

Developing an Enterprise GIS and Web Application with CAMA Integration

Matt Bryant
Bruce Harris & Associates, Inc.



Introduction

- Building GIS Enterprise
 - CAD to SDE Conversion
 - Multi-Editor Versioned Environment
 - GDB Replication
 - CAMA Data Extract
- Building Public Property Web Application
 - Parcel/CAMA Search Design
 - File Management
 - Deployment Strategy
- Osceola County Property Appraiser



Scoping out a project

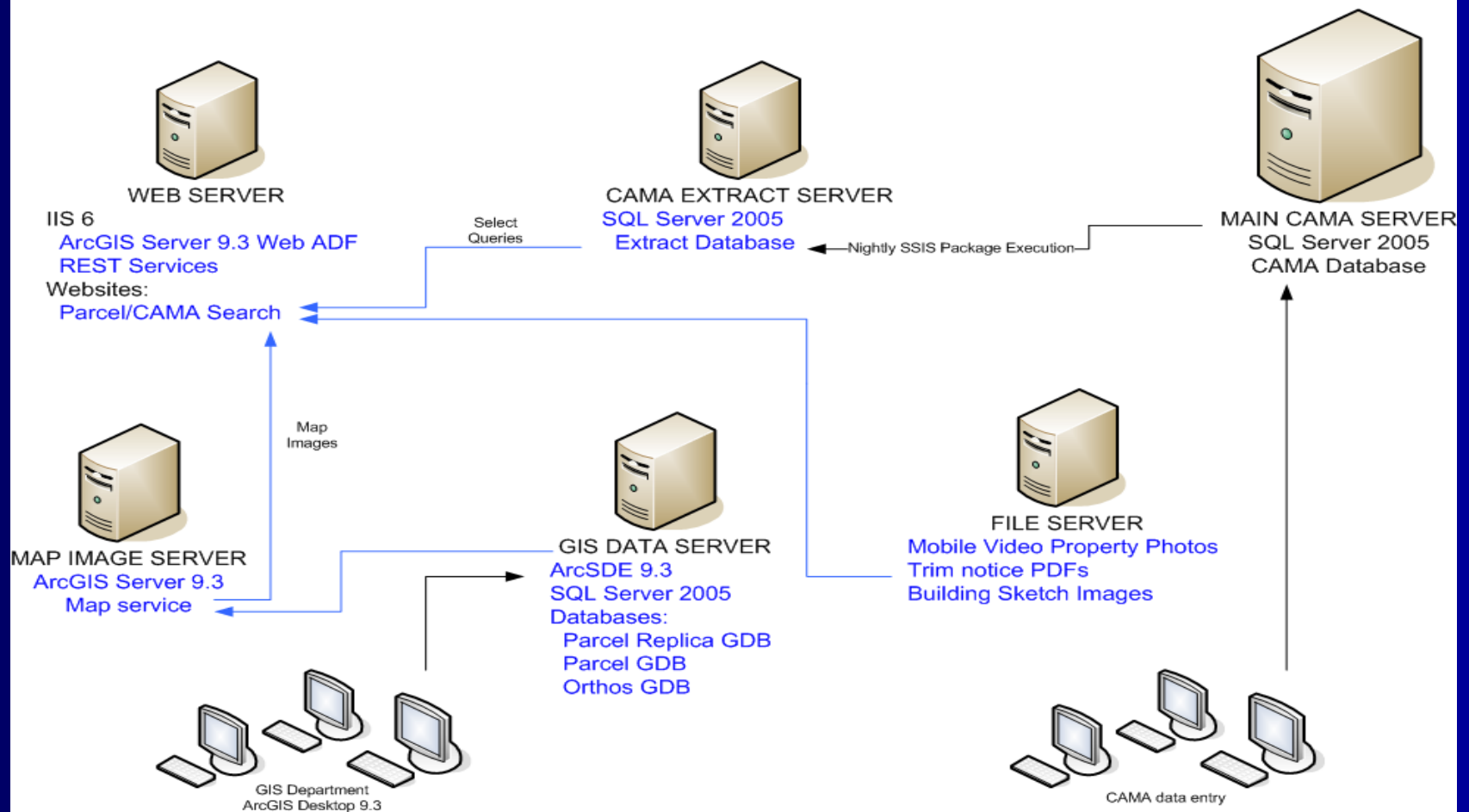
- What are the goals?
 - Migration to ArcSDE SQL Server geodatabase
 - New Web Application
 - ArcGIS Server
 - County Standard Tax Map
 - Modern look and feel
 - Cleaner backend
 - More Functionality

Scoping out a project

- What are the challenges?
 - Geodatabase
 - Topologically accurate boundaries and polylines
 - Intelligent feature linked annotation
 - New condominium model
 - CAMA
 - New clean data extract
 - Web Application
 - New Design
 - New ESRI Technologies (REST, Javascript API)

Deployment Strategy

Osceola Deployment

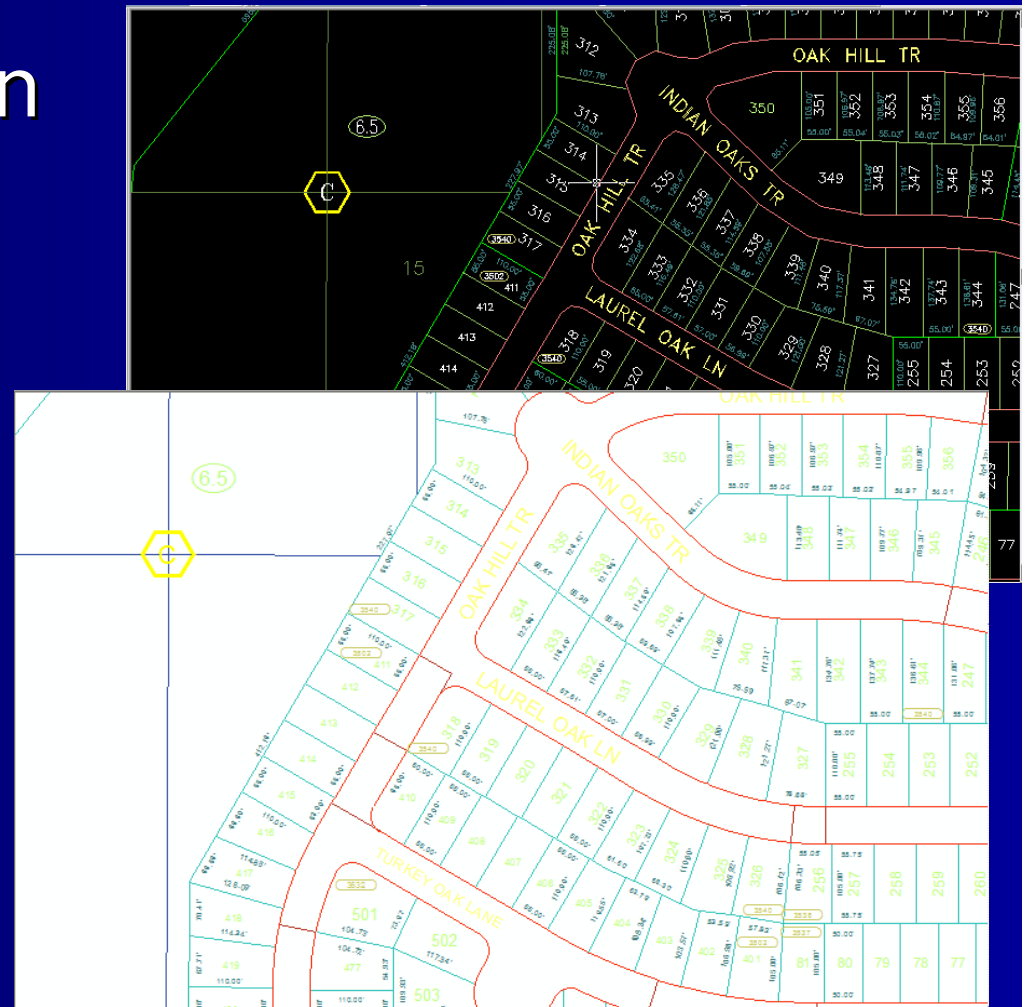


Development Strategy

- Data Tier
 - ArcSDE Geodatabase
 - CAMA extract database
 - Files
- Business Tier
 - Server code executing Stored Procedures
 - File Management and PDF Generation
 - ArcGIS Server
- Presentation Tier
 - AJAX Tabbed Web Application
 - ESRI JavaScript API
 - Input Validation

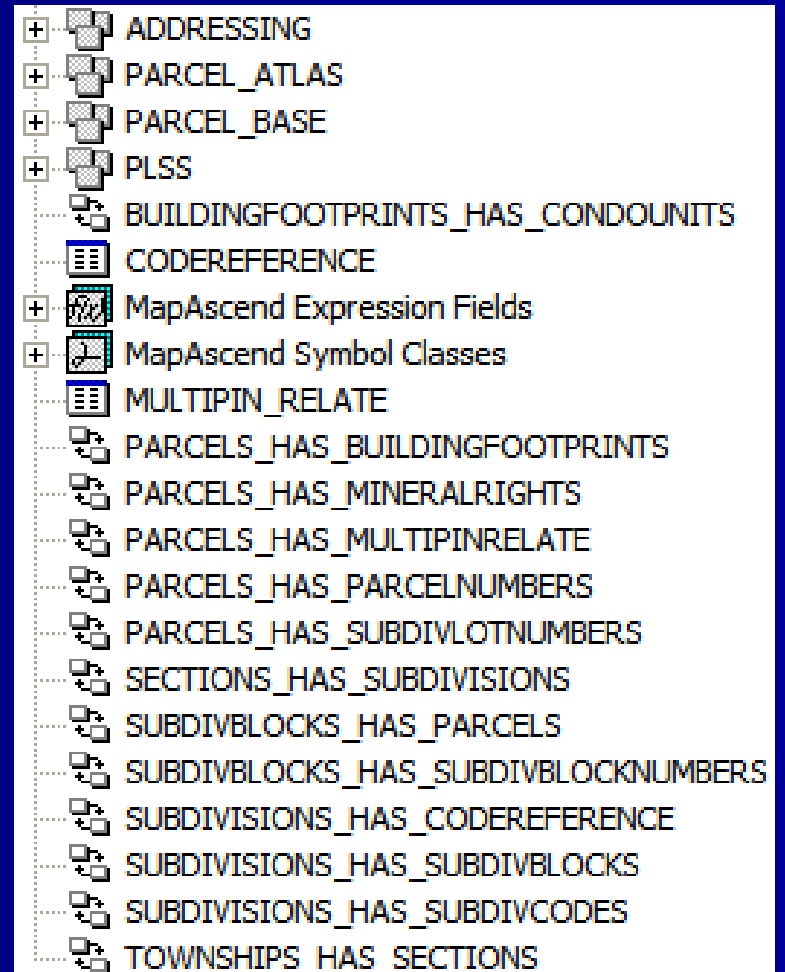
Geodatabase Conversion

- Database design
 - CAD data look
 - Topology
 - Feature linked annotation
 - Condominium support



GIS Data

- ArcSDE
 - ArcSDE Production database
 - Versioned Editing
 - GDB Replication
- ArcGIS Server
 - REST Service

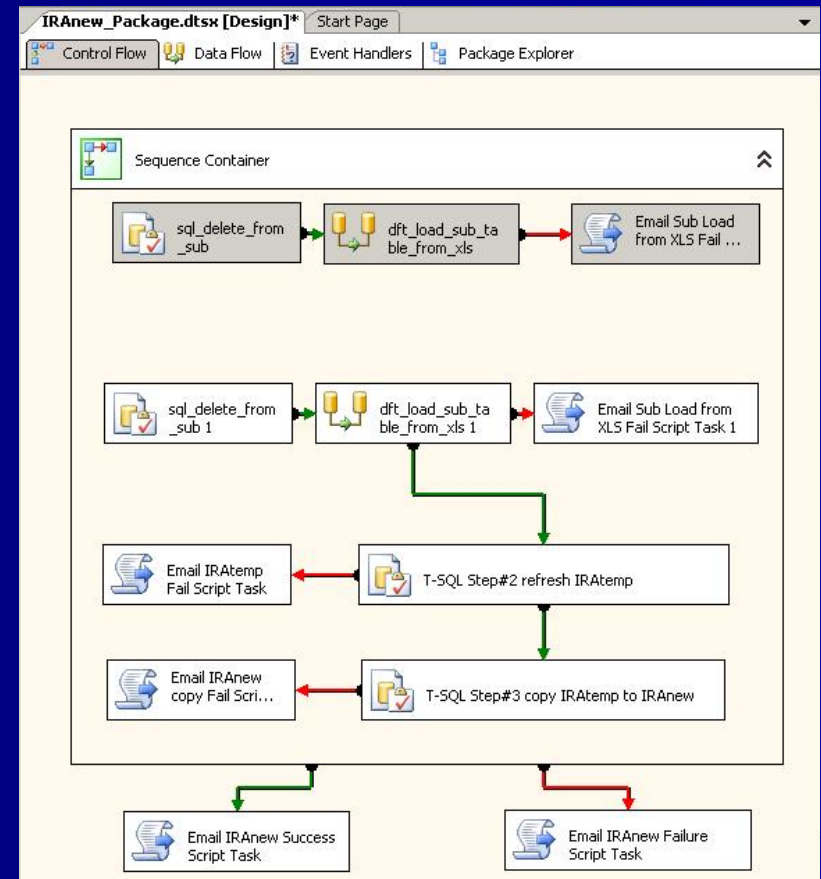


CAMA Data

- Identify public domain data
- Avoid overwhelming the user
- Design Web Application specific database
- Modify schema for optimal search performance
- Keep data as live as the map

CAMA Data

- Queries
 - Stored Procedures
- SSIS package
- Schedule job



Website Design

- Simple Interface
- New look and feel
 - Common CSS with main site
- Tab driven workflow
- AJAX driven updates
- Vertical scroll details page
- Data or Map search -> same workflow

Web Application

- VB.NET - ASP.NET 3.5
- IIS 6+
- Google BlueprintCSS
- JQuery
- ESRI JavaScript API
- Home brewed controls and AJAX framework

Property Search

- Basic and Advanced Search Tabs

The screenshot shows the Osceola County Property Appraiser website. At the top left is the official seal of the Osceola County Property Appraiser. To its right, the name 'Katrina S. Scarborough, CFA, CCF, MCF' is displayed in gold, followed by 'Osceola County Property Appraiser' in a larger font, and a signature 'Katrina Scarborough' in a cursive script. Below the header is a navigation bar with tabs for 'Basic Search', 'Advanced Search', 'Search Results (257)', 'Parcel Result', 'Map Result', and 'Help'. The 'Basic Search' tab is selected. The main content area is titled 'Basic Property Search' and contains a search form. The form has an 'Account Number' field and a 'Reset Form' link. Below this is an 'OR' separator. The second section of the form includes an 'Owner Name' field with 'bryant' entered and an example 'ex: SMITH JOHN or SMITH JOHN L'. It also has fields for 'Street Name' (example: WILLMORE STREET OR WILLMORE), 'Street Number' (example: 123), 'Street Direction' (a dropdown menu), and 'Parcel Number' (example: 12-14-15-1000-2100-1420 or 121415100021001420). A 'Search' button is at the bottom left of the form, and another 'Reset Form' link is at the bottom right. On the left side of the page, there is a sidebar with links for 'Property Appraiser Main Page', 'Search', and 'Map'. Below these links is a photograph of the Osceola County Government Center building, with its address '2505 E. Irio Bronson Hwy, Kissimmee FL, 34744' and phone numbers '(407)742-5000' and '(407)742-4900 (fax)'. The operating hours 'Mon-Fri 8:00 AM-5:00 PM' are also listed.

OSCEOLA COUNTY PROPERTY APPRAISER

Katrina S. Scarborough, CFA, CCF, MCF
Osceola County
Property Appraiser
Katrina Scarborough

Property Appraiser
Main Page
Search
Map

Basic Search | Advanced Search | Search Results (257) | Parcel Result | Map Result | Help

Basic Property Search Reset Form

Account Number:

OR

Owner Name: ex: SMITH JOHN or SMITH JOHN L

Street Name: ex: WILLMORE STREET OR WILLMORE

Street Number: ex: 123

Street Direction:

Parcel Number: ex: 12-14-15-1000-2100-1420 or 121415100021001420

Reset Form

Osceola County Government Center
2505 E. Irio Bronson Hwy,
Kissimmee FL, 34744

Mon-Fri 8:00 AM-5:00 PM
(407)742-5000
(407)742-4900 (fax)

Property Search

■ Search Results

- Sorting
- CSV

The screenshot shows the website for Katrina S. Scarborough, CFA, CCF, MCF, Osceola County Property Appraiser. The page features a navigation menu with options: Basic Search, Advanced Search, Search Results (80), Parcel Result, Map Result, and Help. The search results are displayed in a table with columns for PIN, Owner, and Physical Address. The table lists 15 properties, with the 6th property (PIN 04263009000010400) highlighted in blue. The page also includes a sidebar with contact information for the Osceola County Government Center and a small image of the building.

Osceola County Property Appraiser
Katrina S. Scarborough, CFA, CCF, MCF
Osceola County Property Appraiser
Katrina Scarborough

Property Appraiser Main Page
Search
Map

Basic Search | Advanced Search | Search Results (80) | Parcel Result | Map Result | Help

Search Results

Page: 1 of 2 | 1 | 2 | » | Last »

PIN ↓ ↑	Owner ↓ ↑	Physical Address ↓ ↑
01262842000020080	BRYANT SHAWN M	4435 BRYAN AVE
022631443200010660	BRYANT BUILDING COMPANY INC	1815 LAKEWOOD DR
022631443300010790	BRYANT BUILDING CO INC	UNKNOWN
0425305411TRAC003A	BRYANT OLIVE	UNKNOWN
0425305411TRAC003B	BRYANT OLIVE	UNKNOWN
0425305411TRAC0RW0	BRYANT OLIVE	UNKNOWN
04263009000010400	BRYANT DOUGLAS C	606 PONDEROSA DR
04263009000010400	BRYANT TRINA L	606 PONDEROSA DR
052527316100012290	BRYANT STEVEN PAUL	8580 BAY LILLY LOOP
052529237900010620	BRYANT WESLEY	2933 WHITE CEDAR CIR
052529237900010620	BRYANT MARLENE	2933 WHITE CEDAR CIR
062530291103100270	BRYANT KEITH	305 BLUE BAYOU DR
062530291103100270	BRYANT CHRISTINE M	305 BLUE BAYOU DR
062629276000020060	BRYANT BETTY	4363 HELEN AVE
072530268401200190	BRYANT JAMES THOMAS	154 ALDERWOOD DR
072530272701990100	BRYANT LISA R	237 COMPETITION DR

Osceola County Government Center
2505 E. Irla Bronson Hwy,
Kissimmee FL, 34744
Mon-Fri 8:00 AM-5:00 PM
(407)742-5000
(407)742-4900 (fax)

Property Search

■ Parcel Details



Katrina S. Scarborough, CFA, CCF, MCF
Osceola County
Property Appraiser

Katrina Scarborough

[Property Appraiser](#)
Main Page

[Search](#)

[Map](#)

Basic Search Advanced Search Search Results (80) **Parcel Result** Map Result Help

Parcel Result

Parcel : 042630090000010400 [View TRIM Notice](#) [Print Property Card](#) [View Parcel on Map](#) [Property Photo](#) | [Map Photo](#)



Osceola County
Government Center
 2505 E. Irl Bronson Hwy,
 Kissimmee FL, 34744

Mon-Fri 8:00 AM-5:00 PM
 (407)742-5000
 (407)742-4900 (fax)

Owner Information	
Owner Name:	BRYANT DOUGLAS C; BRYANT TRINA L;
Mailing Address:	606 PONDEROSA DR SAINT CLOUD FL, 34769-1660
Physical Address:	606 PONDEROSA DR
Tax District:	100
Description:	SINGLE FAMILY-IMPROVED
Acreage:	0.35

Current Values		Certified Values	
Current Value represents working appraised values as of 4/27/2009, which are subject to change prior to certification			
Land:	\$36,800.00	Land:	\$36,800.00
AG:	N/A	AG:	\$0.00
Extra Features:	\$8,600.00	Extra Features:	\$8,700.00
Buildings:	\$126,300.00	Buildings:	\$162,400.00
Appraised(Just):	\$171,700.00	Appraised(Just):	\$207,900.00
Assessed(estimated):	\$127,573.00	Assessed*:	\$127,446.00
Exemption(estimated):	\$50,000.00	Exemption:	\$50,000.00
Additional Exemption(estimated):	N/A	Additional Exemption:	\$50,000.00
Taxable(estimated):	\$77,573.00	Taxable:	\$77,446.00
* Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap		* Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap	



04-26-30-0900-0001-0400 12/11/2007

Property Search

- Links to Photo, Trim, Sketch, and Map

OSCEOLA COUNTY TAXING AUTHORITIES
P O BOX 422366
KISSIMMEE FL 34742-2366

2007 REAL ESTATE

04-26-30-0900-0001-0400

BRYANT DOUGLAS C
BRYANT TRINA L
606 PONDEROSA DR
SAINT CLOUD FL 34769-1660

2007 NOTICE OF PROPOSED PROPERTY TAXES AND PROPOSED OR ADOPTED NON-AD VALOREM ASSESSMENTS
DO NOT PAY THIS IS NOT A BILL

The taxing authorities which levy property taxes against your property will soon hold **Public Hearings** to adopt budgets and tax rates for the next year. The purpose of these **Public Hearings** is to receive opinions from the general public and to answer questions on the proposed tax change and budget **Prior to Taking Final Action**. Each taxing authority may **Amend or Alter** its proposals at the hearing.

LEGAL DESCRIPTION:
PINE LAKE ESTATES UNIT 1 LOT 4
0 PB 2 PG 58 09-26-30

Taxing Authority	Additional Exemptions Granted*	Taxable Value	COLUMN 1** Your Property Taxes Last Year	COLUMN 2** Your Taxes This Year If PROPOSED Budget Change Is Made	COLUMN 3** Your Taxes This Year If NO Budget Change Is Made	A Public Hearing On The Proposed Taxes And Budget Will Be Held:
COUNTY						
Osceola Co	100	98,734	573.77	491.89	528.92	Sept 12, 6:30 PM 1 Courthouse Square
SAVE DSC MAN		98,734	23.93	15.80	16.98	
PUBLIC SCHOOLS						
SCH STATE LW		98,734	480.69	498.80	456.35	Sept 11, 5:05 PM
SCH-LOCAL BD		98,734	264.18	268.56	250.80	817 B111 Beck Blvd
MUNICIPALITIES						

Map Interaction

- Select
 - Search Results



Katrina S. Scarborough, CE
Osceola County
Property Appraiser

Property Appraiser
Main Page

Search

Map



**Osceola County
Government Center**
2505 E. Irio Bronson Hwy,
Kissimmee FL, 34744

Mon-Fri 8:00 AM-5:00 PM
(407)742-5000
(407)742-4900 (fax)


Basic Search Advanced Search Search Results (3)

Search Results

Page: 1 of 1

PIN	Owner
042630090000010360	KLEIN BERNARD
042630090000010370	METZGER DAVID
042630090000010380	DEVILBISS RUSSELL EUGENE

Download Search Results: Text File




Property Appraiser
Katrina Scarborough

Basic Search Advanced Search Search Results (80) Parcel Result Map Result Help

Property Appraiser
Main Page

Search


Map



**Osceola County
Government Center**
2505 E. Irio Bronson Hwy,
Kissimmee FL, 34744

Mon-Fri 8:00 AM-5:00 PM
(407)742-5000
(407)742-4900 (fax)

Map Result



Map Interaction

- Identify
 - Parcel Detail

OSCEOLA COUNTY PROPERTY APPRAISER
 Katrina S. Scarborough, CFA
 Osceola County Property Appraiser

Property Appraiser Main Page
 Search
 Map

Basic Search Advanced Search Search Results (80)

Parcel Result
Parcel : 042630090000010400 [View TRIM Notice](#)

Owner Information

Owner Name:	BRYANT DOUGLAS C; BRYANT TRINA L;
Mailing Address:	606 PONDEROSA DR SAINT CLOUD FL, 34769-1660
Physical Address:	606 PONDEROSA DR
Tax District:	100
Description:	SINGLE FAMILY-IMPROVED
Acreage:	0.35

Current Values

Current Value represents working appraised values as of 4/27/2009, which are subject to change prior to certification

Land:	\$36,800.00
AG:	N/A
Extra Features:	\$8,600.00
Buildings:	\$126,300.00
Appraised(Just):	\$171,700.00
Assessed(estimated):	\$127,573.00
Exemption(estimated):	\$50,000.00
Additional Exemption(estimated):	N/A
Taxable(estimated):	\$77,573.00

* Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap

Property Appraiser
 Katrina Scarborough

Property Appraiser Main Page
 Search
 Map

Basic Search Advanced Search Search Results (80) Parcel Result Map Result Help

Map Result

Identify Result

PIN: 042630090000010410
OWNER: GLOSS RICHARD S JR
DESC: SINGLE FAMILY-IMPROVED
ADDR: 604 PONDEROSA DR
[View Parcel Information](#)

Land:	\$36,800.00
AG:	\$0.00
Extra Features:	\$8,700.00
Buildings:	\$162,400.00
Appraised(Just):	\$207,900.00
Assessed*:	\$127,446.00
Exemption:	\$50,000.00
Additional Exemption:	\$50,000.00
Taxable:	\$77,446.00

* Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap

Additional Funtionality

- Generate PDF
- Birds Eye View

Osceola County Property Appraiser
 Katrina S. Scarborough, CFA, CCF, MCF
 Osceola County Property Appraiser
 Katrina Scarborough

Property Appraiser
 Main Page

Osceola County
 Government Center
 2505 E. Iro Bronson Hwy,
 Kissimmee FL, 34744

Mon-Fri 8:00 AM-5:00 PM
 (407)742-5000
 (407)742-4900 (fax)

Microsoft Virtual Earth

Osceola County Property Appraiser
 Katrina S. Scarborough, CFA, CCF, MCF
 Osceola County Property Appraiser
 www.property-appraiser.org
 Osceola County Government Center
 2505 East Iro Bronson Memorial Hwy, Kissimmee, FL 34744
 Ph: (407) 742-5000 Fax: (407) 742-4900

Parcel: 04263009000010400

Parcel Information
 Owner Name: BRYANT DOUGLAS C; BRYANT TRINA L;
 Mailing Address: 806 PONDEROSA DR, SAINT CLOUD, FL 34789-1880
 Physical Address: 806 PONDEROSA DR
 Tax District: 100
 Description: SINGLE FAMILY-IMPROVED

Current Values		Certified Values	
<small>Current Value represents working appraised values as of 4/27/2009, which are subject to change prior to certification</small>		<small>Certified Value represents certified values that appeared on the tax roll as of 10/8/2008</small>	
Land:	\$36,800.00	Land:	\$36,800.00
AG:	N/A	AG:	\$0.00
Extra Features:	\$8,800.00	Extra Features:	\$8,700.00
Buildings:	\$128,300.00	Buildings:	\$162,400.00
Appraised(Just):	\$171,700.00	Appraised(Just):	\$207,900.00
Assessed*:	\$127,573.00	Assessed*:	\$127,448.00
Exempt*:	\$50,000.00	Exempt*:	\$50,000.00
Taxable:	\$77,573.00	Taxable:	\$77,448.00

* Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap

Sales Information

Seq	Legal	Price	Date	Deed Type
0	1385-1810	\$110,000.00	11/27/1998	WD
1	848-2657	\$92,000.00	8/1/1987	WD
2	0-786	\$33,100.00	1/1/1971	WD

Building Information

Building: 0			
Description	SINGLE FAM	Bedrooms	0
Year Built	1971	Bathrooms	2
Value	\$128,300.00	Fixtures	0
Actual Area	3050	Roof Cover	COMP SHNGL
Heated Area	2370	Exterior Wall	CB STUCCO

Land Information

Contacts

- <http://ira.property-appraiser.org>

- Bruce Harris & Associates, Inc.
 - Kevin Hardester
 - khardester@bruceharris.com
 - (321) 663-6045
 - Matt Bryant
 - matt@bruceharris.com
 - (630) 761-0951

