

# Fellsmere, Florida

Working together to vitalize a community once forgotten.



AIA SDAT

# About AIA and the Fellsmere SDAT



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## AIA Center for Communities by Design

The Center for Communities by Design is a catalyst, convener, and source of information that helps AIA members work with citizens and other stakeholders to envision and create more livable communities.

The center believes that architects are critical to designing safe, attractive, economically viable and environmentally sustainable communities. Good design is an investment; well-designed communities will attract and benefit residents, business, and visitors, and meet the needs of the present and future generations alike.

## SDAT Principles for planning and community residents

The Sustainable Design Assessment Team (SDAT) program is an interdisciplinary community assistance program that focuses on principles of sustainability. Modeled on the AIA's long-standing Regional and Urban Design Assistance Team (R/UDAT) program, the SDAT program provides broad assessments to help frame future policies or design solutions in the context of sustainability and helps communities plan the first steps of implementation. The SDAT program is based on an understanding of design as a process that

- Is integrative, holistic, and visual
- Is central to achieving a sustainable relationship among humans, the natural environment, and the place
- Gives three-dimensional form to a culture and a place
- Achieves balance between culture, environment, and economic systems

The SDAT program is grounded in the AIA design assistance team values, which call for a multidisciplinary approach, objectivity of the participating team members, and broad public participation.

The key to SDAT success is diversity and participation; the process involves multiple disciplines and multiple stakeholders. For Fellsmere, the team's expertise included architects, planners and a natural systems specialist, all with interdisciplinary expertise. The SDAT process includes not only the expert team but also government agencies and officials, private businesses, schools and students, community members, and other parties as appropriate.

In the end, the citizens of the community are the critical players, both for their creative insights and observations during the team visit and for their support for the new directions that emerge from the SDAT process.

On behalf of the Fellsmere SDAT and the AIA, it is hoped that this toolkit will be a useful guide for the Fellsmere community as it charts its future sustainably for the coming years and for coming generations.

## Principles of Sustainability: More than just being "Green"

**"Sustainable communities are cities and towns that prosper because people work together to produce a high quality of life that they want to sustain and constantly improve. They are communities that flourish because they build a mutually supportive, dynamic balance between social well-being, economic opportunity, and environmental quality."**

It is the goal of this toolkit to illustrate those threefold principals as they can be achieved in the city of Fellsmere and in particular, the community of Hall Carter James.

# Introduction

## Fellsmere: Working together to vitalize a community once forgotten.

### Fellsmere Florida SDAT Background

In 2007 the city of Fellsmere, FL under the auspices of the Florida Department of Health, submitted a proposal to the American Institute of Architects (AIA) for a Sustainable Design Assessment Team Grant (SDAT) to assist the Hall Carter James community and the city in addressing key issues facing residents and the city. These included:

- Housing infrastructure and options
- Access to transportation - pedestrian + public
- Neighborhood beautification, lighting and safety
- Lack of business opportunities for residents
- The need to expand community parks integrating natural water resources and climate
- Providing adult education resources for residents
- Address political barriers and strained relations between the city and county officials.

The AIA accepted the proposal and after an initial scoping visit by a small group in February the SDAT team arrived in Fellsmere on April 19, 2008. For three days the team toured the city, met with residents, and forged recommendations for the future. This toolkit is a result of that work.

### What we observed and heard

Strong ethnic family bonds and traditions unite the Historic Community of Hall Carter James, the original black settlement in the region. This neighborhood of 219 residents, of which 176 are black, represents 70% of all blacks in the city. Approximately one third live below poverty level. In addition to economic hardship and below standard housing, the neighborhood itself lacks basic infrastructure such as paved streets, sidewalks, lighting and proper septic systems. Drug trafficking and crime are a daily occurrence on certain streets, making the neighborhood unsafe for children and residents as it fuels an unhealthy fear for other residents of the city. Overall there is a lack of social capital and economic opportunity; with that comes an unhealthy lack of expectation.

The recent growth in population in the region, has shifted demographics, making Fellsmere a predominantly Latino community. Recent improvements targeting these new areas of growth in the city have fueled a perception of inequality, not without merit, for the residents of Hall Carter James. Currently, three distinct ethnic groups populate the city. Though still very segregated in the traditional sense, our visit revealed a common ground that demonstrated a need to come together in a mutually beneficial relationship.

The recent Protocol for Assessing Community Excellence in Environmental Health (PACE-EH) has been the genesis of a renewed sense of hope for the residents of Hall Carter James as various government stakeholders and volunteers have partnered together to move this community forward. Despite enormous challenges, there is new optimism and a strong desire to rework and rebuild their neighborhood.

As a team, our goal was to build a bridge between planning and architectural theory and practice. Utilizing the talents of this amazing team of architects and planners, we brought our best minds together to address the issues that came to light as a result of this intensive immersion into Fellsmere. It was the power of story, a rich community history that brought us to the table and with their help, we have sketched and imagined a sustainable Fellsmere. Though not totally exhaustive of every option, in this toolkit, we have outlined specific and realistic steps that will empower Fellsmere to become the community it desires to be.



# Recommendations

A summary matrix of interdependent options for Fellsmere residents.

	HOUSE + HOME	STREET + BLOCK
<b>NATURAL SYSTEMS</b> 	<ul style="list-style-type: none"> <li>• Develop water conservation + rainwater harvesting strategies</li> <li>• Use living green roofs/living walls and vegetation for climate control</li> <li>• Develop ecological wastewater treatment and grey water systems for water re-use in kitchen garden</li> <li>• Provide energy conservation with shading and wind buffers</li> <li>• Use native plants in your garden</li> </ul>	<ul style="list-style-type: none"> <li>• Organize a shade tree program</li> <li>• Install alternative stormwater management systems such as bio-swales and “train gardens” throughout the city. Consider a demonstration project for Hall Carter James</li> <li>• Require the use of porous paving + native plants throughout the city</li> <li>• Create a series of inter-connected backyard garden networks for children</li> </ul>
<b>BUILT ENVIRONMENT</b> 	<ul style="list-style-type: none"> <li>• Use Passive Climate Design principals for all housing</li> <li>• Employ energy conservation and management strategies throughout your home.</li> <li>• Design shading and wind buffers into the structure</li> <li>• Use climate appropriate materials</li> <li>• You can “Do-it-yourself”</li> </ul>	<ul style="list-style-type: none"> <li>• Insure all new structures and renovations respect building scale and setbacks in each neighborhood</li> <li>• All housing layouts should accommodate a well defined public, semi-public, semi private and space layer</li> <li>• Foster cooperative block wide resource sharing</li> <li>• Develop a street signage and lighting scheme unique to your neighborhood</li> </ul>
<b>COMMUNITY CULTURE</b> 	<ul style="list-style-type: none"> <li>• Begin a self help “Do-it-Yourself” knowledge exchange with other residents of the city</li> <li>• Take pride in cultural affirmation</li> <li>• Support extended family structure with mixed housing types</li> <li>• Keep housing affordable</li> <li>• Develop a Fellsmere Vernacular</li> </ul>	<ul style="list-style-type: none"> <li>• Organize regular street and block wide work parties</li> <li>• Create a backyard playground network with neighbors</li> <li>• Organize annual spring-clean ups.</li> <li>• Develop a tool and resource sharing program on your street for costly items like mowers and power tools</li> </ul>

# Recommendations

## NEIGHBORHOOD

- Develop landscaped water retention areas for storm water runoff
- Begin an Urban Permaculture Program
- Incorporate water in public art/playgrounds
- Create neighborhood organizations for stewardship of the environment, safety of residents, work parties and social events

## CITY SPACE

- Become a stormwater neutral city by increasing infiltration into soils and aquifers. Create a stormwater plan that minimizes the effects of pollutant loads into the local waterways.
- Establish riparian buffer zones/ city eco park system
- Create a citywide composting + mulching program
- Start a CSA farm for city residents

## COUNTY + REGION

- Plan on a regional level to protect wildlife habitat and natural eco system.
- Coordinate planning and design of stormwater management infrastructure – carrying capacity, riparian buffer zones + reconstructed wetlands
- Become a leader in the region. Be a proactive supporter of resource management + greenway corridors

- Incorporate Art and Identity in all public infrastructure design
- Design neighborhood bus shelters
- Create small scale parks and public gathering areas in each neighborhood
- Support the economic development of a small convenience store for each neighborhood
- Build recycling drop off areas convenient for each resident

- Develop city wide green building standards for infrastructure and all public buildings
- Support a citywide beautification plan including bus shelters and gateways and shade tree planting.
- Ensure the presence of civic space Create a plaza or square for public gatherings and celebrations for residents of all ages

- Plan public transportation connections to facilitate access to regional services for all Fellsmere residents such as education and commerce
- Coordinate all development of Commercial Centers with socio-economic sustainability as a goal
- Develop amenities to support Fellsmere’s cultural and recreational destination status.

- Form a not-for-profit startup to fund neighborhood projects
- Exchange, organize and sell a cookbook with special recipes, as a fundraiser for other projects
- Provide preschool and day-care options for each neighborhood
- Support the creation of neighborhood vegetable gardens and a community farmers market

- Design an internet cafe and library for downtown Fellsmere
- Create a cooperative learning and resource center. Expand the city’s library to allow full access for all.
- Provide civic space for citizens of all ages to gather, socialize and recreate. Incorporate water fountains.
- Establish a cultural education center for traditional arts and crafts

- Promote Fellsmere as a “Green” destination with City based eco tours, farmers market, and greenway trail accessories
- Acknowledge Fellsmere’s importance as a unique “Public Commons” in the region.
- Celebrate Fellsmere’s history - “Souls Grown Deep” - by acknowledging and celebrating your ancestors.

# House + Home

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## Introduction

A house, (your home) is what brings you back to Fellsmere every time you leave. It can be a place of memory, healing, renewal and often refuge; a place to gather with family, friends and even pets, and sometimes a place of work. It's the place you have the most control over and possibility to personalize and express your values. A house is also often the biggest expense or purchase we make in our lives. Whether we are passing through briefly as tenants or staying longer as owners, we develop a significant relationship with this space and often the land it is situated on. This relationship can span generations. For most people their first memory of a place is their home and the surrounding neighborhood where they grew up and spent significant moments in their life. When thinking about sustainability and personal well being, this is the first place to begin; this is where your life takes shape.

## Climate + Topography

Fellsmere is situated in a subtropical climate at latitude 32N with a mean temperature range of 50-90 degrees F and annual rainfall of 50.5 inches. On average, there are 815 heating and 3200 cooling degree days<sup>1</sup> annually. Relative humidity, which measures the amount of moisture in the air and is another indicator of comfort, averages between 64 -75%. The ideal range is between 50-60%. High humidity combined with heat does not allow for natural evaporative cooling to take place. High humidity also increases the growth of mold, viruses and bacteria that can affect the air quality in your home. The climate in Fellsmere presents the challenge of moderate humidity, tropical storms and high temperatures. Much of this can be controlled with proper design of all structures, their openings, shading devices, insulation and landscaping.

The land Fellsmere occupies was originally swamp land that was drained for agricultural purposes. The success of the city's livelihood relies on the delicate relationship to water in its below sea level topography. Regardless of the drainage systems in place, stormwater management should be addressed pro-actively in all designs, especially with the current change in weather patterns and the increasing frequency of severe storms. It is also critical that all construction and development in Fellsmere mitigate its impact on the land and drainage in particular. Your residence is the first line of defense in weathering storms and climate change. A look to vernacular architecture can provide insight into design solutions that respond to the particular challenges of building in Fellsmere.

The town of Fellsmere clearly identified the desire to move into a more sustainable way of thinking and operating as it related to the individual experience. Concentrating on three-fold sustainability has a multi layer effect. Improving energy and water use will not just help reduce the use of global resources, but will also help residents reduce monthly utility costs. Reducing or eliminating toxic materials and related fumes, will increase the air quality and provide a healthier living environment. Natural materials also provide enduring quality for furniture and equipment. Simply stated, a green home is a more efficient and healthy home and is better for the environment overall.

**VERNACULAR - The native language or dialect of particular region or place. The visual language of architecture and buildings as it embodies a response to climate and local materials and methods of construction. House forms molded by tradition and hand-crafted skills taught by one generation to another.**

Many of the earlier traditional structures such as the Florida Cracker Farmhouses were designed in response to the local climate. Much can be learned from this "Vernacular Architecture" which provided comfort to its occupants using local materials without air-conditioning. The book [Classic Cracker - Florida's Wood-Frame Vernacular Architecture](#) by Ronald Haase is an excellent resource for inspiration on sustainable house design. These house forms were molded by tradition and hand-crafted skills taught by one generation to another. Today, they are still being used successfully throughout the state and adapted for current needs.

*1-Heating and cooling degree days are quantitative indices designed to reflect the demand for energy needed to heat or cool a home or business.*

# Natural Environment

## Natural Environment

Use native plants for their resistance to extreme weather conditions and diseases. Plant fruit trees like mango, avocado, guava, mulberry, citrus, and other fruit producing perennials such as blueberries as a food source for you and local wildlife. Use local mulch and compost generated by kitchen scraps to fertilize your garden.

Install a low maintenance green roof to provide passive evaporative cooling, extra insulation and extend the lifespan of your roofing system. A green roof can also reduce roof stormwater runoff by up to 90%. Green screens or vines planted and trained on trellises 1' off the walls of your house can significantly reduce cooling loads in summer months. Use plants such as Passion flowers; besides being native food sources for songbirds and butterflies, they will add fragrance and beauty to your home.

Trees can reduce damage from high winds. Plant wind resistant trees in strategic locations to reduce damage to your property from tropical storms. Proper clustering of trees can also reduce potential wind and flying debris damage from hurricanes. Trees also retain rainwater and absorb stormwater runoff.

Install rainwater collection cisterns for use in your garden. One thousand square feet of roof will produce nearly 625 gallons of water in a 1" rain event. This water is ideal for watering and irrigation as it is free of the chlorine that usually kills the beneficial microorganisms that are essential for soil health. Rainwater collection also can significantly improve stormwater quality and alleviate local flooding.

Landscaping creates a wonderful opportunity to help make any property a green site. Through strategic planting, composting, and rainwater collection, there is even the possibility of generating some extra income from a vegetable garden.

Consider creating a mulching station with your neighbors. Use landscape waste and convert it into valuable mulch. Other household organic waste can also be used to create fertilizer providing a valuable resource for your garden.

When planting new plants, choose trees and shrubs that are drought tolerant and are specific for central Florida. Plant trees and palms on the south and north side of the home or business. When mature, the tree canopy will naturally cool the building reducing or eliminating the need for air conditioning. Also consider planting trees to shade streets.

## Vernacular Architecture and Health

Statistic show that air-conditioning increases obesity. The body does not have the chance to adjust to the change in weather patterns and shed winter fat because it is being forced to live in an artificially cold climate. Given the chance, our metabolism does adjust to the year round change in temperatures quite well. We can live quite comfortably in the Florida climate if we use climate appropriate design strategies when we design our buildings, landscape our gardens and wear proper clothing.



Residential Cistern

# Built Environment

**Building in Florida - "It's is all about ways to augment shade and air movement" Ronald Haase**

## Design in Response to Climate

Florida has an ideal climate for passive climate design. Compared to other regions, you have year round gardening, an abundance of sunshine, a small daily temperature range, an abundance of water and the ability to capture the wind. Passive design includes: designing buildings that allow air to move throughout the structure and use light colors on the outside to reduce heat gain; adding extra insulation and shading devices over openings to further increase comfort; using landscaping techniques to provide additional shade and evaporative cooling to add even more benefits, all at minimal cost.

## Energy Management

When addressing energy in any structure, two aspects of energy must be considered: supply and demand. The demand or load is the same as your usage, or simply put, what you need to operate all the appliances, lighting fixtures, air conditioners, heating and cooling appliances. The supply or source is the type of power and fuel that you use to operate appliances, light fixtures, electronics and other devices. The most important thing to consider is reducing your demand through "passive design" responses. These include insulation, shading and natural ventilation. With simple awareness and tracking use, the average homeowner can easily reduce energy demands by 10-25%. A thoughtful evaluation of needs, alternatives and proper design can reduce the demand even further. Planning, designing and building efficiently in response to climate is the easiest way to minimize your energy loads in new construction and retrofit of existing homes.

The supply source, oil, gas and electricity, can be replaced in many instances by sun and wind power, with solar hot water as the most economical. As the cost of PV panels and other alternatives come down, the best option is still passive design and reducing your load by using hand tools, drying your clothes outside, and eliminating the need for air conditioning.

## Building Durability and Sustainability into your Home

Since Fellsmere is often subject to severe tropical storms, it is a prudent approach to design passive survivability into your home. In the event you find yourself without power for extended periods of time, you can still live in your house because it has design features that regulate temperature and store food with minimal power. The judicious use of windows and doors provides access to natural daylight and ventilation.

Utilities contribute largely to the everyday demand on operating cost as well as use of resources. Reducing energy and water needs is a simple and most important step to becoming more sustainable.

Simple solutions that require no or minimal investments include:

- Change your light bulbs to incandescent fluorescent bulbs as they need replacing.
- Replace the AC thermostat with a programmable one that can automatically raise the temperature when no one is present.
- Upgrade to dual flush toilets or install dual flush retro-fit kits to save up to 40% of water from your water closet.
- Replace faucets with low flow units. Replace shower heads with low flow or aerator heads. This can also increase the feel of water pressure as well.
- Replace broken appliances with energy star options. Appliances that have the greatest energy savings impact are refrigerators and clothes dryers. Water saving can be added to a new efficient washer and dishwasher.
- Change all your cleaning supplies to non toxic alternatives.
- Install a gutter to collect rainwater for irrigation.



# Community Culture

**“Children are never good at listening to their parents but they never fail to imitate them” James Baldwin**

## Do-it Yourself

Your home is the perfect place to begin taking action and reconnect to a tradition of knowledge sharing. As you make improvements to your property and acquire skills, you develop a sense of empowerment and pride. This is an opportunity for your family to work together and begin to develop knowledge that you can pass on to others. Connect to your neighbors and begin to share your skills or even enroll in a workshop for homeowners and become a master teacher for others. Some “do-it-yourself” examples follow below.

If maintenance has to be done on the house, consider the sustainable alternative.

Larger projects include:

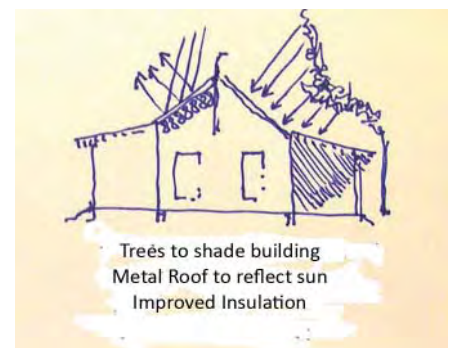
- Use non VOC paint when painting or sealing leaking windows
- Increase the use of insulation and make sure that door and window frames are sealed (with non VOC sealant)
- If replacing the floor, opt for a reclaimed wood or rapidly renewable material. Also consider the amount of cleaning. Non toxic cleaning materials and equipment will help maintain a health home.
- Replace conventional water heater with tank less on-demand units to save water and energy use.
- Install solar water collector to completely eliminate the need for energy heated water.
- Replace windows with impact and energy efficient models to increase the safety and insulation of the building.
- Install a grey water system to re-route waste water from shower and laundry to be able to flush toilets and water the lawn. Use biodegradable + non-toxic household products for this to work properly.

A building requiring major repairs, creates an opportunity to improve greatly on its green elements. Consider the following when altering the structure:

- Add porches to cover the south and west side of the home to prevent the walls from heating and radiating into the building.
- Install an outdoor kitchen or enclosed living room.
- Replace the dark asphalt shingle roof with a metal or other reflective material. Use light colors to reduce heat gain.
- Consider installing a green roof covered with vegetation to improve water filtration and reduce your cooling load.

## Saving and Investing

Your property should be able to accommodate your needs at various stages in your life so you can “age in place”. Consider adding accessory units to your house. This is an investment that can increase the value of a property and keep an older person connected to others. It also provides housing for younger people and single professionals. It would allow you to live on site while doing major repairs to the main house if you phase the work and once complete can provide rental income.



# Street + Block



## Introduction

The street and block gives definition to a neighborhood and the buildings it contains. It defines clear boundaries and creates a separation between the public and private realm of a place. The relationship of buildings to the street and each other as well as the scale of those buildings in comparison to the street width, amount and frequency of traffic, vegetation and tree canopy are significant in how they define a place. Your perception and comfort as a visitor or resident is colored by the many layers of sensations you experience on a street such as:



1. Acoustic Qualities: the sounds of city traffic screened by the sound of birds + wildlife, children, water and wind
2. Qualities of Light: the amount of shade and sunlight and the interplay of the two, its effect on the temperature and relative humidity of the area and the increase in comfort when there is variety
3. Visual Qualities of layered transparency and boundaries: public space and the need for visual privacy and a sense of protection
4. Textural + Sensual Qualities: Materials, textures, scale, color, light, shadow and scent. This richness can convey a sense of wellbeing
5. Visual Identifiers: Street Signs, house numbers, lighting, furniture, paving details help define a sense of place reinforcing connectedness and belonging.



A rich and meaningful sensory experience adds to a successful street.

## Stormwater Management and Street Design

Water management in your neighborhood is critical to the long term sustainability of your property. Existing drainage swales along the street offer minimal improvement or guarantees for success against heavy down pours or tropical storms. Use permeable concrete whenever paving is required and narrow the roadways to keep stormwater to a minimum. Take advantage of the traffic calming properties of narrow streets and landscaped vegetative swales. When there is something to see, people usually reduce their speed. Landscaping also provides an opportunity for self expression and pride of place. The SDAT team urges the City to support residents in this endeavor with the creation of a street beautification fund.



Front Yard Porch House Back Porch Garden Neighborhood Play Area Garden Accessory Unit Porch

# Street + Block

**“My kids all grew up playing together back here. They use to go from one neighbor to the other and I never had to worry about their safety. This is still the best place to grow up.”**

## The Enacted Environment of Fellsmere: Designing the Street

The streets of Fellsmere serve as places for social gatherings for residents. From the Latino communities to the African American neighborhoods, street activity plays an important role in their daily life. The street design should achieve three goals.

1. Design should respect and highlight the natural environment (lush landscape of the area.)
2. Design should frame the built environment of the community
3. Design should support human activities that include walking, biking or just socializing.

## Building Scale, Setbacks and Use of Space

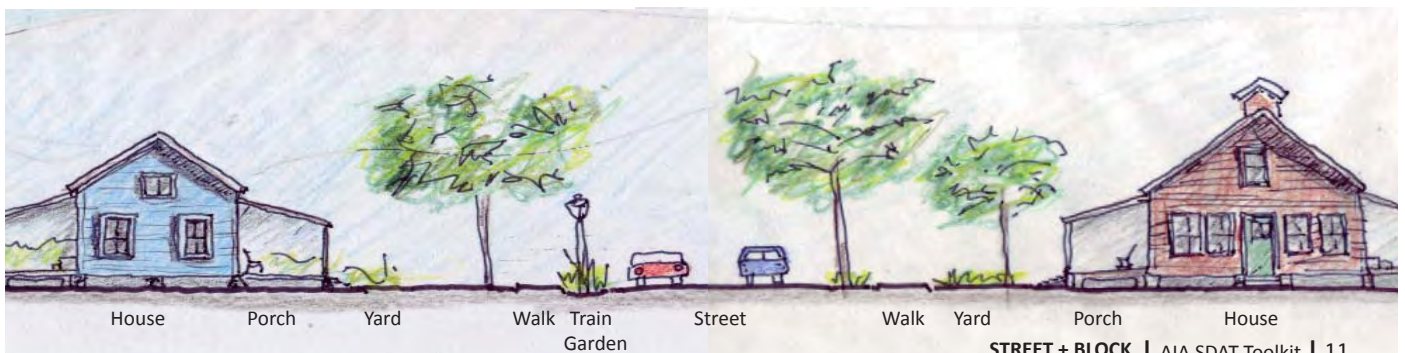
The building scale, setback and use of space are important elements to help support the social life and preserve the visual consistency of the neighborhoods. Existing streets, such as the historic downtown, should serve as a measure of scale and setback for future development. The front yards in the Hall Carter James Neighborhood were some of most important social spaces for the community. This successful example should serve as a standard for all new development.

## Backyard Resources for Residents

The interconnected semi-private world of backyards offers a range of possibilities for homeowners and neighborhoods. From magical places to kitchen gardens, these are the “wild places” that fuel childhood imagination and sustain a family. It is the informal common ground of backyards, where sharing gardening tips or talking about the weather while hanging laundry reinforces community and connects us to a place. Hall Carter James demonstrates the success of this vital urban space and should be used as a reference for model subdivision codes in the City.

Residents of Hall Carter James can further enhance the value of this space by sharing their wisdom with others. Future development in Grace Meadows should consciously incorporate this critical space.

In the end, it is all about scale and proportion, not size; the gesture is what matters. Consciously integrating layered space into each subdivision design will foster and support a healthier community that can live together and embrace cultural diversity as a valuable asset. On a day to day scale it all happens in the cross-section of space between the street, the house, the backyard and neighbor.



# Neighborhood

**“Most black people in the region can trace their roots back to Hall Carter James. They all started here.”**



## Introduction

For residents, the neighborhood defines the social life of a city more than anything else. It is what we think of when we identify ourselves with belonging to a place, especially if it is where we “grew up”. As an entity, neighborhoods have enough critical mass to undertake projects and get them done; either by the residents alone or with the help of others. Neighborhoods are the components and building blocks of the rich tapestry of a city. In Fellsmere, the Hall Carter James subdivision represents a neighborhood defined as much by its natural and man-made boundaries, its vegetation, scale of houses, as by the rich cultural history of its people.



The neighborhood of Hall Carter James began as a settlement of ten African Americans in 1911 when the Fellsmere Farms company needed laborers to build the railroad and cook for the survey party that laid out the city. As the city grew, so did this subdivision. In 1913, a school opened with B.F. James as the instructor. Around the same time J.G Carter, R.L James and Murray Hall, community leaders and merchants, subdivided the area into 40’ building lots with a centrally located park. Growth of this self-sufficient development continued through the land boom of the 20s and the depression years later.



As a neighborhood, Hall Carter James is an excellent example of good design with an ideal urban neighborhood scale and a healthy mix of basic uses such as a centrally situated park, preschool and small grocery store. The neighborhood, as defined by its boundaries, has a protected quiet quality that increases its value to the residents without being physically separated. Once the model neighborhood, years of neglect by the county and city combined with the economic distress faced by most of the residents has left the homes and infrastructure in complete disrepair. The park is now used by drug dealers, making it unsafe for children. Recent projects in the neighborhood have given the residents hope for the future, but there is still a great deal of work to do, especially when compared to the standards set by recent development in Whispering Pines and Grace Meadows to the north.



The SDAT team saw enormous potential for Hall Carter James to again become a model of good design and a key player in fostering community in this growing area of the city. Strategically situated, existing amenities can be leveraged by neighbors. A series of pedestrian paths and development of Lincoln Pond and adjacent wetland areas will create a vital public space that supports walking, biking, social interaction and healthy community. A network of pedestrian and bike trails will provide much needed access to the region when combined with an improved public transit system and the new rail trail. The Go line IRT currently stops at Booker and Lincoln on Willow Street with a terminal point at Whispering Pines. As Grace Meadows is developed, it is imperative that service is expanded to accommodate those residents in an equitable way. Internally the three subdivisions will require a network of developed green space to reduce the sense of segregation that now exists between the three subdivisions.



# Natural Environment

## Natural Environment

Older subdivisions often have great appeal and value because of their scale and the established vegetation and tree canopy that can provide shade, privacy and other desirable qualities. The shade trees and narrow streets in Hall Carter James are clearly a defining characteristic to be cherished. It takes decades to establish these qualities and the adjacent newer subdivisions are a clear example of that difference in planning styles and lack of vegetation and layered space.

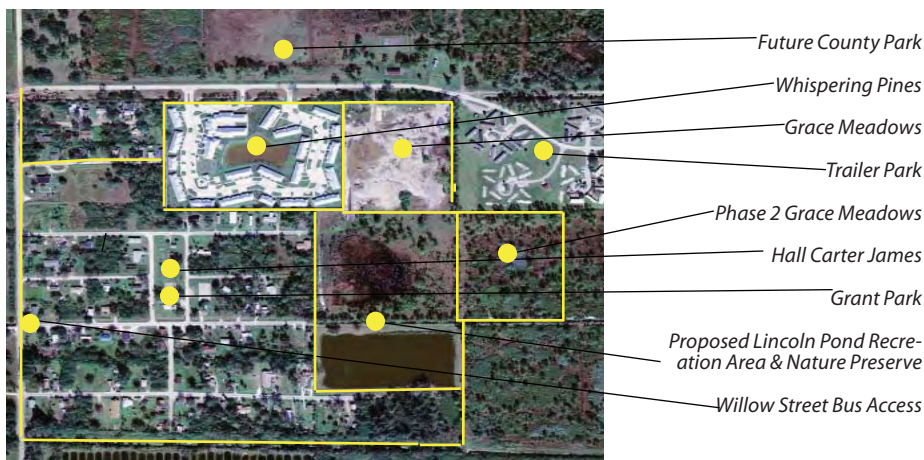
## Birds

Fellsmere is on one of the worlds greatest migratory bird flyways. This is something to celebrate. Create a city code for bird safe buildings and lighting and declare Fellsmere a migratory bird safe-zone. Insure that habitat and food sources are plentiful. This is a great way to build awareness about the environment. Involve the elementary school and city library to access grant funding for educational programs. Embrace the stewardship of land and wildlife wholeheartedly!

## Trees and Vegetation

Live Oaks and Bald Cypress are two of the most wind tolerant trees in the world. During hurricane Katrina in the Gulf Coast these trees were able to withstand both wind and storm surge. Many were the only structures left standing. Live Oaks are phenomenal shade trees for planting in and around home sites. Cypresses can be planted in clumps as close as five feet on center. In combination, these trees can provide superior storm resilience to structures and communities. Both are native to the bioregion.

Initiate a program for public fruit and nut tree mixed species (polyculture) orchards. Explore alternative native tree species such as Mayhaw, Paw Paw, Wild Plum, Black Cherry, Pecan, and Chestnut among many others. Combine this planting with understory fruiting perennials such as Blueberry or vines such as Passion Flower.



# Built Environment

**“We could use help understanding the building code requirements for residential construction.”**



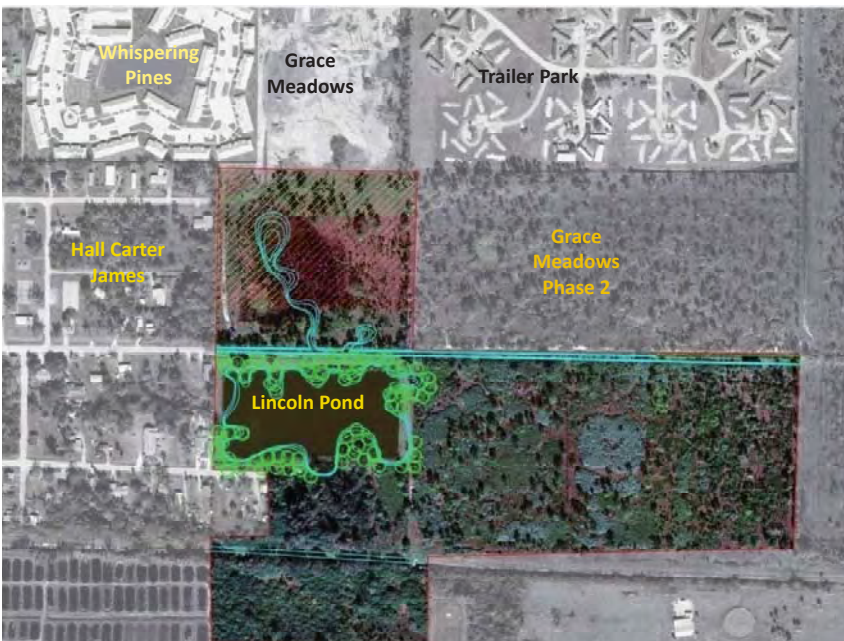
## Design for Livability

Fostering healthy communities, a sense of belonging, pride and well being is more than the economics of housing accessibility. It is most importantly about architecture, design and place making and how that fosters and supports:

- A broad diversity in age, income, cultural ethnicity and persuasion.
- The ability to create culturally appropriate space and celebrate life
- Access to services in a safe and equitable way
- The need to feel connected and a part of a greater community
- The need for comfort, privacy and self expression.

We have all been witness to the results of postwar suburbanization in America and its impact on our health, culture and social wellbeing. There is no need to repeat mistakes.

Most of the houses in Hall Carter James have fallen in to disrepair. Septic systems need upgrading, streets need proper paving, sidewalks and a functioning stormwater system need to be implemented. This presents an opportunity for the city and county to employ sustainable strategies for infrastructure. As mentioned earlier, the adjacency of these three subdivisions - Hall Carter James, Whispering Pines, Grace Meadows - presents an incredible opportunity for model community design that can support and foster a healthy social fabric and community. While Hall Carter James is defined by natural boundaries, Whispering Pines is designed as an inwardly focused neighborhood of 71 rental units that revolves around the community child care center. This increases its exclusivity and isolation from adjacent neighborhoods. The fencing surrounding the property only serves to reinforce that message. The construction of Grace Meadows,



while applaudable and attractive to homeowners looking for a new affordable home, is designed using post war planning models lacking visual and spatial variety. There is little in the way of public space and long term social sustainability for a community of 80 homes. To help all three communities be successful, the existing interstitial space will need to be developed as a public connector space with access between all neighborhoods; otherwise the area will suffer the fate of every uniformly non-diverse ghetto. The recent development of these two parcels creates the opportunity to combine resources and create social capital for all three subdivisions. The residents and the City will need to be pro-active and aggressive in their planning to ensure success for this rapidly growing area of the City.

# Community Culture

**“What we need the most are the tools and skills to rebuild our neighborhood.”**

## Fostering Community

On August 25, 2005, there were two disasters in the Gulf Region: Hurricane Katrina and governmental neglect. Likewise, Fellsmere has been hit with a complex wave of factors that have had an obvious effect on the social and spatial environment in Fellsmere. New housing in adjacent subdivisions with paved streets, a new community center and other amenities has further emphasized the inequitable distribution of resources. Despite its very rural and/or agrarian identity, Fellsmere is plagued by a number of problems that usually affect urban communities. Fellsmere residents have faced major issues concerning housing, employment, social defragmentation, a visible underground economy and racial segregation. The animosity and resentment between neighboring communities of color is very tangible, and the social-spatial infrastructure is complicated by neighborhood design issues that seem disparate. Hall Carter James residents, for instance, do not see dirt roads as an asset. And while Whispering Pines residents have the convenience of paved streets, they are not in the position to make structural changes to their residential space, which is primarily rental property.

Nevertheless, local officials have worked closely with members of the Hall Carter James community and the Whispering Pines community. Various local projects, such as the free meals program, give residents the opportunity to break down barriers and foster community. We observed the potential for residents to define their own spatial designs in an exercise led by James Rojas.

*As part of process to get to know the concerns of the community, we hosted a 2 hour bi-lingual community reflective exercise for Fellsmere residents. The exercise was successful by breaking down language and age barriers. The 30 participants were a mix of Latino and African American residents and included children and senior citizens. The mayor, preacher, and chief of police as well as teenagers participated. Recent Latino immigrants made up a large percentage of the group.*

*The Design Based Planning exercise is a new hands-on artistic technique developed by James Rojas for engaging communities on discussing urban planning/design issues for the following reasons. For the residents of Fellsmere this fast paced exercise helped build design fluency, created a friendly forum for the exchange of ideas, and was a feel good exercise. In addition it helped the SDAT team understand community perspectives in a broader, more nuanced way.*

*Participants are given a problem to design a never before seen city that they would like to live in. After a brief discussion to develop criteria for this city, they were each given a blank foam core square. They used a medley of recycled materials to help them articulate their ideas in physical terms. They had 20 – 30 minutes to design their NBS city. After the deadline they had one minute to discuss their individual solutions. In this short amount of time, the participants assembled their ideas and shared them with others. Fellsmere’s residents had a variety of cities that range from the Manhattan to pueblos in Mexico. They included art galleries, gardens, zoos, fountains, parks, crafts center, a big library, public plazas, swimming pool and other elements.*

We recommend that local and/or regional planners and architects get involved with Fellsmere by providing similar workshops to assist residents in the breaking down of barriers and resentments. It is important that local residents understand the power that they have: they have a voice in planning for community and economic development in Fellsmere and their participation does make a difference.



# City Space

“We need our own local businesses, not to have to drive 30 miles for work”



## Public Space - Civic Space: Fostering Community

The SDAT team asked Fellsmere residents the following question: If you were to stay in Fellsmere for the next 10 years, or if you had a family member who stayed here, what would you want to be in place for you to be comfortable and sustain a healthy future for you and your loved ones? Answers ranged from “tear everything down and start over again,” to “open an ice cream shop, arcade, internet café and outdoor plaza.” Thus, we learned that there is a great desire for development on many scales, i.e., housing, commercial, and social. It was outwardly visible that Hall Carter James residents use front lawns and the space around their homes as informal meeting places, as do Latino residents of Whispering Pines. This is a real asset to Fellsmere and we encourage Fellsmere to build on these social and cultural practices for greater social interaction and cohesion. Create the civic space that fosters and supports the social capital.



Downtown Fellsmere is lined with several restaurants. These businesses/restaurants are primarily utilized by older residents and visitors in the case of the more traditional Marsh Landing and recent Latinos who appreciate Mexican cuisine in the case of the smaller Mexican restaurants. Hall Carter James residents and Whispering Pines residents, on the other hand, go to Sebastian and Vero Beach to access services such as food, health care, education, a swimming pool, etc., and they are primarily dependent upon their limited access to personal vehicles to do this. During a meeting session, we engaged in a conversation about the extension of local bus service and learned that plans were to extend bus service to Fellsmere. We strongly recommend that these plans to extend bus service to Fellsmere be implemented as soon as possible.



All cities find expression in their civic space. It was made very clear by young adults and teens that the city is currently lacking in that much needed public space and a central commercial core. Younger adults and teens want to see and be seen by others in a public context. They have an important voice as the future of the city. To keep younger residents from permanently leaving for other cities, it is critical that these public squares and plazas be created and incorporated with services and amenities such as an expanded library, ice cream shop, educational and athletic facilities that will keep that generation in town and investing in the future of Fellsmere.



## Fellsmere: A Stormwater Neutral City

A stormwater neutral city is one which has returned its stormwater quality and quantity to “pre-settlement” or “natural” rates. Require all new development to have no impact on stormwater rates. Incorporate raingardens or bio-cells into streetscapes throughout the City. Raingardens are bioretention zones that manage and trap stormwater runoff using a conditioned planting soil bed and plants to filter runoff stored within a shallow depression. Not only will these provide cleaner

# Natural Environment

## “The kids here need a place for sports and recreation”

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water runoff and greater infiltration but they are a very low maintenance landscape amenity that can be very beautiful.

Institute a rainwater collection program. Cisterns of at least 1000 gallons installed on every home would not only reduce the stormwater and pollutant load impacts on local waterways, but would save significant amounts of water, up to fifty percent, from being withdrawn from the aquifer.

A program should be developed to purchase cisterns in bulk quantities, therefore reducing the price to residents. Subsidizing this effort will eventually save the city money that would normally have to be spent on stormwater infrastructure and aquifer resources. This has proven to be a very successful program in other cities.

Convert Lincoln Pond and other retention ponds into recreation areas. Alter the slope and edge of these ponds so that wetland edges are created. This will have great benefits on the quality of water and will provide greater habitat for aquatic species and a landscaped amenity for residents throughout the city.

With increasing stewardship of resources, the city works towards a more sustainable future for all residents and creates meaningful jobs and roles for citizens. The recommendations below can be organized in many meaningful ways and allows residents to assume responsibility for their overall health and well being while providing access to natural resources for the future. In addition, the rewards of a leadership role with a sense of accomplishment for residents on a regional level are infinite.

1. Start a citizen’s “water keepers alliance” to monitor these water bodies for contaminants such as fecal chloroform. This will be an increasingly critical role for citizens to undertake.
2. Institute a program to monitor and maintain septic systems. Un-maintained septic systems are, in this case, the foremost cause of fecal chloroform pollution in waterways.
3. Institute a program to manage the effects of fertilizer runoff from agricultural areas into waterways. Create a network of stormwater infiltration zones planted with nitrogen fixing plants such as legumes at runoff points from agricultural areas.

## Water Resources

Cap withdraws from the city’s aquifer. Develop a masterplan for the city that limits growth based on sustainable withdraws from aquifer. Being good stewards of water resources could be an excellent branding opportunity for the City considering its name and origins. Fifty to seventy percent of residential water use is typically used for irrigation. As a role model for the region, outlaw irrigation from potable water sources. Letting your faucet run for five minutes uses about as much energy as letting a 60-watt light bulb run for 14 hours. In ever increasing times of drought, the City needs to take a leadership role in water conservation.

## Agriculture

Start a public or community supported nursery network. One gallon cypresses can be purchased for around \$2 each. In 4 years time each of these plants can be sold on the market for over \$100. Live Oaks grown from seed (each approximately 10 cents each) can be sold in five years for \$150. Plants such as Fragrant White Water Lily can be propagated in stormwater retention ponds and serve the dual purpose of cleansing the water of pollutants, but can be sold on the wholesale market for significant profit.

**CSA - Community Supported Agriculture:** Create a network of vegetable gardens. Lease plots to residents to grow revenue generating organic crops. Strive to develop a localized food economy by starting a weekly Farmers Market. (include wholesale and Internet sales.) A market will attract people from surrounding regions and provide food for local residents without transportation. A market will also provide much needed economic capital for the City and its residents.

# Built Environment

**“Most people here don’t own a car. They have to rely on public transportation”**



## Public Space - Civic Space: Creating Space for Community

The civic space of a city is critical to the social well being and economic vitality of its residents. Shady streets, creatively paved and landscaped sidewalks, and parks and plazas with water features are the “living room” of a community. The City presents itself to the world through these first impressions. As important as entry gateways, these public rooms and pathways will support and encourage future commercial and cultural activities. Public health is an important beneficiary of livable spaces because residents are more likely to walk and spend time outdoors engaging in spontaneous social interaction. The bonds and connections to place are a crucial component of public health and collective well being. The planning, architecture and design of a city is what truly makes a community livable and desirable.

## Streetscape Design and Identity

Providing incentives for incorporating exercise into the daily life of residents is a powerful statement in a community. It fosters a sense of caring and pride on the part of the city as a collective entity and to the residents as citizens. Street signs, building identification, and bus stops all offer an opportunity for city and neighborhood identity. Seize this opportunity and involve residents in the design of these urban furnishings and accessories.

## Green Building Program

With the cost of conventional energy rising and technology advancing for alternative energy solutions, the integration of an energy plan is crucial. As a large scale project, the city of Fellsmere may wish to investigate the application of solar and wind power as alternative energy solutions.

Even though individuals can install these systems and receive tax credits and other incentives, the city of Fellsmere may want to pursue a citywide project to bring alternative energy to the people. Installation of solar street lights may be an easy and affordable start. These installations have a very short return of investment and will contribute greatly to the safety of any neighborhood.

To get the entire community involved, the establishment of a sustainable resource center and a sustainability officer is suggested. During the SDAT process, a weakness surfaced with regards to the sharing of available information. By creating a “go to” location and person, the community has a clear source for information and assistance. Further, this office can find and organize funding, tracking efficiency and savings as well as other events to move the city closer to net zero energy.

Programs to be developed or expanded may include:

- City supported residential upgrade programs
- Create a best practice energy use guide
- Incentives for solar power system installation

# Community Cultural

**“We need our own local businesses”**

## Green Fellsmere, Farmers Market and City History

We recognize that there is a lack of opportunity for local business development, but there are several locally owned stores and/or businesses that provide residents with a range of goods. Members of the SDAT team were invited to visit locally owned stores and businesses that provide residents with a range of goods. In the Hall Carter James community there is one local grocery store that sells black hair care products, urban clothing, a few grocery (food) items, and snack products. Although it was clear that residents use the store on a daily basis, many shelves were understocked and/or empty. Starting a local business association could assist business owners with inventory expansion and business plan development. This association could be supported with technical assistance from a local institution and/or a nearby business school /or association. Partnerships such as this one could lead to development of successful economic cooperatives.

## Latino Urbanism in Fellsmere

As greater numbers of Latino immigrants settle into Fellsmere, they bring with them different use of urban space to an already existing built environment. Their homes, ciudades, pueblos, and ranchos in Latin America are structured differently both physically and socially than the American suburb.

Latinos bring a rich use of public life and creative energy that can be seen and felt all around Fellsmere. Latinos are retrofitting the urban design of the Fellsmere’s streets to fit their needs. From the shires of Our Lady of Guadalupe to Latino men riding their bikes, Latinos are repeating their urban patterns from Latin American.

The Garcia Plaza Bakery is an all purpose store that sells Mexican products and provides community services. The door serves as a message board for community news. In addition, the front of the store acts as an impromptu plaza as men congregate and sit on a bench that over looks the street. A soda machine and telephone provide other amenities for this small plaza user.

The “Taco Mobil” truck parked next to the bakery in a vacant corner lot provides Mexican food for people around the area. The taco truck has a tarp in front of the window to provide shade for its patrons. A map of Mexico with all its states is painted on the wall of taco truck.

Religion plays an important role in Latino civic life. Garcia Plaza Bakery has a tile mural of our Lady of Guadalupe. Our Lady of Guadalupe church has a shrine in front of it as well as a rendering for an expanded church to serve a growing congregation.

Whispering Pines, where many Latinos live, is a new facility based on a standard design. The central parking lot, small porches, and white stucco finish unfortunately do not allow for cultural expression as we see in the older parts of Fellsmere where Latinos live. There is little, if any, “front or back porch” type space.



## The Kitchen Gardens of Hall Carter James

The residents of Hall Carter James have long understood the value of the kitchen garden. Born out of necessity generations ago, this important part of the back yard did not go un-noticed during the SDAT team visit. Family recipes and homegrown ingredients are the pride of many residents. We were all able to experience the delicious fried chicken cooked outdoors by Annie Mae Brown and her husband during a community work day and celebration. Earlier during our visit we had a tour of Annie Mae’s yard and her mother’s vegetable garden and house next door. Within earshot of each other, the special connection between these two backyards goes beyond the practical ease of proximity. A culture and family stays connected as knowledge and skills get passed down to children and future generations through exposure and the experience of staying connected. Good neighborhood design supports the “kitchen garden” tradition of the south and is an important part of Fellsmere’s cultural legacy.

# County - Region

**“In the end, its all about people.”**

LIVING – LEARNING  WORKING – PLAYING

## Indian River County, Florida

Vero Beach ~ Sebastian ~ Fellsmere ~ Indian River Shores ~ Orchid



### Fellsmere and Indian River County

One of the wealthier counties in the state, Indian River has an abundance of resources. The luxury home market and tourism have grown in the last 50 years and agriculture is still a powerful force in the economy. The City of Fellsmere figures prominently on web sites with a center stage position.

In addressing the “Sustainable” future of the city, the SDAT team considered Fellsmere in the regional context with particular focus on its relationship to the county. There was a desire among all participants, experts and residents alike, to see the future role of the City as a more equitable team player without denying the unique qualities the city has to offer on a regional scale. As a stakeholder of a large portion of agricultural lands in the region, Fellsmere is perfectly positioned to become a leader and role model in the sustainability agenda for the region’s natural resources. Understanding how the city and its residents can position themselves will be critical for the environmental and economic sustainability of the region’s future.



### Carbon Market and Reforestation

The international carbon market is currently placing high value on reforestation efforts. As a Fellsmere initiative, explore the possibility of a large scale reforestation campaign for the western part of the county. Involve school children and use plant nursery funds to support the endeavour. Form a Groundwork non-profit organization. Groundwork is funded in part by the National Park Service and the EPA. Currently none exist in Florida.

Fertilizer runs off of agricultural sites and is greatly deteriorating water quality for much of the region. Again, with Fellsmere in the lead, institute an organic farming and permaculture education program. Create a network of stormwater infiltration zones planted with nitrogen fixing plants such as legumes at runoff points from agricultural areas in Fellsmere and the region’s aquifer recharge areas. As stewards, become leaders and a role model for other regions of the state.

### Waste

Currently many cities are actually shipping their wastes to processing facilities outside of there region. Develop a constructed wetland sewage treatment facility for treatment of city sewerage and septage. Constructed wetlands are now accepted as effective ,low-cost, and low-impact wastewater treatment facilities. The cost of installation and maintenance is much less expensive than the unsightly industrial facilities and has the added benefit of being highly productive wildlife refuges, as well as providing recreational, and educational opportunities. A properly sized wetland treatment center could even create revenue for the city by accepting these imported wastes. Develop a regional composting facility. Both constructed wet-



## “Plan Regionally, Act Locally”

land sewage treatment facilities and composting and soil creation can see investment returns in the carbon market.

### History and Culture

As a regional partner, Fellsmere offers a rich historic and cultural heritage. It is critical that the county support and visibly acknowledge that past and history. Maintaining opportunities for reconnecting with the past are critical for the collective well-being of any society. Connection to the past reaffirms that you have a place and will not be forgotten in the collective memory. In particular for the Hall Carter James neighborhood, acknowledging those connections will be important to the livelihood of the city as well as the neighborhood.

### Transportation: Access to Education, Employment & Commerce

The majority of residents in Fellsmere do not own a vehicle and rely on public transportation, bicycles and walking to get around. While this is a sustainable approach to living, there is insufficient support from the public infrastructure to make this equitable for all. Indian River County amenities are concentrated on the eastern side of the county. Most high school students are unable to participate in after school activities because there is no transportation to bring them back to Fellsmere. A coordinated public system could address the needs of students and adults alike by providing access at any time for recreation, education, commerce and county services. Without a car it is nearly impossible to get to a beach.

### Recreation And Tourism

Fellsmere is home to some of the prime ecological sites in the region. The planned rail trail improvements, will allow the city to take advantage of the increased access the trail can provide for residents and visitors. The rail/trail corridor will also facilitate a safer access route for cyclists to and from services and commerce in the eastern part of county.

Eco-Heritage Tourism – The appeal of history and the natural environment has attracted visitors to Florida again and again. Statistics repeatedly confirm the value in combining outdoor activities with a glimpse of a less hurried past for residents and visitors alike. Developing cultural and recreational services with this in mind can provide a sustainable economic base that meets the needs of residents as well as the region and its visitors. As an ethnically diverse population, Fellsmere offers access to other cultures, other people, and their history through arts and crafts events, storytelling and culinary traditions. Seed money for start-ups will be a benefit to residents and the region as a whole.



# Conclusions

**“A dream doesn’t become reality through magic; it takes sweat, determination, and hard work”. Colin Powell**



## Moving Forward

Recent improvements in the Hall Carter James community are the result of PACE-EH program. Nothing would have been able to happen without the participation of residents in coordination with the City and County. Now that positive changes are occurring, it is up to everyone in the community to keep the momentum alive.

## Hall Carter James - the Jewel in the Crown

Hall Carter James residents maintain their culture in a context of traditional orality. They make sense of their lives through the use of storytelling, they think in terms of relationships, and they make use of daily proverbs or moralistic sayings.<sup>1</sup> This is often most pronounced in black churches, and Hall Carter James is no exception. The centrality of the local black church leadership is therefore key to thinking about social mobilization and community development. During our stay, we were joined by the Rev. Ned J. Childress Sr., the pastor of the New Bethel A.M.E. Church, and we learned that many of the women were active in their church as spiritual guides, ministers and/or pastors. We especially were introduced to Annie Mae Brown who has been civically engaged in a way that is trusted and meaningful; she holds a prominent place in her church. This commitment to community is what will support any future design and/or development. In some cases local church culture can be an obstacle to local development in some communities, but that is not the case with Fellsmere. The network of organizations that supports these churches must be included in any future plans for Hall Carter James.

1- Traditional orality is discussed by Tex Sample, *Ministry in an Oral Culture: Living with Will Rogers, Uncle Remus & Minnie Pearl*. (Westminster: John Knox Press, 1994). Dr. Tex Sample is the Robert B. and Kathleen Rogers Professor Emeritus of Church & Society at Saint Paul School of Theology, which is located in Kansas City, Missouri.



## What’s Next

The SDAT team has provided a checklist for the County, City, Neighborhoods and Residents. This is only a starting point. It is our hope that these suggestions, which are a result of our time together, will help you respond to some of the most pressing needs in your lives. This checklist is based on first steps and basic priorities. There will be other needs and projects that begin to reveal themselves with time. Your process will evolve accordingly when you stay open to overall goal of sustainability.

The importance of a checklist is to make sure goals are met and action items are completed. As residents, you should all have a list of priorities for yourselves, your community and your city. Some tasks will be easy and require minimal funds and effort. Others will require participation and support from the city and the county. Regardless of size, cost or the time it takes for implementation, it is important that one or two people take on the role of “Vision Keeper” and ensure that each project keeps going until you achieve success and it comes to fruition. Just as everyone is the keeper of their own vision, collectively you share and hold a vision for the future of your community. Nurture it and it will thrive. In general, leadership from all levels will be critical for sustained improvements



# Local Resources

## Health Services

**Indian River County Health Department**  
1900 27th Street  
Vero Beach, FL 32960  
(772) 794-7400

**Gifford Health Center**  
4675 28th Court  
Vero Beach, FL 32967  
(772) 770-5151

**Treasure Coast Community Health Center**  
12196 County Road 512  
Fellsmere, FL 32948  
(772) 571-8828

## City of Fellsmere

**Community Development Department**  
21 S. Cypress Street  
Fellsmere, FL 32948  
(772) 571-9077

**Utilities Department**  
21 S. Cypress Street  
Fellsmere, FL 32948  
(772) 571-0127

**Police Department**  
25 S. Cypress Street  
Fellsmere, FL 32948  
(772) 569-6700  
For emergencies, dial 911

**City Clerk**  
21 S. Cypress Street  
Fellsmere, FL 32948  
(772) 571-1616

**Public Works Department**  
21 S. Cypress Street  
Fellsmere, FL 32948  
(772) 571-1902

**Recreation Department**  
21 S. Cypress Street  
Fellsmere, FL 32948  
(772) 571-1902

## Transportation

**GoLine Indian River Transit**  
(772) 569-0903

## Education

**Indian River Community College**  
1-866-866-4722

**North Indian River County Library**  
1001 Sebastian Blvd. (CR 512)  
Sebastian, FL 32958  
(772) 589-1355

## Indian River County

**Community Development Department**  
1801 27th Street  
Vero Beach, FL 32960  
(772) 567-8000 Ext. 1237

**Voter Registration and Elections Information**  
4375 43rd Ave Unit 101  
Vero Beach, FL 32967  
(772) 226-3440

**General Services**  
1800 27th Street  
Vero Beach, FL 32960  
(772) 226-1223

## Social Services

**HelpLine 211**  
Offers free 24 hour counseling services plus a robust resource database – just dial 211

**Treasure Coast Homeless Services Council, Inc.**  
2525 Saint Lucie Ave.  
Vero Beach, FL 32960  
(772) 567-7790

**Brad Bernauer**  
Human Services Program Specialist  
Gifford Health Center  
4675 28th Court  
Vero Beach, FL 32967  
(772) 226-1467

**Care Net**  
Pregnancy Center of Indian River County  
1503 24th Street  
Vero Beach, FL 32960  
(772) 569-7939

## Housing

**Habitat for Humanity**  
4568 U.S. Highway 1 No.  
Vero Beach, FL 32967  
(772) 562-9860

**World Changers**  
[www.world-changers.net](http://www.world-changers.net)

**Future Builders of America**  
Ms. Gail Kavanagh  
(772) 464-8222  
[gail@treasurecoastba.com](mailto:gail@treasurecoastba.com)

## Legal Services

**Florida Rural Legal Services**  
200 S. Indian River Drive, Suite 101  
P.O. Box 433  
Fort Pierce, FL 34950  
(772) 466-4766



## Fostering Community

Sustainability is above all about a paradigm shift in the way we think. When a community embraces new thinking, it is good to share common knowledge and a common vocabulary. Sharing stories, reading a book together or watching a documentary film as a community is a good way to foster conversation. We recommend beginning a community conversation by inviting guest speakers to facilitate these events. These can be organized by the library, the city, a neighborhood organization, church or community center. Have a variety of topics and a diversity of perspective presented. Getting to know each other on common ground will build bridges and understanding. In the end it is all about people and their shared humanity in our rich cultural differences.

# County + City Checklist

“Leadership in general from all levels will be critical for sustained improvements.”

## CHECKLIST FOR COUNTY

- Invite community leaders of Fellsmere to the table when planning on a regional scale.
- Expand transportation to provide equitable access for all County residents including Fellsmere residents and migrant farm workers. Schedule service to facilitate access to work, education, recreation and commerce. Include express route service to Fellsmere at high peak hours.
- Coordinate development of eco-tourism + rail trails with city of Fellsmere.
- Foster opportunities and provide micro loans for local startup businesses to provide amenities to rail trail users.
- Foster and coordinate a relationship between Indian River County Historic Resources Advisory Committee + the Community Leaders of Fellsmere
- Provide seed money for Fellsmere initiatives that have regional benefits. Support Fellsmere residents locally to become economically sustainable
- Coordinate and support the promotion of Fellsmere as a multi-cultural destination.
- When planning, use threefold sustainability as the driver of any vision and decisions concerning future development. Achieving environmental, building, social and economic sustainability must be a priority for the county.
- Support the creation of a Fellsmere Cultural Center with focus on living arts culture, history and ethnic cuisine.
- Coordinate and develop regional continuing education opportunities for business start-ups + “do-it-yourself” home-improvement programs.
- Provide seed money for small business start-ups.
- Provide bike lanes and stripe all routes to and from Fellsmere for cyclists and pedestrians.
- Foster awareness on water conservation and protection of aquifer. Require the use of biodegradable non-toxic cleaning products in all county buildings.
- Eliminate the use of pesticides and herbicides in county.

## CHECKLIST FOR CITY

- As a rule, always involve residents of all ages + backgrounds in city program planning. Encourage community participation to enhance results.
- Support and foster the creation of a cooperative learning center for all residents.
- Start a shade tree + street beautification program.
- Coordinate with the local building inspector and local AIA volunteers, for building code compliance and home improvement workshops for residents.
- Expand the library with input from residents of all ages.
- Take advantage of faith based programs and initiatives to encourage public and social welfare. Foster public-private partnerships for socially based programs for residents.
- Form a “Historic Hall Carter James” committee and provide seed money for program development.
- Create a “Best Practices for Energy Use” guide for the residents.
- Establish a City-wide composting area for residents and farmers to share.
- Start a City “take it or leave it” exchange for building supplies, furniture and other usable materials.
- Declare a “Walk Fellsmere Day” to familiarize residents with the streets and neighborhoods of the City.
- Bulk purchase biodegradable non-toxic cleaning and household products for purchase by residents. Ban Toxics.
- Require new development to have no impact on stormwater rates.
- Become a stormwater neutral city by increasing infiltration into soils and aquifers.
- Create a stormwater plan that minimizes the effects of pollutant loads into the local waterways.
- Become a leader in the region in resource management.
- Use permeable concrete whenever paving is required.
- Narrow the roadways and increase landscaping.
- Translate and publish all city forms in English + Spanish.

# Neighborhood + Resident Checklist

**“You have the ability and the right to shape your future.”**

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## CHECKLIST FOR NEIGHBORHOOD

- Develop a timetable of goals and action items for your neighborhood. Assign two “Vision Keepers” to each independent task and help them achieve success. Track progress and celebrate every milestone of success.
- Make your neighborhood a child safe zone. Get to know your neighbors to e.
- Build a tree house or backyard playground with your neighbors for the younger children in your neighborhood.
- Organize a neighborhood sharing Co-Operative program for items like lawn mowers, ladders and other less frequently used tools for home improvements; gardening tips; and bulk buying.
- Help start a “Community Read-In” funded by a grant. Once or twice a year select a book or topic about sustainability, community or the environment and have a conversation with your neighbors or church group.
- Develop a master plan for your home improvements setting goals for completion.
- Make your neighborhood a child friendly zone. Get to know your neighbors and plan events for all children together. Start a tradition; organize a weekly story telling or reading hour for the children and families in your neighborhood.
- Start a neighborhood pantry with home baked goods or annual canning days. Share recipes and publish a Fellsmere cookbook.
- Organize a bi-monthly neighborhood clean-up day.
- Start a neighborhood beautification program .
- Start a neighborhood pot luck brunch tradition.
- Design street signs and furnishings for your neighborhood. Be creative and have it express something special about your particular neighborhood.
- Institute a rainwater collection program using 1000 gallon cisterns.
- As a way of increasing housing opportunities, consider a variety of ownership options such as: a habitat program for a condemned property or a community developed unit for rental income.

## CHECKLIST FOR RESIDENTS

- Get to know your government and representatives. Know who represents your voice.
- Run for office or support a candidate from your neighborhood. Vote in every election.
- Volunteer to help with a local program or event in your neighborhood or the City every year.
- As appliances break down, replace them with energy star rated appliances. Apply for rebates and tax credits on all “green” or energy savings improvements and appliance purchases.
- Set up a log of energy use and try to reduce your consumption every month. Keep track of and reinvest your savings in further improvements on your home or in new energy star appliances.
- Build creativity into all your home and garden improvements, personalizing them in a way that is relevant for your family. Involve your family in all your projects.
- Protect the region’s Aquifer and your drinking water. Make a pledge to use only biodegradable/nontoxic cleaning and household products. Whatever goes in the aquifer will eventually come back in your drinking water.
- Compost all organic waste from your kitchen
- Re-cycle all paper, plastic glass and metal waste. There should be very little in your trash can every week.
- Track your water use. Begin to reduce by changing bad habits. For example, let soiled dishes and clothes soak before washing.
- Develop a master plan for your home improvements setting goals for completion.
- Celebrate your sustainability accomplishments with your family .
- Walk in your neighborhood every day. Once a week take a longer walk to another neighborhood nearby.
- Grow your own fruits and vegetables or try to buy from local farmers as much as possible. Get to know the people who grow your food.

# Resources

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## Native Plants and Habitat Protection

Plants that grow naturally in your area have been tested over the years by Mother Nature and have proven themselves. That is the key for success in Florida.

**Florida Native Plant Society** lists all the plants for your region. <http://www.fnps.org/>

The web site “**Your Florida Backyard**” is also a good source of information. <http://www.nsis.org/index.html>

**The Lady Bird Johnson Wildflower Center** at the is a fantastic source for Native plants. [www.wildflower.org](http://www.wildflower.org)

## Environment + Ecology

### EPA - Environmental Protection Agency

Excellent resource and information on the following topics below. <http://www.epa.gov/>

- Water
- Air
- Climate
- Wastes and Pollution
- Green Living
- Human Health
- Ecosystems

Water Efficiency Standards - [www.epa.gov/owm/water-efficiency/final\\_final.pdf](http://www.epa.gov/owm/water-efficiency/final_final.pdf)

Septic System Design - [www.epa.gov/owm/septic/pubs/septic\\_202\\_osdm\\_all.pdf](http://www.epa.gov/owm/septic/pubs/septic_202_osdm_all.pdf)

## Water and Aquifer Protection

Several websites listed below address issues of water conservation and use.

**WaterSense**, a partnership program sponsored by the U.S.EPA makes it easy for Americans to save water and protect the environment. [www.epa.gov/watersense/](http://www.epa.gov/watersense/)

**The Journal for Water Conservation Professionals**, is published 7 times a year and reaches more than 25,000 readers responsible for minimizing water loss in municipal, industrial, commercial, residential, and agricultural settings. [www.waterefficiency.net](http://www.waterefficiency.net)

**WaterWiser**<sup>®</sup>, a comprehensive clearinghouse of resources on water conservation, efficiency, and demand management for conservation professionals and the larger water supply community. <http://www.awwa.org/Waterwiser>.

**Alliance for Water Efficiency** – Promoting the efficient and sustainable use of water.

[www.allianceforwaterefficiency.org](http://www.allianceforwaterefficiency.org)

**USGS** - Current water resource conditions from USGS an unbiased, multi-disciplinary science organization that focuses on biology, geography, geology, geospatial information, and water, they are dedicated to the timely, relevant, and impartial study of the landscape, our natural resources, and the natural hazards that threaten us.

[www.water.usgs.gov/waterwatch/](http://www.water.usgs.gov/waterwatch/)

**American Water Works Association** – Authoritative resource on safe water. [www.awwa.org](http://www.awwa.org)

**American Rainwater Catchment Systems Association** was founded in 199, to promote rainwater catchment systems in the United States. [www.arcsa-usa.org](http://www.arcsa-usa.org)

TexasET contains weather information, current and average evapotranspiration data, and irrigation watering recommendations. <http://texaset.tamu.edu>

## Green Building and Do-it -Yourself Tools

The following web sites have information on green building, indoor air quality, addressing mold and home improvements. All sites have details for increasing durability and energy savings for your house.

**Building America** has assembled a list of Web sites for homeowners that offer tips and ideas on making new and existing homes more energy-efficient.

[http://www1.eere.energy.gov/buildings/building\\_america/homeowners.html](http://www1.eere.energy.gov/buildings/building_america/homeowners.html)

**Green Building** To help separate the real green products, professionals and procedures from all the “greenwashing” that is taking place. Whether you are a homeowner looking to remodel your home green or a building professional wanting to learn more about how to build green, this is the place for you. <http://www.greenbuilding.com/>

**Energy Star** Resource for energy star program and ratings on appliances <http://www.energystar.gov/>

### EPA - Indoor Air Quality

<http://www.epa.gov/iaq/> - EPA indoor air quality

**Home Improvement Advisor** - Excellent paper on the basics of how to keep your warm and healthy. [http://www.buildingscienceconsulting.com/resources/mold/Read\\_This\\_Before\\_You\\_Design\\_Build\\_or\\_Renovate.pdf](http://www.buildingscienceconsulting.com/resources/mold/Read_This_Before_You_Design_Build_or_Renovate.pdf)  
[http://www.energystar.gov/index.cfm?fuseaction=home\\_energy\\_advisor.showGetInput](http://www.energystar.gov/index.cfm?fuseaction=home_energy_advisor.showGetInput)

# Resources

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[http://www.energystar.gov/index.cfm?c=home\\_improvement.hm\\_improvement\\_index](http://www.energystar.gov/index.cfm?c=home_improvement.hm_improvement_index)

## Sustainability

**The Florida House Institute for Sustainable Development** is a non-profit organization that works to build civic capacity around a practice of vision-centered, place-based planning for a sustainable future. <http://www.i4sd.org/>

**The Natural Step** - Provides a clear, compelling, science-based definition of sustainability and a strategic planning framework to help communities make smart decisions that will move them step-by-step towards a successful and sustainable future. <http://www.naturalstep.org/>

**Context Institute** - Since its founding in 1979, the Institute has explored how human society can become sustainable (i.e. able to meet the needs of the present without diminishing the prospects for the future), and has served as a catalyst for voluntary change toward a more humane and sustainable culture. Excellent source of articles and interviews from a variety of people. <http://www.context.org/>

**The Natural Resources Defense Council** works to protect wildlife and wild places and to ensure a healthy environment for all life on earth. Excellent source of information on many issues that concern all of us. <http://www.nrdc.org/>

**NRDC Switchboard** - The voice of NRDC's environmental experts <http://switchboard.nrdc.org/blogs/>

## Community Organizing and Planning

**The Citizens Handbook** - is meant to encourage the emergence of more active citizens – people motivated by an interest in public issues, and a desire to make a difference beyond their own private lives. Active citizens are a great untapped resource, and citizenship is a quality to be nurtured. <http://www.vcn.bc.ca/citizens-handbook/>

**The Community Tool Box** - The world's largest resource for free information on essential skills for building healthy communities. The site offers more than 7,000 pages of practical guidance in creating change and improvement for community organizers and residents alike. This site is growing as a global resource for this work. <http://ctb.ku.edu/en/>

**Comm-org** - Links academics and activists, and theory and practice, toward the goal of improving community organizing and its related crafts. <http://comm-org.wisc.edu/>

**USDA Rural Development** - The following sections contain references to Federal government materials and web sites that can assist communities in accomplishing the goals concerning each of these principles. [w.ezec.gov/toolbox/](http://www.ezec.gov/toolbox/)

## Sharon Astyk

Author of **Depletion and Abundance** Excellent blog about getting back to basics. <http://sharonastyk.com/>

**TED stands for Technology, Entertainment, Design.** TED is devoted to giving millions of knowledge-seekers around the globe direct access to the world's greatest thinkers and teachers. Whoever you are, wherever you live, you can join the TED community when you become a free member of TED. <http://www.ted.com/>

**The Latino Urban Forum (LUF)** was established by a group of architects, urban planners and community members to understand and improve the condition of Latino communities by examining the architecture, open space, environment, infrastructure and land use policies of today's evolving urban landscape. [http://www.lponline.com/eWebPages/Featured-Articles\\_id,999127363,2001.eWeb](http://www.lponline.com/eWebPages/Featured-Articles_id,999127363,2001.eWeb)

## Books Recommended by SDAT Team

**Introduction to Permaculture** by Bill Mollison  
An integrated approach to restoring our eco-systems.

**The Transition Handbook** by Rob Hopkins. From oil dependency to local resilience; a manual for communities.

**Cradle to cradle : remaking the way we make things.**  
William McDonough & Michael Braungart.  
Waste equals food. Smart design without waste.

**The Natural Step for Communities: How Cities and Towns can Change to Sustainable Practices** by Sarah James and Torbjörn Lahti. Stories of successful change in communities around the world.

**American Planning Association - Planning Magazine.**  
For subscriptions [www.planning.org/](http://www.planning.org/)

## American Institute of Architects

**AIA - Center for Communities by Design**  
<http://www.aia.org/about/initiatives/AIAS075265>

Notes:

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Fellsmere: “A Place Where You Can Take Your Shoes Off.”  
Walkable - Livable - Sustainable “By Design”

