Aluminum) Smelting and Refining
331410	Nonferrous Metal (except Aluminum) Smelting and Refining
33142	Copper Rolling, Drawing, Extruding, and Alloying
331420	Copper Rolling, Drawing, Extruding, and Alloying
33149	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying
331491	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)
3315	Foundries
33151	Ferrous Metal Foundries
331511	Iron Foundries
331512	Steel Investment Foundries
331513	Steel Foundries (except Investment)
33152	Nonferrous Metal Foundries
331523	Nonferrous Metal Die-Casting Foundries
331524	Aluminum Foundries (except Die-Casting)
331529	Other Nonferrous Metal Foundries (except Die-Casting)
332	Fabricated Metal Product Manufacturing
3321	Forging and Stamping
33211	Forging and Stamping
332111	Iron and Steel Forging
332112	Nonferrous Forging
332114	Custom Roll Forming
332117	Powder Metallurgy Part Manufacturing
332119	Metal Crown, Closure, and Other Metal Stamping (except Automotive)
3322	Cutlery and Handtool Manufacturing
33221	Cutlery and Handtool Manufacturing
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing

332216	Saw Blade and Handtool Manufacturing
3323	Architectural and Structural Metals Manufacturing
33231	Plate Work and Fabricated Structural Product Manufacturing
332311	Prefabricated Metal Building and Component Manufacturing
332312	Fabricated Structural Metal Manufacturing
332313	Plate Work Manufacturing
33232	Ornamental and Architectural Metal Products Manufacturing
332321	Metal Window and Door Manufacturing
332322	Sheet Metal Work Manufacturing
332323	Ornamental and Architectural Metal Work Manufacturing
3324	Boiler, Tank, and Shipping Container Manufacturing
33241	Power Boiler and Heat Exchanger Manufacturing
332410	Power Boiler and Heat Exchanger Manufacturing
33242	Metal Tank (Heavy Gauge) Manufacturing
332420	Metal Tank (Heavy Gauge) Manufacturing
33243	Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing
332431	Metal Can Manufacturing
332439	Other Metal Container Manufacturing
3325	Hardware Manufacturing
33251	Hardware Manufacturing
332510	Hardware Manufacturing
3326	Spring and Wire Product Manufacturing
33261	Spring and Wire Product Manufacturing
332613	Spring Manufacturing
332618	Other Fabricated Wire Product Manufacturing
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing
33271	Machine Shops
332710	Machine Shops
33272	Turned Product and Screw, Nut, and Bolt Manufacturing
332721	Precision Turned Product Manufacturing
332722	Bolt, Nut, Screw, Rivet, and Washer Manufacturing
3328	Coating, Engraving, Heat Treating, and Allied Activities
33281	Coating, Engraving, Heat Treating, and Allied Activities
332811	Metal Heat Treating
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring
3329	Other Fabricated Metal Product Manufacturing
33291	Metal Valve Manufacturing
332911	Industrial Valve Manufacturing
332912	Fluid Power Valve and Hose Fitting Manufacturing
332913	Plumbing Fixture Fitting and Trim Manufacturing
332919	Other Metal Valve and Pipe Fitting Manufacturing
33299	All Other Fabricated Metal Product Manufacturing
332991	Ball and Roller Bearing Manufacturing
332992	Small Arms Ammunition Manufacturing
332993	Ammunition (except Small Arms) Manufacturing
332994	Small Arms, Ordnance, and Ordnance Accessories Manufacturing
332996	Fabricated Pipe and Pipe Fitting Manufacturing
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing
333	Machinery Manufacturing
3331	Agriculture, Construction, and Mining Machinery Manufacturing
33311	Agricultural Implement Manufacturing
333111	Farm Machinery and Equipment Manufacturing
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

33312	Construction Machinery Manufacturing
333120	Construction Machinery Manufacturing
33313	Mining and Oil and Gas Field Machinery Manufacturing
333131	Mining Machinery and Equipment Manufacturing
333132	Oil and Gas Field Machinery and Equipment Manufacturing
3332	Industrial Machinery Manufacturing
33324	Industrial Machinery Manufacturing
333241	Food Product Machinery Manufacturing
333242	Semiconductor Machinery Manufacturing
333243	Sawmill, Woodworking, and Paper Machinery Manufacturing
333244	Printing Machinery and Equipment Manufacturing
333249	Other Industrial Machinery Manufacturing
3333	Commercial and Service Industry Machinery Manufacturing
33331	Commercial and Service Industry Machinery Manufacturing
333314	Optical Instrument and Lens Manufacturing
333316	Photographic and Photocopying Equipment Manufacturing
333318	Other Commercial and Service Industry Machinery Manufacturing
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing
33341	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing
3335	Metalworking Machinery Manufacturing
33351	Metalworking Machinery Manufacturing
333511	Industrial Mold Manufacturing
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing
333515	Cutting Tool and Machine Tool Accessory Manufacturing
333517	Machine Tool Manufacturing
333519	Rolling Mill and Other Metalworking Machinery Manufacturing
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing
33361	Engine, Turbine, and Power Transmission Equipment Manufacturing
333611	Turbine and Turbine Generator Set Units Manufacturing
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing
333613	Mechanical Power Transmission Equipment Manufacturing
333618	Other Engine Equipment Manufacturing
3339	Other General Purpose Machinery Manufacturing
33391	Pump and Compressor Manufacturing
333911	Pump and Pumping Equipment Manufacturing
333912	Air and Gas Compressor Manufacturing
333913	Measuring and Dispensing Pump Manufacturing
33392	Material Handling Equipment Manufacturing
333921	Elevator and Moving Stairway Manufacturing
333922	Conveyor and Conveying Equipment Manufacturing
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing
33399	All Other General Purpose Machinery Manufacturing
333991	Power-Driven Handtool Manufacturing
333992	Welding and Soldering Equipment Manufacturing
333993	Packaging Machinery Manufacturing
333994	Industrial Process Furnace and Oven Manufacturing
333995	Fluid Power Cylinder and Actuator Manufacturing

333996	Fluid Power Pump and Motor Manufacturing
333997	Scale and Balance Manufacturing
333999	All Other Miscellaneous General Purpose Machinery Manufacturing
334	Computer and Electronic Product Manufacturing
3341	Computer and Peripheral Equipment Manufacturing
33411	Computer and Peripheral Equipment Manufacturing
334111	Electronic Computer Manufacturing
334112	Computer Storage Device Manufacturing
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing
3342	Communications Equipment Manufacturing
33421	Telephone Apparatus Manufacturing
334210	Telephone Apparatus Manufacturing
33422	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
33429	Other Communications Equipment Manufacturing
334290	Other Communications Equipment Manufacturing
3343	Audio and Video Equipment Manufacturing
33431	Audio and Video Equipment Manufacturing
334310	Audio and Video Equipment Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
33441	Semiconductor and Other Electronic Component Manufacturing
334412	Bare Printed Circuit Board Manufacturing
334413	Semiconductor and Related Device Manufacturing
334416	Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing
334417	Electronic Connector Manufacturing
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing
334419	Other Electronic Component Manufacturing
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
33451	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables
334514	Totalizing Fluid Meter and Counting Device Manufacturing
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals
334516	Analytical Laboratory Instrument Manufacturing
334517	Irradiation Apparatus Manufacturing
334519	Other Measuring and Controlling Device Manufacturing
3346	Manufacturing and Reproducing Magnetic and Optical Media
33461	Manufacturing and Reproducing Magnetic and Optical Media
334613	Blank Magnetic and Optical Recording Media Manufacturing
334614	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing
335	Electrical Equipment, Appliance, and Component Manufacturing
3351	Electric Lighting Equipment Manufacturing
33511	Electric Lamp Bulb and Part Manufacturing
335110	Electric Lamp Bulb and Part Manufacturing
33512	Lighting Fixture Manufacturing
335121	Residential Electric Lighting Fixture Manufacturing
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing
335129	Other Lighting Equipment Manufacturing

3352	Household Appliance Manufacturing
33521	Small Electrical Appliance Manufacturing
335210	Small Electrical Appliance Manufacturing
33522	Major Appliance Manufacturing
335221	Household Cooking Appliance Manufacturing
335222	Household Refrigerator and Home Freezer Manufacturing
335224	Household Laundry Equipment Manufacturing
335228	Other Major Household Appliance Manufacturing
3353	Electrical Equipment Manufacturing
33531	Electrical Equipment Manufacturing
335311	Power, Distribution, and Specialty Transformer Manufacturing
335312	Motor and Generator Manufacturing
335313	Switchgear and Switchboard Apparatus Manufacturing
335314	Relay and Industrial Control Manufacturing
3359	Other Electrical Equipment and Component Manufacturing
33591	Battery Manufacturing
335911	Storage Battery Manufacturing
335912	Primary Battery Manufacturing
33592	Communication and Energy Wire and Cable Manufacturing
335921	Fiber Optic Cable Manufacturing
335929	Other Communication and Energy Wire Manufacturing
33593	Wiring Device Manufacturing
335931	Current-Carrying Wiring Device Manufacturing
335932	Noncurrent-Carrying Wiring Device Manufacturing
33599	All Other Electrical Equipment and Component Manufacturing
335991	Carbon and Graphite Product Manufacturing
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing
336	Transportation Equipment Manufacturing
3361	Motor Vehicle Manufacturing
33611	Automobile and Light Duty Motor Vehicle Manufacturing
336111	Automobile Manufacturing
336112	Light Truck and Utility Vehicle Manufacturing
33612	Heavy Duty Truck Manufacturing
336120	Heavy Duty Truck Manufacturing
3362	Motor Vehicle Body and Trailer Manufacturing
33621	Motor Vehicle Body and Trailer Manufacturing
336211	Motor Vehicle Body Manufacturing
336212	Truck Trailer Manufacturing
336213	Motor Home Manufacturing
336214	Travel Trailer and Camper Manufacturing
3363	Motor Vehicle Parts Manufacturing
33631	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing
33632	Motor Vehicle Electrical and Electronic Equipment Manufacturing
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing
33633	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing
33634	Motor Vehicle Brake System Manufacturing
336340	Motor Vehicle Brake System Manufacturing
33635	Motor Vehicle Transmission and Power Train Parts Manufacturing
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing
33636	Motor Vehicle Seating and Interior Trim Manufacturing
336360	Motor Vehicle Seating and Interior Trim Manufacturing
33637	Motor Vehicle Metal Stamping
336370	Motor Vehicle Metal Stamping

33639	Other Motor Vehicle Parts Manufacturing
336390	Other Motor Vehicle Parts Manufacturing
3364	Aerospace Product and Parts Manufacturing
33641	Aerospace Product and Parts Manufacturing
336411	Aircraft Manufacturing
336412	Aircraft Engine and Engine Parts Manufacturing
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing
336414	Guided Missile and Space Vehicle Manufacturing
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing
3365	Railroad Rolling Stock Manufacturing
33651	Railroad Rolling Stock Manufacturing
336510	Railroad Rolling Stock Manufacturing
3366	Ship and Boat Building
33661	Ship and Boat Building
336611	Ship Building and Repairing
336612	Boat Building
3369	Other Transportation Equipment Manufacturing
33699	Other Transportation Equipment Manufacturing
336991	Motorcycle, Bicycle, and Parts Manufacturing
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing
336999	All Other Transportation Equipment Manufacturing
337	Furniture and Related Product Manufacturing
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing
33711	Wood Kitchen Cabinet and Countertop Manufacturing
337110	Wood Kitchen Cabinet and Countertop Manufacturing
33712	Household and Institutional Furniture Manufacturing
337121	Upholstered Household Furniture Manufacturing
337122	Nonupholstered Wood Household Furniture Manufacturing
337124	Metal Household Furniture Manufacturing
337125	Household Furniture (except Wood and Metal) Manufacturing
337127	Institutional Furniture Manufacturing
3372	Office Furniture (including Fixtures) Manufacturing
33721	Office Furniture (including Fixtures) Manufacturing
337211	Wood Office Furniture Manufacturing
337212	Custom Architectural Woodwork and Millwork Manufacturing
337214	Office Furniture (except Wood) Manufacturing
337215	Showcase, Partition, Shelving, and Locker Manufacturing
3379	Other Furniture Related Product Manufacturing
33791	Mattress Manufacturing
337910	Mattress Manufacturing
33792	Blind and Shade Manufacturing
337920	Blind and Shade Manufacturing
339	Miscellaneous Manufacturing
3391	Medical Equipment and Supplies Manufacturing
33911	Medical Equipment and Supplies Manufacturing
339112	Surgical and Medical Instrument Manufacturing
339113	Surgical Appliance and Supplies Manufacturing
339114	Dental Equipment and Supplies Manufacturing
339115	Ophthalmic Goods Manufacturing
339116	Dental Laboratories
3399	Other Miscellaneous Manufacturing
33991	Jewelry and Silverware Manufacturing

339910	Jewelry and Silverware Manufacturing
33992	Sporting and Athletic Goods Manufacturing
339920	Sporting and Athletic Goods Manufacturing
33993	Doll, Toy, and Game Manufacturing
339930	Doll, Toy, and Game Manufacturing
33994	Office Supplies (except Paper) Manufacturing
339940	Office Supplies (except Paper) Manufacturing
33995	Sign Manufacturing
339950	Sign Manufacturing
33999	All Other Miscellaneous Manufacturing
339991	Gasket, Packing, and Sealing Device Manufacturing
339992	Musical Instrument Manufacturing
339993	Fastener, Button, Needle, and Pin Manufacturing
339994	Broom, Brush, and Mop Manufacturing
339995	Burial Casket Manufacturing
339999	All Other Miscellaneous Manufacturing
42	Wholesale Trade
423	Merchant Wholesalers, Durable Goods
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers
42311	Automobile and Other Motor Vehicle Merchant Wholesalers
423110	Automobile and Other Motor Vehicle Merchant Wholesalers
42312	Motor Vehicle Supplies and New Parts Merchant Wholesalers
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers
42313	Tire and Tube Merchant Wholesalers
423130	Tire and Tube Merchant Wholesalers
42314	Motor Vehicle Parts (Used) Merchant Wholesalers
423140	Motor Vehicle Parts (Used) Merchant Wholesalers
4232	Furniture and Home Furnishing Merchant Wholesalers
42321	Furniture Merchant Wholesalers
423210	Furniture Merchant Wholesalers
42322	Home Furnishing Merchant Wholesalers
423220	Home Furnishing Merchant Wholesalers
4233	Lumber and Other Construction Materials Merchant Wholesalers
42331	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers
42332	Brick, Stone, and Related Construction Material Merchant Wholesalers
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers
42333	Roofing, Siding, and Insulation Material Merchant Wholesalers
423330	Roofing, Siding, and Insulation Material Merchant Wholesalers
42339	Other Construction Material Merchant Wholesalers
423390	Other Construction Material Merchant Wholesalers
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers
42341	Photographic Equipment and Supplies Merchant Wholesalers
423410	Photographic Equipment and Supplies Merchant Wholesalers
42342	Office Equipment Merchant Wholesalers
423420	Office Equipment Merchant Wholesalers
42343	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers
42344	Other Commercial Equipment Merchant Wholesalers
423440	Other Commercial Equipment Merchant Wholesalers
42345	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers
42346	Ophthalmic Goods Merchant Wholesalers
423460	Ophthalmic Goods Merchant Wholesalers
42349	Other Professional Equipment and Supplies Merchant Wholesalers

423490	Other Professional Equipment and Supplies Merchant Wholesalers
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers
42351	Metal Service Centers and Other Metal Merchant Wholesalers
423510	Metal Service Centers and Other Metal Merchant Wholesalers
42352	Coal and Other Mineral and Ore Merchant Wholesalers
423520	Coal and Other Mineral and Ore Merchant Wholesalers
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers
42361	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers
42362	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers
42369	Other Electronic Parts and Equipment Merchant Wholesalers
423690	Other Electronic Parts and Equipment Merchant Wholesalers
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers
42371	Hardware Merchant Wholesalers
423710	Hardware Merchant Wholesalers
42372	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers
42373	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers
42374	Refrigeration Equipment and Supplies Merchant Wholesalers
423740	Refrigeration Equipment and Supplies Merchant Wholesalers
4238	Machinery, Equipment, and Supplies Merchant Wholesalers
42381	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers
42382	Farm and Garden Machinery and Equipment Merchant Wholesalers
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers
42383	Industrial Machinery and Equipment Merchant Wholesalers
423830	Industrial Machinery and Equipment Merchant Wholesalers
42384	Industrial Supplies Merchant Wholesalers
423840	Industrial Supplies Merchant Wholesalers
42385	Service Establishment Equipment and Supplies Merchant Wholesalers
423850	Service Establishment Equipment and Supplies Merchant Wholesalers
42386	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers
4239	Miscellaneous Durable Goods Merchant Wholesalers
42391	Sporting and Recreational Goods and Supplies Merchant Wholesalers
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers
42392	Toy and Hobby Goods and Supplies Merchant Wholesalers
423920	Toy and Hobby Goods and Supplies Merchant Wholesalers
42393	Recyclable Material Merchant Wholesalers
423930	Recyclable Material Merchant Wholesalers
42394	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers
423940	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers
42399	Other Miscellaneous Durable Goods Merchant Wholesalers

423990	Other Miscellaneous Durable Goods Merchant Wholesalers
424	Merchant Wholesalers, Nondurable Goods
4241	Paper and Paper Product Merchant Wholesalers
42411	Printing and Writing Paper Merchant Wholesalers
424110	Printing and Writing Paper Merchant Wholesalers
42412	Stationery and Office Supplies Merchant Wholesalers
424120	Stationery and Office Supplies Merchant Wholesalers
42413	Industrial and Personal Service Paper Merchant Wholesalers
424130	Industrial and Personal Service Paper Merchant Wholesalers
4242	Drugs and Druggists' Sundries Merchant Wholesalers
42421	Drugs and Druggists' Sundries Merchant Wholesalers
424210	Drugs and Druggists' Sundries Merchant Wholesalers
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers
42431	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers
424310	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers
42432	Men's and Boys' Clothing and Furnishings Merchant Wholesalers
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers
42433	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers
42434	Footwear Merchant Wholesalers
424340	Footwear Merchant Wholesalers
4244	Grocery and Related Product Merchant Wholesalers
42441	General Line Grocery Merchant Wholesalers
424410	General Line Grocery Merchant Wholesalers
42442	Packaged Frozen Food Merchant Wholesalers
424420	Packaged Frozen Food Merchant Wholesalers
42443	Dairy Product (except Dried or Canned) Merchant Wholesalers
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers
42444	Poultry and Poultry Product Merchant Wholesalers
424440	Poultry and Poultry Product Merchant Wholesalers
42445	Confectionery Merchant Wholesalers
424450	Confectionery Merchant Wholesalers
42446	Fish and Seafood Merchant Wholesalers
424460	Fish and Seafood Merchant Wholesalers
42447	Meat and Meat Product Merchant Wholesalers
424470	Meat and Meat Product Merchant Wholesalers
42448	Fresh Fruit and Vegetable Merchant Wholesalers
424480	Fresh Fruit and Vegetable Merchant Wholesalers
42449	Other Grocery and Related Products Merchant Wholesalers
424490	Other Grocery and Related Products Merchant Wholesalers
4245	Farm Product Raw Material Merchant Wholesalers
42451	Grain and Field Bean Merchant Wholesalers
424510	Grain and Field Bean Merchant Wholesalers
42452	Livestock Merchant Wholesalers
424520	Livestock Merchant Wholesalers
42459	Other Farm Product Raw Material Merchant Wholesalers
424590	Other Farm Product Raw Material Merchant Wholesalers
4246	Chemical and Allied Products Merchant Wholesalers
42461	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers
42469	Other Chemical and Allied Products Merchant Wholesalers
424690	Other Chemical and Allied Products Merchant Wholesalers
4247	Petroleum and Petroleum Products Merchant Wholesalers
42471	Petroleum Bulk Stations and Terminals
424710	Petroleum Bulk Stations and Terminals

42472	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers
42481	Beer and Ale Merchant Wholesalers
424810	Beer and Ale Merchant Wholesalers
42482	Wine and Distilled Alcoholic Beverage Merchant Wholesalers
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers
4249	Miscellaneous Nondurable Goods Merchant Wholesalers
42491	Farm Supplies Merchant Wholesalers
424910	Farm Supplies Merchant Wholesalers
42492	Book, Periodical, and Newspaper Merchant Wholesalers
424920	Book, Periodical, and Newspaper Merchant Wholesalers
42493	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers
42494	Tobacco and Tobacco Product Merchant Wholesalers
424940	Tobacco and Tobacco Product Merchant Wholesalers
42495	Paint, Varnish, and Supplies Merchant Wholesalers
424950	Paint, Varnish, and Supplies Merchant Wholesalers
42499	Other Miscellaneous Nondurable Goods Merchant Wholesalers
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers
425	Wholesale Electronic Markets and Agents and Brokers
4251	Wholesale Electronic Markets and Agents and Brokers
42511	Business to Business Electronic Markets
425110	Business to Business Electronic Markets
42512	Wholesale Trade Agents and Brokers
425120	Wholesale Trade Agents and Brokers
44-45	Retail Trade
441	Motor Vehicle and Parts Dealers
4411	Automobile Dealers
44111	New Car Dealers
441110	New Car Dealers
44112	Used Car Dealers
441120	Used Car Dealers
4412	Other Motor Vehicle Dealers
44121	Recreational Vehicle Dealers
441210	Recreational Vehicle Dealers
44122	Motorcycle, Boat, and Other Motor Vehicle Dealers
441222	Boat Dealers
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers
4413	Automotive Parts, Accessories, and Tire Stores
44131	Automotive Parts and Accessories Stores
441310	Automotive Parts and Accessories Stores
44132	Tire Dealers
441320	Tire Dealers
442	Furniture and Home Furnishings Stores
4421	Furniture Stores
44211	Furniture Stores
442110	Furniture Stores
4422	Home Furnishings Stores
44221	Floor Covering Stores
442210	Floor Covering Stores
44229	Other Home Furnishings Stores
442291	Window Treatment Stores

442299	All Other Home Furnishings Stores
443	Electronics and Appliance Stores
4431	Electronics and Appliance Stores
44314	Electronics and Appliance Stores
443141	Household Appliance Stores
443142	Electronics Stores
444	Building Material and Garden Equipment and Supplies Dealers
4441	Building Material and Supplies Dealers
44411	Home Centers
444110	Home Centers
44412	Paint and Wallpaper Stores
444120	Paint and Wallpaper Stores
44413	Hardware Stores
444130	Hardware Stores
44419	Other Building Material Dealers
444190	Other Building Material Dealers
4442	Lawn and Garden Equipment and Supplies Stores
44421	Outdoor Power Equipment Stores
444210	Outdoor Power Equipment Stores
44422	Nursery, Garden Center, and Farm Supply Stores
444220	Nursery, Garden Center, and Farm Supply Stores
445	Food and Beverage Stores
4451	Grocery Stores
44511	Supermarkets and Other Grocery (except Convenience) Stores
445110	Supermarkets and Other Grocery (except Convenience) Stores
44512	Convenience Stores
445120	Convenience Stores
4452	Specialty Food Stores
44521	Meat Markets
445210	Meat Markets
44522	Fish and Seafood Markets
445220	Fish and Seafood Markets
44523	Fruit and Vegetable Markets
445230	Fruit and Vegetable Markets
44529	Other Specialty Food Stores
445291	Baked Goods Stores
445292	Confectionery and Nut Stores
445299	All Other Specialty Food Stores
4453	Beer, Wine, and Liquor Stores
44531	Beer, Wine, and Liquor Stores
445310	Beer, Wine, and Liquor Stores
446	Health and Personal Care Stores
4461	Health and Personal Care Stores
44611	Pharmacies and Drug Stores
446110	Pharmacies and Drug Stores
44612	Cosmetics, Beauty Supplies, and Perfume Stores
446120	Cosmetics, Beauty Supplies, and Perfume Stores
44613	Optical Goods Stores
446130	Optical Goods Stores
44619	Other Health and Personal Care Stores
446191	Food (Health) Supplement Stores
446199	All Other Health and Personal Care Stores
447	Gasoline Stations
4471	Gasoline Stations
44711	Gasoline Stations with Convenience Stores

447110	Gasoline Stations with Convenience Stores
44719	Other Gasoline Stations
447190	Other Gasoline Stations
448	Clothing and Clothing Accessories Stores
4481	Clothing Stores
44811	Men's Clothing Stores
448110	Men's Clothing Stores
44812	Women's Clothing Stores
448120	Women's Clothing Stores
44813	Children's and Infants' Clothing Stores
448130	Children's and Infants' Clothing Stores
44814	Family Clothing Stores
448140	Family Clothing Stores
44815	Clothing Accessories Stores
448150	Clothing Accessories Stores
44819	Other Clothing Stores
448190	Other Clothing Stores
4482	Shoe Stores
44821	Shoe Stores
448210	Shoe Stores
4483	Jewelry, Luggage, and Leather Goods Stores
44831	Jewelry Stores
448310	Jewelry Stores
44832	Luggage and Leather Goods Stores
448320	Luggage and Leather Goods Stores
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores
4511	Sporting Goods, Hobby, and Musical Instrument Stores
45111	Sporting Goods Stores
451110	Sporting Goods Stores
45112	Hobby, Toy, and Game Stores
451120	Hobby, Toy, and Game Stores
45113	Sewing, Needlework, and Piece Goods Stores
451130	Sewing, Needlework, and Piece Goods Stores
45114	Musical Instrument and Supplies Stores
451140	Musical Instrument and Supplies Stores
4512	Book Stores and News Dealers
45121	Book Stores and News Dealers
451211	Book Stores
451212	News Dealers and Newsstands
452	General Merchandise Stores
4521	Department Stores
45211	Department Stores
452111	Department Stores (except Discount Department Stores)
452112	Discount Department Stores
4529	Other General Merchandise Stores
45291	Warehouse Clubs and Supercenters
452910	Warehouse Clubs and Supercenters
45299	All Other General Merchandise Stores
452990	All Other General Merchandise Stores
453	Miscellaneous Store Retailers
4531	Florists
45311	Florists
453110	Florists
4532	Office Supplies, Stationery, and Gift Stores
45321	Office Supplies and Stationery Stores

453210	Office Supplies and Stationery Stores
45322	Gift, Novelty, and Souvenir Stores
453220	Gift, Novelty, and Souvenir Stores
4533	Used Merchandise Stores
45331	Used Merchandise Stores
453310	Used Merchandise Stores
4539	Other Miscellaneous Store Retailers
45391	Pet and Pet Supplies Stores
453910	Pet and Pet Supplies Stores
45392	Art Dealers
453920	Art Dealers
45393	Manufactured (Mobile) Home Dealers
453930	Manufactured (Mobile) Home Dealers
45399	All Other Miscellaneous Store Retailers
453991	Tobacco Stores
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)
454	Nonstore Retailers
4541	Electronic Shopping and Mail-Order Houses
45411	Electronic Shopping and Mail-Order Houses
454111	Electronic Shopping
454112	Electronic Auctions
454113	Mail-Order Houses
4542	Vending Machine Operators
45421	Vending Machine Operators
454210	Vending Machine Operators
4543	Direct Selling Establishments
45431	Fuel Dealers
454310	Fuel Dealers
45439	Other Direct Selling Establishments
454390	Other Direct Selling Establishments
48-49	Transportation and Warehousing
481	Air Transportation
4811	Scheduled Air Transportation
48111	Scheduled Air Transportation
481111	Scheduled Passenger Air Transportation
481112	Scheduled Freight Air Transportation
4812	Nonscheduled Air Transportation
48121	Nonscheduled Air Transportation
481211	Nonscheduled Chartered Passenger Air Transportation
481212	Nonscheduled Chartered Freight Air Transportation
481219	Other Nonscheduled Air Transportation
482	Rail Transportation
4821	Rail Transportation
48211	Rail Transportation
482111	Line-Haul Railroads
482112	Short Line Railroads
483	Water Transportation
4831	Deep Sea, Coastal, and Great Lakes Water Transportation
48311	Deep Sea, Coastal, and Great Lakes Water Transportation
483111	Deep Sea Freight Transportation
483112	Deep Sea Passenger Transportation
483113	Coastal and Great Lakes Freight Transportation
483114	Coastal and Great Lakes Passenger Transportation
4832	Inland Water Transportation
48321	Inland Water Transportation

483211	Inland Water Freight Transportation
483212	Inland Water Passenger Transportation
484	Truck Transportation
4841	General Freight Trucking
48411	General Freight Trucking, Local
484110	General Freight Trucking, Local
48412	General Freight Trucking, Long-Distance
484121	General Freight Trucking, Long-Distance, Truckload
484122	General Freight Trucking, Long-Distance, Less Than Truckload
4842	Specialized Freight Trucking
48421	Used Household and Office Goods Moving
484210	Used Household and Office Goods Moving
48422	Specialized Freight (except Used Goods) Trucking, Local
484220	Specialized Freight (except Used Goods) Trucking, Local
48423	Specialized Freight (except Used Goods) Trucking, Long-Distance
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance
485	Transit and Ground Passenger Transportation
4851	Urban Transit Systems
48511	Urban Transit Systems
485111	Mixed Mode Transit Systems
485112	Commuter Rail Systems
485113	Bus and Other Motor Vehicle Transit Systems
485119	Other Urban Transit Systems
4852	Interurban and Rural Bus Transportation
48521	Interurban and Rural Bus Transportation
485210	Interurban and Rural Bus Transportation
4853	Taxi and Limousine Service
48531	Taxi Service
485310	Taxi Service
48532	Limousine Service
485320	Limousine Service
4854	School and Employee Bus Transportation
48541	School and Employee Bus Transportation
485410	School and Employee Bus Transportation
4855	Charter Bus Industry
48551	Charter Bus Industry
485510	Charter Bus Industry
4859	Other Transit and Ground Passenger Transportation
48599	Other Transit and Ground Passenger Transportation
485991	Special Needs Transportation
485999	All Other Transit and Ground Passenger Transportation
486	Pipeline Transportation
4861	Pipeline Transportation of Crude Oil
48611	Pipeline Transportation of Crude Oil
486110	Pipeline Transportation of Crude Oil
4862	Pipeline Transportation of Natural Gas
48621	Pipeline Transportation of Natural Gas
486210	Pipeline Transportation of Natural Gas
4869	Other Pipeline Transportation
48691	Pipeline Transportation of Refined Petroleum Products
486910	Pipeline Transportation of Refined Petroleum Products
48699	All Other Pipeline Transportation
486990	All Other Pipeline Transportation
487	Scenic and Sightseeing Transportation
4871	Scenic and Sightseeing Transportation, Land

48711	Scenic and Sightseeing Transportation, Land
487110	Scenic and Sightseeing Transportation, Land
4872	Scenic and Sightseeing Transportation, Water
48721	Scenic and Sightseeing Transportation, Water
487210	Scenic and Sightseeing Transportation, Water
4879	Scenic and Sightseeing Transportation, Other
48799	Scenic and Sightseeing Transportation, Other
487990	Scenic and Sightseeing Transportation, Other
488	Support Activities for Transportation
4881	Support Activities for Air Transportation
48811	Airport Operations
488111	Air Traffic Control
488119	Other Airport Operations
48819	Other Support Activities for Air Transportation
488190	Other Support Activities for Air Transportation
4882	Support Activities for Rail Transportation
48821	Support Activities for Rail Transportation
488210	Support Activities for Rail Transportation
4883	Support Activities for Water Transportation
48831	Port and Harbor Operations
488310	Port and Harbor Operations
48832	Marine Cargo Handling
488320	Marine Cargo Handling
48833	Navigational Services to Shipping
488330	Navigational Services to Shipping
48839	Other Support Activities for Water Transportation
488390	Other Support Activities for Water Transportation
4884	Support Activities for Road Transportation
48841	Motor Vehicle Towing
488410	Motor Vehicle Towing
48849	Other Support Activities for Road Transportation
488490	Other Support Activities for Road Transportation
4885	Freight Transportation Arrangement
48851	Freight Transportation Arrangement
488510	Freight Transportation Arrangement
4889	Other Support Activities for Transportation
48899	Other Support Activities for Transportation
488991	Packing and Crating
488999	All Other Support Activities for Transportation
491	Postal Service
4911	Postal Service
49111	Postal Service
491110	Postal Service
492	Couriers and Messengers
4921	Couriers and Express Delivery Services
49211	Couriers and Express Delivery Services
492110	Couriers and Express Delivery Services
4922	Local Messengers and Local Delivery
49221	Local Messengers and Local Delivery
492210	Local Messengers and Local Delivery
493	Warehousing and Storage
4931	Warehousing and Storage
49311	General Warehousing and Storage
493110	General Warehousing and Storage
49312	Refrigerated Warehousing and Storage

493120	Refrigerated Warehousing and Storage
49313	Farm Product Warehousing and Storage
493130	Farm Product Warehousing and Storage
49319	Other Warehousing and Storage
493190	Other Warehousing and Storage
<b>51</b>	<b>Information</b>
511	Publishing Industries (except Internet)
5111	Newspaper, Periodical, Book, and Directory Publishers
51111	Newspaper Publishers
511110	Newspaper Publishers
51112	Periodical Publishers
511120	Periodical Publishers
51113	Book Publishers
511130	Book Publishers
51114	Directory and Mailing List Publishers
511140	Directory and Mailing List Publishers
51119	Other Publishers
511191	Greeting Card Publishers
511199	All Other Publishers
5112	Software Publishers
51121	Software Publishers
511210	Software Publishers
512	Motion Picture and Sound Recording Industries
5121	Motion Picture and Video Industries
51211	Motion Picture and Video Production
512110	Motion Picture and Video Production
51212	Motion Picture and Video Distribution
512120	Motion Picture and Video Distribution
51213	Motion Picture and Video Exhibition
512131	Motion Picture Theaters (except Drive-Ins)
512132	Drive-In Motion Picture Theaters
51219	Postproduction Services and Other Motion Picture and Video Industries
512191	Teleproduction and Other Postproduction Services
512199	Other Motion Picture and Video Industries
5122	Sound Recording Industries
51221	Record Production
512210	Record Production
51222	Integrated Record Production/Distribution
512220	Integrated Record Production/Distribution
51223	Music Publishers
512230	Music Publishers
51224	Sound Recording Studios
512240	Sound Recording Studios
51229	Other Sound Recording Industries
512290	Other Sound Recording Industries
515	Broadcasting (except Internet)
5151	Radio and Television Broadcasting
51511	Radio Broadcasting
515111	Radio Networks
515112	Radio Stations
51512	Television Broadcasting
515120	Television Broadcasting
5152	Cable and Other Subscription Programming
51521	Cable and Other Subscription Programming
515210	Cable and Other Subscription Programming

517	Telecommunications
5171	Wired Telecommunications Carriers
51711	Wired Telecommunications Carriers
517110	Wired Telecommunications Carriers
5172	Wireless Telecommunications Carriers (except Satellite)
51721	Wireless Telecommunications Carriers (except Satellite)
517210	Wireless Telecommunications Carriers (except Satellite)
5174	Satellite Telecommunications
51741	Satellite Telecommunications
517410	Satellite Telecommunications
5179	Other Telecommunications
51791	Other Telecommunications
517911	Telecommunications Resellers
517919	All Other Telecommunications
518	Data Processing, Hosting, and Related Services
5182	Data Processing, Hosting, and Related Services
51821	Data Processing, Hosting, and Related Services
518210	Data Processing, Hosting, and Related Services
519	Other Information Services
5191	Other Information Services
51911	News Syndicates
519110	News Syndicates
51912	Libraries and Archives
519120	Libraries and Archives
51913	Internet Publishing and Broadcasting and Web Search Portals
519130	Internet Publishing and Broadcasting and Web Search Portals
51919	All Other Information Services
519190	All Other Information Services
52	Finance and Insurance
521	Monetary Authorities-Central Bank
5211	Monetary Authorities-Central Bank
52111	Monetary Authorities-Central Bank
521110	Monetary Authorities-Central Bank
522	Credit Intermediation and Related Activities
5221	Depository Credit Intermediation
52211	Commercial Banking
522110	Commercial Banking
52212	Savings Institutions
522120	Savings Institutions
52213	Credit Unions
522130	Credit Unions
52219	Other Depository Credit Intermediation
522190	Other Depository Credit Intermediation
5222	Nondepository Credit Intermediation
52221	Credit Card Issuing
522210	Credit Card Issuing
52222	Sales Financing
522220	Sales Financing
52229	Other Nondepository Credit Intermediation
522291	Consumer Lending
522292	Real Estate Credit
522293	International Trade Financing
522294	Secondary Market Financing
522298	All Other Nondepository Credit Intermediation
5223	Activities Related to Credit Intermediation

52231	Mortgage and Nonmortgage Loan Brokers
522310	Mortgage and Nonmortgage Loan Brokers
52232	Financial Transactions Processing, Reserve, and Clearinghouse Activities
522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities
52239	Other Activities Related to Credit Intermediation
522390	Other Activities Related to Credit Intermediation
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities
5231	Securities and Commodity Contracts Intermediation and Brokerage
52311	Investment Banking and Securities Dealing
523110	Investment Banking and Securities Dealing
52312	Securities Brokerage
523120	Securities Brokerage
52313	Commodity Contracts Dealing
523130	Commodity Contracts Dealing
52314	Commodity Contracts Brokerage
523140	Commodity Contracts Brokerage
5232	Securities and Commodity Exchanges
52321	Securities and Commodity Exchanges
523210	Securities and Commodity Exchanges
5239	Other Financial Investment Activities
52391	Miscellaneous Intermediation
523910	Miscellaneous Intermediation
52392	Portfolio Management
523920	Portfolio Management
52393	Investment Advice
523930	Investment Advice
52399	All Other Financial Investment Activities
523991	Trust, Fiduciary, and Custody Activities
523999	Miscellaneous Financial Investment Activities
524	Insurance Carriers and Related Activities
5241	Insurance Carriers
52411	Direct Life, Health, and Medical Insurance Carriers
524113	Direct Life Insurance Carriers
524114	Direct Health and Medical Insurance Carriers
52412	Direct Insurance (except Life, Health, and Medical) Carriers
524126	Direct Property and Casualty Insurance Carriers
524127	Direct Title Insurance Carriers
524128	Other Direct Insurance (except Life, Health, and Medical) Carriers
52413	Reinsurance Carriers
524130	Reinsurance Carriers
5242	Agencies, Brokerages, and Other Insurance Related Activities
52421	Insurance Agencies and Brokerages
524210	Insurance Agencies and Brokerages
52429	Other Insurance Related Activities
524291	Claims Adjusting
524292	Third Party Administration of Insurance and Pension Funds
524298	All Other Insurance Related Activities
525	Funds, Trusts, and Other Financial Vehicles
5251	Insurance and Employee Benefit Funds
52511	Pension Funds
525110	Pension Funds
52512	Health and Welfare Funds
525120	Health and Welfare Funds
52519	Other Insurance Funds

525190	Other Insurance Funds
5259	Other Investment Pools and Funds
52591	Open-End Investment Funds
525910	Open-End Investment Funds
52592	Trusts, Estates, and Agency Accounts
525920	Trusts, Estates, and Agency Accounts
52599	Other Financial Vehicles
525990	Other Financial Vehicles
53	Real Estate and Rental and Leasing
531	Real Estate
5311	Lessors of Real Estate
53111	Lessors of Residential Buildings and Dwellings
531110	Lessors of Residential Buildings and Dwellings
53112	Lessors of Nonresidential Buildings (except Miniwarehouses)
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)
53113	Lessors of Miniwarehouses and Self-Storage Units
531130	Lessors of Miniwarehouses and Self-Storage Units
53119	Lessors of Other Real Estate Property
531190	Lessors of Other Real Estate Property
5312	Offices of Real Estate Agents and Brokers
53121	Offices of Real Estate Agents and Brokers
531210	Offices of Real Estate Agents and Brokers
5313	Activities Related to Real Estate
53131	Real Estate Property Managers
531311	Residential Property Managers
531312	Nonresidential Property Managers
53132	Offices of Real Estate Appraisers
531320	Offices of Real Estate Appraisers
53139	Other Activities Related to Real Estate
531390	Other Activities Related to Real Estate
532	Rental and Leasing Services
5321	Automotive Equipment Rental and Leasing
53211	Passenger Car Rental and Leasing
532111	Passenger Car Rental
532112	Passenger Car Leasing
53212	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing
5322	Consumer Goods Rental
53221	Consumer Electronics and Appliances Rental
532210	Consumer Electronics and Appliances Rental
53222	Formal Wear and Costume Rental
532220	Formal Wear and Costume Rental
53223	Video Tape and Disc Rental
532230	Video Tape and Disc Rental
53229	Other Consumer Goods Rental
532291	Home Health Equipment Rental
532292	Recreational Goods Rental
532299	All Other Consumer Goods Rental
5323	General Rental Centers
53231	General Rental Centers
532310	General Rental Centers
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing
53241	Construction, Transportation, Mining, and Forestry Machinery and Equipment Rental and Leasing
532411	Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing

532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing
53242	Office Machinery and Equipment Rental and Leasing
532420	Office Machinery and Equipment Rental and Leasing
53249	Other Commercial and Industrial Machinery and Equipment Rental and Leasing
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
53311	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
533110	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
54	Professional, Scientific, and Technical Services
541	Professional, Scientific, and Technical Services
5411	Legal Services
54111	Offices of Lawyers
541110	Offices of Lawyers
54112	Offices of Notaries
541120	Offices of Notaries
54119	Other Legal Services
541191	Title Abstract and Settlement Offices
541199	All Other Legal Services
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services
54121	Accounting, Tax Preparation, Bookkeeping, and Payroll Services
541211	Offices of Certified Public Accountants
541213	Tax Preparation Services
541214	Payroll Services
541219	Other Accounting Services
5413	Architectural, Engineering, and Related Services
54131	Architectural Services
541310	Architectural Services
54132	Landscape Architectural Services
541320	Landscape Architectural Services
54133	Engineering Services
541330	Engineering Services
54134	Drafting Services
541340	Drafting Services
54135	Building Inspection Services
541350	Building Inspection Services
54136	Geophysical Surveying and Mapping Services
541360	Geophysical Surveying and Mapping Services
54137	Surveying and Mapping (except Geophysical) Services
541370	Surveying and Mapping (except Geophysical) Services
54138	Testing Laboratories
541380	Testing Laboratories
5414	Specialized Design Services
54141	Interior Design Services
541410	Interior Design Services
54142	Industrial Design Services
541420	Industrial Design Services
54143	Graphic Design Services
541430	Graphic Design Services
54149	Other Specialized Design Services
541490	Other Specialized Design Services
5415	Computer Systems Design and Related Services
54151	Computer Systems Design and Related Services
541511	Custom Computer Programming Services
541512	Computer Systems Design Services

541513	Computer Facilities Management Services
541519	Other Computer Related Services
5416	Management, Scientific, and Technical Consulting Services
54161	Management Consulting Services
541611	Administrative Management and General Management Consulting Services
541612	Human Resources Consulting Services
541613	Marketing Consulting Services
541614	Process, Physical Distribution, and Logistics Consulting Services
541618	Other Management Consulting Services
54162	Environmental Consulting Services
541620	Environmental Consulting Services
54169	Other Scientific and Technical Consulting Services
541690	Other Scientific and Technical Consulting Services
5417	Scientific Research and Development Services
54171	Research and Development in the Physical, Engineering, and Life Sciences
541711	Research and Development in Biotechnology
541712	Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)
54172	Research and Development in the Social Sciences and Humanities
541720	Research and Development in the Social Sciences and Humanities
5418	Advertising, Public Relations, and Related Services
54181	Advertising Agencies
541810	Advertising Agencies
54182	Public Relations Agencies
541820	Public Relations Agencies
54183	Media Buying Agencies
541830	Media Buying Agencies
54184	Media Representatives
541840	Media Representatives
54185	Outdoor Advertising
541850	Outdoor Advertising
54186	Direct Mail Advertising
541860	Direct Mail Advertising
54187	Advertising Material Distribution Services
541870	Advertising Material Distribution Services
54189	Other Services Related to Advertising
541890	Other Services Related to Advertising
5419	Other Professional, Scientific, and Technical Services
54191	Marketing Research and Public Opinion Polling
541910	Marketing Research and Public Opinion Polling
54192	Photographic Services
541921	Photography Studios, Portrait
541922	Commercial Photography
54193	Translation and Interpretation Services
541930	Translation and Interpretation Services
54194	Veterinary Services
541940	Veterinary Services
54199	All Other Professional, Scientific, and Technical Services
541990	All Other Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
551	Management of Companies and Enterprises
5511	Management of Companies and Enterprises
55111	Management of Companies and Enterprises
551111	Offices of Bank Holding Companies
551112	Offices of Other Holding Companies

551114	Corporate, Subsidiary, and Regional Managing Offices
56	Administrative and Support and Waste Management and Remediation Services
561	Administrative and Support Services
5611	Office Administrative Services
56111	Office Administrative Services
561110	Office Administrative Services
5612	Facilities Support Services
56121	Facilities Support Services
561210	Facilities Support Services
5613	Employment Services
56131	Employment Placement Agencies and Executive Search Services
561311	Employment Placement Agencies
561312	Executive Search Services
56132	Temporary Help Services
561320	Temporary Help Services
56133	Professional Employer Organizations
561330	Professional Employer Organizations
5614	Business Support Services
56141	Document Preparation Services
561410	Document Preparation Services
56142	Telephone Call Centers
561421	Telephone Answering Services
561422	Telemarketing Bureaus and Other Contact Centers
56143	Business Service Centers
561431	Private Mail Centers
561439	Other Business Service Centers (including Copy Shops)
56144	Collection Agencies
561440	Collection Agencies
56145	Credit Bureaus
561450	Credit Bureaus
56149	Other Business Support Services
561491	Repossession Services
561492	Court Reporting and Stenotype Services
561499	All Other Business Support Services
5615	Travel Arrangement and Reservation Services
56151	Travel Agencies
561510	Travel Agencies
56152	Tour Operators
561520	Tour Operators
56159	Other Travel Arrangement and Reservation Services
561591	Convention and Visitors Bureaus
561599	All Other Travel Arrangement and Reservation Services
5616	Investigation and Security Services
56161	Investigation, Guard, and Armored Car Services
561611	Investigation Services
561612	Security Guards and Patrol Services
561613	Armored Car Services
56162	Security Systems Services
561621	Security Systems Services (except Locksmiths)
561622	Locksmiths
5617	Services to Buildings and Dwellings
56171	Exterminating and Pest Control Services
561710	Exterminating and Pest Control Services
56172	Janitorial Services
561720	Janitorial Services

56173	Landscaping Services
561730	Landscaping Services
56174	Carpet and Upholstery Cleaning Services
561740	Carpet and Upholstery Cleaning Services
56179	Other Services to Buildings and Dwellings
561790	Other Services to Buildings and Dwellings
5619	Other Support Services
56191	Packaging and Labeling Services
561910	Packaging and Labeling Services
56192	Convention and Trade Show Organizers
561920	Convention and Trade Show Organizers
56199	All Other Support Services
561990	All Other Support Services
562	Waste Management and Remediation Services
5621	Waste Collection
56211	Waste Collection
562111	Solid Waste Collection
562112	Hazardous Waste Collection
562119	Other Waste Collection
5622	Waste Treatment and Disposal
56221	Waste Treatment and Disposal
562211	Hazardous Waste Treatment and Disposal
562212	Solid Waste Landfill
562213	Solid Waste Combustors and Incinerators
562219	Other Nonhazardous Waste Treatment and Disposal
5629	Remediation and Other Waste Management Services
56291	Remediation Services
562910	Remediation Services
56292	Materials Recovery Facilities
562920	Materials Recovery Facilities
56299	All Other Waste Management Services
562991	Septic Tank and Related Services
562998	All Other Miscellaneous Waste Management Services
61	Educational Services
611	Educational Services
6111	Elementary and Secondary Schools
61111	Elementary and Secondary Schools
611110	Elementary and Secondary Schools
6112	Junior Colleges
61121	Junior Colleges
611210	Junior Colleges
6113	Colleges, Universities, and Professional Schools
61131	Colleges, Universities, and Professional Schools
611310	Colleges, Universities, and Professional Schools
6114	Business Schools and Computer and Management Training
61141	Business and Secretarial Schools
611410	Business and Secretarial Schools
61142	Computer Training
611420	Computer Training
61143	Professional and Management Development Training
611430	Professional and Management Development Training
6115	Technical and Trade Schools
61151	Technical and Trade Schools
611511	Cosmetology and Barber Schools
611512	Flight Training

611513	Apprenticeship Training
611519	Other Technical and Trade Schools
6116	Other Schools and Instruction
61161	Fine Arts Schools
611610	Fine Arts Schools
61162	Sports and Recreation Instruction
611620	Sports and Recreation Instruction
61163	Language Schools
611630	Language Schools
61169	All Other Schools and Instruction
611691	Exam Preparation and Tutoring
611692	Automobile Driving Schools
611699	All Other Miscellaneous Schools and Instruction
6117	Educational Support Services
61171	Educational Support Services
611710	Educational Support Services
<b>62</b>	<b>Health Care and Social Assistance</b>
621	Ambulatory Health Care Services
6211	Offices of Physicians
62111	Offices of Physicians
621111	Offices of Physicians (except Mental Health Specialists)
621112	Offices of Physicians, Mental Health Specialists
6212	Offices of Dentists
62121	Offices of Dentists
621210	Offices of Dentists
6213	Offices of Other Health Practitioners
62131	Offices of Chiropractors
621310	Offices of Chiropractors
62132	Offices of Optometrists
621320	Offices of Optometrists
62133	Offices of Mental Health Practitioners (except Physicians)
621330	Offices of Mental Health Practitioners (except Physicians)
62134	Offices of Physical, Occupational and Speech Therapists, and Audiologists
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists
62139	Offices of All Other Health Practitioners
621391	Offices of Podiatrists
621399	Offices of All Other Miscellaneous Health Practitioners
6214	Outpatient Care Centers
62141	Family Planning Centers
621410	Family Planning Centers
62142	Outpatient Mental Health and Substance Abuse Centers
621420	Outpatient Mental Health and Substance Abuse Centers
62149	Other Outpatient Care Centers
621491	HMO Medical Centers
621492	Kidney Dialysis Centers
621493	Freestanding Ambulatory Surgical and Emergency Centers
621498	All Other Outpatient Care Centers
6215	Medical and Diagnostic Laboratories
62151	Medical and Diagnostic Laboratories
621511	Medical Laboratories
621512	Diagnostic Imaging Centers
6216	Home Health Care Services
62161	Home Health Care Services
621610	Home Health Care Services
6219	Other Ambulatory Health Care Services

62191	Ambulance Services
621910	Ambulance Services
62199	All Other Ambulatory Health Care Services
621991	Blood and Organ Banks
621999	All Other Miscellaneous Ambulatory Health Care Services
622	Hospitals
6221	General Medical and Surgical Hospitals
62211	General Medical and Surgical Hospitals
622110	General Medical and Surgical Hospitals
6222	Psychiatric and Substance Abuse Hospitals
62221	Psychiatric and Substance Abuse Hospitals
622210	Psychiatric and Substance Abuse Hospitals
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals
62231	Specialty (except Psychiatric and Substance Abuse) Hospitals
622310	Specialty (except Psychiatric and Substance Abuse) Hospitals
623	Nursing and Residential Care Facilities
6231	Nursing Care Facilities (Skilled Nursing Facilities)
62311	Nursing Care Facilities (Skilled Nursing Facilities)
623110	Nursing Care Facilities (Skilled Nursing Facilities)
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities
62321	Residential Intellectual and Developmental Disability Facilities
623210	Residential Intellectual and Developmental Disability Facilities
62322	Residential Mental Health and Substance Abuse Facilities
623220	Residential Mental Health and Substance Abuse Facilities
6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
62331	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
623311	Continuing Care Retirement Communities
623312	Assisted Living Facilities for the Elderly
6239	Other Residential Care Facilities
62399	Other Residential Care Facilities
623990	Other Residential Care Facilities
624	Social Assistance
6241	Individual and Family Services
62411	Child and Youth Services
624110	Child and Youth Services
62412	Services for the Elderly and Persons with Disabilities
624120	Services for the Elderly and Persons with Disabilities
62419	Other Individual and Family Services
624190	Other Individual and Family Services
6242	Community Food and Housing, and Emergency and Other Relief Services
62421	Community Food Services
624210	Community Food Services
62422	Community Housing Services
624221	Temporary Shelters
624229	Other Community Housing Services
62423	Emergency and Other Relief Services
624230	Emergency and Other Relief Services
6243	Vocational Rehabilitation Services
62431	Vocational Rehabilitation Services
624310	Vocational Rehabilitation Services
6244	Child Day Care Services
62441	Child Day Care Services
624410	Child Day Care Services
71	Arts, Entertainment, and Recreation

711	Performing Arts, Spectator Sports, and Related Industries
7111	Performing Arts Companies
71111	Theater Companies and Dinner Theaters
711110	Theater Companies and Dinner Theaters
71112	Dance Companies
711120	Dance Companies
71113	Musical Groups and Artists
711130	Musical Groups and Artists
71119	Other Performing Arts Companies
711190	Other Performing Arts Companies
7112	Spectator Sports
71121	Spectator Sports
711211	Sports Teams and Clubs
711212	Racetracks
711219	Other Spectator Sports
7113	Promoters of Performing Arts, Sports, and Similar Events
71131	Promoters of Performing Arts, Sports, and Similar Events with Facilities
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities
71132	Promoters of Performing Arts, Sports, and Similar Events without Facilities
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures
71141	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures
7115	Independent Artists, Writers, and Performers
71151	Independent Artists, Writers, and Performers
711510	Independent Artists, Writers, and Performers
712	Museums, Historical Sites, and Similar Institutions
7121	Museums, Historical Sites, and Similar Institutions
71211	Museums
712110	Museums
71212	Historical Sites
712120	Historical Sites
71213	Zoos and Botanical Gardens
712130	Zoos and Botanical Gardens
71219	Nature Parks and Other Similar Institutions
712190	Nature Parks and Other Similar Institutions
713	Amusement, Gambling, and Recreation Industries
7131	Amusement Parks and Arcades
71311	Amusement and Theme Parks
713110	Amusement and Theme Parks
71312	Amusement Arcades
713120	Amusement Arcades
7132	Gambling Industries
71321	Casinos (except Casino Hotels)
713210	Casinos (except Casino Hotels)
71329	Other Gambling Industries
713290	Other Gambling Industries
7139	Other Amusement and Recreation Industries
71391	Golf Courses and Country Clubs
713910	Golf Courses and Country Clubs
71392	Skiing Facilities
713920	Skiing Facilities
71393	Marinas
713930	Marinas
71394	Fitness and Recreational Sports Centers

713940	Fitness and Recreational Sports Centers
71395	Bowling Centers
713950	Bowling Centers
71399	All Other Amusement and Recreation Industries
713990	All Other Amusement and Recreation Industries
<b>72</b>	<b>Accommodation and Food Services</b>
721	Accommodation
7211	Traveler Accommodation
72111	Hotels (except Casino Hotels) and Motels
721110	Hotels (except Casino Hotels) and Motels
72112	Casino Hotels
721120	Casino Hotels
72119	Other Traveler Accommodation
721191	Bed-and-Breakfast Inns
721199	All Other Traveler Accommodation
7212	RV (Recreational Vehicle) Parks and Recreational Camps
72121	RV (Recreational Vehicle) Parks and Recreational Camps
721211	RV (Recreational Vehicle) Parks and Campgrounds
721214	Recreational and Vacation Camps (except Campgrounds)
7213	Rooming and Boarding Houses
72131	Rooming and Boarding Houses
721310	Rooming and Boarding Houses
722	Food Services and Drinking Places
7223	Special Food Services
72231	Food Service Contractors
722310	Food Service Contractors
72232	Caterers
722320	Caterers
72233	Mobile Food Services
722330	Mobile Food Services
7224	Drinking Places (Alcoholic Beverages)
72241	Drinking Places (Alcoholic Beverages)
722410	Drinking Places (Alcoholic Beverages)
7225	Restaurants and Other Eating Places
72251	Restaurants and Other Eating Places
722511	Full-Service Restaurants
722513	Limited-Service Restaurants
722514	Cafeterias, Grill Buffets, and Buffets
722515	Snack and Nonalcoholic Beverage Bars
<b>81</b>	<b>Other Services (except Public Administration)</b>
811	Repair and Maintenance
8111	Automotive Repair and Maintenance
81111	Automotive Mechanical and Electrical Repair and Maintenance
811111	General Automotive Repair
811112	Automotive Exhaust System Repair
811113	Automotive Transmission Repair
811118	Other Automotive Mechanical and Electrical Repair and Maintenance
81112	Automotive Body, Paint, Interior, and Glass Repair
811121	Automotive Body, Paint, and Interior Repair and Maintenance
811122	Automotive Glass Replacement Shops
81119	Other Automotive Repair and Maintenance
811191	Automotive Oil Change and Lubrication Shops
811192	Car Washes
811198	All Other Automotive Repair and Maintenance
8112	Electronic and Precision Equipment Repair and Maintenance

81121	Electronic and Precision Equipment Repair and Maintenance
811211	Consumer Electronics Repair and Maintenance
811212	Computer and Office Machine Repair and Maintenance
811213	Communication Equipment Repair and Maintenance
811219	Other Electronic and Precision Equipment Repair and Maintenance
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance
81131	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance
8114	Personal and Household Goods Repair and Maintenance
81141	Home and Garden Equipment and Appliance Repair and Maintenance
811411	Home and Garden Equipment Repair and Maintenance
811412	Appliance Repair and Maintenance
81142	Reupholstery and Furniture Repair
811420	Reupholstery and Furniture Repair
81143	Footwear and Leather Goods Repair
811430	Footwear and Leather Goods Repair
81149	Other Personal and Household Goods Repair and Maintenance
811490	Other Personal and Household Goods Repair and Maintenance
812	Personal and Laundry Services
8121	Personal Care Services
81211	Hair, Nail, and Skin Care Services
812111	Barber Shops
812112	Beauty Salons
812113	Nail Salons
81219	Other Personal Care Services
812191	Diet and Weight Reducing Centers
812199	Other Personal Care Services
8122	Death Care Services
81221	Funeral Homes and Funeral Services
812210	Funeral Homes and Funeral Services
81222	Cemeteries and Crematories
812220	Cemeteries and Crematories
8123	Drycleaning and Laundry Services
81231	Coin-Operated Laundries and Drycleaners
812310	Coin-Operated Laundries and Drycleaners
81232	Drycleaning and Laundry Services (except Coin-Operated)
812320	Drycleaning and Laundry Services (except Coin-Operated)
81233	Linen and Uniform Supply
812331	Linen Supply
812332	Industrial Launderers
8129	Other Personal Services
81291	Pet Care (except Veterinary) Services
812910	Pet Care (except Veterinary) Services
81292	Photofinishing
812921	Photofinishing Laboratories (except One-Hour)
812922	One-Hour Photofinishing
81293	Parking Lots and Garages
812930	Parking Lots and Garages
81299	All Other Personal Services
812990	All Other Personal Services
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations
8131	Religious Organizations

81311	Religious Organizations
813110	Religious Organizations
8132	Grantmaking and Giving Services
81321	Grantmaking and Giving Services
813211	Grantmaking Foundations
813212	Voluntary Health Organizations
813219	Other Grantmaking and Giving Services
8133	Social Advocacy Organizations
81331	Social Advocacy Organizations
813311	Human Rights Organizations
813312	Environment, Conservation and Wildlife Organizations
813319	Other Social Advocacy Organizations
8134	Civic and Social Organizations
81341	Civic and Social Organizations
813410	Civic and Social Organizations
8139	Business, Professional, Labor, Political, and Similar Organizations
81391	Business Associations
813910	Business Associations
81392	Professional Organizations
813920	Professional Organizations
81393	Labor Unions and Similar Labor Organizations
813930	Labor Unions and Similar Labor Organizations
81394	Political Organizations
813940	Political Organizations
81399	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)
813990	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)
814	Private Households
8141	Private Households
81411	Private Households
814110	Private Households
92	Public Administration
921	Executive, Legislative, and Other General Government Support
9211	Executive, Legislative, and Other General Government Support
92111	Executive Offices
921110	Executive Offices
92112	Legislative Bodies
921120	Legislative Bodies
92113	Public Finance Activities
921130	Public Finance Activities
92114	Executive and Legislative Offices, Combined
921140	Executive and Legislative Offices, Combined
92115	American Indian and Alaska Native Tribal Governments
921150	American Indian and Alaska Native Tribal Governments
92119	Other General Government Support
921190	Other General Government Support
922	Justice, Public Order, and Safety Activities
9221	Justice, Public Order, and Safety Activities
92211	Courts
922110	Courts
92212	Police Protection
922120	Police Protection
92213	Legal Counsel and Prosecution
922130	Legal Counsel and Prosecution

92214 Correctional Institutions  
 922140 Correctional Institutions  
 92215 Parole Offices and Probation Offices  
 922150 Parole Offices and Probation Offices  
 92216 Fire Protection  
 922160 Fire Protection  
 92219 Other Justice, Public Order, and Safety Activities  
 922190 Other Justice, Public Order, and Safety Activities  
 923 Administration of Human Resource Programs  
 9231 Administration of Human Resource Programs  
 92311 Administration of Education Programs  
 923110 Administration of Education Programs  
 92312 Administration of Public Health Programs  
 923120 Administration of Public Health Programs  
 92313 Administration of Human Resource Programs (except Education, Public Health, and Veterans' Affairs Programs)  
 923130 Administration of Human Resource Programs (except Education, Public Health, and Veterans' Affairs Programs)  
 92314 Administration of Veterans' Affairs  
 923140 Administration of Veterans' Affairs  
 924 Administration of Environmental Quality Programs  
 9241 Administration of Environmental Quality Programs  
 92411 Administration of Air and Water Resource and Solid Waste Management Programs  
 924110 Administration of Air and Water Resource and Solid Waste Management Programs  
 92412 Administration of Conservation Programs  
 924120 Administration of Conservation Programs  
 925 Administration of Housing Programs, Urban Planning, and Community Development  
 9251 Administration of Housing Programs, Urban Planning, and Community Development  
 92511 Administration of Housing Programs  
 925110 Administration of Housing Programs  
 92512 Administration of Urban Planning and Community and Rural Development  
 925120 Administration of Urban Planning and Community and Rural Development  
 926 Administration of Economic Programs  
 9261 Administration of Economic Program  
 92611 Administration of General Economic Programs  
 926110 Administration of General Economic Programs  
 92612 Regulation and Administration of Transportation Programs  
 926120 Regulation and Administration of Transportation Programs  
 92613 Regulation and Administration of Communications, Electric, Gas, and Other Utilities  
 926130 Regulation and Administration of Communications, Electric, Gas, and Other Utilities  
 92614 Regulation of Agricultural Marketing and Commodities  
 926140 Regulation of Agricultural Marketing and Commodities  
 92615 Regulation, Licensing, and Inspection of Miscellaneous Commercial Sectors  
 926150 Regulation, Licensing, and Inspection of Miscellaneous Commercial Sectors  
 927 Space Research and Technology  
 9271 Space Research and Technology  
 92711 Space Research and Technology  
 927110 Space Research and Technology  
 928 National Security and International Affairs  
 9281 National Security and International Affairs  
 92811 National Security  
 928110 National Security  
 92812 International Affairs  
 928120 International Affairs

**ORANGE COUNTY  
BOARD OF COMMISSIONERS  
QUARTERLY PUBLIC HEARING ACTION AGENDA ITEM ABSTRACT**  
**Meeting Date:** September 12, 2016

**Action Agenda  
Item No.   D.3**

**SUBJECT:** Zoning Atlas Amendment – Hillsborough Economic Development District

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**DEPARTMENT:** Planning and Inspections

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**ATTACHMENT(S):**

1. Comprehensive Plan and Unified Development Ordinance (UDO) Amendment Outline Form
2. Statement of Consistency
3. Proposed Ordinance, Including Maps
4. Excerpt of Draft August 3, 2016 Planning Board Minutes and Statement of Consistency
5. Comments Received Via E-Mail
6. Certification of Mailing

**INFORMATION CONTACT: (919)**

Perdita Holtz, Planner III, 245-2578  
Craig Benedict, Director, 245-2575

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**PURPOSE:** To hold a public hearing on Planning Director initiated amendments to the Zoning Atlas. This amendment involves five parcels south of Interstate 40 in the vicinity of Old Highway 86 and adjacent interstate right-of-way.

**BACKGROUND:** In order to better promote economic development opportunities in the Hillsborough EDD, the Planning Director is suggesting amendments to the Zoning Atlas. A coordination meeting was held with the Town of Hillsborough's Planning Director who concurs with these proposals. Plans are currently underway to extend water and sewer infrastructure to the portion of the EDD south of Interstate 40. All or portions of 4 parcels, totaling 166.2 acres, located west of Old Highway 86 are proposed to be rezoned from EDH-3 (Economic Development Hillsborough Limited Office with Residential [current name]) to EDH-5 (Economic Development Hillsborough Research and Manufacturing [proposed name]). One 34.58 acre parcel located east of Old Highway 86 is proposed to be rezoned from EDH-2 (Economic Development Hillsborough Limited Office) to EDH-4 (Economic Development Hillsborough Office / Retail [proposed name]).

Three overlay districts also apply in this geographic area (Watershed Protection, Special Flood Hazard Area, and Major Transportation Corridor). No modifications are being proposed to the boundaries of the three overlay districts and requirements related to the overlay districts will continue to apply. This area is not located in a critical or protected watershed.

Attachment 1 contains additional information and analysis regarding this amendment. The proposed ordinance, including a map that shows the extent of the proposed rezoning, can be found in Attachment 3.

Planning staff held a Public Information Meeting on July 26 to explain the proposed amendments affecting the Hillsborough EDD. Five interested persons attended the meeting.

The Planning Department and Economic Development Departments have reviewed and discussed these amendments and find they further joint goals.

Planning Director's Recommendation: The Planning Director recommends **approval** of the Statement of Consistency, indicating the amendments are reasonable and in the public interest, contained in Attachment 2 and proposed amendment package contained in Attachment 3.

Planning Board Recommendation: At its August 3, 2016 meeting, the Board voted 7-1 to **recommend approval** of the Statement of Consistency and the Zoning Atlas amendments. Draft minutes from this meeting and the signed Statement of Consistency are included in Attachment 4. Agenda materials from the August 3, 2016 Planning Board meeting can be viewed at: <http://www.orangecountync.gov/8.3.16PlanningBoardAgendaPacket.pdf>.

**FINANCIAL IMPACT**: Consideration and approval will not create the need for additional funding for the provision of County services. Costs for the required legal advertisement and signs will be paid from FY2016-17 Departmental funds budgeted for this purpose. Existing Planning staff included in the Departmental staffing budget will accomplish the work required to process this amendment.

**SOCIAL JUSTICE IMPACT**: The following Orange County Social Justice Goal is applicable to this agenda item:

- **GOAL: ENSURE ECONOMIC SELF-SUFFICIENCY**

The creation and preservation of infrastructure, policies, programs and funding necessary for residents to provide shelter, food, clothing and medical care for themselves and their dependents.

**RECOMMENDATION(S)**: The Administration recommends the Board:

1. Receive the proposed amendments to the Zoning Atlas as detailed in this abstract and attachments.
2. Conduct the public hearing and accept comment on the proposed amendments.
3. Close the public hearing. (Note that, because this is a legislative decision, additional comments at a later date are permitted).
4. Decide on one of the following options:
  - a. Adopt the proposed amendments by approving the Statement of Consistency (Attachment 2) and Ordinance (Attachment 3).
  - b. Defer a decision to a later BOCC regular meeting date.
  - c. Refer the item back to the Planning Board for a specific purpose.
  - d. Deny the proposed amendments. (Note: Section 2.2.8 *Effect of Denial on Subsequent Applications* of the UDO states that no application for the same or similar amendment may be submitted for a period of one year. The one year period begins on the date of denial.)

# COMPREHENSIVE PLAN / FUTURE LAND USE MAP AND UNIFIED DEVELOPMENT ORDINANCE (UDO) AMENDMENT OUTLINE

UDO / Zoning-2016-04

Rezoning of 5 Parcels plus Interstate Right-of-Way in the Hillsborough Economic Development District, South of Interstate 40 in the Vicinity of Old Highway 86

## A. AMENDMENT TYPE

### Map Amendments

Future Land Use Map:

From:

To:

Zoning Map:

From: EDH-2 (Economic Development Hillsborough Limited Office) and EDH-3 (Economic Development Hillsborough Limited Office With Residential)

To: EDH-4 (Economic Development Hillsborough Office/Retail [proposed name]) and EDH-5 (Economic Development Hillsborough Research and Manufacturing [proposed name])

Three overlay districts also apply in this geographic area (Watershed Protection, Special Flood Hazard Area, and Major Transportation Corridor). No modifications are being proposed to the boundaries of the three overlay districts and requirements related to the overlay districts will continue to apply.

Other:

### Text Amendments

Comprehensive Plan Text:

Section(s):

UDO Text:

UDO General Text Changes

UDO Development Standards

UDO Development Approval Processes

Section(s):

Other:

## B. RATIONALE

### 1. Purpose/Mission

In order to better promote economic development opportunities in the Hillsborough Economic Development District (EDD), the Planning Director is suggesting consideration of rezoning parcels in the EDD south of Interstate 40 in the vicinity of Old Highway 86. Related text amendments to the UDO are also being proposed as a separate action.

### 2. Analysis

The Hillsborough Economic Development District (EDD) has been designated as an EDD since the mid-1990s and was designated Transition Area in the 1981 Comprehensive Plan. The County is currently working on plans to invest in extending water and sewer infrastructure to the south side of Interstate 40. Planning and Economic Development staff are suggesting that these areas could be better promoted to economic development prospects if some areas were rezoned to districts that allow for a broader range of uses and higher intensities and if some text amendments were made to the UDO (the text amendments are a separate but related item).

Portions or all of four parcels, totaling 166.2 acres, south of Interstate 40 and west of Old Highway 86 are proposed to be rezoned from EDH-3 to EDH-5. Additionally, 17.05 acres of interstate right-of-way is proposed to be rezoned from and to the same districts.

One 34.58 acre parcel west of Old Highway 86 is proposed to be rezoned from EDH-2 to EDH-4. Additionally, 8.92 acres of interstate right-of-way is proposed to be rezoned from and to the same districts.

The maps included in Attachment 3 show the extent of the proposed rezonings.

Three overlay districts are applicable in this geographic area of the county:

- Watershed Protection Overlay District (parcels of interest are located in the Lower Eno Unprotected Watershed Overlay District and shall remain in this overlay district; Section 4.2 of the UDO contains requirements for this overlay district)
- Special Flood Hazard Area (SFHA) Overlay District (no modifications to the boundaries of this overlay district are being suggested; Sections 2.6, 4.3, and 6.6.1 of the UDO contain requirements for areas within the SFHA Overlay District)
  - As a reminder, stream buffer requirements are separate from SFHA requirements. Stream buffer requirements continue to apply as well.
- Major Transportation Corridor (MTC) Overlay District (no modifications to the

boundaries of this overlay district are being suggested; Sections 4.7 and 6.6.5 of the UDO contain requirements for areas within the MTC Overlay District) A map in Attachment 3 shows the extent of these overlay districts in the area.

The County's UDO contains a myriad of development standards that protect adjacent and nearby properties and seek to mitigate any adverse impacts caused by development. Any development occurring in the EDD is subject to all applicable standards contained in the UDO.

### **3. Comprehensive Plan Linkage (i.e. Principles, Goals and Objectives)**

#### **Objective ED-1.5:**

Identify barriers to development of desirable businesses and local businesses, and mitigate these barriers.

#### **Objective ED-2.1:**

Encourage compact and higher density development in areas served by water and sewer. (See also Land Use Objective LU-1.1 and Water and Wastewater Objective WW-5.)

#### **Objective ED-2.5:**

Identify lands suitable to accommodate the expansion and growth of commercial and industrial uses in the County.

#### **Objective ED-2.7:**

Select industrial sites in Economic Development Areas based on present and planned supporting systems, such as public water and sewer, access to adequate highway, rail, or public transportation infrastructures, and minimize detrimental environmental or negative social outcomes. (See also Water and Wastewater Objective WW-15.)

**Land Use Goal 1:** Fiscally and environmentally responsible, sustainable growth, consistent with the provision of adequate services and facilities and a high quality of life.

#### **Objective LU-1.1:**

Coordinate the location of higher intensity / high density residential and non-residential development with existing or planned locations of public transportation, commercial and community services, and adequate supporting infrastructure (i.e., water and sewer, high-speed internet access, streets, and sidewalks), while avoiding areas with protected natural and cultural resources. This could be achieved by increasing allowable densities and creating new mixed-use zoning districts where adequate public services are available. (See also Economic Development Objectives ED-2.1, ED-2.3, ED-2.10, and Water and Wastewater Objective WW-2.)

**Land Use Goal 4:** Land development regulations, guidelines, techniques and/or incentives that promote the integrated achievement of all Comprehensive Plan goals.

**4. New Statutes and Rules**

N/A

**C. PROCESS**

**1. TIMEFRAME/MILESTONES/DEADLINES**

- a. BOCC Authorization to Proceed

April 19, 2016

- b. Quarterly Public Hearing

September 12, 2016

- c. BOCC Updates/Checkpoints

August 3, 2016 – Planning Board Meeting for Recommendation (BOCC receives agenda)

- d. Other

**2. PUBLIC INVOLVEMENT PROGRAM**

**Mission/Scope:** Public Hearing process consistent with NC State Statutes and Orange County ordinance requirements. Additionally, a public information meeting (PIM) was held on July 26, 2016. The PIM covered all three related items scheduled for the September QPH (modifications to the joint plan with the Town of Hillsborough, a related rezoning action, and the proposed text amendments).

- a. Planning Board Review:

July 6, 2016 – Proposed rezoning was included in the presentation made to the ORC on related UDO text amendments  
 August 3, 2016 – Recommendation - Substantial discussion, including public comment that encompassed all three related items but was related primarily to the proposed rezoning action, occurred at the Planning Board meeting. Interested persons are encouraged to read the draft Planning Board Minutes in Attachment 4. Six people attended the Planning Board meeting for the three related Hillsborough EDD items.

- b. Advisory Boards:

Economic Development Advisory Board  
 (Sent via e-mail on July 11 because the EDAB does not meet again until September. To date, no comments have been received on the proposed rezoning )

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- c. Local Government Review:

Staff has worked jointly with the Town of Hillsborough’s staff on the three related items.

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d. Notice Requirements

Consistent with NC State Statutes and Orange County Requirements – legal ad prior to public hearing, signs posted in affected area, mailed notifications to affected property owners and property owners within 1,000 feet of the affected property.

e. Outreach:

General Public: A public information meeting (PIM) that covered all three related items (modifications to the joint plan with the Town of Hillsborough, a related rezoning action, and the proposed text amendments) was held on July 26, 2016. Notices regarding the PIM and Planning Board meetings were mailed to affected and adjacent (1,000-foot boundary) property owners on July 11. Five interested persons attended the PIM. Signs advertising the Planning Board meeting were posted in the area affected by the proposed amendments on July 21.

Notices regarding the Public Hearing for the related rezoning action were mailed to affected and adjacent (1,000-foot boundary) property owners on August 26. Signs for the related rezoning advertising the Public hearing were posted in the area affected by the proposed amendments on August 30.

Small Area Plan Workgroup:

Other:

**3. FISCAL IMPACT**

Consideration and approval will not create the need for additional funding for the provision of county services. Costs for the mailings and required legal advertisement will be paid from FY2016-17 Departmental funds budgeted for this purpose. Existing Planning staff included in the Departmental staffing budget will accomplish the work required to process this amendment.

**D. AMENDMENT IMPLICATIONS**

Staff is proposing to pre-zone properties within the Hillsborough EDD to revised zoning districts (separate but related item) that allow for a broader range of uses and higher intensities so that the County can better promote this area to economic development prospects.

## E. SPECIFIC AMENDMENT LANGUAGE

Attachment 3 contains the Ordinance and Maps for the proposed rezoning.

**Primary Staff Contact:**

Perdita Holtz and Craig Benedict

Planning & Inspections Department

919-245-2575

[pholtz@orangecountync.gov](mailto:pholtz@orangecountync.gov)

or [cbenedict@orangecountync.gov](mailto:cbenedict@orangecountync.gov)

## Attachment 2

**STATEMENT OF CONSISTENCY  
OF A PROPOSED UNIFIED DEVELOPMENT ORDINANCE TEXT AMENDMENT  
WITH THE ADOPTED ORANGE COUNTY 2030 COMPREHENSIVE PLAN**

Orange County has initiated amendments to the Zoning Atlas to rezone parcels in the Hillsborough Economic Development District, south of Interstate 40 as follows:

- All or portions of 4 parcels, totaling 166.2 acres, located west of Old Highway 86 are proposed to be rezoned from EDH-3 (Economic Development Hillsborough Limited Office with Residential [current name]) to EDH-5 (Economic Development Hillsborough Research and Manufacturing [proposed name]). Additionally, 17.05 acres of Interstate right-of-way is proposed to be rezoned from and to the same zoning districts.
- One 34.58 acre parcel located east of Old Highway 86 is proposed to be rezoned from EDH-2 (Economic Development Hillsborough Limited Office) to EDH-4 (Economic Development Hillsborough Office / Retail [proposed name]). Additionally, 8.92 acres of Interstate right-of-way is proposed to be rezoned from and to the same zoning districts.

The following parcels are affected by this proposal:

Parcel Identification Number (PIN)	Owner on Record	Acreage Proposed to be Rezoned	Current Zoning District	Proposed Zoning District
9863-93-6843 (portion of)	Sally and Allen Addison	4.15 acres	EDH-3	EDH-5
9863-71-8857 (entire)	Suzanne Upton	88.52 acres	EDH-3	EDH-5
9863-91-6573 (portion of)	Christy D. Bailey, et al	59.53 acres	EDH-3	EDH-5
9873-01-4031 (entire)	Rant B. Barlow, Jr.	14.0 acres	EDH-3	EDH-5
9873-20-2388 (entire)	Robert J. Ayers, et al	34.58 acres	EDH-2	EDH-4
Interstate right-of-way	NC Dept. of Transportation	17.05 acres	EDH-3	EDH-5
Interstate right-of-way	NC Dept. of Transportation	8.92 acres	EDH-2	EDH-4

Three overlay districts also apply in this geographic area (Watershed Protection, Special Flood Hazard Area, and Major Transportation Corridor). No modifications are being proposed to the boundaries of the three overlay districts and requirements related to the overlay districts will continue to apply.

The Board of County Commissioners finds:

- a. The requirements of Section 2.8 of the UDO have been deemed complete; and,
- b. Pursuant to Sections 1.1.5, and 1.1.7 of the UDO and to Section 153A-341 of the North Carolina General Statutes, the Board finds sufficient documentation within the record denoting that the amendment **is consistent** with the adopted 2030 Comprehensive Plan.
  1. The amendment is consistent with applicable plans because it supports the following 2030 Comprehensive Plan goals and objectives:

**Objective ED-1.5:**

Identify barriers to development of desirable businesses and local businesses, and mitigate these barriers.

**Objective ED-2.1:**

Encourage compact and higher density development in areas served by water and sewer. (See also Land Use Objective LU-1.1 and Water and Wastewater Objective WW-5.)

**Objective ED-2.5:**

Identify lands suitable to accommodate the expansion and growth of commercial and industrial uses in the County.

**Objective ED-2.7:**

Select industrial sites in Economic Development Areas based on present and planned supporting systems, such as public water and sewer, access to adequate highway, rail, or public transportation infrastructures, and minimize detrimental environmental or negative social outcomes. (See also Water and Wastewater Objective WW-15.)

**Land Use Goal 1:** Fiscally and environmentally responsible, sustainable growth, consistent with the provision of adequate services and facilities and a high quality of life.

**Objective LU-1.1:**

Coordinate the location of higher intensity / high density residential and non-residential development with existing or planned locations of public transportation, commercial and community services, and adequate supporting infrastructure (i.e., water and sewer, high-speed internet access, streets, and sidewalks), while avoiding areas with protected natural and cultural resources. This could be achieved by increasing allowable densities and creating new mixed-use zoning districts where adequate public services are available. (See also Economic Development Objectives ED-2.1, ED-2.3, ED-2.10, and Water and Wastewater Objective WW-2.)

**Land Use Goal 4:** Land development regulations, guidelines, techniques and/or incentives that promote the integrated achievement of all Comprehensive Plan goals.

- c. The amendment is reasonable and in the public interest because it:
1. Assists Orange County in promoting the Hillsborough EDD to economic development prospects.
    - a. Adjacent and nearby land uses continue to be protected through the myriad of development standards in the County's UDO.

The Board of County Commissioners hereby adopts this Statement of Consistency and findings expressed herein.

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Earl McKee, Chair

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Date

Ordinance #: ORD-2016-030

**AN ORDINANCE AMENDING  
THE ORANGE COUNTY ZONING ATLAS**

WHEREAS, Orange County has initiated amendments to the Orange County Zoning Atlas, as established in Section 1.2 of the Orange County Unified Development Ordinance (UDO), and

WHEREAS, the proposed rezoning consists of the following:

- Rezone all or portions of 4 parcels, totaling 166.2 acres, located west of Old Highway 86 from EDH-3 (Economic Development Hillsborough Limited Office with Residential [current name]) to EDH-5 (Economic Development Hillsborough Research and Manufacturing [proposed name, per separate text amendment action]). Additionally, rezone 17.05 acres of Interstate right-of-way from and to the same zoning districts.
- Rezone one 34.58 acre parcel located east of Old Highway 86 from EDH-2 (Economic Development Hillsborough Limited Office) to EDH-4 (Economic Development Hillsborough Office / Retail [proposed name, per separate text amendment action]). Additionally, rezone 8.92 acres of Interstate right-of-way from and to the same zoning districts.
- Three overlay districts apply in this geographic area (Watershed Protection, Special Flood Hazard Area, and Major Transportation Corridor). No modifications are being proposed to the boundaries of the three overlay districts, and

WHEREAS, the following parcels are affected by the rezoning proposal:

<b>Parcel Identification Number (PIN)</b>	<b>Owner on Record</b>	<b>Acreege Proposed to be Rezoned</b>	<b>Current Zoning District</b>	<b>Proposed Zoning District</b>
9863-93-6843 (portion of)	Sally and Allen Addison	4.15 acres	EDH-3	EDH-5
9863-71-8857 (entire)	Suzanne Upton	88.52 acres	EDH-3	EDH-5
9863-91-6573 (portion of)	Christy D. Bailey, et al	59.53 acres	EDH-3	EDH-5
9873-01-4031 (entire)	Rant B. Barlow, Jr.	14.0 acres	EDH-3	EDH-5
9873-20-2388 (entire)	Robert J. Ayers, et al	34.58 acres	EDH-2	EDH-4
Interstate right-of-way	NC Dept. of Transportation	17.05 acres	EDH-3	EDH-5
Interstate right-of-way	NC Dept. of Transportation	8.92 acres	EDH-2	EDH-4

and

WHEREAS, the proposal has been found to be consistent with the 2030 Orange County Comprehensive Plan, and

WHEREAS, the requirements of Section 2.8 of the UDO have been deemed complete, and

WHEREAS, the Board has held the required public hearing and has found the proposed zoning atlas amendment to be reasonably necessary to promote the public health, safety, and general welfare.

BE IT ORDAINED by the Board of Commissioners of Orange County that the Orange County Zoning Atlas is hereby amended to rezone the areas described above and depicted on the attached maps.

BE IT FURTHER ORDAINED THAT this ordinance be placed in the book of published ordinances and that this ordinance is effective upon its adoption.

Upon motion of Commissioner \_\_\_\_\_, seconded by Commissioner \_\_\_\_\_, the foregoing ordinance was adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

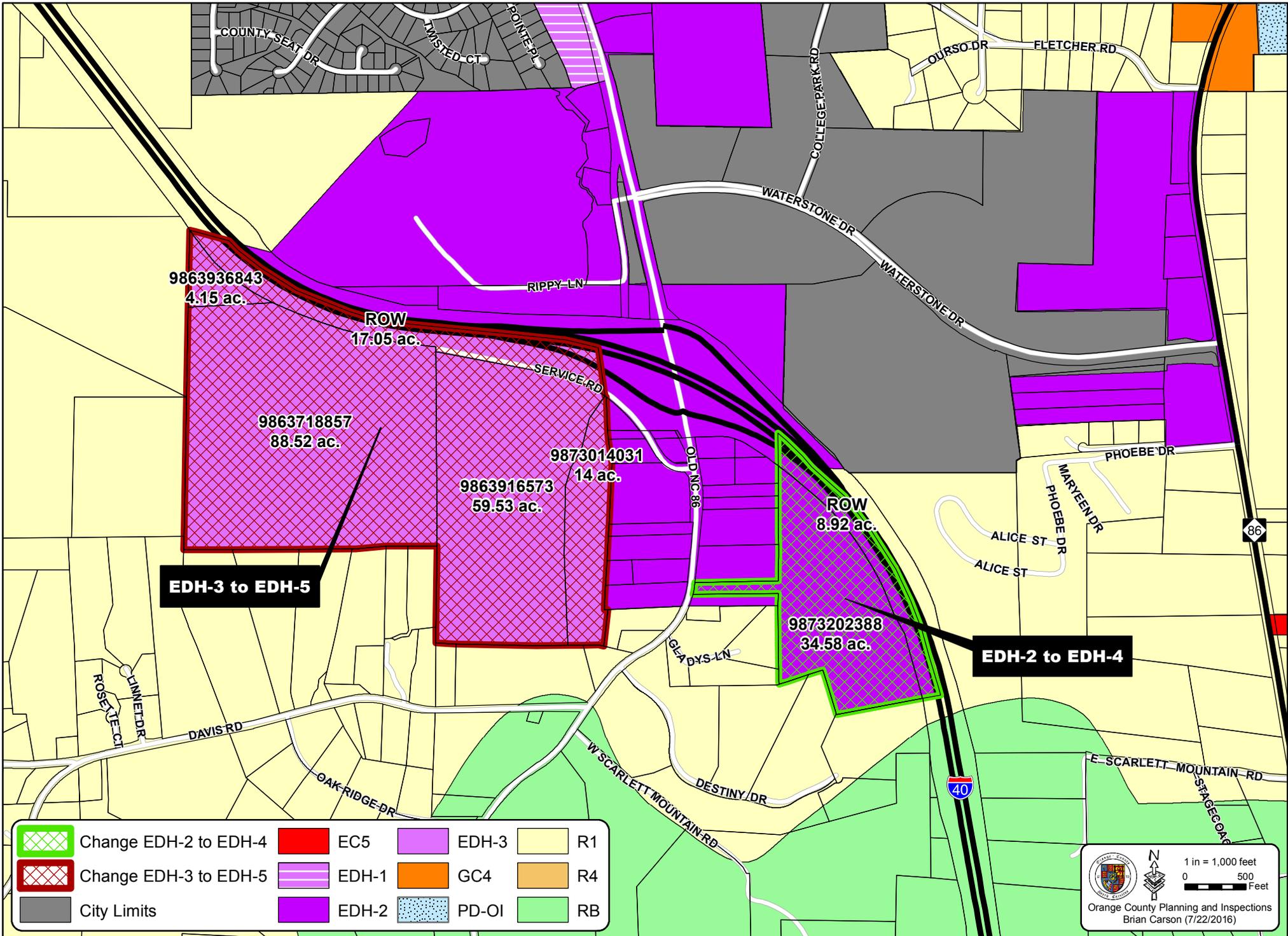
I, Donna S. Baker, Clerk to the Board of Commissioners for Orange County, DO HEREBY CERTIFY that the foregoing is a true copy of so much of the proceedings of said Board at a meeting held on \_\_\_\_\_, 2016 as relates in any way to the adoption of the foregoing and that said proceedings are recorded in the minutes of the said Board.

WITNESS my hand and the seal of said County, this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

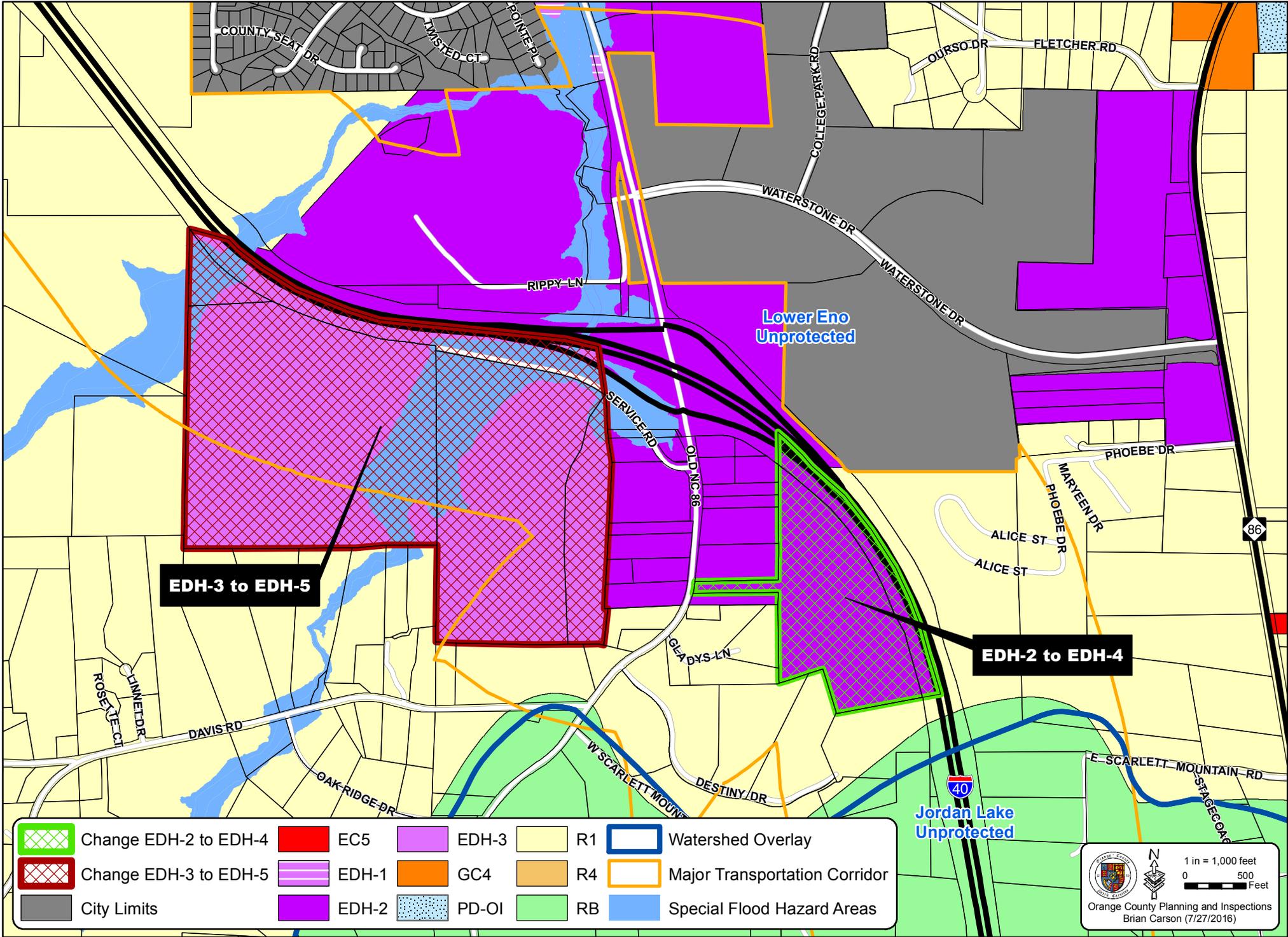
SEAL

\_\_\_\_\_  
Clerk to the Board of Commissioners

# Proposed Hillsborough EDD Zoning Amendments



# Proposed Hillsborough EDD Zoning Amendments with Overlay Districts



Excerpt of Draft Minutes  
for the three related  
Hillsborough EDD items

MINUTES  
ORANGE COUNTY PLANNING BOARD  
AUGUST 3, 2016  
REGULAR MEETING

**MEMBERS PRESENT:** Lydia Wegman (Chair), Cheeks Township Representative; Paul Guthrie, At-Large Chapel Hill Township; Buddy Hartley, Little River Township Representative; Tony Blake (Vice-Chair), Bingham Township Representative; Lisa Stuckey, Chapel Hill Township Representative; Patricia Roberts, Cheeks Township Representative; Laura Nicholson, Eno Township Representative; Kim Piracci, At-Large;

**MEMBERS ABSENT:** Andrea Rohrbacher, At-Large Chapel Hill Township; Maxecine Mitchell, At-Large Bingham Township;

**STAFF PRESENT:** Craig Benedict, Planning Director; Michael Harvey, Current Planning Supervisor; Perdita Holtz, Planning Systems Coordinator; Ashley Moncado, Special Projects Planner; Patrick Mallett, Planner II; Rachel McCook, Planner I; Molly Boyle, Planning Technician; Meredith Pucci, Administrative Assistant II.

**OTHERS PRESENT:** Sharon Mace; Dan Way; Austin Seifts; Annie Seifts; Nathan Robinson; Chris Cole; Franklin Garland; Jimmy Garland; Javier Latre Gorge; George Horton; Jim Parker.

**AGENDA ITEM 1: CALL TO ORDER AND ROLL CALL**

Tony Blake called the meeting to order.

**AGENDA ITEM 2: INFORMATIONAL ITEMS**  
a) Planning Calendar for August and September

Lydia Wegman arrived and assumed chair duties.

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**Agenda Item 8: Town of Hillsborough/ Orange County Central Orange Coordinated Area Land Use Plan Amendment** To make a recommendation to the BOCC on a Land Use Plan amendment involving five parcels south of Interstate 40 in the vicinity of Old Highway 86.

- Four parcels totaling approximately 166.2 acres are proposed to be changed from "Suburban Office Complex" to "Employment".
- One parcel totaling 34.58 acres is proposed to be changed from "Mixed Residential Neighborhood" to "Suburban Office Complex".

This item is scheduled for the September 12, 2016 quarterly public hearing.  
**Presenter: Perdita Holtz, Planning Systems Coordinator**

*Perdita Holtz presented.*

Lisa Stuckey: What is on these parcels now?

Perdita Holtz: They're undeveloped.

Patricia Roberts: As an interstate exit, is there any plan for gas stations?

Perdita Holtz: That's not really envisioned with these parcels. That's not to say in the future something couldn't happen on other parcels.

Craig Benedict: If you could show the map, there's some areas that were not effecting change that would allow those types is uses.

Patricia Roberts: What is the pink on the map?

Perdita Holtz: It's neighborhood mixed use.

Patricia Roberts: So if somebody wanted to put a gas station they would have to get a SUP?

Perdita Holtz: It would depend on the zoning and the zoning of those parcels are EDH-2. So I would need to look up and see.

Lisa Stuckey: Would it be allowed in employment?

Perdita Holtz: Well the land use classification is just the general thing; it's the zoning that's going to allow or disallow a particular use.

Paul Guthrie: Where is the water line going?

Perdita Holtz: The sewer line is currently in the vicinity of Cornwallis Hills and it would be coming down through here, under the interstate where the sewer line is. The water line actually exists on Old 86 right now.

Paul Guthrie: And the sewer line, I assume, will be using the outflow structure that serves the hospital as well?

Craig Benedict: That's correct. When the hospital was built the sewer came closer to the parcels to the south. Part of our capital improvement initiative is to assist in economic development in this area by bringing it underneath the interstate, which is a high-end effort. We want to ensure that before we bring utilities to the south we'll be in agreement with Hillsborough that says we provide these economic development infrastructure incentives that we will have primarily non-residential uses that have tax based employment.

Paul Guthrie: And if I remember correct, the elevations are such that at least until you get to Old 86 you would have flow into the Hillsborough system for sewers, correct?

Craig Benedict: That's correct. The sewer shed is where it flows downhill and there's a ridgeline roughly at Davis Road that flows north all the way into their system. So there's a water and sewer boundary map that guides a lot of our decisions about where you can more easily put public water/sewer versus not, and it shows this area as going towards Hillsborough.

Paul Guthrie: I assume that Hillsborough has the water pumping capacity for drinking water to also go to that same area?

Craig Benedict: Yes, they do. And part of the inter-local agreement will be somewhat of a reservation of water and sewer capacity for this area, to ensure that if we escorted economic development and they'll say "how much water does the water and sewer purveyor treatment operate?" and we have to have a good idea of what it is. Even with Hillsborough there are limitations. There's sometimes users that have a very large amount of water usage and sewage and we have to gauge. So we do have that in mind, that there is capacity for treatment and water.

Paul Guthrie: One last question. Existing owners of residential properties- when and if those water systems are in place would they be eligible to connect?

Craig Benedict: They would be able to. The design for the system to bring it south of the interstate would be enough to accommodate all the growth in that area.

Lydia Wegman: Okay, let me turn to the public.

Chris Cole (member of the public): My name's Chris Cole, I live right about there. A couple of things; First of all, I wanted to make you aware that according to the town officials there is no plan to extend water and sewer south of 40 at this point. Of course, everything's subject to change but there is no plan in place. Second, if you could back up one slide... Employment, and this is in your packets, includes manufacturing. I just wanted to point out a couple of items that would be considered permissible, if this were zoned for manufacturing. Rendering a new by-product processing, poultry processing, seafood product, preparation and packaging, leather and hide tanning and finishing, asphalt paving mixture and block manufacturing, chemical manufacturing, explosives manufacturing, fertilizer manufacturing. That's all the kinds of things that would be permissible changing this zoning to employment. And, a lot of stuff that would be really good but, as a person who lives here I'm worried about my water and I'm worried about my air. Thank you.

Franklin Garland - Garland Truffles (member of the public): I pretty much expressed my opinion last week when I was here. I have a worse problem than him. I received a letter from you guys that said that I wasn't going to be affected somehow. And I was told that's a legal term. How am I not going to be affected? Now, when Cedar Ridge High School went in there I was told I'm not going to be affected. I'm affected. You should see the traffic on Orange Grove now. When I-40 was put in there, I was told I'm not going to be affected. I have trucks rolling down there all night long, motorcycles and everything. So there's not such thing as not being affected. It's a legal term, so I don't understand how I'm not going to be affected in this. I don't particularly want --- plant down there. I mean someone can do that. Who exactly wants this property? There's wet lines down there. A good portion of this is in a flood plain. So somebody's influencing somebody in this planning commission out here, to say we want to put something in that place. Somebody has something in mind. I don't know who it is. I know when the transfer facility was being placed out there the study that was done at the time said the number one prime location for the transfer facility, right here, that was the number one site until we spoke up and said that's in the flood plain. I mean how can somebody who got paid 5 million dollars to do research on this and find this a number one site for this. That's possibly the worst environmental site to put a garbage facility. Because somebody put a garbage dump next to my property. On top of it, it's in the flood plain. That's the first thing I want to say, is this even suitable? So someone obviously wants this property for commercial development. Now, let me clarify something; I have mixed feelings about this. I live next door. I'm a farmer. I have an orchard, a successful nursery out there. I'm a resident. It's going to affect this residence, a lot. At the same time you guys decide to approve this, my land value goes up. I'm on prime land. The whole property... if I want to get out of here. I've built my own house, I live there, I put up the whole farm and a whole industry in this country. That gets affected by turning this into a manufacturing facility. Which is exactly where it's going, it's not offices that are going to go there. There's somebody that wants to put manufacturing in there. Otherwise, they wouldn't change it. And I would really like to know who it is. I find it very disturbing. That's going to change my taxes, there's going to be water and sewer there, which I could care less. I don't want city water. There are a lot of people on the opposite side of this out here. And again, mixed feelings. You're going to run a water line there because it's going to have to go up I-40 and I'm going to have to be paying city taxes, which you guys want that. I'm on the outskirts of the city; I don't want to do that. That's why I live there to begin with. That's why I bought rural property when I did, back in 1975. I like my privacy. I don't want some plant or some office building next to me. Now, offer me the right amount of money then go right to it. So, I'm not saying but... this is something you guys need to take into consideration. Somebody is pushing for this, and who is that? This doesn't just happen. It's not a convenient place to develop. It doesn't have water, it doesn't have sewer, it has to go through the interstate to do that, it's limited capacity to get to that point, it's not going to come for free, and on top of that a good deal of it is wetland. It's on a flood plain. To me that's saying something else is going on around here. And somebody has self-interest in this. There's really no need for it out there. There's better use to it. Make it protected wilderness. Because that's what it is right now. There could be a better application. Or a little park or something. And I know that there's good economic development out there but it's really poor land.

Nathan Robinson- (member of the public): My name's Nathan Robinson, and we have a property that's located just here on the south, right by Davis Road. So it's about a 13-acre parcel and I understand the purpose of what this

proposed amendment is intended to do if they extend the sewer and water down there. I recognize that the bigger picture is really to make these southern quadrants on the south of 40 generate more capacity and make sure there's a water tap. I think it's a good idea. I don't know if you have a map anywhere where the rural buffer zone is; do you have that map?... So if you come off of 40, obviously those are the parcels you're talking about, this is the Davis Road and, I think you two gentlemen were speaking back and forth, the flow of the watershed this way goes south and this way goes north. These properties right here. The conversations about the gas stations were relevant because I think it seems if there was a 10-year transition zone the use of these properties is intended not to be residential anymore. I think that was said in the beginning, that there are parts of this area that are envisioned to be non-residential. As a result what's going to happen, and what I would really encourage you guys to participate in, is you're going to be left with some orphaned properties along the bottom here. And these orphaned properties, currently, are zoned R1. And those R1 properties have water coming already and it makes sense to fill out this quadrant to encompass those types of uses. It makes sense from the watershed area to include those into the zoning amendment. If that was to be the purpose... I did a little bit of learning about this and the learning I understood is it typically when you have these type of zonings and bunt up against a rural buffer zone that they are all included in one same use that was your solution for --- otherwise you'd have a manufacturing type usage that bunts in --- residential, and it just messes up uses of property. So, I think my objective is to make sure that the uses of these properties down here, I know that we have other neighbors who are along here and I know they've been approached for their property to be purchased for a large roadway to come through here. So I know there is the development of these properties and it isn't going to be without some flow of traffic for commercial uses. I think if you do look down the road 10 years from now, I think then you guys are thinking right but this area and these quadrants are going to be commercial and so I request to you guys to include these properties here and don't orphan these off. Particularly as they naturally flow into the economic development zone that you guys are intending to create here.

Lydia Wegman: So you're asking for an expansion?

Nathan Robinson: I would say to extend it down here, naturally. So that as the rural buffer doesn't end, that the use of this property flows through without creating these little R1's right in the middle.

Lydia Wegman: Ok, thank you.

Perdita Holtz: Including the area between the EDD and Rural Buffer wouldn't be possible with this amendment because the Water and Sewer Planning, Boundary, and Management Agreement would have to be amended to designate the area as primary service area, but it's something we can keep in mind for the future.

Craig Benedict: Chair, just what we can do for the audience and for the Board, all these questions are being written down and we'll have our thoughts moving forward to both the Commissioners for something such as suggested we would engage Hillsborough. It's part of their growth area. And as Perdita mentioned, the transition area that we are talking about; the transition means going from a rural to an urban transition. Where the public water and sewer go and where it cannot go. So, we'll make recommendations as we are starting to see the growth potential with the hospital, bringing sewer closer to this area. Maybe it is time to re-engage with Hillsborough again. It's been 12 plus years since we designated development to say what's happening to the south and our uses and areas. So we will be answering all the questions that are coming up tonight... We can give some brief answers tonight but as an outcome of what we're hearing tonight if it directly affects the amendments we'll of course make some recommendations. Some may come back to you; some may be for future projects.

Lydia Wegman: Well, that's what I'm wondering. In light of what we've heard, you're still asking for us to make a recommendation to the BOCC tonight even though we won't have the answers to some of these questions?

Craig Benedict: Once we've gone through all of them I can give you the ones that we can answer now.

Lydia Wegman: Does anyone else from the public want to speak this evening?

Tony Blake: I have some more questions... Who is driving the rezoning here? Is this a joint effort by Hillsborough and the County?

Perdita Holtz: The Land Use plan is a joint Hillsborough-Orange County plan.

Tony Blake: But there's no specific property owner that's saying, I want this re-zoning?

Perdita Holtz: Right, this is a County initiated rezoning.

Tony Blake: And Brantley doesn't have anybody in the hopper for development or anything like that?

Perdita Holtz: We have been talking about rezoning these parcels for many months. As you know this isn't something that just happens in a month in Orange County. And I do believe that once people found out that land is available and the County might be interested that that has generated interest among people. And people are going out and seeing what's possible.

Tony Blake: I agree, I just wanted to clear the air and make sure there wasn't a horse or a cart that was out of place here. I just wanted to make sure that we fully understood from the Planning Board perspective.

Perdita Holtz: Our Economic Development staff has interest in marketing this property.

Franklin Garland: It's a really odd place.. Like, why this? I can't understand it. I'm just curious what initiated this particular parcel?

Tony Blake: Well I spoke to Steve Brantley about this sort of thing a year or two ago, back when the tax was put in for economic development and asked him what were the attractive places, and he mentioned these places, a while ago. I just wanted to make sure that my understanding hadn't changed.

Chris Cole: So no one has expressed interest in having these rezoned, outside the County? Has anyone expressed an interest in having these rezoned outside the County staff?

Perdita Holtz: Not that I'm aware of.

Lisa Stuckey: I have a question. Would you take the little light and show us where the Hillsborough EDD is, and it's my understanding it's been there since at least the early 80's. I mean this is not a new initiative, this is something that's been designated for a while.

Perdita Holtz: The Hillsborough EDD, it's kind of a scattered thing. It's not as cohesive as the other two that are all contiguous but it's along Old 86 here, it's all the purple lands. Waterstone used to be County EDD land, and then Hillsborough annexed it so now it's part of Hillsborough and it's shown as gray. And then there's some parcels up here near the Wal-Mart, and there's a couple parcels here zoned EDH2 and then also along New 86, in the vicinity of Waterstone.

Lisa Stuckey: So since at least 1994 this has been clearly identified as economic development land, prior to that it was Commercial Transition.

Perdita Holtz: Yes, there have been no changes in the boundaries of the EDDs.

Lisa Stuckey: So if people had investigated they would have known that Hillsborough and the County have been envisioning this land for economic development sometime in the future.

Perdita Holtz: That would be correct.

Franklin Garland: The question here is if people had investigated, not if they would have been notified. No one was notified. I've been there since 1975. No one was notified. And that would make more sense. Let me explain something, you say I'm not affected because --- and I got notified because I'm within 1,000 feet. Well 1,000 feet I can walk back and forth ten times in this room and that's 1,000 feet. So I am affected. But I wasn't notified.

Lisa Stuckey: My question was simply whether this land had been identified for Economic Development for many decades.

Craig Benedict: On both the Orange County land use map and on our zoning map and also on the Hillsborough-County joint land use map we do note where there are flood zones and we restrict development in there. So you can see that, so yes, part of that 160 acres is encumbered by a flood plain and we recognize that and no development can occur there. But there are other lands that would be available.

Perdita Holtz: I'm wondering if it might be helpful since these 3 items are inter-related to go on and do the presentation on the second and third items because it might answer some of the questions and then we'll wait to act on each of them until after the presentations. Would that be helpful?

Lydia Wegman: Yes, I do. Thank you.

**MOTION** [later in the evening, after all three related items had been presented] by Lydia Wegman. Seconded by Lisa Stuckey.

**VOTE: 7-1 OPPOSED- GUTHRIE**

Paul Guthrie: I am uncertain, which is why I voted no.

Lydia Wegman: I am voting in favor because I think there is a benefit to diversify land use.

**Agenda Item 9:**        **Unified Development Ordinance (UDO) Text Amendment:** To make a recommendation to the BOCC on government-initiated amendments to the text of the UDO that would modify existing regulations that pertain to the Hillsborough Economic Development District. This item is scheduled for the September 12, 2016 quarterly public hearing  
**Presenter:** Perdita Holtz, Planning Systems Coordinator

*Perdita Holtz presented item.*

Lisa Stuckey: So you're going to allow apartments but not single family or duplexes? Why?

Perdita Holtz: Well because the purpose of the EDDs is to promote non-residential uses. Multi family, although it is residential, it is actually taxed differently than single family residential. It's considered more of a commercial use so there is some diversification of the tax base that occurs with multi family.

Lisa Stuckey: I think I read some place that there is a worry that if you permit single family that the land will actually get eaten up by that. That there's a tendency for subdivisions.

Craig Benedict: Part of the Waterstone development, it's called planned development, part of the County plan was more non-residential and over the years the market, because of the recession, the non-residential component was more muted and after the recession faster residential growth comes back so some conversions were made there. So residential is easier and so it's good that these areas were preserved. EDH3 now allows single family. We had a proposal, some of the Board members may remember, that some of these lands were going to be part of Hillsborough's extra territorial jurisdiction. Mainly the ones north of I-40. And they were going to afix their zoning category to it and they were going to consciously say which areas were going to be residential and non-residential. They didn't do that because part of the cooperative agreement didn't go forward. That's why we're here 2 years later saying, well we need to put a zoning category on it that fits exactly, as close to possible, what the intent of our

Economic Development District. Mixed use as we mentioned is supportive of non-residential, jobs, employment, multi-family does have a good mix. But it's true, single family chews up more land and creates more fiscal impacts and costs than the non-residential.

Lisa Stuckey: And I think the sort of philosophical thing about this sort of siloing residential versus non, that people are separated from their jobs and they have to commute and that has a bad impact on our quality of life when you pull things apart like that. That comes with it's own set of problems.

Craig Benedict: One other thing that was mentioned a little bit earlier was how these categories and things evolve over time about how you use zoning. And zoning 10, 20, 30 years ago was very siloed. This is manufacturing. This is retail. This is office. And you saw from our amendments that went through the last 3 or 4 months that we have these categories such as office, research, and manufacturing. They put them all in one building. This EDH4 and EDH5 that we're looking at is one of those combined districts where somebody can come in and do office and some assembly and some R&D and we're also suggesting some retail so that if you have the jobs they don't have to go too far to go to a restaurant or bank. And really even thought this will probably be developed in these little zones, this whole area of all 4 quadrants of the interchange is going to be mixed use. We don't need to mix it completely on every parcel but somebody living in a multi family on the south side can easily get over to the hospital if they were working there.

Tony Blake: This is why RTP's putting in all the residential.

Craig Benedict: That's correct.

Lisa Stuckey: That's the flip of it.

Craig Benedict: That's the conventional zoning ideas back in the 60s.

Tony Blake: So just to talk directly to the first gentleman's concerns, this would not preclude a Gorilla Manufacturing or an asphalt plant or anything like that. There are other components to the UDO that would address those. But this particular zone would not prevent it.

Perdita Holtz: You mean the EDH5 zone?

Tony Blake: Yes.

Perdita Holtz: They could theoretically be located in EDH5, but practically, with all the development standards that the UDO contains, it's not likely.

Craig Benedict: This isn't in the UDO but this is in the practice that all cities and counties are doing in the region. There's demand for quality growth and our Commissioners and Economic Development Department targets industries and if it's the appropriate industries that give us the tax base and the high paying jobs, there's incentives. Jobs or businesses that are not fulfilling that targeted market are not likely to get incentives and therefore the pressure for them to locate here is lessened. Meaning that some of those higher intensity uses that are listed in that manufacturing category, we're not going to be escorting those in with incentive packages.

Lisa Stuckey: There's also small businesses that it seems to me that some of what you were just talking about would really... that there's not much land that's available right now to do this kind of construction in Orange County, really.

Craig Benedict: That's correct. There are not too many interchanges and everyone that we have, besides the one in North Chapel Hill, New Hope Church interchange- nothing can happen there. And this is within proximity of our University even. And there are other Economic Development zones in Efland and Buckhorn. Very prime. The developers and businesses that are looking for properties in Orange County, they are surprised that there's still available land at some of these interchanges. Why hasn't it developed in the past? There hasn't been good zoning

there or infrastructure. And so we are trying to prepare the appropriate places where there's good transportation access also.

Chris Cole: Can I make one comment? Lisa... She raises the fact that there are not many opportunities to put a manufacturing facility in Orange County, and that's true. And I'd like to point out that businesses are aware of that too and sometimes they go out and pay a premium... 12 years ago, maybe, next to Euro Sport, someone purchased an option on land to put an asphalt plant next door to them. It cost the town of Hillsborough \$300,000 to make them go away. They supposedly weren't allowed to do that there either.

Craig Benedict: We're familiar with the lawsuit.

Tony Blake: But that, I believe, was addressed in the zoning. There was a hole in the zoning that allowed that to happen. If my understanding... But I believe that's been closed since.

*Perdita Holtz continued presentation.*

**MOTION** [later in the evening, after all three related items had been presented] by Buddy Hartley to approve the Statement of Consistency. Seconded by Tony Blake.

**VOTE: 7-1 OPPOSED- GUTHRIE**

**MOTION** [later in the evening, after all three related items had been presented] by Buddy Hartley to approve the amendment package. Seconded by Laura Nicholson.

**VOTE: 7-1 OPPOSED- GUTHRIE**

*Paul Guthrie opposed because he is uncertain.*

**Agenda Item 10: Zoning Atlas Amendment-** To make a recommendation to the BOCC on government-initiated amendments to the Zoning Atlas that would rezone:

- Four parcels totaling approximately 166.2 acres and 17.05 acres of Interstate right-of-way from EDH-3 (Economic Development Hillsborough Limited Office with Residential [current name]) to EDH-5 (Economic Development Hillsborough Research and manufacturing [proposed name]). The parcels are located immediately south of Interstate 40 and west of Old Highway 86.
- One parcel totaling 34.58 acres and 8.92 acres of Interstate right-of-way from EDH-2 (Economic Development Hillsborough Limited Office) to EDH-4 (Economic Development Hillsborough Office / Retail [proposed name]). The parcel is located immediately south of Interstate 40 and east of Old Highway 86.

This item is scheduled for the September 12, 2016 quarterly public hearing.

**Presenter:** Perdita Holtz, Planning Systems Coordinator

Perdita Holtz presented.

Nathan Robinson (member of the public): In terms of the recognition that's coming for those areas, they're existing residential now, they come down just south on Old 86; would there be a way to include the zoning that needs to be consistent with this action so that this process doesn't have to be repeated in the future?

Perdita Holtz: There is not a way to include it at this time. And we've mentioned to you about the water and sewer boundary agreement that in order to be 10 year transition area the water and sewer boundary agreement would need to be revised, the County's land use plan would need to be revised, and then ultimately zoning would need to be applied. And the thing that would need to happen first would be water and sewer management boundary agreement adjustments. And that requires the approval of the five signatory parties.

Craig Benedict: And what we do if there's comments that come from the public, in the future public hearing on September 12<sup>th</sup> the Commissioners can say, " Craig and Staff, can you provide a report about how this would be

accomplished". It doesn't mean they'd want us to proceed or not, and to come up with what departments are involved, what maps have to change, and we give that back to them on what we call a future amendment outline. An outline of how'd we'd get it done and that we involved Hillsborough, etcetera. And then we bring that back to them and the public's available to talk at those meetings, also. And they say please proceed or not proceed. It is an overlapping, multi layer process, as Perdita said.

Perdita Holtz: What happens here does get presented at the public hearing, and the Minutes for this meeting are included, so the BOCC will be aware that that's something that you brought up.

Nathan Robinson: Okay, because we literally just bought the property 6 months ago. We literally were playing with the plans to put single-family residences here. And just for the sake of everyone else, we have spoken with Perdita and Craig. So we had to modify our plans based on what the wave of the future is. We get that, and that's cool but as we modify we don't want to get stuck between a hard decisions if say this is going to stay R1 forever. Because then we feel like we're going to get stuck with our only use being our one usage, but that's not what the whole quadrant is tending toward.

Lydia Wegman: Thank you.

Franklin Garland: I have a quick question. How hard is it to get land use changed? I mean, my farm is for sale. But I've been approached by people that want it for commercial property.

Perdita Holtz: It requires the same type of process that we're going through now. If you wanted to do it as an individual...

Franklin Garland: But the same thing as Nathan's, it's like being between a rock and a hard place.

Perdita Holtz: Any property owner can apply to amend any of these documents. The land use plan, the zoning map, the UDO. In order to have the County do a County initiated action it's something that we can potentially talk about. I can tell you that a County initiated amendment will take more than a year.

Lydia Wegman: Thank you. Do you have any discussion?

Paul Guthrie: I'm still unsure exactly. I would comment that I think if we can avoid stacking so many of these things on a meeting at one time, I understand there were reasons for that, it would be helpful. After 200 pages of material of which was changed at least twice and reading it, coming here and then having 2 hours of discussion, I still feel uncomfortable. And I'm not sure exactly, when you ask for my vote, I'm not sure what I'm going to do. It's not that I'm for or against, I'm just not sure in my own mind exactly what the best option is given all of the variables that are involved. So I just want to state that.

Kim Piracci: I'm just clarifying a question, all these changes are being driven by the desire to increase the tax base; is that correct?

Perdita Holtz: They're being pursued to diversify the tax base, not necessarily increase it.

Tony Blake: In other words, to have the County less reliant on residential housing taxes, and have a little more diversity in the base. In case there's changes in the economy you have less of an impact.

Craig Benedict: And the underlying analysis is non-residential property pays more taxes than it costs in services. So there's a little bonus there. And residential, in most cases, costs more than what we get in tax, unless it's a real expensive house. So Orange County is overly reliant on their residential property owners to provide those services that everybody loves. And that's for schools, that's for social services and health services. So our comprehensive plan which is how to promote growth in the right areas and match the uses to their locations. This has been for 40 years, an area at an interchange. We knew that it was coming that we needed to preserve and promote it for primarily non-residential uses. That's why one of the recommendations here was to bring down the single family

potential since it's happening everywhere else, that there are limited areas that are prime, and interest from the non-residential development sector that they're looking for. And they've looked at interchanges. They look at visibility on the interstate and interchange and infrastructure. It wasn't until we got that quarter sales tax, part of it going to schools, part of it going to promote economic development, that we start putting infrastructure out there, so what prompts this whole process is there's been a lot of work done from Efland back to Mebane with infrastructure, we have something on the edge of Durham that's underway, and this has been the last area. And what has slowed us down a little bit was not wanting to put a million dollars of infrastructure in and have it turn to residential. Residential now is in EDH3 is by right. There's been some interest in the development community to do something out there. They may use EDH3 or 4 or 5, or they may come in with a master plan development which would be an additional zoning and they might have to go through this process again. But at least this will be a guide of what can be done out there. And if they go through that conditional zoning district process there's public meetings, what uses exactly go out there, so the 41 pages that Perdita listed will be there.

Lydia Wegman: Are there comments? I'll just say with Paul, I'm a little uncertain about how exactly to proceed, as well but your recommendation is important.

**MOTION** by Lisa Stuckey to approve the Statement of Consistency. Seconded by Tony Blake.  
**VOTE: 7-1 OPPOSED- GUTHRIE**

**MOTION** by Laura Nicholson to recommend approval of the amendments to the Orange County zoning atlas. Seconded by Buddy Hartley.  
**VOTE: 7-1 OPPOSED- GUTHRIE**

*Paul Guthrie opposed because he was uncertain.*

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**STATEMENT OF CONSISTENCY  
OF A PROPOSED UNIFIED DEVELOPMENT ORDINANCE TEXT AMENDMENT  
WITH THE ADOPTED ORANGE COUNTY 2030 COMPREHENSIVE PLAN**

Orange County has initiated amendments to the Zoning Atlas to rezone parcels in the Hillsborough Economic Development District, south of Interstate 40 as follows:

- All or portions of 4 parcels, totaling 166.2 acres, located west of Old Highway 86 are proposed to be rezoned from EDH-3 (Economic Development Hillsborough Limited Office with Residential [current name]) to EDH-5 (Economic Development Hillsborough Research and Manufacturing [proposed name]). Additionally, 17.05 acres of Interstate right-of-way is proposed to be rezoned from and to the same zoning districts.
- One 34.58 acre parcel located east of Old Highway 86 is proposed to be rezoned from EDH-2 (Economic Development Hillsborough Limited Office) to EDH-4 (Economic Development Hillsborough Office / Retail [proposed name]). Additionally, 8.92 acres of Interstate right-of-way is proposed to be rezoned from and to the same zoning districts.

The following parcels are affected by this proposal:

<b>Parcel Identification Number (PIN)</b>	<b>Owner on Record</b>	<b>Acreage Proposed to be Rezoned</b>	<b>Current Zoning District</b>	<b>Proposed Zoning District</b>
9863-93-6843 (portion of)	Sally and Allen Addison	4.15 acres	EDH-3	EDH-5
9863-71-8857 (entire)	Suzanne Upton	88.52 acres	EDH-3	EDH-5
9863-91-6573 (portion of)	Christy D. Bailey, et al	59.53 acres	EDH-3	EDH-5
9873-01-4031 (entire)	Rant B. Barlow, Jr.	14.0 acres	EDH-3	EDH-5
9873-20-2388 (entire)	Robert J. Ayers, et al	34.58 acres	EDH-2	EDH-4
Interstate right-of-way	NC Dept. of Transportation	17.05 acres	EDH-3	EDH-5
Interstate right-of-way	NC Dept. of Transportation	8.92 acres	EDH-2	EDH-4

Three overlay districts also apply in this geographic area (Watershed Protection, Special Flood Hazard Area, and Major Transportation Corridor). No modifications are being proposed to the boundaries of the three overlay districts and requirements related to the overlay districts will continue to apply.

The Planning Board finds:

- a. The requirements of Section 2.8 of the UDO have been deemed complete; and,
- b. Pursuant to Sections 1.1.5, and 1.1.7 of the UDO and to Section 153A-341 of the North Carolina General Statutes, the Board finds sufficient documentation within the record denoting that the amendment **is consistent** with the adopted 2030 Comprehensive Plan.
  1. The amendment is consistent with applicable plans because it supports the following 2030 Comprehensive Plan goals and objectives:

**Objective ED-1.5:**

Identify barriers to development of desirable businesses and local businesses, and mitigate these barriers.

**Objective ED-2.1:**

Encourage compact and higher density development in areas served by water and sewer. (See also Land Use Objective LU-1.1 and Water and Wastewater Objective WW-5.)

**Objective ED-2.5:**

Identify lands suitable to accommodate the expansion and growth of commercial and industrial uses in the County.

**Objective ED-2.7:**

Select industrial sites in Economic Development Areas based on present and planned supporting systems, such as public water and sewer, access to adequate highway, rail, or public transportation infrastructures, and minimize detrimental environmental or negative social outcomes. (See also Water and Wastewater Objective WW-15.)

**Land Use Goal 1:** Fiscally and environmentally responsible, sustainable growth, consistent with the provision of adequate services and facilities and a high quality of life.

**Objective LU-1.1:**

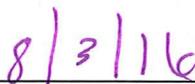
Coordinate the location of higher intensity / high density residential and non-residential development with existing or planned locations of public transportation, commercial and community services, and adequate supporting infrastructure (i.e., water and sewer, high-speed internet access, streets, and sidewalks), while avoiding areas with protected natural and cultural resources. This could be achieved by increasing allowable densities and creating new mixed-use zoning districts where adequate public services are available. (See also Economic Development Objectives ED-2.1, ED-2.3, ED-2.10, and Water and Wastewater Objective WW-2.)

**Land Use Goal 4:** Land development regulations, guidelines, techniques and/or incentives that promote the integrated achievement of all Comprehensive Plan goals.

- c. The amendment is reasonable and in the public interest because it:
1. Assists Orange County in promoting the Hillsborough EDD to economic development prospects.
    - a. Adjacent and nearby land uses continue to be protected through the myriad of development standards in the County's UDO.

The Planning Board of Orange County hereby recommends that the Board of County Commissioners consider adoption of the proposed Zoning Atlas amendments.

  
 Lydia N. Wegman, Chair

  
 Date

**From:** [Chris Cole](#)  
**To:** [Perdita Holtz](#)  
**Cc:** [Barry Jacobs](#); [Bernadette Pelissier](#); [Earl McKee](#); [Mark Dorosin](#); [Mia Burroughs](#); [Penny Rich](#); [Renee Price](#); [Travis Myren](#); [Craig Benedict](#)  
**Subject:** Re: Rezoning Near Old 86 and I-40  
**Date:** Thursday, August 18, 2016 12:08:41 PM

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Thanks, Perdita. I appreciate your comments and the commissioners' focus on economic development. Again, I would point out that if there are people with an interest in the properties, and the county has already demonstrated a significant willingness to rezone those properties, why not let the developer(s) request the rezoning for their specific uses?

Please keep in mind that Orange County voters/taxpayers purchased the land surrounding these properties knowing that it is an EDD, but subject to zoning that allows office space, not manufacturing. I would think that a significant change like this would merit a great deal more transparency as to the use of the property.

Chris

---

**From:** Perdita Holtz <[pholtz@orangecountync.gov](mailto:pholtz@orangecountync.gov)>  
**To:** Chris Cole <[christopherscottcole@yahoo.com](mailto:christopherscottcole@yahoo.com)>  
**Cc:** Barry Jacobs <[bjacobs2@orangecountync.gov](mailto:bjacobs2@orangecountync.gov)>; Bernadette Pelissier <[bpelissier@orangecountync.gov](mailto:bpelissier@orangecountync.gov)>; Earl McKee <[emckee@orangecountync.gov](mailto:emckee@orangecountync.gov)>; Mark Dorosin <[mdorosin@orangecountync.gov](mailto:mdorosin@orangecountync.gov)>; Mia Burroughs <[mburroughs@orangecountync.gov](mailto:mburroughs@orangecountync.gov)>; Penny Rich <[prich@orangecountync.gov](mailto:prich@orangecountync.gov)>; Renee Price <[rprice@orangecountync.gov](mailto:rprice@orangecountync.gov)>; Travis Myren <[tmyren@orangecountync.gov](mailto:tmyren@orangecountync.gov)>; Craig Benedict <[cbenedict@orangecountync.gov](mailto:cbenedict@orangecountync.gov)>  
**Sent:** Wednesday, August 10, 2016 9:31 AM  
**Subject:** RE: Rezoning Near Old 86 and I-40

Dear Mr. Cole,

Thank you for submitting your comments about the proposed Hillsborough Economic Development District (EDD) rezoning via e-mail; they, and this response, will be included in the quarterly public hearing materials.

As was explained at the Planning Board meeting, the impetus for the various amendments land use and zoning pertaining to the Hillsborough EDD are to create better consistency with the plans currently underway by the County to extend water and sewer infrastructure to areas south of the Interstate. The next public step in that work will be an Interlocal Agreement between the County and Town of Hillsborough outlining how, when, where, and under what conditions such services will be extended. The Interlocal Agreement is expected to be on a Board of County Commissioners meeting agenda in October. Many aspects of the proposed UDO text amendment are important to have in place prior to finalization of the Interlocal Agreement, including limiting residential uses to a relatively small amount of multi-family, allowing for a project to have a mix of uses, and allowing for the types of targeted uses the County is attempting to attract (high-tech research and development, assembly/manufacturing, and distribution).

The County's Economic Development staff works on marketing available land in the County's three EDDs. I explained a bit of the site selection process companies typically go through at the Planning Board meeting and mentioned that Orange County is sometimes at

a disadvantage in the selection process because lands are not already clearly or exclusively zoned for the types of high-tech research and development/manufacturing industries the County is attempting to attract.

So that you are aware, the Board of County Commissioners approved the Amendment Outline Forms, which authorize staff to commence significant work on potential amendments, for the Hillsborough EDD amendments at its April 19, 2016 meeting. These amendments have been "in the works" for several months and were discussed internally for some time before Amendment Outline Forms were prepared for approval. It's my understanding that private parties have now negotiated purchase options on some of these properties, but I have not had contact with those parties and I do not know when such options were entered in to nor what their plans are. The proposed rezonings began to be pursued so that Economic Development staff could better market properties that are available so that the County can better reach its goals of diversifying the tax base with appropriate non-residential development. The prospective developer may use these proposed zoning districts or be guided by their use potential and propose a master plan rezoning which would include a public hearing and Board of County Commissioner review.

I understand your concern regarding not knowing the exact use(s) that may ultimately be developed on the properties. The various Performance Standards and other required development standards that comprise the ~145 pages of Article 6 of the [County's UDO](#) apply to all by-right development projects and are rather stringent in preventing and mitigating any impacts of development. As you know, the quarterly public hearing is on Monday, September 12, beginning at 7:00 p.m. at the Whitted Meeting Facility (300 West Tryon Street in Hillsborough) and all interested persons are invited to state their opinions to the Board of County Commissioners. Craig Benedict, Planning and Inspections Director, and I are available to meet in the interim, if desired.

Sincerely,

Perdita Holtz, AICP  
Planning Systems Coordinator  
Orange County, NC Planning Department  
919.245.2578

---

From: Chris Cole [christopherscottcole@yahoo.com]  
Sent: Thursday, August 04, 2016 9:47 AM  
To: ALL\_BOCC\_MANAGER\_CLERK  
Subject: Rezoning Near Old 86 and I-40

Good Morning Commissioners,

I plan to attend our meeting on 9/12 to express my concerns about the rezoning along I-40 and Old 86, but I wanted to give you something to mull over when considering your agenda materials.

Personally, I am ok with developing the property, even for manufacturing, provided it isn't stinky, noisy or polluting my water. It would seem to be a more transparent process to rezone it when there is a project presented with a request for rezoning. I attended the

planning board meeting last night. It was apparent from what was said, what wasn't said and who attended the meeting last night that someone has plans for developing that property but doesn't want to deal with the rezoning themselves and/or doesn't want to make their plans public knowledge.

My concerns are based on the permissible uses of the property by-right if rezoned for manufacturing. Those uses include, per planning board agenda materials, things such as the list below. Obviously, not all of these businesses would be appropriate for Orange County, but once the zoning is changed, it is very difficult to prevent any of these from coming. Sometimes the worst offenders will pay a premium for location just because no one else will have them.

County staff says that there are rules in place that would prevent some of these. I will remind you that in 2007, the Town of Hillsborough had to pay a developer \$300K not to put an asphalt plant near downtown. The town thought they had rules in place as well. Wouldn't it be better to let the developer explain what they want to use the land for before giving blanket permission? Isn't that why all those rules and processes were put in place?

Thank you,  
Chris Cole, CPA  
101 Old Heritage Ct.  
Hillsborough, NC  
919-452-7034

I listed those types of businesses that I felt would represent significant air and water quality issues or that involve actual explosives, but there are hundreds more industries on the list.

311615 Poultry Processing  
313 Textile Mills  
3161 Leather and Hide Tanning and Finishing  
3212 Veneer, Plywood, and Engineered Wood Product Manufacturing  
322 Paper Manufacturing  
324 Petroleum and Coal Products Manufacturing  
324110 Petroleum Refineries  
32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing  
325110 Petrochemical Manufacturing  
32512 Industrial Gas Manufacturing  
325130 Synthetic Dye and Pigment Manufacturing  
3252 Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing  
32531 Fertilizer Manufacturing  
32532 Pesticide and Other Agricultural Chemical Manufacturing  
3255 Paint, Coating, and Adhesive Manufacturing  
32592 Explosives Manufacturing  
32621 Tire Manufacturing  
32731 Cement Manufacturing  
332992 Small Arms Ammunition Manufacturing  
332993 Ammunition (except Small Arms) Manufacturing  
332994 Small Arms, Ordnance, and Ordnance Accessories Manufacturing

**ORANGE COUNTY PLANNING & INSPECTIONS DEPARTMENT****Craig N. Benedict, AICP, Director**

**Administration**  
**(919) 245-2575**  
**(919) 644-3002 (FAX)**  
**www.orangecountync.gov**



**131 W. Margaret Lane**  
**Suite 201**  
**P O Box 8181**  
**Hillsborough, NC 27278**

**CERTIFICATION OF MAILING**

**ZONING ATLAS AMENDMENT**  
**ORANGE COUNTY, NORTH CAROLINA**

I, Perdita Holtz, Planning Systems Coordinator with Orange County, North Carolina, DO HEREBY CERTIFY that in accordance with the provisions of Section 2.8.7 of the Orange County Unified Development Ordinance I have mailed, or have caused to be mailed, a Notice of the Planning Board Meeting and a Notice of Public Hearing to be held regarding the proposed rezoning of five parcels and adjacent Interstate right-of-way located south of Interstate 40 in the vicinity of Old Highway 86 in the Hillsborough Economic Development District.

The owners were identified according to the Tax Records and as required by Section 2.8.7 of the Orange County Unified Development Ordinance.

The mailed notices specified the date, time, place and subject of the Planning Board Meeting and the Public Hearing.

WITNESS my hand, this 26th day of August 2016.

---

Perdita Holtz, AICP  
 Planning Systems Coordinator

PLANNING & INSPECTIONS DEPARTMENT  
Craig N. Benedict, AICP, Director

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July 11, 2016

**Notice of Public Information Meeting and  
Planning Board Meeting  
for various amendments affecting the  
Hillsborough Economic Development District**

Dear Property Owner:

This letter is to notify you of upcoming meetings pertaining to proposed amendments to the:

- Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan
- Orange County Zoning Atlas (Map)
- Orange County Unified Development Ordinance (UDO)

Your property, or portion thereof, lies within the geographic area proposed for amendments (see enclosed maps). Additionally, your property is likely located within 1,000-feet of other affected parcels. This notification is occurring in accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the Orange County UDO.

The Planning Director has initiated amendments to the documents/maps listed above in order to better promote properties in the area for economic development opportunities. Planning Department staff will hold a **public information meeting on Tuesday, July 26, 2016 from 6:00 to 7:30 p.m.** to explain the proposal to interested persons. The meeting will be held in Room 004 of the West Campus Office Building (lowest level) located at **131 W. Margaret Lane in Hillsborough, North Carolina**. Free parking is available in the adjacent parking deck.

The **Planning Board** will consider recommendations on the proposed amendments at its meeting on **Wednesday, August 3, 2016, which begins at 7:00 p.m.** The Planning Board meeting is also held in Room 004 of the West Campus Office Building. Interested persons are invited to address the Planning Board with their comments regarding the proposed amendments.

Draft information was recently reviewed by the Planning Board's Ordinance Review Committee and meeting materials can be viewed at: <http://goo.gl/6dT5sT> (long URL was shortened).

A **formal public hearing** on the proposed amendments will be held by the Board of County Commissioners on **September 12, 2016**. You will receive another written notice about the public hearing closer to the hearing date.

The Town of Hillsborough is holding its own public hearing on the proposed amendments to the Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan on July 21, 2016. Please reference the Town's website (<https://www.hillsboroughnc.gov/>) for information regarding its public hearing.

If you cannot attend the public information meeting and reviewing the materials on the website does not answer your questions about the proposed amendments, you may call Perdita Holtz, Planning Systems Coordinator, or Tom Altieri, Comprehensive Planning Supervisor, at (919) 245-2575 during regular business hours for assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Craig N. Benedict". The signature is written in a cursive, flowing style.

Craig N. Benedict, AICP  
Planning Director

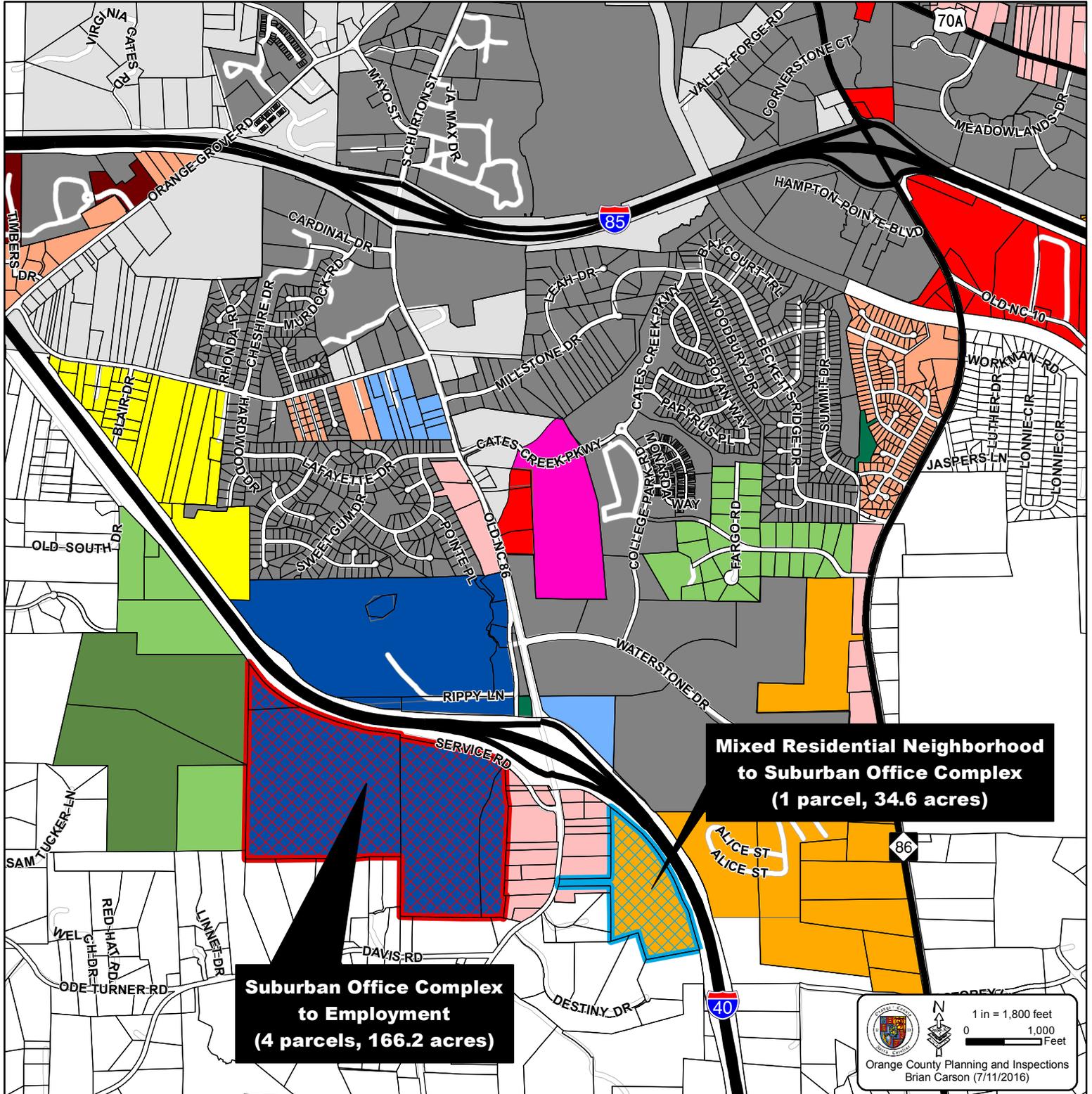
Enclosure

# Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan Proposed Amendments

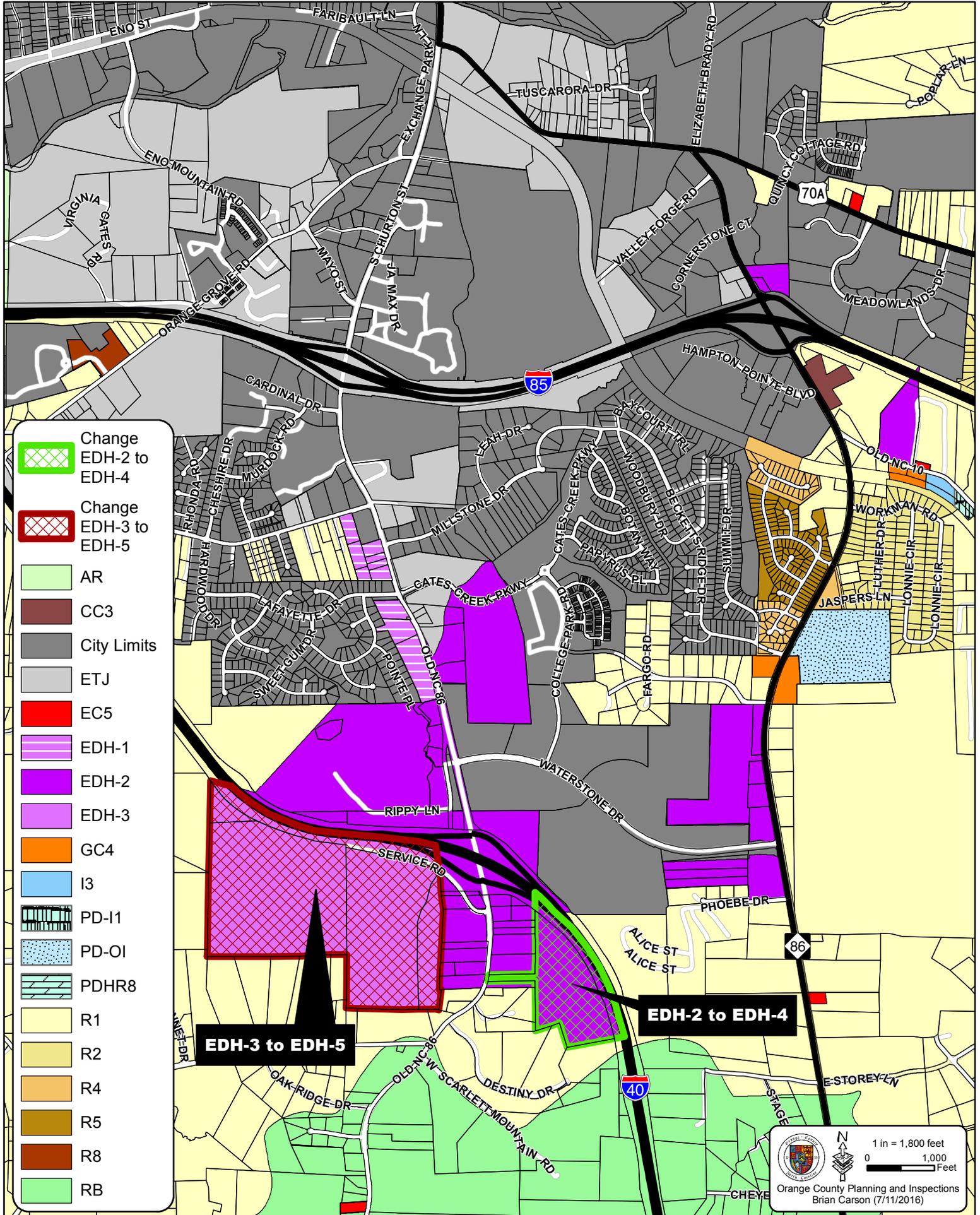
## Proposed Amendments

- From Mixed Residential
- Neighborhood to Suburban Office Complex
- From Suburban Office Complex to Employment

- |               |                         |                        |                 |
|---------------|-------------------------|------------------------|-----------------|
| City Limit    | Medium Density Res.     | Neighborhood Mixed Use | Retail Service  |
| ETJ           | Mixed Res. Neighborhood | Permanent Open Space   | Small Lot Res.  |
| Attached Res. | Employment              | Rural Living           | Suburban Office |
| Employment    | Mixed Use               |                        | Working Farm    |



# Proposed Hillsborough EDD Zoning Amendments<sup>83</sup>



PLANNING & INSPECTIONS DEPARTMENT  
Craig N. Benedict, AICP, Director

Administration  
(919) 245-2575  
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www.orangecountync.gov



131 W. Margaret Lane  
Suite 201  
P. O. Box 8181  
Hillsborough, NC 27278



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Planning Board Meeting  
for various amendments affecting the  
Hillsborough Economic Development District**

Dear Property Owner:

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- Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan
- Orange County Zoning Atlas (Map)
- Orange County Unified Development Ordinance (UDO)

**You are receiving this notice because you own property located within 1,000-feet of parcels affected by the proposed amendments.**

**YOUR PROPERTY IS NOT AFFECTED BY THE PROPOSED AMENDMENTS.**

This notification is occurring in accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the Orange County UDO.

The Planning Director has initiated amendments to the documents/maps listed above in order to better promote properties in the area for economic development opportunities. Planning Department staff will hold a **public information meeting** on **Tuesday, July 26, 2016 from 6:00 to 7:30 p.m.** to explain the proposal to interested persons. The meeting will be held in Room 004 of the West Campus Office Building (lowest level) located at **131 W. Margaret Lane in Hillsborough, North Carolina**. Free parking is available in the adjacent parking deck.

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Sincerely,

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Craig N. Benedict, AICP  
Planning Director

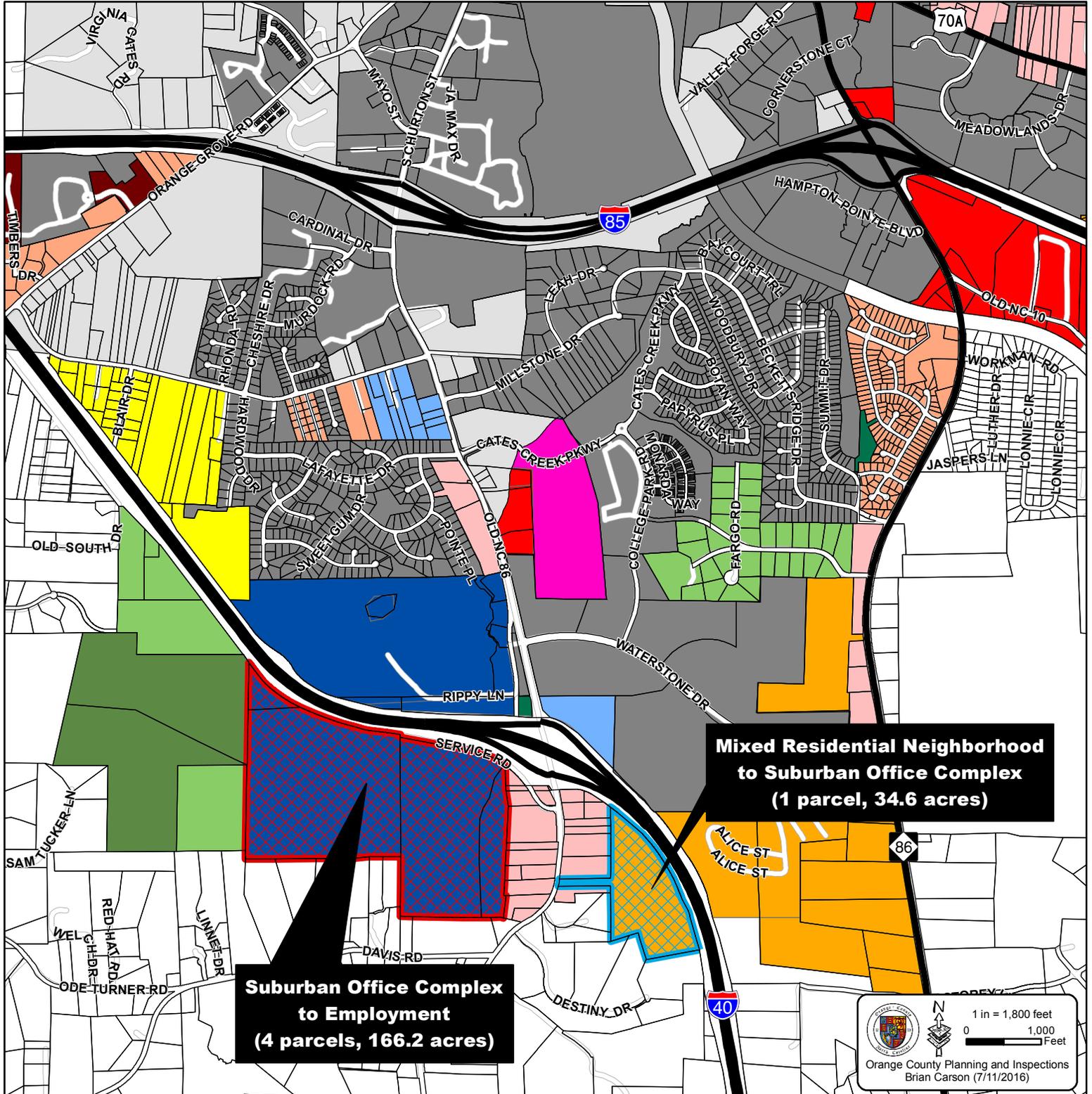
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# Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan Proposed Amendments

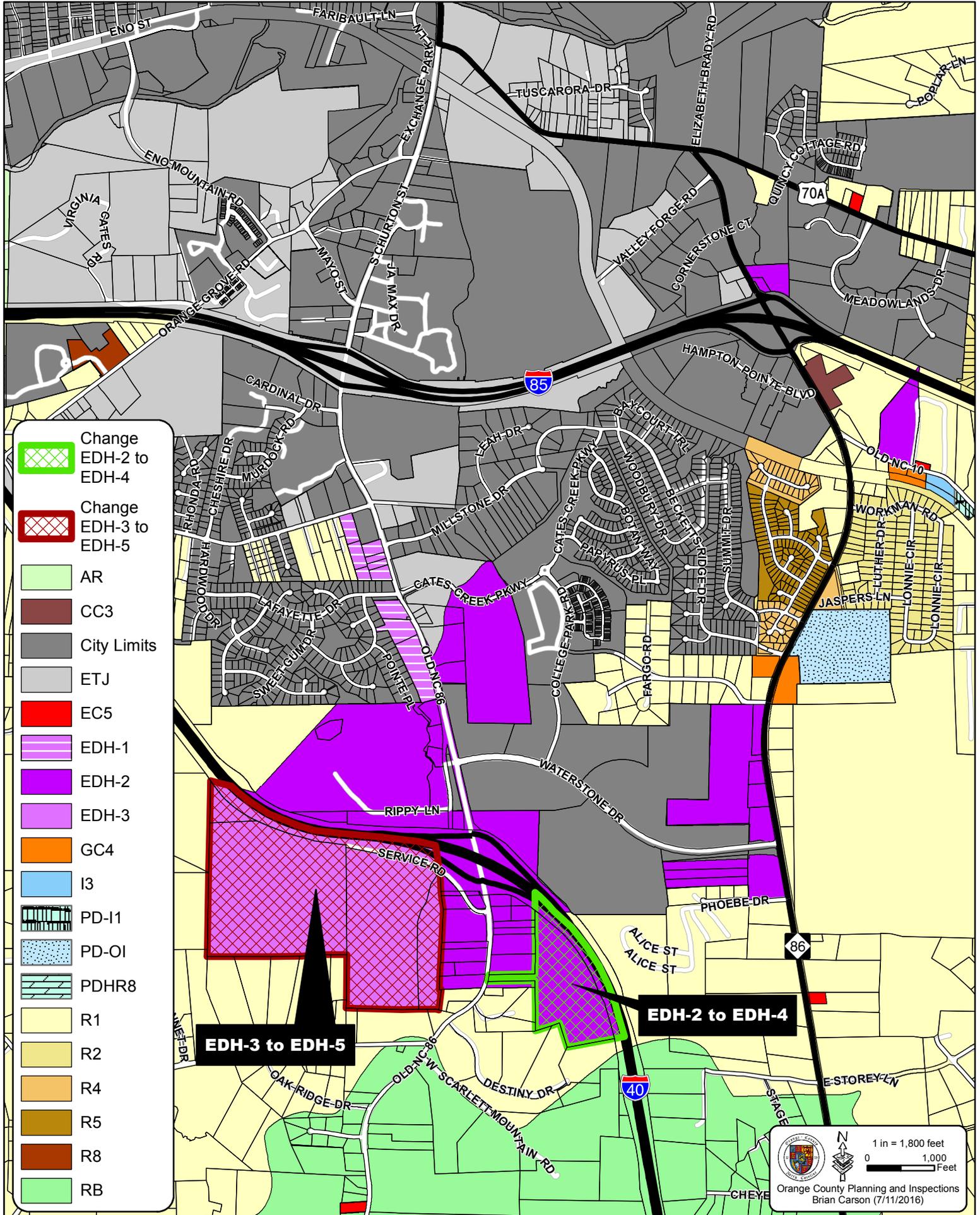
## Proposed Amendments

- From Mixed Residential
- Neighborhood to Suburban Office Complex
- From Suburban Office Complex to Employment

- |               |                         |                        |                 |
|---------------|-------------------------|------------------------|-----------------|
| City Limit    | Medium Density Res.     | Neighborhood Mixed Use | Retail Service  |
| ETJ           | Mixed Res. Neighborhood | Permanent Open Space   | Small Lot Res.  |
| Attached Res. | Employment              | Rural Living           | Suburban Office |
| Employment    | Mixed Use               |                        | Working Farm    |



# Proposed Hillsborough EDD Zoning Amendments<sup>87</sup>



PLANNING & INSPECTIONS DEPARTMENT  
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131 W. Margaret Lane  
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August 26, 2016

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for various amendments affecting the  
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Your property, or portion thereof, lies within the geographic area proposed for amendments (see enclosed maps). Additionally, your property is likely located within 1,000-feet of other affected parcels. This notification is occurring in accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the Orange County UDO.

The Planning Director has initiated amendments to the documents/maps listed above in order to better promote properties in the area for economic development opportunities. The Orange County Planning Board, an advisory board, considered these amendments at its meeting on August 3, 2016 and has recommended approval of the amendments.

A **public hearing** on the proposed amendments will be held by the Board of County Commissioners on **Monday, September 12, 2016, beginning at 7:00 p.m** at the Whitted Building, 300 West Tryon Street, 2nd Floor, Hillsborough, North Carolina.

Information regarding these proposals is available on the Planning Department's website:

[http://www.orangecountync.gov/departments/planning\\_and\\_inspections/current\\_interest\\_projects.php](http://www.orangecountync.gov/departments/planning_and_inspections/current_interest_projects.php)

The public hearing agenda materials will be published no later than September 2, 2016 at:  
[http://www.orangecountync.gov/departments/board\\_of\\_county\\_commissioners/agendas.php#](http://www.orangecountync.gov/departments/board_of_county_commissioners/agendas.php#)

If reviewing the materials on the website does not answer your questions about the proposed amendments, you may call Perdita Holtz, Planning Systems Coordinator, or Tom Altieri, Comprehensive Planning Supervisor, at (919) 245-2575 during regular business hours for assistance.

Sincerely,

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Craig N. Benedict, AICP  
Planning Director

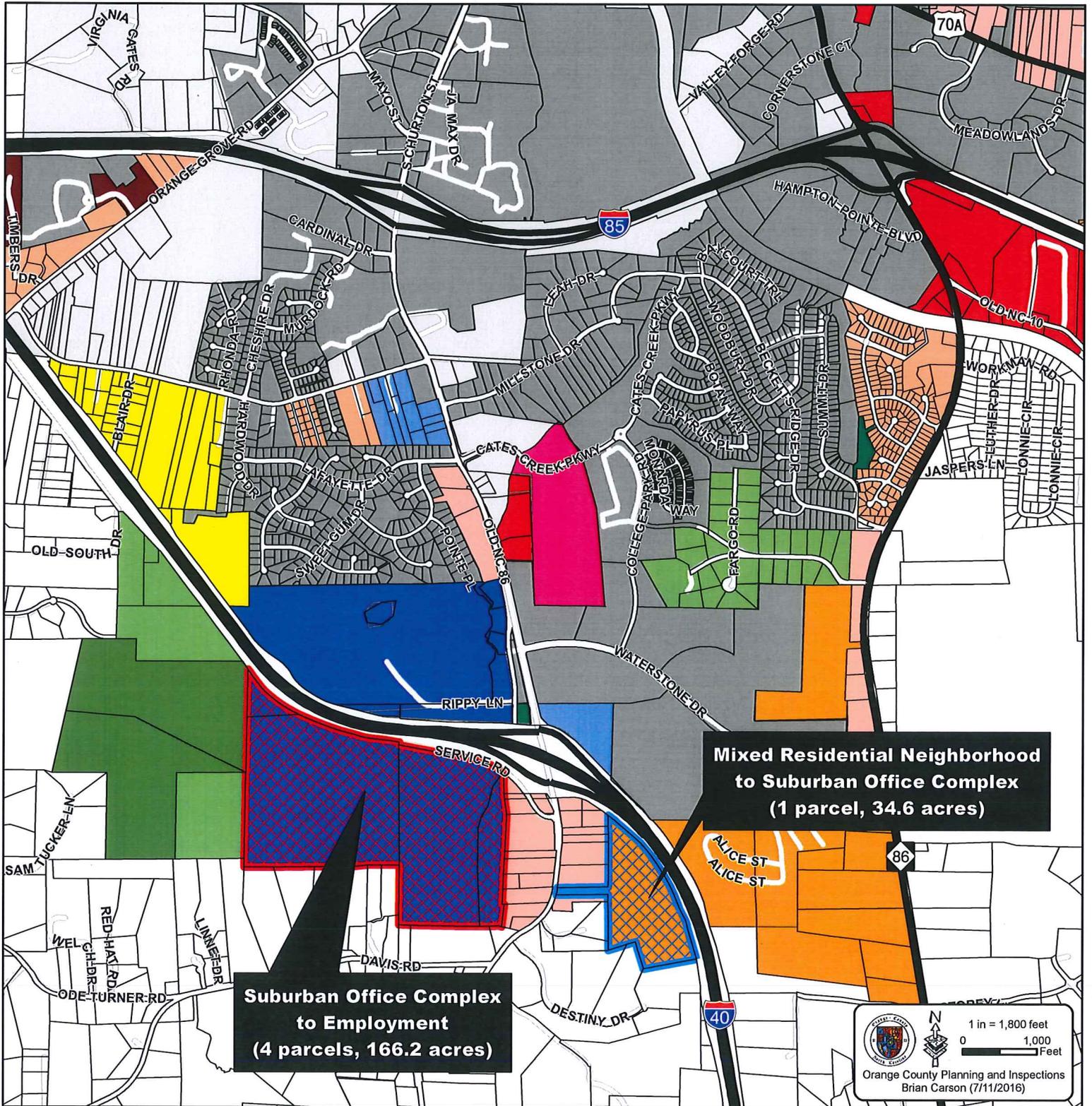
Enclosure

# Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan Proposed Amendments

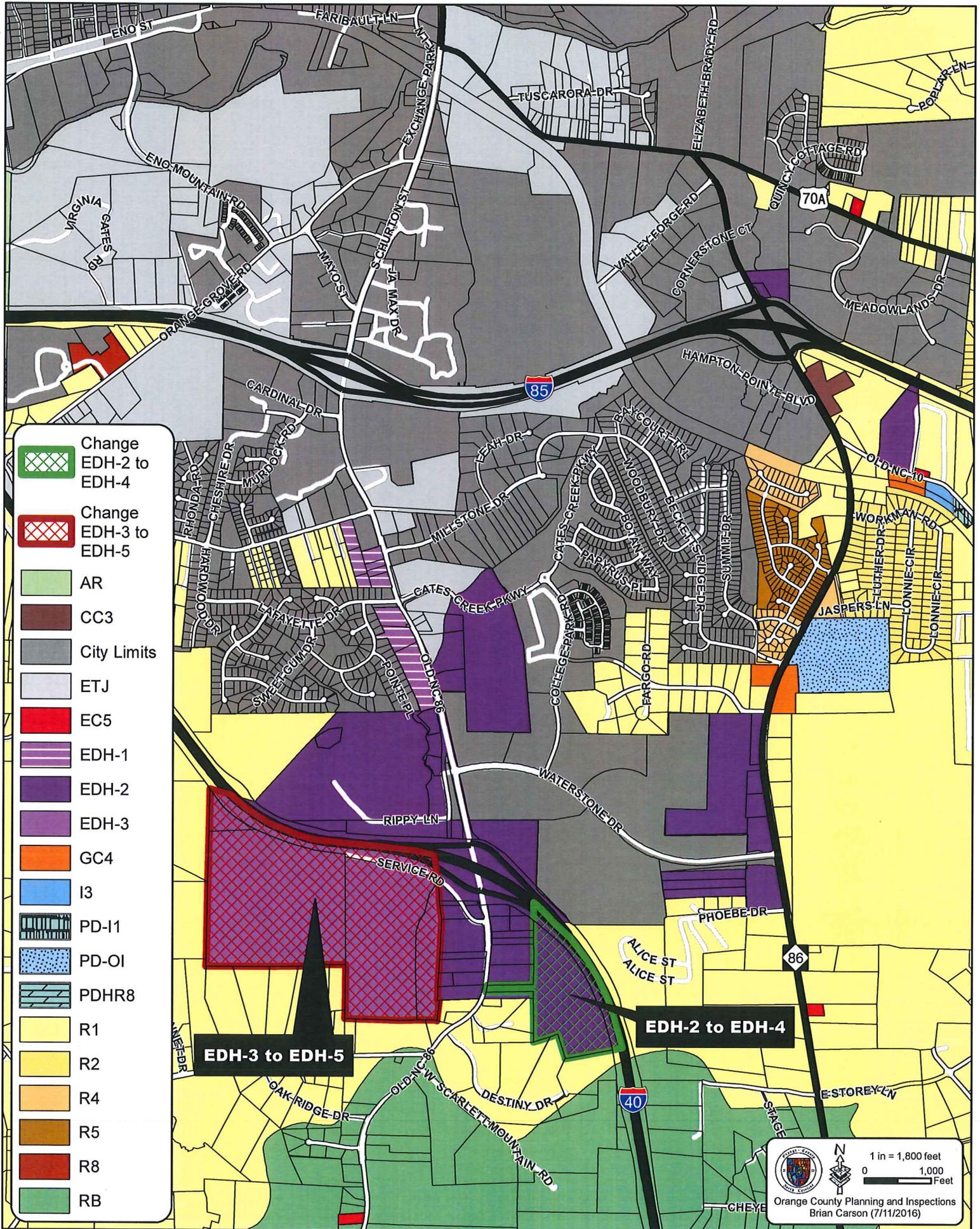
## Proposed Amendments

- From Mixed Residential Neighborhood to Suburban Office Complex
- From Suburban Office Complex to Employment

 City Limit	 Medium Density Res.	 Neighborhood Mixed Use	 Retail Service
 ETJ	 Mixed Res. Neighborhood	 Permanent Open Space	 Small Lot Res.
 Attached Res.	 Mixed Use	 Rural Living	 Suburban Office
 Employment			 Working Farm



# Proposed Hillsborough EDD Zoning Amendments



**PLANNING & INSPECTIONS DEPARTMENT**  
**Craig N. Benedict, AICP, Director**

**Administration**  
**(919) 245-2575**  
**(919) 644-3002 (FAX)**  
**www.orangecountync.gov**



**131 W. Margaret Lane**  
**Suite 201**  
**P. O. Box 8181**  
**Hillsborough, NC 27278**



August 26, 2016

**Notice of Public Hearing**  
**for various amendments affecting the**  
**Hillsborough Economic Development District**

Dear Property Owner:

This letter is to notify you of an upcoming public hearing pertaining to proposed amendments to the:

- Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan
- Orange County Zoning Atlas (Map)
- Orange County Unified Development Ordinance (UDO)

**You are receiving this notice because you own property located within 1,000-feet of parcels proposed for rezoning.**

**YOUR PROPERTY IS NOT PROPOSED FOR REZONING.**

This notification is occurring in accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the Orange County UDO.

The Planning Director has initiated amendments to the documents/maps listed above in order to better promote properties in the area for economic development opportunities. The Orange County Planning Board, an advisory board, considered these amendments at its meeting on August 3, 2016 and has recommended approval of the amendments.

A **public hearing** on the proposed amendments will be held by the Board of County Commissioners on **Monday, September 12, 2016, beginning at 7:00 p.m** at the Whitted Building, 300 West Tryon Street, 2nd Floor, Hillsborough, North Carolina.

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[http://www.orangecountync.gov/departments/board\\_of\\_county\\_commissioners/agendas.php#](http://www.orangecountync.gov/departments/board_of_county_commissioners/agendas.php#)

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Sincerely,

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Craig N. Benedict, AICP  
Planning Director

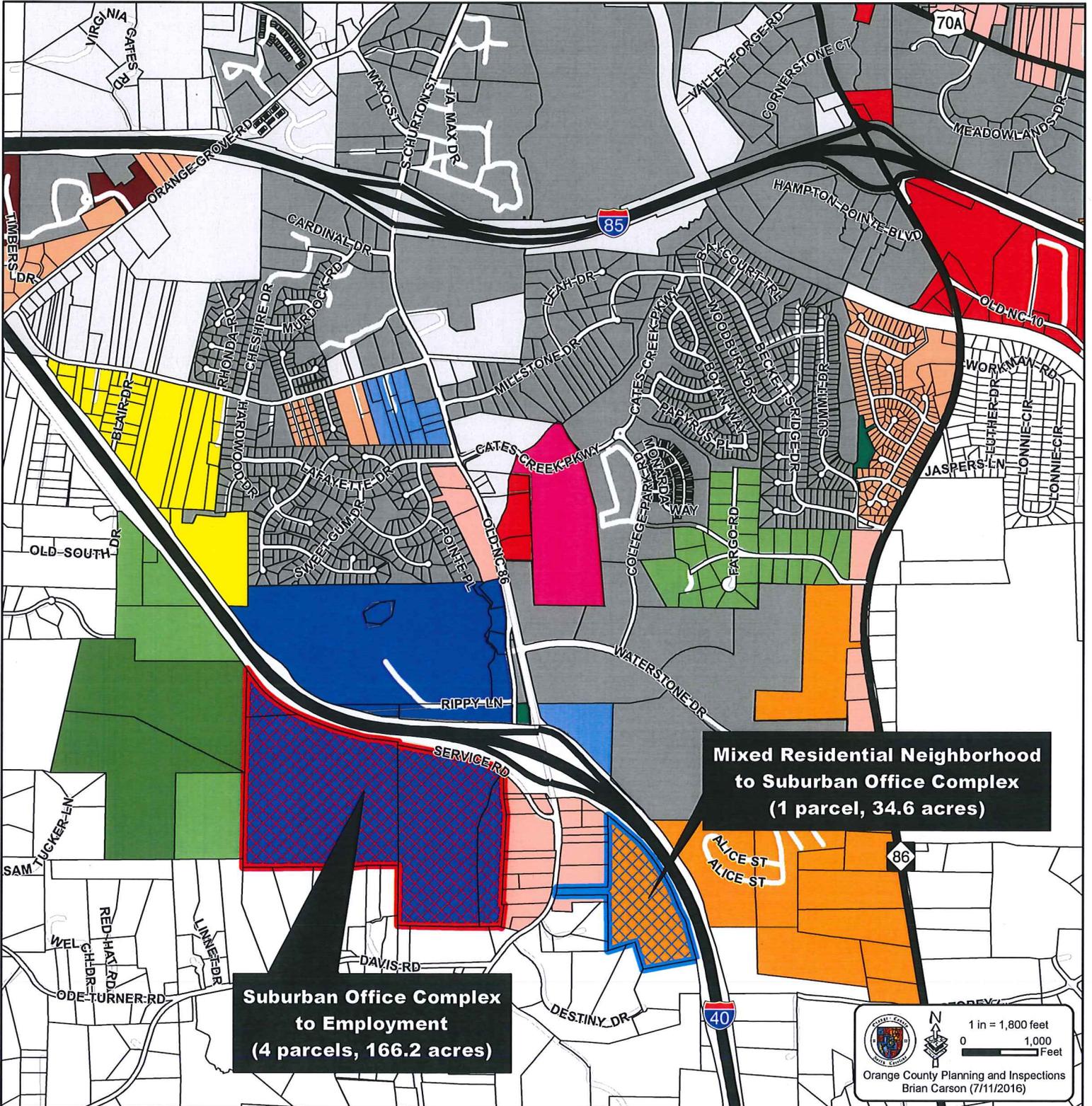
Enclosure

# Town of Hillsborough/Orange County Central Orange Coordinated Area Land Use Plan Proposed Amendments

## Proposed Amendments

- From Mixed Residential Neighborhood to Suburban Office Complex
- From Suburban Office Complex to Employment

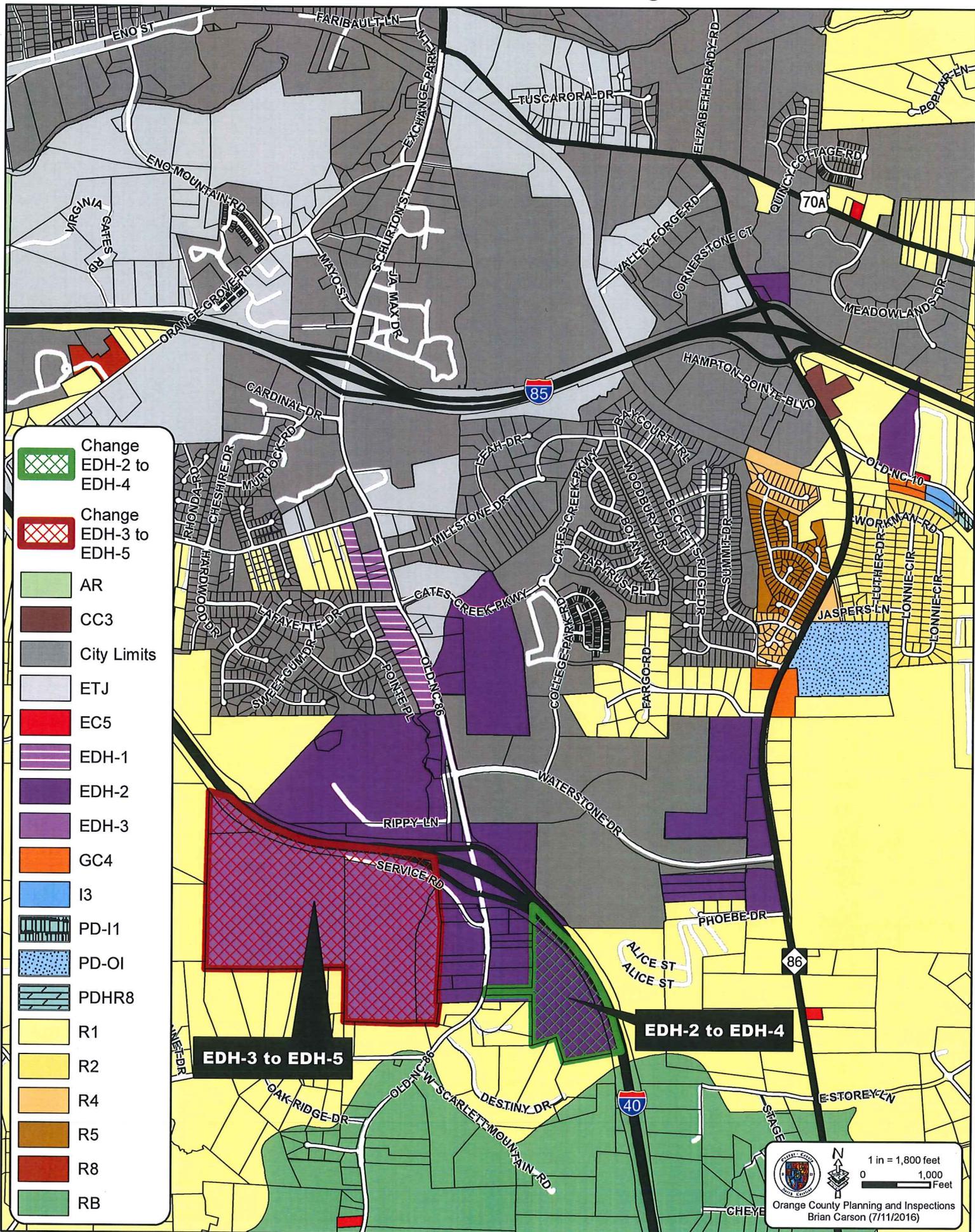
 City Limit	 Medium Density Res.	 Neighborhood Mixed Use	 Retail Service
 ETJ	 Mixed Res. Neighborhood	 Permanent Open Space	 Small Lot Res.
 Attached Res.	 Mixed Use	 Rural Living	 Suburban Office
 Employment			 Working Farm



**Suburban Office Complex  
to Employment  
(4 parcels, 166.2 acres)**

**Mixed Residential Neighborhood  
to Suburban Office Complex  
(1 parcel, 34.6 acres)**

# Proposed Hillsborough EDD Zoning Amendments 2015



Affected Property Owners - Notices Sent via Certified Mail
--

PIN	OWNER 1	OWNER2	ADDRESS1	ADDRESS2	CITY	STATE	ZIPCODE
9863718857	SUZANNE UPTON		11508 BRIDGETENDER DR		RICHMOND	VA	232331782
9863916573	CHRISTY D ETAL BAILEY	JOHN O CLAYTON	7510 COUNTRY LANE		ROUGEMONT	NC	27572
9863936843	SALLY A ADDISON	W ALLEN ADDISON	PO BOX 727		HILLSBOROUGH	NC	27278
9873014031	RANT B JR BARLOW		3315 OLD NC 86		HILLSBOROUGH	NC	27278
9873202388	ROBERT J ETAL AYERS	LUCILLE AYERS	1031 JONES FERRY RD		PITTSBORO	NC	27312

Adjacent Property Owners - 1,000-Foot Boundary - Notices Sent via First Class Mail (Duplicate Owners Removed from List)

PIN	OWNER1	OWNER2	ADDRESS1	ADDRESS2	CITY	STATE	ZIPCODE
9863802371	ANGELA DENISE DAVIS BARNETT		549 DIXON RD		WILLOW SPRING	NC	27592
9873107608	BARBARA FONTENELLE		116 OLLIE DR		BELLE CHASSE	LA	700374134
9873104310	BEATRICE S BROOKS		3410 OLD NC 86		HILLSBOROUGH	NC	27278
9873117247	CATHY W FUQUAY	CYNTHIA W BESSOIR	8519 HAW RIVER RD		OAK RIDGE	NC	27310
9862998894	CLETUS CLARK	CAROLYN CLARK	1412 MITCHELL DR		MITCHELLVILLE	MD	20716
9872080892	CLETUS L CLARK		1412 ALBERT DR		MITCHELLVILLE	MD	20716
9873100657	DAN E WAY		3401 OLD NC 86		HILLSBOROUGH	NC	27278
9862992837	DAVID M BARLOW	RHONDA M BARLOW	223 DAVIS RD		HILLSBOROUGH	NC	272787317
9871766139	DEPARTMENT OF TRANSPORTATION		PO BOX 15580		DURHAM	NC	27704
9872483693	DERRICK B EADS		1608 SCARLETT MOUNTAIN RD		HILLSBOROUGH	NC	27278
9863805324	DIANNE H DAVIS		319 DAVIS RD		HILLSBOROUGH	NC	27278
9873008345	DRCR ENTERPRISES		9530 BRIDIE SPUR		CHAPEL HILL	NC	27516
9863656022	EDWARD T GEIGER	ILEEN G TRUSTEE MOORMAN	4016 OLD NC 86		Hillsborough	NC	27278
9863539059	FRANKLIN E GARLAND		3020 ODE TURNER RD		HILLSBOROUGH	NC	272789631
9863607374	FREDERICK L TAPP	LINDA Y TAPP	4030 LEGATO LN		EFLAND	NC	27243
9862997320	HILLSBOROUGH UNITED CHURCH OF CHRIST		200 DAVIS RD		HILLSBOROUGH	NC	27278
9862698851	IRWIN O ROJAS	SILVIA E MORENO	111 LINNET RD		Hillsborough	NC	27278
9863705049	ISABETH W DAVIS		319 DAVIS RD		HILLSBOROUGH	NC	272788395
9862891480	JAMES G JR BUCHANAN	RONDA F BUCHANAN	313 OAK RIDGE DR		HILLSBOROUGH	NC	272787395
9863526072	JAMES GARLAND		2711 ODE TURNER RD		HILLSBOROUGH	NC	272787631
9872191961	JEANINE L DUKE	JAMES N POULOS	4606 PACES FERRY DR		DURHAM	NC	27712
9863604417	JOEL K GILLIS	ROBIN A GILLIS	6321 ANGUS DR		RALEIGH	NC	27617
9873007189	JOHN JR BOXTER	SHANNON MARTIN	3423 OLD NC 86		HILLSBOROUGH	NC	27278
9863615525	JOSEPH LLOYD JR LINEBERRY	MARY L T GILBERT	3106 WILSHIRE DR		GREENSBORO	NC	274083013
9873009867	JUANITA C DAVIS		3319 OLD NC HWY 86		Hillsborough	NC	27278
9863503862	KAREN FAITH TURNER HALL		1101 SAM TUCKER LANE		HILLSBOROUGH	NC	27278
9872491050	KAREN S JORDAN		1622 SCARLETT MOUNTAIN RD		HILLSBOROUGH	NC	27278
9872095945	LARRY B LEE		3503 OLD NC 86		HILLSBOROUGH	NC	27278
9873017820	LOUISE J SCARLETTE		3209 OLD CH HILLSBOROUGH RD		HILLSBOROUGH	NC	27278
9862999596	MATTHEW ETAL CLARK		4503 BUMPHUS RD		CHAPEL HILL	NC	27514
9873117506	MICHAEL J DODSON		P O BOX 1081		HILLSBOROUGH	NC	272781081
9873104230	MICHAEL W SUDYK	GEORGE W SUDYK	3412 COUNTRY CLUB DR		GASTONIA	NC	28056
9873108103	MICHAEL WILLIAM SUDYK		418 DARBY CREEK LANE		MORRISVILLE	NC	27560
9863709304	MIGUEL G MUNOZ	DAWN C MUNOZ	425 DAVIS RD		HILLSBOROUGH	NC	272789330
9862896438	MISTY C HILTON		320 DAVIS RD		HILLSBOROUGH	NC	27278
9862899868	MYRA E GWIN SUMMERS	RICHARD W SUMMERS	103 GRAPEVINE LN		Hillsborough	NC	27278
9873045166	OLD 86 COMMONS LLC		PO BOX 1083		HILLSBOROUGH	NC	27278
9873119450	PAUL C DODSON		3224 OLD NC 86		HILLSBOROUGH	NC	27278
9872087570	RANDALL J HAMLETT	CHARLENE W HAMLETT	3633 CHAPEL HILL BLVD		DURHAM	NC	27707
9873116137	RANT B JR BARLOW		3315 OLD NC 86		HILLSBOROUGH	NC	27278
9872383933	REA LANDCOM INC		PO BOX 52328		DURHAM	NC	27717
9862690948	ROBBIE D WRIGHT	DAVID FRANKLIN WRIGHT	3914 ODE TURNER RD		HILLSBOROUGH	NC	272789377
9873100408	ROWDY B WALKER		1877 FLYING W TRL		Hillsborough	NC	27278
9862990443	ROY VERNON SCOTT	MARY G SCOTT	302 DAVIS RD		HILLSBOROUGH	NC	27278
9873038433	SLF II NC WATERSTONE LLC		SUITE 1750	5949 SHERRY LANE	DALLAS	TX	75225
9873107937	STEVEN L KAUFMANN	JESSE S KAUFMANN	2304 DAVIS RD		HILLSBOROUGH	NC	272787321
9863900565	SUMMERS MYRA E GWIN	RICHARD W SUMMERS (H)	103 GRAPEVINE LN		HILLSBOROUGH	NC	27278
9872298289	THEODORE L BRYANT	BEVERLY N BRYANT	2000 WOODVIEW DR		DURHAM	NC	27704
9873320287	UNIVERSITY OF NORTH CAROLINA HOSPITALS AT CHAPEL HILL #319		101 MANNING DR MED SCHOOL CB7600		CHAPEL HILL	NC	27514
9863632994	VERONICA DUCLAY	THIERRY DUCLAY	32 GREENHILLS RD		HUNTINGTON STATION	NY	11746
9873018382	VICKIE R BERRY	RICKY G BERRY	1810 ADAMS PLACE		HILLSBOROUGH	NC	272789513
9873006678	VIVIAN BEST		4018 WRENN RD		DURHAM	NC	27705
9863827960	W ALLEN ADDISON	SALLY A ADDISON	PO BOX 727		HILLSBOROUGH	NC	272780727

9862898435 WILLIAM NEAL JR AUSTIN  
9873402548 WOODSEGE PROPERTIES LLC

SHIRLEY B AUSTIN

2803 LITTLE RIVER DRIVE  
4522 LITTLE RIVER CH RD

HILLSBOROUGH  
HURDLE MILLS

NC 272789720  
NC 27541



**ORANGE COUNTY  
BOARD OF COMMISSIONERS  
QUARTERLY PUBLIC HEARING ACTION AGENDA ITEM ABSTRACT**  
**Meeting Date:** September 12, 2016

**Action Agenda  
Item No.   D.4**

**SUBJECT:** Unified Development Ordinance Text Amendment – Modify Use Standards

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**DEPARTMENT:** Planning and Inspections

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**ATTACHMENT(S):**

1. Comprehensive Plan and Unified Development Ordinance (UDO) Amendment Outline Form
2. Statement of Consistency
3. Proposed Ordinance
4. Approved July 6, 2016 Ordinance Review Committee Notes
5. Draft August 3, 2016 Planning Board Minutes

**INFORMATION CONTACT:**

Ashley Moncado, Planner II (919) 245-2589  
Craig Benedict, Director (919) 245-2575

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**PURPOSE:** To hold a public hearing on a Planning Director initiated text amendment to the Unified Development Ordinance (UDO) that would establish standards to allow certain principal uses to include a small component of other specific uses in the O/RM (Office/Research and Manufacturing) zoning district.

**BACKGROUND:** In working with site selection specialists and the Economic Development Department for various economic development projects, Planning staff has noted that the County could be more competitive in attracting economic development projects if the UDO were to include a by-right process that allows for mixed use developments. Currently, an office, research, and manufacturing business park which includes, for example, a restaurant primarily serving onsite employees, but also open to the public could not be permitted by right in the general use zoning districts. Instead the project would be required to follow either the Master Development Plan Conditional Zoning District (MDP-CZ) process or Conditional Use District process. In order to make the County more competitive in the site selection process for these types of multi-use projects, Planning staff is proposing to allow for additional uses to be permitted in conjunction with, but not before, a specific identified principal use (Industrial (Light), Research Facility, or Research and Manufacturing Facility) as part of an overall project development plan.

This amendment will allow for uses that primarily serve and support the needs of the business, facility, and employees involved in the principal use without overpowering the intended purpose of the O/RM zoning district. In addition, the amendment will allow for a more efficient review process for future mixed use developments. Therefore, allowing an office, research, and manufacturing business park which includes, for example, a restaurant serving onsite employees and the general public to be permitted by-right in the O/RM zoning district.

Originally, this text amendment package was envisioned to establish and permit secondary uses in the UDO. Following a recommendation from the Orange County Attorney's Office, Planning staff revised the amendment in order to permit the uses initially proposed as secondary uses in a more concise manner. In essence, adding these support uses directly to the specific principal use standards. As a result, the secondary use concept will not be established in the UDO; however, the same outcome is expected to be achieved by amending the use standards contained in Article 5.

The proposed amendment was presented for review and comment at the July 6, 2016 Ordinance Review Committee (ORC) meeting. Agenda materials from that meeting are available at <http://www.co.orange.nc.us/planning/planningboard.asp>. Summary notes from this meeting are included in Attachment 4.

Attachment 1 contains additional information and analysis regarding this amendment. Proposed text amendment language can be found in Attachment 3 within a "track changes" format.

Planning Director's Recommendation: The Planning Director recommends **approval** of the Statement of Consistency, indicating the amendments are reasonable and in the public interest, contained in Attachment 2 and proposed amendment package contained in Attachment 3.

Planning Board Recommendation: At its August 3, 2016 meeting, the Board voted unanimously to **recommend approval** of the Statement of Consistency and the amendment package. Draft minutes from this meeting are included in Attachment 5. Agenda materials from the August 3, 2016 Planning Board meeting can be viewed at: <http://www.orangecountync.gov/8.3.16PlanningBoardAgendaPacket.pdf>.

Following the August 3rd Planning Board meeting, County Attorney staff completed their review of the proposed text amendments. As a result of the review, edits were made to the proposed amendments. The edits made after the August 3rd meeting are identified with yellow highlighting in Attachment 3. Due to the edits made to the proposed text amendment package following Planning Board recommendation, the Orange County Attorney's Office determined the amendments would need to be presented to the Board at the September 7, 2016 Planning Board meeting for a second review and recommendation before the September Quarterly Public Hearing. Planning staff will present a summary of the Planning Board's discussion and recommendation for the BOCC at the September Quarterly Public Hearing. Agenda materials from the September 7, 2016 Planning Board meeting can be viewed at: <http://www.orangecountync.gov/SeptemberPlanningBoardPacket.pdf>.

**FINANCIAL IMPACT**: Consideration and approval will not create the need for additional funding for the provision of County services. Costs for the required legal advertisement were paid from FY2016-17 Departmental funds budgeted for this purpose. Existing Planning staff included in the Departmental staffing budget will accomplish the work required to process this amendment.

**SOCIAL JUSTICE IMPACT:** The following Orange County Social Justice Goal is applicable to this agenda item:

- **GOAL: ENSURE ECONOMIC SELF-SUFFICIENCY**

The creation and preservation of infrastructure, policies, programs and funding necessary for residents to provide shelter, food, clothing and medical care for themselves and their dependents.

**RECOMMENDATION(S):** The Administration recommends the Board:

1. Receive the proposed amendments to the UDO as detailed in this abstract and attachments.
2. Conduct the public hearing and accept comment on the proposed amendments.
3. Close the public hearing. (Note that, because this is a legislative decision, additional comments at a later date are permitted).
4. Decide on one of the following options:
  - a. Adopt the proposed amendments by approving the Statement of Consistency (Attachment 2) and Ordinance (Attachment 3).
  - b. Defer a decision to a later BOCC regular meeting date.
  - c. Refer the item back to the Planning Board for a specific purpose.
  - d. Deny the proposed amendments. (Note: Section 2.2.8 *Effect of Denial on Subsequent Applications* of the UDO states that no application for the same or similar amendment may be submitted for a period of one year. The one year period begins on the date of denial.)

# COMPREHENSIVE PLAN / FUTURE LAND USE MAP AND UNIFIED DEVELOPMENT ORDINANCE (UDO) AMENDMENT OUTLINE

UDO / Zoning-2016-09

Modify Use Standards

## A. AMENDMENT TYPE

### Map Amendments

Land Use Element Map:

From:

To:

Zoning Map:

From:

To:

Other:

### Text Amendments

Comprehensive Plan Text:

Section(s):

UDO Text:

UDO General Text Changes

UDO Development Standards

UDO Development Approval Processes

Section(s): Section 5.14, *Standards for Manufacturing, Assembly, and Processing*

Section 5.17, *Standards for Miscellaneous Uses*

Other:

## B. RATIONALE

### 1. Purpose/Mission

In accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the UDO, the Planning Director has initiated a text amendment that would establish use standards to allow certain principal uses (Industrial (Light), Research Facility, or Research and Manufacturing Facility) to include a small component of other specific uses in the O/RM (Office/Research and Manufacturing) zoning district. This amendment will allow for uses that primarily serve and support the needs of the business, facility, and employees involved in the principal use without overpowering the intended purpose of the O/RM zoning district.

## 2. Analysis

In working with site selection specialists for various economic development projects, Planning staff has noted that the County could be more competitive in attracting economic development projects if the UDO were to include a by-right process that allows for mixed use developments. Currently, an office, research, and manufacturing business park which includes, for example, a restaurant primarily serving onsite employees, but is also open to the public could not be permitted by right in the general use zoning districts. Instead the project would be required to follow either the Master Development Plan Conditional Zoning District (MDP-CZ) process or Conditional Use District process. In order to make the County more competitive in the site selection process for these types of multi-use projects, Planning staff is proposing to allow for additional uses to be permitted in conjunction with, but not before, a specific identified principal use as part of an overall project development plan.

Originally, this text amendment package was envisioned to establish and permit secondary uses in the UDO. Following a recommendation from the Orange County Attorney's Office, Planning staff revised the amendment in order to permit the uses initially proposed as secondary uses in a more concise manner. As a result, the secondary use concept will not be established in the UDO; however, the same outcome is expected to be achieved by amending the use standards contained in Article 5. Proposed standards will allow additional uses (banks, beauty and barber shops, laundry and dry cleaning services, restaurants, etc.) to be permitted in the O/RM zoning district when the principal use type is Industrial, Light, Research Facility, or Research and Manufacturing Facility and the cumulative additional uses do not exceed 25% of the total square footage of all structures.

## 3. Comprehensive Plan Linkage (i.e. Principles, Goals and Objectives)

### **Chapter 3: Economic Development Element - Section 3.5 Goals**

**Economic Development Overarching Goal:** Viable and sustainable economic development that contributes to both property and sales tax revenues, and enhances high-quality employment opportunities for County residents.

**Objective ED-1.5:**

Identify barriers to development of desirable businesses and local businesses, and mitigate these barriers.

**Objective ED-2.1:**

Encourage compact and higher density development in areas served by water and sewer.

### **Chapter 5: Land Use Element - Section 5.6 Goals**

**Land Use Overarching Goal:** Coordination of the amount, location, pattern and designation of future land uses, with availability of County services and facilities sufficient to meet the needs of Orange County's population and economy consistent with other Comprehensive Plan element goals and objectives.

**Land Use Goal 1:**

Fiscally and environmentally responsible, sustainable growth, consistent with the provision of adequate services and facilities and a high quality of life.

**Land Use Goal 3:**

A variety of land uses that are coordinated within a program and pattern that limits sprawl, preserves community and rural character, minimizes land use conflicts, supported by an efficient and balanced transportation system.

**Land Use Goal 4:**

Land development regulations, guidelines, techniques and/or incentives that promote the integrated achievement of all Comprehensive Plan goals.

**Objective LU-1.1:**

Coordinate the location of higher intensity / high density residential and non-residential development with existing or planned locations of public transportation, commercial and community services, and adequate supporting infrastructure (i.e., water and sewer, high-speed internet access, streets, and sidewalks), while avoiding areas with protected natural and cultural resources. This could be achieved by increasing allowable densities and creating new mixed-use zoning districts where adequate public services are available.

**Objective LU-3.1:**

Discourage urban sprawl, encourage a separation of urban and rural land uses, and direct new development into areas where necessary community facilities and services exist through periodic updates to the Land Use Plan. (See also Economic Development Objective ED-2.8)

**4. New Statutes and Rules**

N/A

**C. PROCESS****1. TIMEFRAME/MILESTONES/DEADLINES**

- a. BOCC Authorization to Proceed

June 7, 2016

- b. Quarterly Public Hearing

September 12, 2016

- c. BOCC Updates/Checkpoints

July 6, 2016 – Ordinance Review Committee (receive materials)

August 3, 2016 – Planning Board Recommendation (receive materials)

September 7, 2016 – Planning Board Recommendation (receive materials)

- d. Other

**2. PUBLIC INVOLVEMENT PROGRAM**

**Mission/Scope:** Public Hearing process consistent with NC State Statutes and Orange County ordinance requirements.

- a. Planning Board Review:

July 6, 2016 – Ordinance Review Committee

August 3, 2016 – Recommendation to the BOCC

September 7, 2016 – Recommendation to the BOCC

b. Advisory Boards:

_____	_____
_____	_____

c. Local Government Review:

_____	_____
_____	_____

d. Notice Requirements

Consistent with NC State Statutes – legal ad prior to public hearing
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e. Outreach:

General Public:

A public information meeting for a previous amendment which included the “secondary use” concept was held on April 20, 2016 at the Efland-Cheeks Community Center from 6:00 p.m. to 7:30 p.m. to review the proposed amendments and accept public comment. Eleven people attended the meeting. No concerns about the proposal were expressed by attendees.

Small Area Plan Workgroup:

Other:

**FISCAL IMPACT**

Consideration and approval will not create the need for additional funding for the provision of county services. Costs for the required legal advertisement will be paid from FY2016-17 Departmental funds budgeted for this purpose. Existing Planning staff included in the Departmental staffing budget will accomplish the work required to process this amendment.

**D. AMENDMENT IMPLICATIONS**

Adoption of the proposed amendment will allow for additional uses that serve and support permitted principal uses in the O/RM zoning district. As a result, mixed use developments which include a principal use type of Industrial (Light), Research Facility, or Research and Manufacturing Facility and identified additional uses will be permitted by right on a parcel allowing for a faster review process than would currently be required.

**E. SPECIFIC AMENDMENT LANGUAGE**

See Attachment 3

**Primary Staff Contact:**

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Planning Department

919-245-2589

amoncado@orangecountync.gov

**STATEMENT OF CONSISTENCY  
OF A PROPOSED UNIFIED DEVELOPMENT ORDINANCE TEXT AMENDMENT  
WITH THE ADOPTED ORANGE COUNTY 2030 COMPREHENSIVE PLAN**

Orange County has initiated an amendment to the Unified Development Ordinance (UDO) in order to modify use standards to allow certain principal uses to include a small component of other specific uses in the O/RM (Office/Research and Manufacturing) zoning district.

The Board of County Commissioners finds:

- a. The requirements of Section 2.8 of the UDO have been deemed complete; and,
- b. Pursuant to Sections 1.1.5, and 1.1.7 of the UDO and to Section 153A-341 of the North Carolina General Statutes, the Board finds sufficient documentation within the record denoting that the amendment **is consistent** with the adopted 2030 Comprehensive Plan.
- c. The amendment is consistent with applicable plans because it:
  1. *Supports the following 2030 Comprehensive Plan goals and objectives:*

Chapter 3: Economic Development Element

Economic Development Overarching Goal: Viable and sustainable economic development that contributes to both property and sales tax revenues, and enhances high-quality employment opportunities for County residents.

Objective ED-1.5: Identify barriers to development of desirable businesses and local businesses, and mitigate these barriers.

Objective ED-2.1: Encourage compact and higher density development in areas served by water and sewer.

Chapter 5: Land Use Element

Land Use Overarching Goal: Coordination of the amount, location, pattern and designation of future land uses, with availability of County services and facilities sufficient to meet the needs of Orange County's population and economy consistent with other Comprehensive Plan element goals and objectives.

Land Use Goal 1: Fiscally and environmentally responsible, sustainable growth, consistent with the provision of adequate services and facilities and a high quality of life.

Land Use Goal 3: A variety of land uses that are coordinated within a program and pattern that limits sprawl, preserves community and rural character, minimizes land use conflicts, supported by an efficient and balanced transportation system.

Land Use Goal 4: Land development regulations, guidelines, techniques and/or incentives that promote the integrated achievement of all Comprehensive Plan goals.

Objective LU-1.1: Coordinate the location of higher intensity / high density residential and non-residential development with existing or planned locations of public transportation, commercial and community services, and adequate supporting infrastructure (i.e., water and sewer, high-speed internet access, streets, and sidewalks), while avoiding areas with protected natural and cultural resources. This could be achieved by increasing allowable densities and creating new mixed-use zoning districts where adequate public services are available.

Objective LU-3.1: Discourage urban sprawl, encourage a separation of urban and rural land uses, and direct new development into areas where necessary community facilities and services exist through periodic updates to the Land Use Plan. (See also Economic Development Objective ED-2.8.)

d. The amendment is reasonable and in the public interest because it:

1. Reduces barriers for future mixed use projects while expanding economic development opportunities in the county.
2. Balances economic suitability with orderly, compact growth.
3. Promotes mixed use development in appropriate areas of the county served by water and sewer infrastructure which limits sprawl, protects the rural environment, and lessens land use conflicts.

The Board of County Commissioners hereby adopts this Statement of Consistency and findings expressed herein.

---

Earl McKee, Chair

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Date

**AN ORDINANCE AMENDING  
THE ORANGE COUNTY UNIFIED DEVELOPMENT ORDINANCE**

**Whereas**, the County determined existing language in the Unified Development Ordinance (UDO) limited mixed-use development potential in districts intended for economic development, and

**Whereas**, the County determined existing language in the UDO needed to be amended to support and accommodate innovative and diverse economic development opportunities in the future, and

**Whereas**, the County identified necessary amendments to the UDO to establish standards to allow certain principal uses to include a small component of other specific uses in the O/RM zoning district in order to serve the needs of a specific principal use without overpowering the intended purpose of the zoning district, and

**Whereas**, the requirements of Section 2.8 of the Unified Development Ordinance have been deemed complete, and

**Whereas**, the County has held the required public hearing and has found the proposed text amendment is consistent with the goals and policies of the adopted Comprehensive Plan.

**Be it ordained** by the Board of Commissioners of Orange County that the Orange County Unified Development Ordinance is hereby amended as depicted in the attached pages.

**Be it further ordained** that this ordinance be placed in the book of published ordinances and that this ordinance is effective upon adoption.

Upon motion of Commissioner \_\_\_\_\_, seconded by Commissioner \_\_\_\_\_, the foregoing ordinance was adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

I, Donna S. Baker, Clerk to the Board of Commissioners for Orange County, DO  
HEREBY CERTIFY that the foregoing is a true copy of so much of the proceedings of said Board at a meeting held on \_\_\_\_\_, 2016 as relates in any way to the adoption of the foregoing and that said proceedings are recorded in the minutes of the said Board.

WITNESS my hand and the seal of said County, this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

SEAL

\_\_\_\_\_  
Clerk to the Board of Commissioners

## UNIFIED DEVELOPMENT ORDINANCE AMENDMENT PACKET NOTES:

The following packet details the proposed text amendment regarding the modification of existing use standards. The amendment package will modify Sections 5.14 and 5.17 of the Unified Development Ordinance (UDO).

As the number of affected pages/sections of the existing UDO are being modified with this proposal, staff has divided the proposed amendments into the following color coded classifications:

- **Red Text:** Denotes new, proposed text, that staff is suggesting be added to the UDO.
- **Red Highlighted Text:** Denotes revisions made after the August 3<sup>rd</sup> Planning Board meeting.

Only those pages of the UDO impacted by the proposed modification(s) have been included within this packet. Some text on the following pages has a large "X" through it to denote that these sections are not part of the amendments under consideration. The text is shown only because in the full UDO it is on the same page as text proposed for amendment or footnotes from previous sections 'spill over' onto the included page. Text with a large "X" is not proposed for modification.

**Please note that the page numbers in this amendment packet may or may not necessarily correspond to the page numbers in the adopted UDO because adding text may shift all of the text/sections downward.**

Users are reminded that these excerpts are part of a much larger document that regulates land use and development in Orange County. The full UDO is available online at: <http://orangecountync.gov/planning/Ordinances.asp>.

from the property line.

- (3) Hours of operation shall be limited to the hours between 7 a.m. and 7 p.m.
- (4) Site shall have direct access to a major road, as classified in the Orange County Comprehensive Plan, and shall use said road as the primary access, unless approved otherwise in the permit.

#### 5.14.4 Winery, production only

##### (A) Standards for Class B Special Use Permit or ASE-CZ Zoning District

- (1) If located in an AR or RB zoning district, the winery must be located on a bona fide farm.
  - (a) A winery, production only, that is located on a bona fide farm, and which utilizes primarily crops produced on-site is considered a bona fide farming use and is not subject to zoning regulations.
  - (b) A winery, production only, that does not utilize primarily crops produced on-site, regardless of whether it is located on a bona fide farm, is not considered a bona fide farming use and is subject to the regulations contained in this Ordinance.
- (2) If located adjacent to residentially zoned property, all buildings shall be located a minimum of 100 feet from the property line.
- (3) Application materials shall include a comprehensive groundwater study, for facilities expected to use more groundwater on an annual basis than an average single family residence (which uses 240 gallons of water per day) built at the highest density the existing zoning district would allow. For example, if the existing zoning district allows a residential density of 1 unit for 2 acres and the proposed use is on a six acre parcel (which could yield 3 residences), the proposed use(s) may use three times the water used by an average single family residence (or 720 gallons per day, on an annualized basis) before a comprehensive groundwater study is required. The water usage rates of any existing use subject to zoning regulations located on the same lot shall be taken into account when determining if a comprehensive groundwater study is required. Said study shall detail:
  - (a) The amount of water anticipated to be used on a daily, weekly, monthly, and annual basis by regulated uses located on the parcel (e.g., water usage by bona fide farm uses is not required to be included);
  - (b) An analysis of the amount of groundwater withdrawal considered to be safe and sustainable in the immediate vicinity; and
  - (c) An analysis of whether other wells in the vicinity of the proposed use are expected to be affected by withdrawals made by the proposed use.

#### 5.14.5 Industrial, Light

##### (A) Standards for the O/RM Zoning District

- (1) The following Multiple Uses are permitted in the O/RM zoning district when the Principal Use type is Industrial, Light and adhere to the standards of Section 5.14.5(A)(2):
  - (a) Banks & Financial Institutions
  - (b) Beauty & Barber Shops
  - (c) Laundry & Dry Cleaning Services
  - (d) Nightclubs, Bars, Pubs

- (e) Restaurants: Carry Out
- (f) Restaurants: General
- (g) Retail, Class 1
- (h) Printing & Lithography
- (2) Multiple Uses, identified in Section 5.14.5(A)(1), are permitted in the O/RM zoning district only in accordance with the following standards:
  - (a) The site plan must identify the square footage of each structure by type of use.
  - (b) The Principal Use type of Industrial, Light must be established on the site.
  - (c) The Multiple Use shall not exceed 25% of the total square footage of all structures on the site.

## SECTION 5.15: STANDARDS FOR AUTOMOTIVE/TRANSPORTATION RELATED USES

### 5.15.1 Motor Vehicle Sales / Rental (New & Used)

- (A) **Submittal Requirements**
  - (1) In addition to the information required by Section 2.5, the site plan shall show the area for the display of vehicles for sale or rental.
- (B) **General Standards**
  - (1) Property shall have frontage and direct access onto a State maintained roadway.
  - (2) Areas of the property designated for the display of vehicles for sale or rent shall be improved with an all-weather surface (i.e. concrete, asphalt, gravel) and shall not be used for any other purpose.
  - (3) Additional vehicles, other than those offered for sale, rent or staff/customer designated parking as required under Section 6.9 of this Ordinance, can be stored on-site and shall be screened from view from adjacent properties and public rights-of-way. Such vehicles shall not be included in the display limit calculation.
- (C) **Standards for the NC-2, EC-5, and E-1 Zoning Districts**
  - (1) The display of vehicles outdoors shall be limited to 32 vehicles per acre of property.
- (D) **Standards for GC-4, I-1, I-2, I-3, EDB-1, EDB-2, and EDE-2**
  - (1) The display of vehicles outdoors shall be limited to 45 vehicles per acre of property.

## SECTION 5.16: STANDARDS FOR MEDICAL USES

### 5.16.1 Veterinary Clinic

- (A) **Standards for Class B Special Use Permit or ASE-CZ or MPD-CZ Zoning District**
  - (1) In the AR and ASE-CZ zoning districts, this use is intended primarily for large animal facilities but may also contain an ancillary small animal component.
  - (2) If located adjacent to residentially zoned property, all buildings and facilities shall be located a minimum of 100 feet from the property line.

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### 5.17.9 Research Facility

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**(A) Standards for the O/RM Zoning District**

(1) The following Multiple Uses are permitted in the O/RM zoning district when the Principal Use type is Research Facility and adhere to the standards of Section 5.17.9(A)(2):

- (a) Banks & Financial Institutions
- (b) Beauty & Barber Shops
- (c) Laundry & Dry Cleaning Services
- (d) Nightclubs, Bars, Pubs
- (e) Restaurants: Carry Out
- (f) Restaurants: General
- (g) Retail, Class 1
- (h) Printing & Lithography

(2) Multiple Uses, identified in Section 5.17.9(A)(1), are permitted in the O/RM zoning district only in accordance with the following standards:

- (a) The site plan must identify the square footage of each structure by type of use.
- (b) The Principal Use type of Research Facility must be established on the site.
- (c) The Multiple Use shall not exceed 25% of the total square footage of all structures on the site.

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### 5.17.10 Research and Manufacturing Facility

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**(A) Standards for the O/RM Zoning District**

(1) The following Multiple Uses are permitted in the O/RM zoning district when the Principal Use type is Research and Manufacturing Facility and adhere to the standards of Section 5.17.10(A)(2):

- (a) Banks & Financial Institutions
- (b) Beauty & Barber Shops
- (c) Laundry & Dry Cleaning Services
- (d) Nightclubs, Bars, Pubs
- (e) Restaurants: Carry Out
- (f) Restaurants: General
- (g) Retail, Class 1
- (h) Printing & Lithography

(2) Multiple Uses, identified in Section 5.17.10(A)(1), are permitted in the O/RM zoning district only in accordance with the following standards:

- (a) The site plan must identify the square footage of each structure by type of use.
- (b) The Principal Use type of Research and Manufacturing Facility must be established on the site.
- (c) The Multiple Use shall not exceed 25% of the total square footage of all structures on the site.

**SUMMARY NOTES  
ORANGE COUNTY PLANNING BOARD  
JULY 6, 2016  
ORDINANCE REVIEW COMMITTEE**

NOTE: A quorum is not required for Ordinance Review Committee meetings.

**MEMBERS PRESENT:** Lydia Wegman-At-Large Chapel Hill Township (Chair); Tony Blake, Bingham Township Representative (Vice-Chair); Paul Guthrie, At-Large Chapel Hill Township; Maxecine Mitchell, At-Large Bingham Township; Kim Piracci, At-Large; Buddy Hartley, Little River Township Representative;

**STAFF PRESENT:** Craig Benedict, Planning Director; Tom Altieri, Current Planning Supervisor; Perdita Holtz, Planning Systems Supervisor; Ashley Moncado, Special Projects Planner; Meredith Pucci Administrative Assistant;

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**AGENDA ITEM 2: UNIFIED DEVELOPMENT ORDINANCE (UDO) TEXT AMENDMENTS – MODIFY USE STANDARDS**

To review and comment upon proposed amendments to the UDO that would establish use standards to allow certain principal uses to include a small component of other specific uses in the O/RM (Office/Research and Manufacturing) zoning district.

**Presenter:** Ashley Moncado, Special Projects Planner

*Ashley Moncado delivered presentation.*

Tony Blake: Does this now permit drive-thrus? I think I remember that there were no drive-thrus.

Ashley Moncado: I believe that is correct.

Tony Blake: I kind of drew this thing on the board when we took the O/RM blob there and divided up into the three possible primary uses and then the secondary uses. The language that I'm missing here is where it talks about multi-family there's a line in there that says, "The multi-family use is part of an overall site plan that includes at least 1 other permitted..." That language is missing here for me. That language that says we need an overall site plan and what I'm afraid to end up with is 25% here and 25% here and 25% here and 25% here, as opposed to a central master plan. It seems to lend itself more towards this cut up view. Now maybe that's on purpose but that was what struck me when reading this.

Perdita Holtz: It's not; that language is part of the next item though. We can probably just put in language indicating that it needs to be part of an overall site plan.

Tony Blake: And that's what I was thinking. Because you could conceivably have all three of these different uses inside this O/RM and you don't know. Say this guy builds industrial and then they want to start building these accessory uses. You don't know what the overall square footage is going to be in this whole thing so you can't say what 25% of that is. And it just starts to get complicated and hard to figure out for a developer.

Craig Benedict: I think that would help during this site plan process to allocate an area of the site that maybe they're not building retail in phase 1 but they could say here's part of the site.

Paul Guthrie: In terms in whether it's language or not, whether you can describe in a neat form that's understandable of what you've just gone through. I'm wondering if the way to deal with the kind of would be to say that after the initial development or something of the whole area any future, additional changes for some of these accepted uses inside the area must go through the whole process again to make sure that they are not more than 25% of the area.

55 Perdita Holtz: The intent of this was for a cohesive development project overall site plan.

56  
57 Paul Guthrie: I understand that, but I think that's one of my worries through the whole paper. All of this is the initial  
58 thing. What's going to happen ten years from now? Because the natural order of things in development is that you  
59 devolve, and then you re-develop, and then you re-develop if you can't get land outside to do it all over again. And  
60 I'm wondering if somehow there could be a clause that the lawyers would accept that at a certain point you have to  
61 basically reinterpret this whole original area that was zoned that way and developed in that definition.

62  
63 Craig Benedict: When we do a site plan, for let's say a ten acre site, but they're only using six acres, but yet that  
64 original site was a ten acre site and somebody wants to develop something we call that a site plan modification. So  
65 that we're still including what happened in phase 1 so maybe something along those lines.

66  
67 Tony Blake: I'm trying to stay with the overall purpose and background, which is to streamline things. To make it  
68 easier to develop and I know a lot of times you guys come up with a conceptual plan for something but the developer  
69 wants to move things around and that's when the real discussions happen. But, if the thing is based on square  
70 footage it seems like that's a cumbersome method of doing it and if you wanted to streamline the process you would  
71 make it based on square acres or land or something.

72  
73 Craig Benedict: We've considered the square footage versus acreage and some projects could use up a lot more  
74 acreage by not keeping it to square footage so we don't want a lot of our economic development zones to have too  
75 much residential so the square footage is a value. So for now we're going square footage and we'll evaluate this as it  
76 comes through.

77  
78 Tony Blake: Would food trucks be permitted?

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80 Craig Benedict: Yes.

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MINUTES  
ORANGE COUNTY PLANNING BOARD  
AUGUST 3, 2016  
REGULAR MEETING

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**MEMBERS PRESENT:** Lydia Wegman (Chair), Cheeks Township Representative; Paul Guthrie, At-Large Chapel Hill Township; Buddy Hartley, Little River Township Representative; Tony Blake (Vice-Chair), Bingham Township Representative; Lisa Stuckey, Chapel Hill Township Representative; Patricia Roberts, Cheeks Township Representative; Laura Nicholson, Eno Township Representative; Kim Piracci, At-Large;

**MEMBERS ABSENT:** Andrea Rohrbacher, At-Large Chapel Hill Township; Maxecine Mitchell, At-Large Bingham Township;

**STAFF PRESENT:** Craig Benedict, Planning Director; Michael Harvey, Current Planning Supervisor; Perdita Holtz, Planning Systems Coordinator; Ashley Moncado, Special Projects Planner; Patrick Mallett, Planner II; Rachel McCook, Planner I; Molly Boyle, Planning Technician; Meredith Pucci, Administrative Assistant II.

**OTHERS PRESENT:** Sharon Mace; Dan Way; Austin Seifts; Annie Seifts; Nathan Robinson; Chris Cole; Franklin Garland; Jimmy Garland; Javier Latre Gorbe; George Horton; Jim Parker.

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**Agenda Item 11: Unified Development Ordinance (UDO) Text Amendment:** To make a recommendation to the BOCC on government-initiated amendments to the text of the UDO that would establish use standards to allow certain principal uses to include a small component of other specific uses in the O/RM (Office/Research and Manufacturing) zoning district. This item is scheduled for the September 12, 2016 quarterly public hearing.  
**Presenter:** Ashley Moncado, Special Projects Planner

*Ashley Moncado reviewed abstract.*

**MOTION** by Laura Nicholson to approve the Statement of Consistency. Seconded by Lisa Stuckey.  
**VOTE: UNANIMOUS**

**MOTION** by Laura Nicholson to recommend approval of the proposed text amendment. Seconded by Lisa Stuckey.  
**VOTE: UNANIMOUS**

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