ORANGE COUNTY BOARD OF COMMISSIONERS

AGENDA

BOCC Regular Work Session
April 14, 2015
Meeting – 7:00 p.m.
Southern Human Services Center
2501 Homestead Road
Chapel Hill, NC

(7:00 – 8:10)	1.	Durham-Orange Light Rail Transit Report
(8:10 – 9:00)	2.	Presentation on Alternatives to On-site Septic Systems
(9:00 – 9:30)	3.	"10% Campaign" and Local Food Economy

Orange County Board of Commissioners' regular meetings and work sessions are available via live streaming video at orangecountync.gov/occlerks/granicus.asp and Orange County Gov-TV on channels 1301 or 97.6 (Time Warner Cable).

ORANGE COUNTY
BOARD OF COMMISSIONERS
ACTION AGENDA ITEM ABSTRACT
Meeting Date: April 14, 2015

Action Agenda Item No. 1

SUBJECT: Durham-Orange Light Rail Transit Report

DEPARTMENT: Planning and Inspections **PUBLIC HEARING: (Y/N)** No

ATTACHMENT(S):

A. GoTriangle PowerPoint Presentation

INFORMATION CONTACT:

Bonnie Hammersley, Orange County Manager, 919-245-2300
David King, Triangle Transit General Manager, 919-485-7424

PURPOSE: To receive GoTriangle's report on the Durham-Orange Light Rail Transit project.

BACKGROUND: The Durham-Orange Light Rail Transit project (D-O LRT) was approved by the BOCC in June 2012 as part of the Orange County Bus and Rail Investment Plan (OCBRIP). The OCBRIP provides local and regional transit opportunities including expanded bus service and proposed light rail. Voters in November 2012 approved a one-half cent sales tax to fund the local portion of the Plan.

Attachment A is a copy of the PowerPoint presentation that GoTriangle (formerly Triangle Transit) staff is using to provide its report. A fly-through video, designed to help visualize the D-O LRT project, will also be shown at the meeting. The video can be accessed via the following link: http://ourtransitfuture.com/projects/durham-orange/

GoTriangle's Presentation Covers:

- Recent Project Update
- What We Study for the Environmental Impact Statement (EIS)
- Five Key Decisions in EIS: Reviewing the Data
  - Build or No Build
  - Little Creek Crossing
    - Duke/VA Station Location Choice
    - Rail Operations and Maintenance Facility (ROMF) Site
    - New Hope Creek Crossing

Project Next Steps:

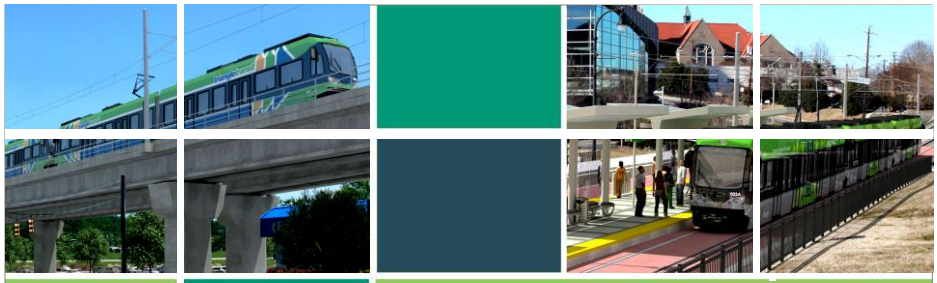
- **March-June 2015** – Local Governments & Public Review Data on Benefits / Impacts of Alternatives
- **April – May 2015** – GoTriangle Develops Recommended National Environmental Policy Act (NEPA) Preferred Alternative
- **September/October 2015** – Official 45-day comment period: Local Governments and Citizens provide comments on Key Decisions and any other items related to the D-O LRT Project

- **Fall/Winter 2015** – GoTriangle Develops Final EIS
- **February 2016** – Record of Decision issued by Federal Transit Administration (FTA)

FINANCIAL IMPACT: There is no financial impact associated with receiving the report.

RECOMMENDATION(S): The Manager recommends the Board:

1. Receive the report;
2. Ask questions as appropriate; and
3. Be prepared for this item to be placed on a future agenda by Planning staff to document BOCC comments on the Key Decisions.



Orange County Board of Commissioners

April 14, 2015

Durham-Orange Light Rail Transit Project

OurTransit FUTURE

1

Presentation Agenda

- Recent Project Update
- What We Study for the EIS
- Five Key Decisions in EIS: Reviewing the Data
  - Build or No Build
  - Little Creek Crossing
    - Duke/VA Station Location Choice
    - Rail Operations and Maintenance Facility (ROMF) Site
    - New Hope Creek Crossing
- Ask Questions Along the Way
- No Action Required At This Meeting

2

Secretary Foxx Visit Feb 19th

3

Elected Official Corridor Tours

Officials from Durham and Orange County

Tour D-O LRT corridor in March

4

What We Study

- Transit Ridership
- Regional Travel Patterns
- Capital & Operating Costs
- Noise / Vibration
- Cultural & Historic Resources
- Public Parklands
- Natural Resources
- Energy Use
- Traffic
- Utilities
- Air Quality
- Water Quality
- Land Use
- Bicycle & Pedestrian Facilities
- Visual & Aesthetic
- Minority & Low-Income Population Impacts
- Neighborhoods
- Business & Residential Impacts
- Population Served
- Employment Served
- Construction Impacts

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Five Key Decisions

- Build or No Build
- Little Creek Crossing
  - Duke/VA Station Location Choice
  - Rail Operations and Maintenance Facility (ROMF) Site
  - New Hope Creek Crossing

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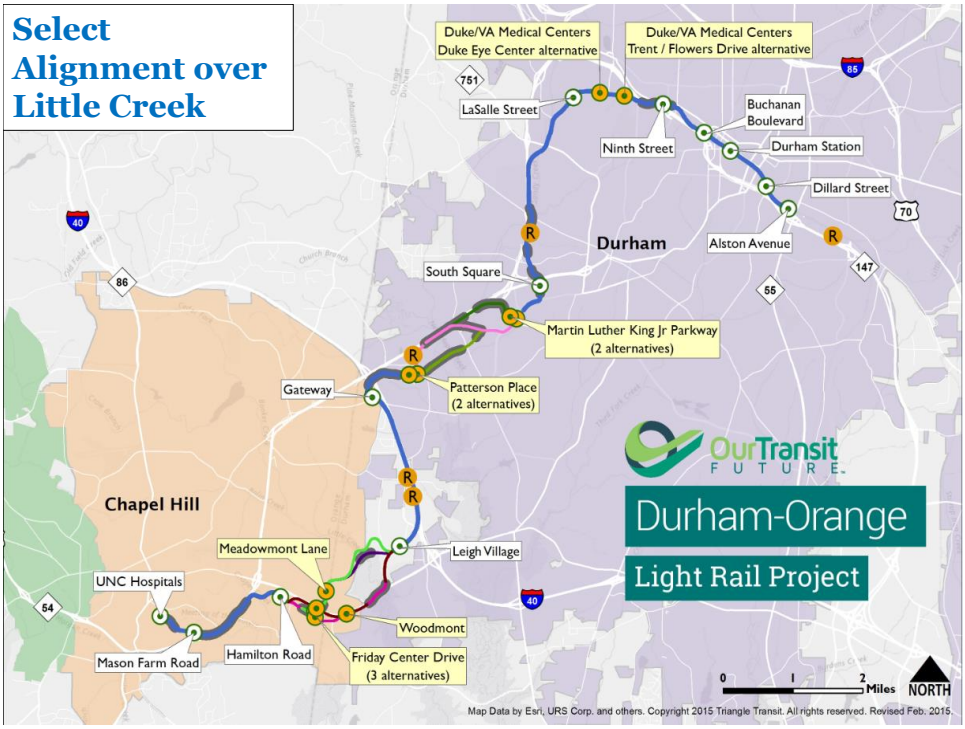
To Build or Not to Build

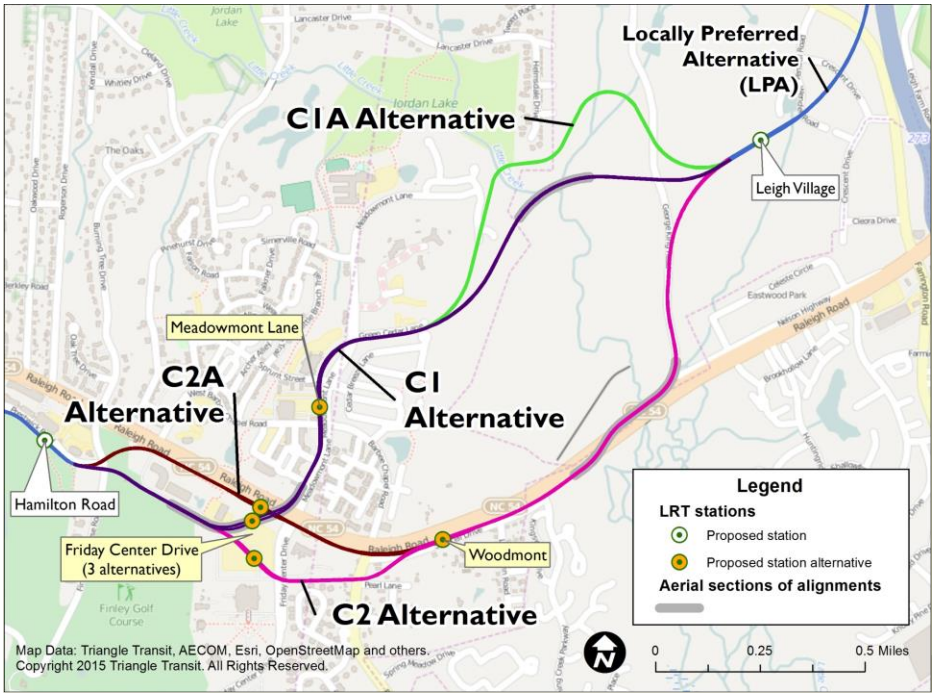
Build

No Build

7

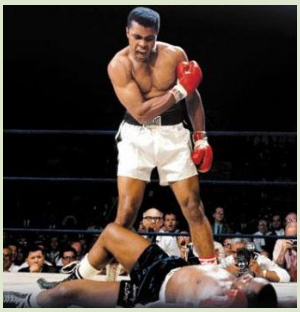
Select Alignment over Little Creek





Little Creek: C1 Eliminated

- US Army Corps of Engineers provided a letter stating that C1A, C2, and C2A were viable alternatives but that C1 was not.
- USACOE would not authorize use of federal government property (game lands and a waterfowl impoundment) for C1 "given the availability of less damaging alternatives."



Little Creek: Travel Time

Alternative	C1A	C2	C2A
Minutes: Seconds	6:59	6:03	5:53

- C2 time 56 seconds shorter than C1A
- C2A time 10 seconds shorter than C2

11

Little Creek: Ridership

Alternative	C1A	C2	C2A
Additional Daily Boardings	--	+720	+730

- Lowest ridership alternative: C1A, NHC2, Duke Eye Care Center Station with 23,560 daily riders
- C2 and C2A both add over 700 daily riders compared to C1A

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Little Creek: Capital Cost

Alternative	C1A	C2	C2A
Additional Cost ($2015 millions)	+ $36.0 m	--	+$7.6 m

- Lowest capital cost alternative: C2, NHC-LPA, either Duke/VA station at $1.522 billion
- C2A adds $7.6m in capital cost
- C1A adds $36.0m in capital cost

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Little Creek: Operating Cost

Alternative	C1A	C2	C2A
Additional Cost ($)	+ $82,100/year	+ $56,900/year	+ $56,900/year

- Lowest operating cost alternative: C1 (eliminated), NHC-LPA, either Duke/VA station at $16,846,000/year
- C2 and C2A add $56,900/year in operating/maintenance cost
- C1A adds $82,100/year in operating/maintenance cost

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Little Creek: Public Parklands-4(f)

Alternative	C1A	C2	C2A
Acres Impacted	1.6	2.1	1.0

- Section 4(f) requires consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development.
- Before approving a project that uses Section 4(f) property, FTA must either:

  (1) determine that the impacts to the property are de minimis (will not adversely affect the activities, features, or attributes of property), or

  (2) undertake a Section 4(f) Evaluation.
- C2A has least impact to Section 4(f) properties

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Little Creek: Natural Resources

Alternative	C1A	C2	C2A
Bottomland (Acres)	1	1	1
Alluvial (Acres)	1	1	--
Mesic Mixed (Acres)	9	8	5
Maintained/Disturbed (Acres)	12	15	19
Total Biotic Resources Impacted (Acres)	23	25	25

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Little Creek: Water Resources

Alternative	C1A	C2	C2A
Stream Impacts (Linear Feet)	434	587	519
Riparian Zone 1 Impacts (Acres)	0.3	0.4	0.3
Riparian Zone 2 Impacts (Acres)	0.2	0.2	0.3
Wetland Impact (Acres)	0.07	0.07	0.12
Pond Impacts (Acres)	0.02	0.07	0.01
100-Year Floodplain Impacts (Acres)	0.3	0.6	0.6

- Low Impact Design techniques have kept total acreage and linear feet impacts low for project of this size

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Timeline for Local Gov't Participation

- **Jan 2015 – Review** Five Key Decisions
- **March-June 2015 – Local Governments & Public Review Data** on Benefits / Impacts of Alternatives
- **April – May 2015 – GoTriangle** Develops Recommended NEPA Preferred Alternative
- **September/October 2015 –** Official 45-day comment period: **Local Governments and Citizens** provide comments on Key Decisions and any other items related to the D-O LRT Project
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Discussion

For more information, please check OurTransitFuture.org

ORANGE COUNTY
BOARD OF COMMISSIONERS

ACTION AGENDA ITEM ABSTRACT
Meeting Date: April 14, 2015

Action Agenda Item No. 2

SUBJECT: Presentation on Alternatives to On-site Septic Systems

DEPARTMENT: Health/Planning

PUBLIC HEARING: (Y/N) No

ATTACHMENT(S):
Powerpoint: Septic System Options

INFORMATION CONTACT:
Alan Clapp, 245-2363
Craig Benedict, 245-2592
Michael Harvey, 245-2597

PURPOSE: To receive a presentation from Environmental Health and Planning staff on septic system and subdivision development alternatives.

BACKGROUND: Typical subdivision development in Orange County in areas not served by public sewer primarily utilizes septic systems on individual lots. There are off-site septic alternatives available using cluster development principles with smaller lots and much larger open spaces. Staff will present some of these development principles that keep the character of the individual lot, but offer the developer flexibility to work around topography and soil limitations. There are watersheds (e.g. University Lake Protected) that have limited options because of the Unified Development Ordinance (UDO). Planning and Environmental Health staff will discuss how alternatives for septic systems and development could be incorporated into the UDO.

FINANCIAL IMPACT: There is no financial impact associated with receiving the presentation.

There is a financial impact with septic system installation that is borne by the developer or eventual lot owner. The cost of a gravity flow system ranges from approximately $5,000 to $12,000 (depending on number of bedrooms for which the system is sized), with pump systems typically costing an additional $1,500 to $2,500. Septic systems also create some personnel costs to the County in the form of permitting and inspection. All systems with a pump require an inspection every 3 to 5 years by Health Department staff based on the drainfield type. The developer, homeowner or Home Owners Association (HOA) incurs fees from the Health Department for the inspection.

RECOMMENDATION(S): The Manager recommends that the Board:

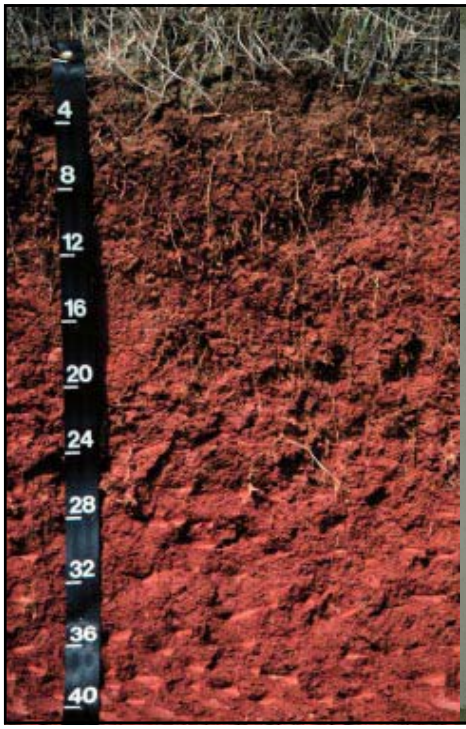
1. Receive the presentation; and
2. Provide feedback and questions as appropriate.

Septic System Options

Alan Clapp
Orange County Environmental Health

Major Considerations

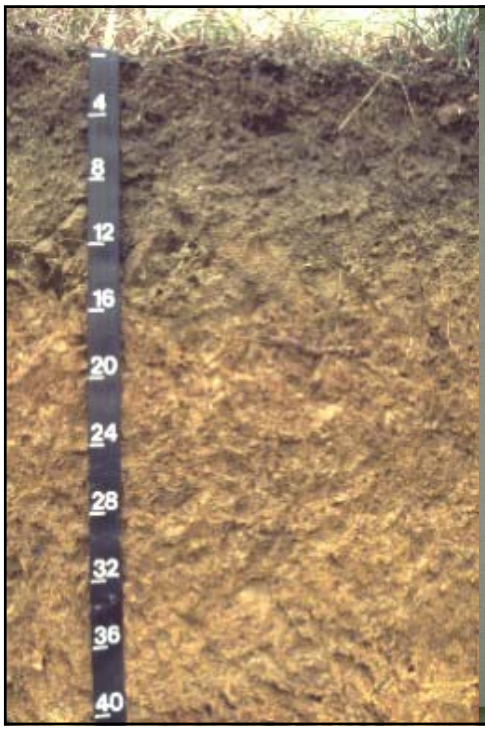
- Soils
- Septic System Options
- Development Type
- Enforcement/Legal
- Accessibility
- Operation and Maintenance



Georgeville Series:

- Red color
- Good for septic systems
- 600,000 acres of this soil in North Carolina
- 28% of the soil found in Orange County is mapped Georgeville

--Very similar properties to the Herndon series (yellowish-red) which occupies 19% of Orange County



Wynott Series:

-- Mapped in Orange County as Enon

-- Yellow clay (buck tallow)

-- Shrink-swell clay

--Poor for septic systems

-- 7% of the soils in Orange County

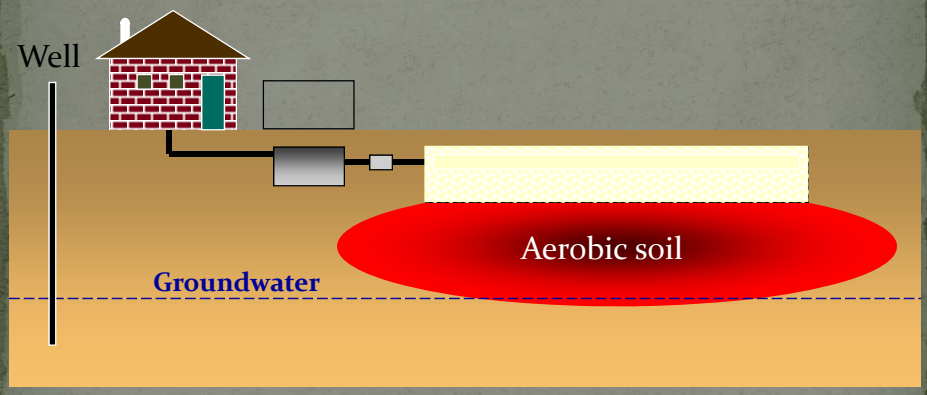
Goldston Series:

--Shallow to rock

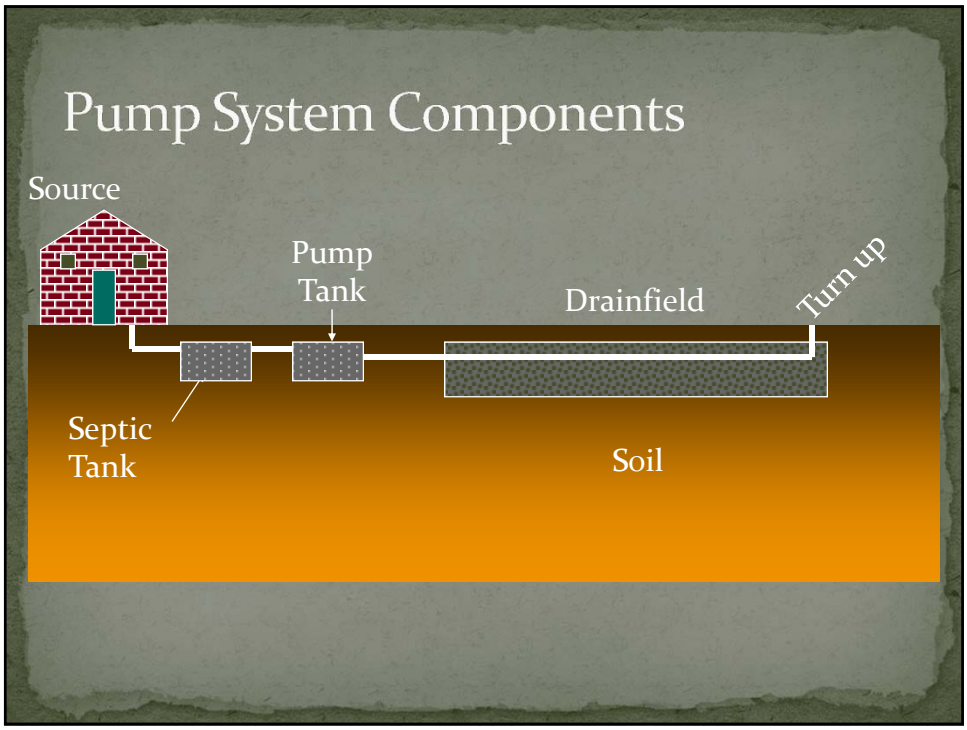
-- Poor for septic systems

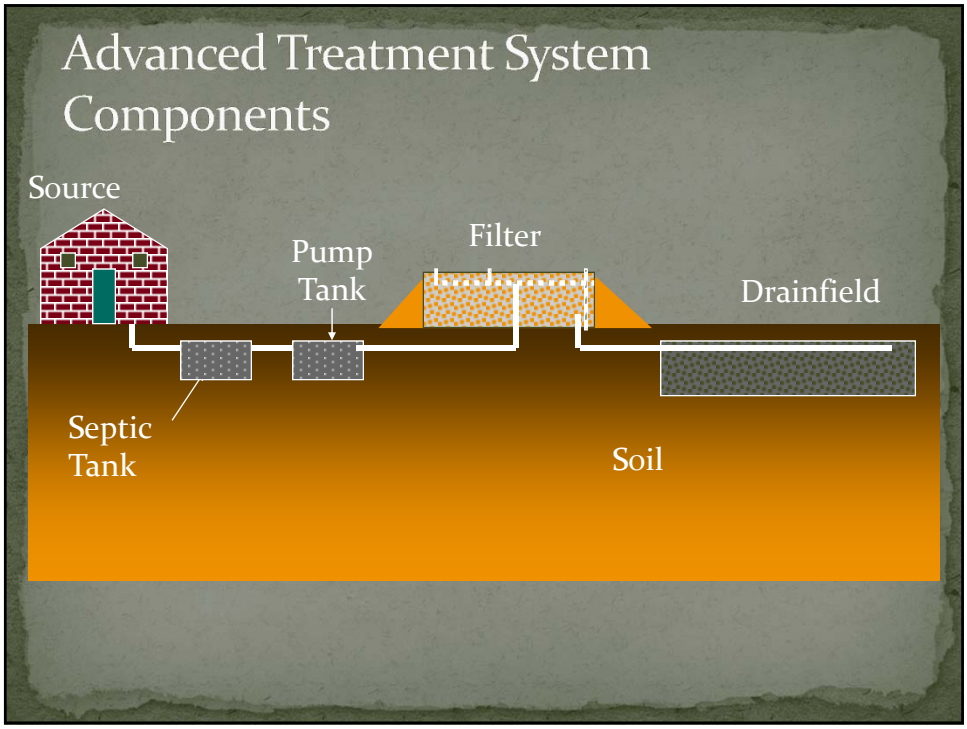
-- 2% of the soils In Orange County

Aerobic zone



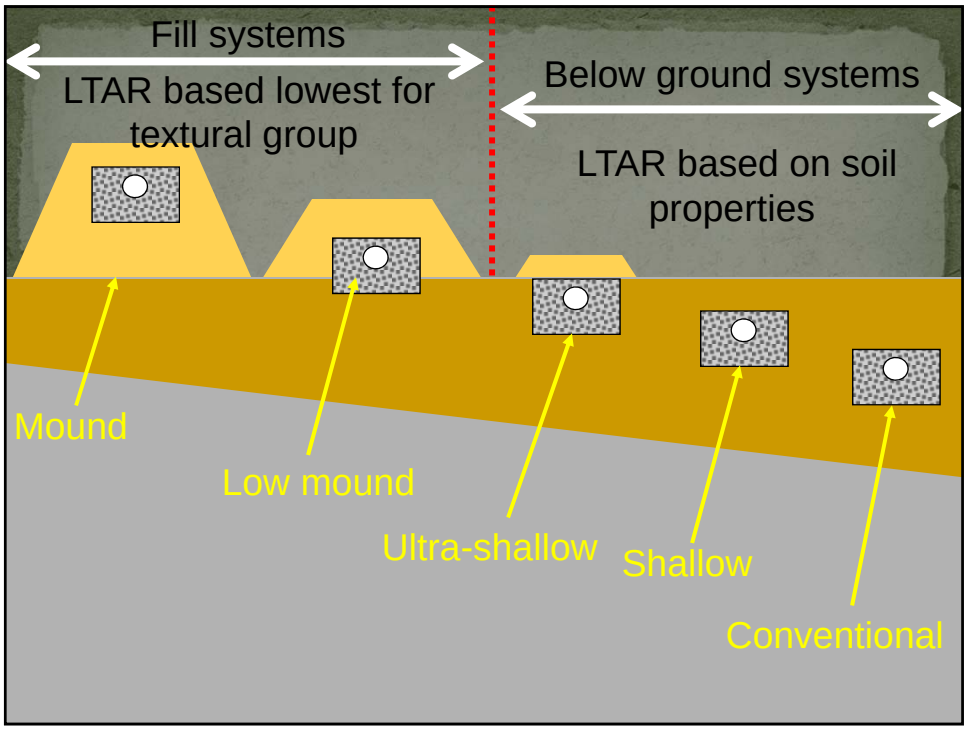
HPCP 1000
STB 774


Pump System Components
Source
Pump Tank
Drainfield
Turn up
Septic Tank
Soil


Advanced Treatment System Components
Source
Pump Tank
Filter
Drainfield
Septic Tank
Soil

Septic Trench Options

- Conventional Trench
- Accepted Trench Products
  - Chamber Trench
  - Polystyrene Trench
  - Tire Chips
- Panel Block
- LPP
- Drip



Conventional Trench

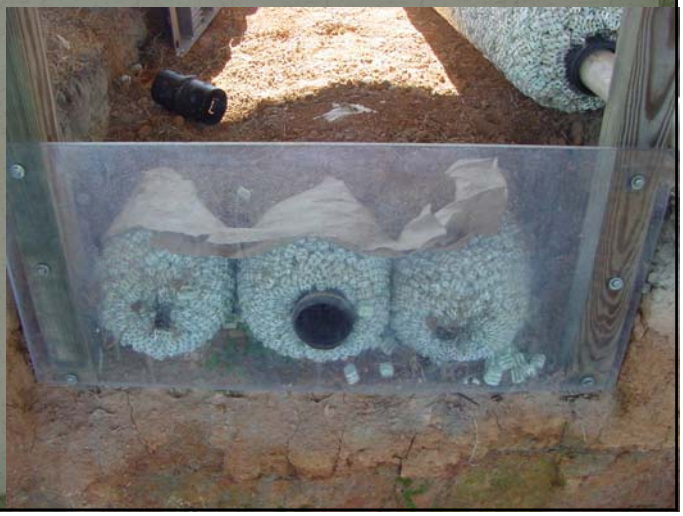
Chamber Trench

- 25% Drain field reduction

Trench is same as conventional but no rock

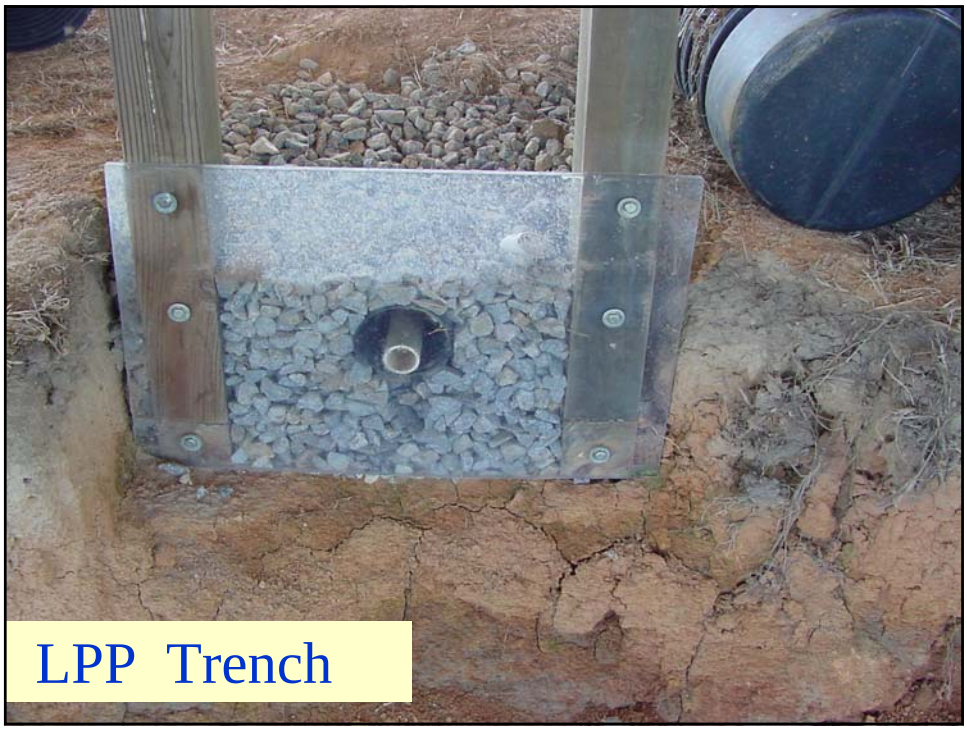
Polystyrene Trench

- 25 % Drain field reduction



Panel Block System

- Allows 50% reduction
- Requires 36" of usable soil



LPP Distribution Network

Drip Dispersal

Development Types

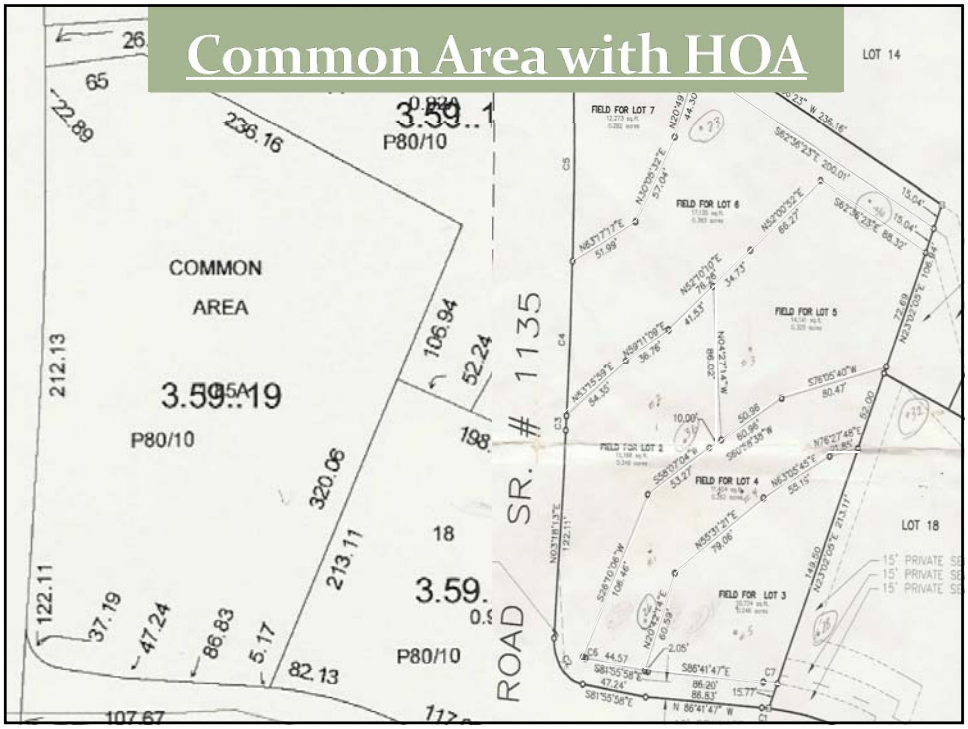
- On Lot systems
  - Conventional
  - Land Hooks
- Off Site Systems
  - Conservation/Cluster
  - Common Area/HOA

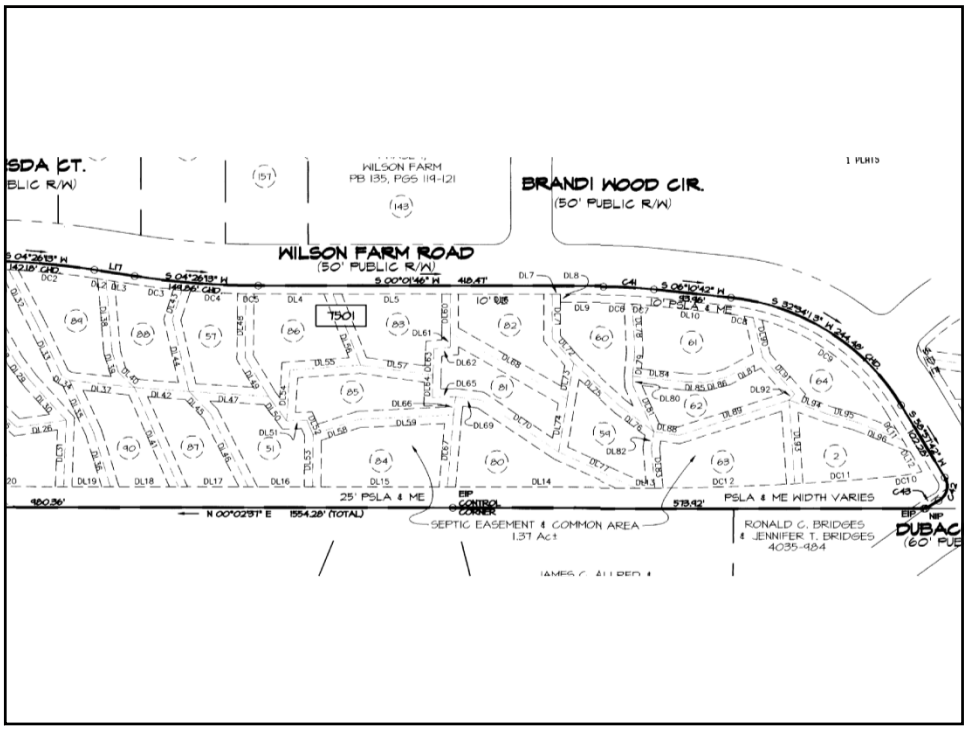
Conventional Developments

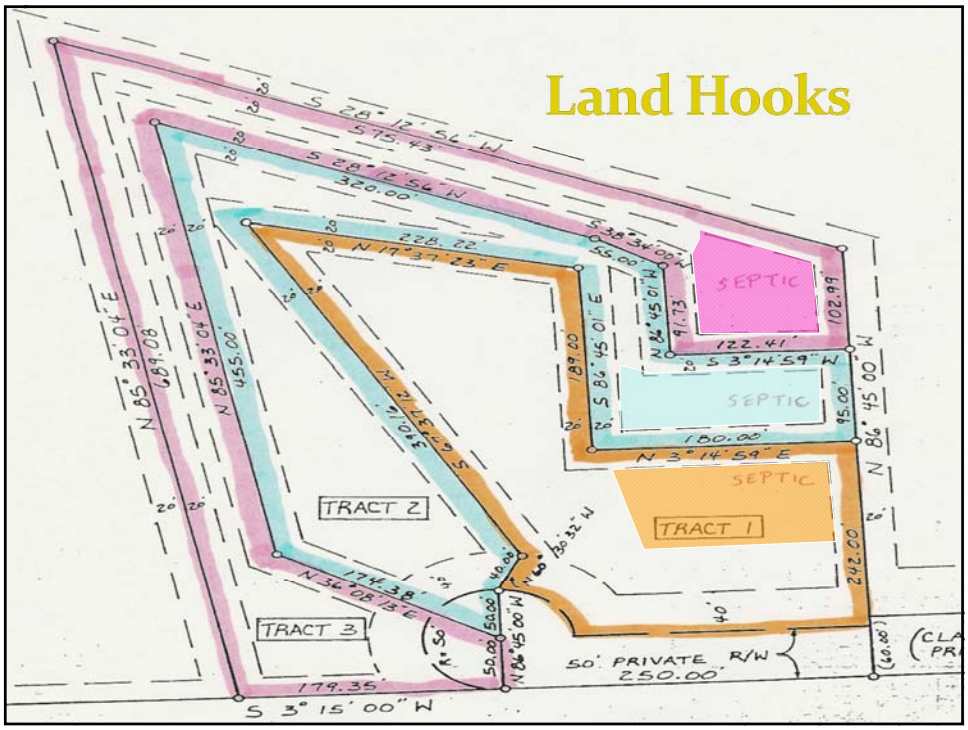
Conservation or Cluster Development

Cluster Development

Figure 3-19
Option B—Locating Individual Wastewater Treatment System Leachfields in Common Open Space


Common Area with HOA
COMMON
AREA
P80/10
SR. # 1135
ROAD
LOT 14
LOT 18
FIELD FOR LOT 7
FIELD FOR LOT 6
FIELD FOR LOT 5
FIELD FOR LOT 4
FIELD FOR LOT 3
FIELD FOR LOT 2


WILSON FARM
PB 135, PGS 114-121
BRANDI WOOD CIR.
(50' PUBLIC R/W)
WILSON FARM ROAD
(50' PUBLIC R/W)
7501
25' PSLA & ME
PSLA & ME WIDTH VARIES
SEPTIC EASEMENT & COMMON AREA
1.37 Ac±
RONALD C. BRIDGES
& JENNIFER T. BRIDGES
4035-484

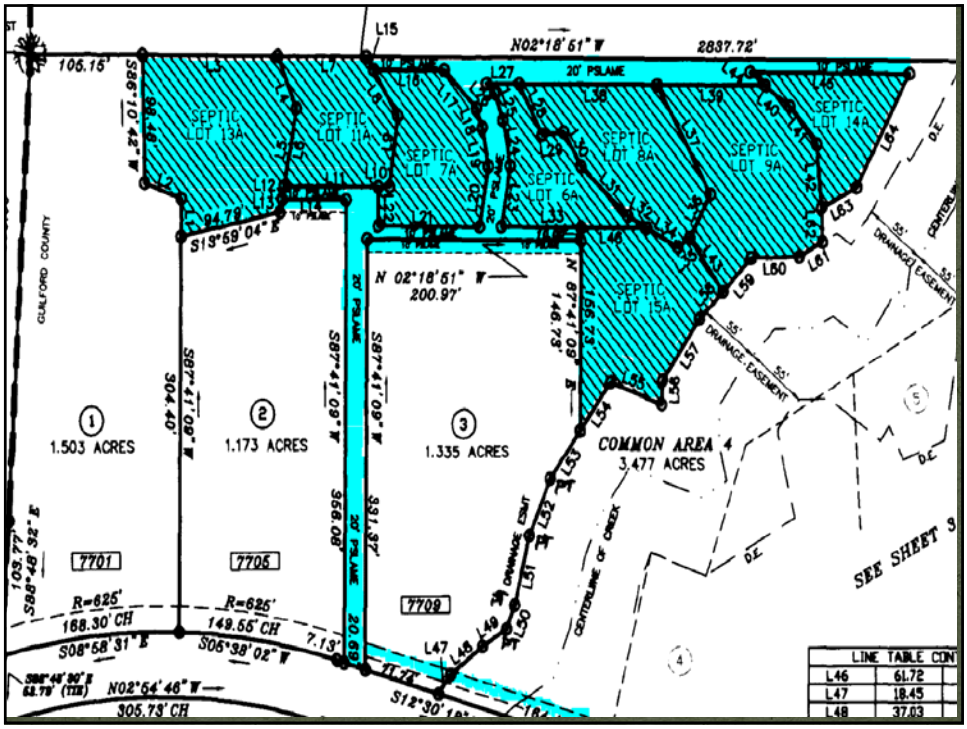

Land Hooks
S 28° 12' 56" W
575.43
S 28° 12' 56" W
320.00'
228.22'
N 17° 37' 23" E
S 38° 34' 00" W
55.00'
SEPTIC
122.41'
S 3° 14' 59" W
SEPTIC
180.00'
N 3° 14' 59" E
SEPTIC
TRACT 1
TRACT 2
TRACT 3
N 85° 33' 04" E
689.08
N 85° 33' 04" E
455.00
174.38'
N 36° 08' 13" E
179.35'
S 3° 15' 00" W
50' PRIVATE R/W
250.00'
242.00'
N 86° 45' 00" W
102.99
95.00
189.00
S 86° 45' 01" E
N 86° 45' 01" W
91.73

50' EXISTING TREE BUFFER
MUST BE MAINTAINED
EVERGREEN CT.
LOCK HIGHLAND CT
TWO ROWS STAGGERED
PINE OR LOUISIANA CYPRESS
10' ON CENTER
MUST BE MAINTAINED

Supply Line Network
2 Lines

Supply Line Network
7 Lines
31 9:14 AM

Ganged Supply Line Network
26 Lines

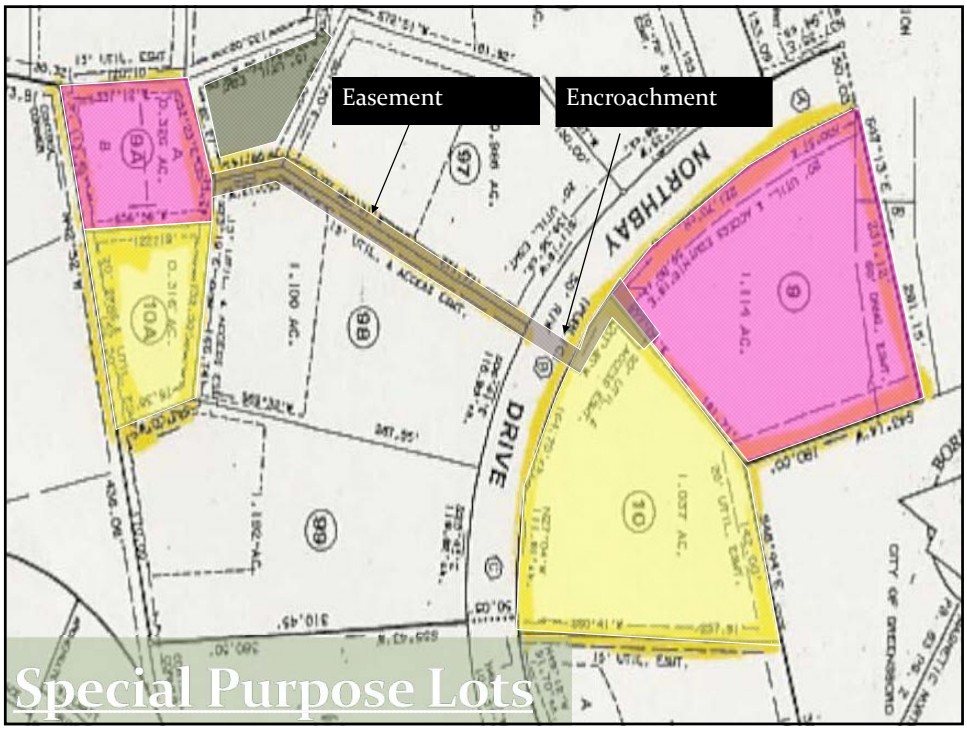


Enforcement

- Local Health Department
  - Permitting for Soils/Siting /Construction
- Planning Department
  - Type of Development (Conventional vs. Conservation)
  - Watershed status
  - Supply Lines as part of Utility Plan

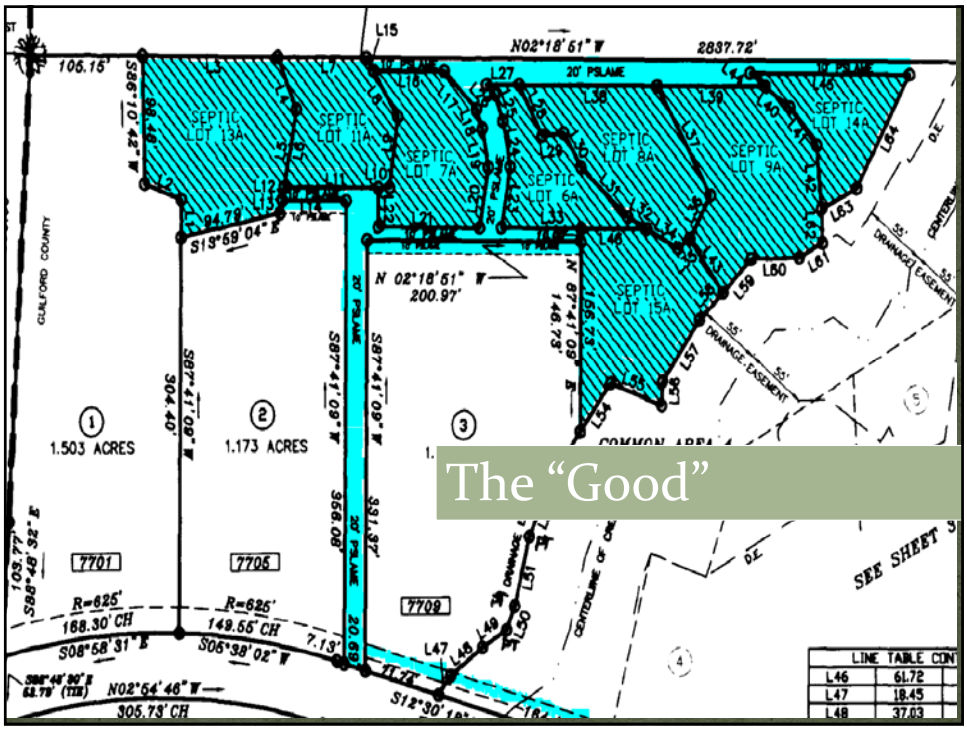
Legal

- Ownership and Control
  - Developer
  - Homeowner
  - Homeowner's Association
  - Tri-party Agreement
  - Easements
  - Encroachments

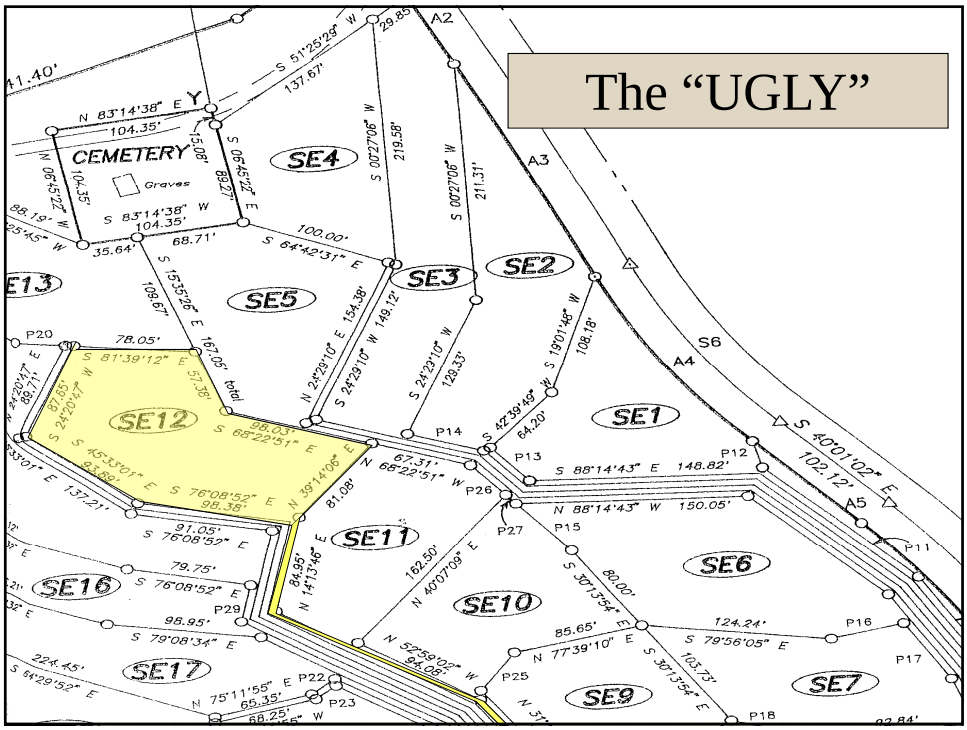


Accessibility

- Must be able to access all components of the system without "trespassing" or going onto another property
  - Drain field
  - Supply lines
  - Tankage
  - O & M
  - Repairs



The “BAD”


The “UGLY”
CEMETERY
Graves
SE1
SE2
SE3
SE4
SE5
SE6
SE7
SE9
SE10
SE11
SE12
SE13
SE16
SE17
A2
A3
A4
A5
S6
P12
P13
P14
P15
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P18
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P22
P23
P25
P26
P27
P29

Operation and Maintenance

- Issues
  - Out of sight out of mind
  - That's not my system
  - Who's responsible?
  - Certified Operator

Septic System Maintenance

Tanks, Pump, Alarms and Electrical

Drain fields
Poorly Maintained

Well Maintained

Best Planning Practices for Remote Systems

- Locate and use the best soils for drain fields
- Designate the appropriate type of remote fields for the type of development proposed
- Allow for dedicated all-weather access to the drain fields instead of easements
- Design for operation and maintenance

Zoning Regulations – septic system (tanks and nitrification fields)

- PROHIBITED FROM BEING LOCATED:
  - Within stream buffers
    - Staff Comment: Section 4.2.2 (I) of UDO establishes a waiver provision where lots created prior to January 1, 1994 or October 19, 1999 (lots in Cane Creek Overlay) can get an exemption from this prohibition.
  - Within 300 feet of the reservoir in the University Lake Critical Watershed Overlay (tank and field).
  - Within Cane Creek and Upper Eno Critical area new septic tanks are prohibited within 150 feet of the reservoir. Nitrification fields cannot be within 300 feet of reservoir.
    - Staff Comment: Health regulations only require a 100 ft. setback from a reservoir and 50 ft. from a stream

Zoning Regulations – septic system (tanks and nitrification fields) continued

- Within 100 feet of a perennial or intermittent stream.
  - Staff Comment: Again we have a waiver requirement to ensure we are not denying a property owner use of their property.

Zoning Regulations – septic system On-site versus off-site installation

- OFF SITE SEPTIC TREATMENT AND/OR DISPOSAL PROHIBITED WITHIN UNIVERSITY LAKE CRITICAL AND PROTECTED WATERSHED OVERLAY DISTRICT(S).
- ALL OTHER DISTRICTS – CAN OCCUR WITH APPROVAL OF FLEXIBLE DEVELOPMENT SUBDIVISION (SECTION 7.12 OF UDO)

ORANGE COUNTY
BOARD OF COMMISSIONERS

AGENDA ITEM ABSTRACT
Meeting Date: April 14, 2015

Action Agenda
Item No. 3

SUBJECT: "10% Campaign" and Local Food Economy

DEPARTMENT: Board of Commissioners **PUBLIC HEARING: (Y/N)** No

ATTACHMENT(S):
A: Media Budgets
B: County Food Expenditure Summary

INFORMATION CONTACT:
Bonnie Hammersley, 919-245-2300
Mike Ortosky, 919-245-2336

PURPOSE: To receive an update from the 10% Campaign Team regarding the status of the Campaign and to hear recommendations on furthering the initiative in Orange County.

BACKGROUND: In June 2012 the Board approved a Resolution supporting the "10% Campaign" to promote the local food economy and encourage County residents to commit 10% of their food dollars to support local food producers and related businesses. Additionally the Board instructed the County Manager and staff to identify existing County government practices and programs that support this effort, and report back on ways to expand or create new opportunities to further implement this goal through County programs, initiatives, practices and events. In November 2014 the current 10% Campaign Team was formed to refocus on the implementation of project goals and report on that progress.

The "10% Campaign"

- Is an initiative of the Center for Environmental Farming Systems at North Carolina State University (CEFS)
- Promotes North Carolina farmers, foods, communities, and businesses
- Educates consumers, decision-makers, and the media
- Collaborates with the many influential organizations/initiatives already in place
- Intends to expand the market which will result in new farm, food, and manufacturing businesses and create jobs.
- Requires cooperators to pledge to spend 10 percent of their existing food dollars locally, a weekly response to email questions, and progress is tracked and entered into statewide database

Orange County Practices and Programs in support of this effort include:

- PLANT @ Breeze

    - Incubator Farm
- Community Gardens
- Food Council
    - Community Based Stakeholders (currently forming)
- Agricultural Summit
    - Annual Conference
- Orangecountyfarms.org
    - Web site for finding producers and markets
- Ag Preservation Board
    - Voluntary Ag Districts
- Piedmont Food and Ag Processing Center
- Agriculture Economic Developer Position
- Growinorange.com
    - Economic Development Website

"Local" as defined by CEFS

- Many different interpretations
- CEFS (10% Campaign) "local is a relative concept"
- CEFS does not assign a mileage limit
- Refers to production & consumption in the same geographic region
- Goal is to optimize sourcing of food in that region

Considerations:

- Do we want to embrace the CEFS 10% Campaign as it exists (including its definition of "local") or do we want a program specific to Orange County?

- Do we want to create requirements or offer incentives toward achieving greater sourcing of local foods?

- Can we effectively achieve the goal by collaborative investments (public-private) in a "farm to fork" food system infrastructure which would facilitate local sourcing?

Proposed steps to move the 10% Campaign forward are:

- Make the 10% Campaign the first priority of the Orange County Economic Development Plan which is under construction at the Economic Development Office.

- Fund an initial public outreach campaign and ongoing quarterly/seasonal activities to raise public awareness of the 10% initiative.

- Work with County departments to increase local food sourcing and develop and maintain a local producer/provider database (buying guide) for use by County departments in their local sourcing efforts. This buying guide will be continually updated and shared throughout all departments.

- Authorize the Economic Development Office to create a Food Systems Advisory Team to assist in the further implementation and ongoing management of the 10% Campaign and other food system economic development efforts.

- Direct the proposed Food Systems Advisory Team to also evaluate the possibility of a separate but complimentary “local food sourcing” campaign specific to Orange County.

- Merge many of the current initiatives into a common collaborative effort to grow agricultural economic development and local food systems by creating market infrastructure (food enterprise district, food hub, Piedmont Food & Agriculture Processing Center (PFAP), rural aggregation center, Breeze Farm development, etc.).

FINANCIAL IMPACT: An initial annual public outreach campaign is projected to cost $10,400.

RECOMMENDATION(S): The Manager recommends the Board receive this update, provide any feedback or questions, and note any requests regarding next steps to the Manager.

Support Local Food Sources

Public Outreach & Marketing Campaign (12 Months)

TOTAL = $10,400

BROCHURES
Quantities and Price
5,000 = $700

POSTERS (11" x 17")
Quantities and Price
200 = $370

POSTCARDS (9" x 6" Handout or Newspaper Insert)
Quantities and Price
10,000 = $1150 ($800 printing fee, plus $350 insert fee)

- News of Orange Insert ($350 insert fee) = 7,000 postcards
- Remaining 3,000 postcards for display racks and handouts

WINDOW CLINGS - Provide to restaurants/businesses supporting the campaign
Quantities and Price
250 = $500

BILLBOARD ADS - Hillsborough billboard at the intersection of 70 and 86,
Display ad for (4) weeks = $715 x 2 (one billboard every six months) =$1430

PROMOTIONAL VIDEO - **Professional five minute video production = $1,500**

NEWSPAPER DISPLAY ADS (full color)
Chapel Hill News - Half page = $617.85 or Quarter page = $434.24
News of Orange – Quarter page = $350
Quarter page ads in both papers each quarter $3200

RESTAURANT GUIDE
Add "green" dot or 'L' designation for the restaurants supporting the campaign
No additional cost associated with this

RADIO SPOTS
Price TBD based on the number of spots and the length; 30 seconds or 60 seconds
One PSA per quarter = $1,000 - $1500

Example Orange County Food Expenditures FY 2014

Jail Provisions		$ 257,905.00
Senior Meals		$ 170,905.00
Caterers		$ 21,510.00
	Total	**$ 450,320.00**