Marketplace.

Meet the Developers of Chatham Park.

A new series by the Research Triangle Cleantech Cluster
Residential Homes
Agricultural Buildings
Commercial Buildings
Nonprofits & Institutions
Industrial Facilities
Government Buildings
1. Improve the design, performance and value of new and existing residential and commercial buildings.

2. Protect the current and future business climate of our industry and create new business opportunities for all its companies.

3. Offer industry professionals career planning, placement, development and continuing education opportunities and resources.

4. Provide educational resources to home, building and property owners that encourage their commitment to high performance construction.
Current Projects

1. Consumer education: residential and commercial

2. MLS “Greening” and improved market valuation

3. Commercial Property Assessed Capital Expenditures “C-PACE” Financing

4. Building and energy code development

5. Career resources, apprenticeship and internship programs
Contact Info

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Marketplace
Meet the Developers of Chatham Park

June 1, 2017
Mission

Accelerate the cleantech economy through collaboration and partnerships which promote innovation and sector growth
Board of Directors

ABBB

Duke Energy

Field2Base

Itron

Power Secure

RTI International

SAS

Schneider Electric

Sensus
Tom D’Alesandro
Blakefield/Chatham Park
1. We believe in integrating life’s activities.
CHATHAM PARK

FRAMEWORK:

Commercial Uses Oriented Toward Historic Pittsboro & Interstate Highways.

Five New Residential Villages Oriented Toward The Haw River and Lake Jordan.

Open Space and parkland along stream valleys, the river and the lake.
The first and only large-scale Mixed use master-planned community in the Triangle Region

1. 4,100 acres of residential organized along stream valleys and oriented between employment and Lake Jordan.
2. 1,000 acres of employment & other commercial uses organized along I-64, I-15/501, and Chatham Park Way.
3. 2,000 acres of parkland and open space.
PLAN FRAMEWORK:

Village Centers

Homes And Neighborhoods Organized In Four Distinct Villages Radiating out from Downtown

Each Village Will Have A Walkable Village Center with churches, schools, and retail providing neighborhood services
2. We believe the best places have a diversity of people (and homes).
2. Chatham Park is planning 27 types of homes in a wide variety of people.

SF Mainstream Homes

SF Custom Homes

SF Age-Qualified

Village Center – single family, townhomes, and multifamily
3. We believe in embracing clean technologies to gain efficiency and convenience.
3. Smart Energy: Smart Meters
3. Smart Energy: Charging Stations
3. Smart Energy: Strata Solar Farm
3. Smart Water: 250,000 Gallon Water Reclamation Plant
3. Smart Water
3. Smart Water: Purple Pipe for recycling water
3. Smart Communications: Durham Tower providing Cellular Wireless Network
3. Smart Communications:
   High Speed Internet
3. Smart Mobility: The North Village will have more than 20 miles of trails.
3. Smart Mobility and Smart Water: Storm water Treatment within the Public Right-of-Way of Complete Streets.
Smart Mobility: G5 Cellular network coverage will support autonomously driving cars
3. Smart Homes

Where Does My Money Go?
Annual Energy Bill for a typical Single Family Home is $2,060

- Heating: 29%
- Cooling: 12%
- Water Heating: 12%
- Appliances: 13%
- Lighting: 13%
- Electronics: 13%

Heating includes refrigerator, dishwasher, clothes washer and dryer.
Cooling includes telephone and external power adapters, consumer electronics (computer, TVs and DVD player), home office equipment, and small appliances.

Envision Charlotte –

A unique Public Private partnership building a smart city that will lead to the most sustainable urban core in the country. Using technology to find efficiencies that will reduce the cost of doing business in Charlotte while driving reductions in Energy, Water, Waste and Air.
3. Smart Buildings
4) We believe nature and art can inspire us.
4. We believe in being good stewards of nature
4. We believe in the ability of art and good design to inspire.
5. We believe in concentrating commerce, entertainment, hospitality, dining, educational and medical facilities in vibrant and distinct gathering places.
5. Great Gathering Places
Foster Civic And Community Life

The Woodlands, TX
5. Great Gathering Places
6. We believe the best communities are environmentally, socially and economically sustainable.
Ten Principles of Smart Growth

- Mix land uses.
- Take advantage of compact building design.
- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, farmland, natural beauty, and critical environmental areas.
- Strengthen and direct development towards existing communities.
- Provide a variety of transportation choices.
- Make development decisions predictable, fair, and cost effective.
- Encourage community and stakeholder collaboration in development decisions.

Source: Smart Growth Network

Six Principles of Green Building

- Protect ecosystems and enhance communities
- Protect climate and ambient air quality while conserving energy resources
- Protect and conserve water
- Conserve materials and resources
- Use environmentally preferable and safer building products and services
- Promote healthy indoor environments

Source: EPA Green Building Principles, Goals, and Recommended Practices
6. economically sustainable.
6. Economically Sustainable
THE ECONOMIC IMPACT of THE CHATHAM PARK DEVELOPMENT

Dr. Michael L. Walden, Project Director
North Carolina State University
December 2014
ECONOMIC IMPACT OF CHATHAM PARK

Dr. Michael L. Walden

- 7,100 ACRES
- 22,000 RESIDENTIAL UNITS
- 2.4 MILLION SQ. FT. COMMERCIAL SPACE
- 16.6 MILLION SQ. FT. OFFICE SPACE
- 2.5 MILLION SQ. FT. OF CIVIC, SCHOOL, AND HOSPITAL SPACE
COMBINED CONSTRUCTION AND OCCUPANCY IMPACTS BY YEAR OF DEVELOPMENT (REAL $ MILLIONS)

Year

Chatham Co.
Triangle
North Carolina
COMBINED CONSTRUCTION AND OCCUPANCY IMPACTS BY YEAR OF DEVELOPMENT (EMPLOYMENT)
ESTIMATED STATE AND LOCAL PUBLIC REVENUES FROM CHATHAM BY YEAR (REAL $ MILLIONS)
7. We believe the best places have distinct identities and cultures.
Smart Growth: Chatham Park led efforts to secure NCDOT funds for Main Street revitalization to connect to and strengthen existing Pittsboro.
CHATHAM PARK
Itron Smart Cities Overview
RTCC Market Place – Chatham Park

Tim Driscoll
Director Solution Marketing
June 1, 2017
Who is Itron?

• Solutions for managing, measuring, analyzing energy and water

• Smart metering solutions and associated management and analytic applications

• 130 Million connected devices in 100 countries
Smart Cities Technologies

smart energy and water

network overlay
Smart Cities Initiatives

Charlotte  Bismarck  Malta  Tianjin
Smart Cities Initiatives

Chatham Park
Bryan Lampley
Hoffman Building Technologies
What is the hardest question that you face?

“What do you want for dinner?”
Mitsubishi Electric Cooling & Heating

- CITY MULTI VRF for Commercial Applications
  - First Two-Pipe Simultaneous Cooling & Heating System
  - Diamond Controls for Integrated Building Management
Mitsubishi Electric Cooling & Heating

- M&P Series for Single-family and Multifamily Residential
  - Hyper-Heating INVERTER (H2i) low ambient heating technology
Zoned Comfort Solutions

• Comfort
  – Individual room control
  – Quiet operation

• Efficiency
  – Inverter compressor

• Health
  – Multiple filtration points
  – Ductless or less duct

MITSUBISHI ELECTRIC
COOLING & HEATING
MAKE COMFORT Personal™
Success Story: The Villages at Cramerton Mills
The Villages at Cramerton Mills

• Mixed-use development
  – Single-family homes
  – Apartments
  – Restaurants
  – Retail
  – Office Space
Zero Energy Ready Homes

• Standard 3kW PV array
• Upgrade to Net Zero
  – Includes 2-year lease on electric vehicle
Zero Energy Ready Home Features

- 2x6 Advanced Framing
- Huber Zip System Sheathing
- Dense Packed Cellulose Insulation
- Advanced Air Sealing Package
- Ply Gem Low-E Windows
- Mitsubishi Electric Cooling & Heating
  - 30+ SEER (more than double the industry standard)
The Camellia

- 3 Bedrooms
- 2.5 Baths
- 2291 Square Feet
- HERS -8
The Mulberry

- 3 Bedrooms
- 2.5 Baths
- 2381 Square Feet
- HERS 30
The Willow

- 3 Bedrooms
- 2.5 Baths
- 2376 Square Feet
- HERS 30
The Dogwood

- 3 Bedrooms
- 2.5 Baths
- 2095 Square Feet
- HERS -7
Dogwood Interior
Dogwood Interior
Grand Opening Event
The Home of the Future – Today

Mitsubishi Electric PV

Mitsubishi Electric HVAC

Mitsubishi Electric EV?
The Home of the Future – Today

Mitsubishi Electric PV
Mitsubishi Electric HVAC
Mitsubishi Electric EV!
Mitsubishi Electric Success Story

- Nick Parker Interview
Marketplace.

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A new series by the Research Triangle Cleantech Cluster
Upcoming Events

June 6 – Show Me the Money – Venture Capital in Cleantech & RIoT Annual Startup Pitch Night
Upcoming Events

June 26-28 – Smart Cities Connect Delegation
Upcoming Events

September 14 – RTCC Annual Meeting
THANK YOU