



AGENDA
ENVIRONMENTAL ADVISORY BOARD
CITY OF PORT ORANGE

Meeting Date: Tuesday, July 26, 2016

Time: 5:15 PM

Type of Meeting: Regular

Location: 2nd Floor Conference Room
City Hall, 1000 City Center Circle

A. CALL TO ORDER

1. Roll Call

B. DISCUSSION/ACTION

2. Consideration of Minutes
3. Environmental Position of City Council Candidates
 - *Chase Tramont
 - *Sarah Jones
 - *Don Burnette
 - *Lance Green
 - *Ted Noftall
4. Historic Tree Removal Mitigation Recommendation / Badcock Home Furniture and More
5. Tree Seedling Program update
6. Foxboro Retention Pond Tree Planting

C. PUBLIC COMMENTS

D. BOARD COMMENTS

E. NEXT MEETING DATE

7. Next Meeting Date: 10/25/16

F. ADJOURNMENT

ANY PERSON WHO DECIDES TO APPEAL ANY DECISION MADE BY THE **ENVIRONMENTAL ADVISORY BOARD** WILL NEED A RECORD OF THE PROCEEDINGS, AND FOR SUCH PURPOSE HE OR SHE MAY NEED TO ENSURE AT HIS OR HER OWN EXPENSE FOR THE TAKING AND PREPARATION OF A VERBATIM RECORD OF ALL TESTIMONY AND EVIDENCE OF THE PROCEEDINGS UPON WHICH THE APPEAL IS TO BE BASED. NOTE: IF YOU ARE A PERSON WITH A DISABILITY WHO NEEDS ANY ACCOMMODATION IN ORDER TO PARTICIPATE IN THIS PROCEEDING, YOU ARE ENTITLED, AT NO COST TO YOU, TO THE PROVISION OF CERTAIN ASSISTANCE. PLEASE CONTACT THE CITY CLERK FOR THE CITY OF PORT ORANGE, 1000 CITY CENTER CIRCLE, PORT ORANGE, FLORIDA 32129, TELEPHONE NUMBER 386-506-5563, WITHIN 2 WORKING DAYS OF YOUR RECEIPT OF THIS NOTICE OR 5 DAYS PRIOR TO THE MEETING DATE; IF YOU ARE HEARING OR VOICE IMPAIRED, CONTACT THE RELAY OPERATOR AT 1-800-955-8771.

ENVIRONMENTAL ADVISORY BOARD MEETING MINUTES
CITY OF PORT ORANGE
1000 CITY CENTER CIRCLE – CITY HALL
CITY MANAGER’S CONFERENCE ROOM
APRIL 26, 2016 @ 5:15 P.M.

THE ENVIRONMENTAL ADVISORY BOARD of the City of Port Orange was called to order by Chairman White at 5:15 p.m.

Present: Newton White, Vice Chairman
 Derek La Montagne, Chairman
 Philip Klema
 Dennis Young
 James Meadows

Absent: Brian Syford

Also Present: Margaret Momberger, Construction/ Engineering Manager
 Barbara Abbate, City Clerk’s Office

A. DISCUSSION/ACTION

1. Consideration of Minutes

Motion made by Member Meadows to accept the minutes as corrected from the January 26, 2016 meeting. Motion was seconded by Member Young. Motion carried unanimously by voice vote.

2. Historic Tree removal request association with the proposed Clubhouse expansion for Briarwood.

Glen Heppard, Briarwood, Mobile Home Park, said there are 331 home sites in this community. He said more of the residents are permanent as opposed to seasonal. There are two club houses on the property and one was updated approximately six years ago. He said it’s now time to update the second one; they would like to demolish the existing one and build a new one for the community. To accommodate the new club house, there is a 50 inch oak tree that will need to be removed with the Boards approval. Member Meadows asked why the tree needs to be removed, questioning, could it just be trimmed back. Mr. Heppard said it is in the foot print of the new building. Chairman La Montagne believes the tree can be saved. He said there are proper ways to cut into the root system that will save this tree.

Member Meadows said there would be \$7,950 placed into the tree bank and they will also need to plant 19 trees. Mr. Heppard is aware of the fee and the tree replacement but had a question: Would the trees be able to be planted anyplace on the property? Margaret Momberger, Construction/ Engineering Manager, said as long as it’s one parcel the trees can be planted anyplace.

There was more discussion about other trees that will also be removed. Member White suggested the wood from the Historic tree be donated to a wood carver for a sculpture.

Motion made by Member Meadows to recommend to City Council the tree be removed with the conditions that the wood be donated to a wood carver for a sculpture, donate to the tree bank, and plant designated amount of replacement trees. Motion was seconded by Member White. Motion carried with a roll call vote 3 – 2 with Member Klema and Chairman La Montagne opposed.

3. Inception of Port Orange Free Seedling Planting Program

Ms. Momberger gave the Board some information on the free seedling program. She said the Parks and Recreation Department is looking into having the giveaway in conjunction with one of their events. Member Klema believes there should be an educational program along with the seedlings so citizens will know where to plant the seedlings and how to take care of them. Ms. Momberger agreed.

Chairman La Montagne asked if this item could be on the October agenda for further discussion. Ms. Momberger will get with the Parks and Recreation Department and have someone come and speak to the Board in October.

B. PUBLIC COMMENTS

There was none.

C. BOARD COMMENTS

Member Meadows was glad the lake at Shunts Road was finished. Member White said that was a long time coming and he is very proud of our City.

Chairman La Montagne said the Army Corps have been approving too many projects and many sensitive wetland areas and they have violated the clean water act and the endangered species act and now the Army Corps is reviewing what they have done because a court has ordered them to do so. He would like to bring this up with City Council because they might not be aware of what is going on. Ms. Momberger asked to clarify who has prepared the resolution he will be presenting. Chairman La Montagne said Attorney Lawton provided this resolution to several Cities and the County to ask for input and support. Chairman La Montagne believes the Board should have some comments and input. He said Mr. Lawton provided this one page resolution based on the Army Corps doing the review that Port Orange hesitated to approve more projects in that area. Member Meadows asked if Army Corps has had their legal review yet. Chairman La Montagne said it would take approximately six months for that review and that should be done in a few months.

Motion made by Member Meadows to have Chairman La Montagne to speak to City Council on behalf of the Environmental Advisory Board to give notice of legal demand for environmental analysis of Army Corps of Engineers impasse associated with the expansion of

Williamson Boulevard and Associated development projects in Volusia County. Motion was seconded by Member Young. Motion carried unanimously by voice vote.

Chairman La Montagne said he will be meeting on April 27, 2016 with people from FDOT as a citizen about the retention pond on Nova Road off of Miles Drive about landscaping. He asked the Board what kind of plants they would like to see in that area. He also invited any citizen to attend the meeting.

E. NEXT MEETING DATE

5. Next Meeting Date: 7/26/16

F. ADJOURNMENT

Motion was made by Member Young to adjourn; seconded by Member Klema. Motion carried unanimously by voice vote and the meeting ended at 6:45 p.m.

Derek La Montagne, Chairman



STAFF REPORT

HISTORIC TREE REMOVAL MITIGATION RECOMMENDATION
BADCOCK HOME FURNITURE AND MORE
4610 S. CLYDE MORRIS BLVD.

CASE NO. 16-80000006

REQUEST:	Historic Tree Removal Mitigation Recommendation / Badcock Home Furniture and More
LOCATION:	4610 S. Clyde Morris Boulevard
OWNER/APPLICANT:	WDS Holdings, LLC, Brandon Smith, Manager
STAFF RECOMMENDATION:	Approval
STAFF CONTACT:	Margaret Momberger, Construction & Engineering Manager (386) 506-5661
ENVIRONMENTAL ADVISORY BOARD:	July 26, 2016
CITY COUNCIL DATE:	TBD

The applicant for a proposed Badcock Furniture and More store at 4610 S. Clyde Morris Blvd. has submitted a request to remove three of six historic live oak trees located on the property. The engineer for the project has laid out the site improvements to protect as many of the historic trees as possible while providing an 18,000 square foot building and 32 parking spaces (2 ADA and 30 standard) to meet code requirements. The proposed site is 1.377 acres and is currently undeveloped.

The Staff Development Review Committee (SDRC) has reviewed this project and all code requirements are being met. A Development Order is ready to be issued for the site plan after this item is considered and approved by City Council. This item will be scheduled for City Council consideration after the EAB provides a recommendation.

Pursuant to Chapter 9, Article II, Section 16.5 the Environmental Advisory Board (EAB) shall decide mitigation requirements for historic tree removal based upon the resolution adopted by city council. In the interest of flexibility and fairness, the EAB may allow a party to mitigate the replacement of a historic tree through any combination of replacement trees, and/or contribution to the city's tree bank provided that the combination equals or exceeds the required percentage of the total cross sectional area of the removed historic tree as established by resolution by city council. Resolution 02-71 is attached for reference. Based on the health and size of the trees the following mitigation is required per Resolution 02-71:

<u>Size</u>	<u>Health</u>	<u>No. of Replacement trees</u>	or	<u>Tree Bank Contribution</u>
38"	deteriorated	4		\$1,531
42"	good	13		\$5,611
40"	deteriorated	<u>4</u>		<u>\$1,696</u>
TOTAL		21	OR	\$8,838

RECOMMENDATION: Tree bank contribution of \$8,838 pursuant to Resolution 02-71.

HISTORIC TREE REPORT



**4610 S Clyde Morris Boulevard
Port Orange, FL 32129**

Richard L. Poore, LA533

300 Gatewood Court
Ormond Beach, FL 32174
ThePoores@bellsouth.net

LANDSCAPE ARCHITECT CERTIFICATE

I hereby certify that I am a registered Landscape Architect in the State of Florida, License No. 533, Florida Board of Landscape Architecture. I certify to the best of my knowledge and belief that the statements of fact contained in this report are true and correct, that opinions, evaluation and conclusion are limited only by the reported assumptions and limiting conditions, and that they are my personal, unbiased, professional analysis, opinions and conclusions. I have no personal or prospective interest in the subject of this report and I have no personal or bias with respect to the parties involved.

Project: BADCOCK FURNITURE

**Location: 4610 S CLYDE MORRIS BOULEVARD
PORT ORANGE, FL 32129**

**Client: WDS HOLDING, LLC
1530 MASON AVENUE
DAYTONA, FL 32117-4549**



Richard L. Poore, LA533
300 Gatewood Court
Ormond Beach, FL 32174
(386) 212-8491

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Appendix C	Site Plan Layout
Appendix D	Landscape Plan

INTRODUCTION

This Tree Evaluation Report has been prepared to evaluate the existing conditions of six (6) historic oak trees located within the proposed Badcock Furniture and More Development. Three (3) of the six (6) historic trees are proposed to be removed with this project. The site was inspected by Richard Poore, LA #533 on June 13, 2016.

The City classifies any Live Oak (*Quercus Virginiana*) or Bald Cypress (*Taxodium Distichum*) 36 inches diameter at breast height (DBH) or greater or any other tree which is 36 inches DBH or greater and is determined by the city council to be of such unique and intrinsic value to the general public because of its size, age, historic association or ecological value to justify this classification. This term shall also include any tree in the city selected and designated as a Florida State Champion, United States Champion or World Champion by the American Forestry Association.

METHODOLOGY

The inspection method used was the Visual Tree Assessment (VTA) method by Mattheck & Breloer 2010 and A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas” by Matheny and Clark published by the International Society of Arboriculture.

The VTA method involves inspecting the trees from ground level, using binoculars to aid in identification of any external signs of decay, physical damage, growth related structural defects and the site conditions where the tree is growing.

The Photographic Guide to the Evaluation of Hazard Trees in Urban Areas focuses on several important aspects: review of past and present conditions, identification and assessment of structural defects in roots, root crown, and crown; evaluation of likely and significant failure; assessment of the significance of the target; development of the hazard rating.

OBSERVATIONS AND DISCUSSIONS

Tree 1: Live Oak (*Quercus Virginiana*)

- 48” DBH.
- Tree to be saved and protected with a proposed tree conservation easement. During construction tree protection will be provided.
- Tree is in good condition.
- Tree has full canopy and good spread.
- Florida Power and Light power line has resulted in pruning that has resulted in head leaning to the west.
- Tree needs to be trimmed.

Tree 2: Live Oak (Quercus Virginiana)

- 48" DBH.
- Tree to be saved and protected with a proposed tree conservation easement. During construction tree protection will be provided.
- Tree is in good condition.
- Tree has full canopy and good spread.
- Dead wood present in canopy.
- Tree needs to be trimmed.

Tree 3: Live Oak (Quercus Virginiana)

- 38" DBH.
- Tree proposed to be removed.
- Tree is in fair condition.
- Tree leaning to the NE at 30 degree angle.
- Tree has no canopy.

Tree 4: Live Oak (Quercus Virginiana)

- 42" DBH.
- Tree proposed to be removed.
- Tree is in good condition.
- Sparse canopy.
- Dead wood present in canopy.
- Weak leaf color and quantity.

Tree 5: Live Oak (Quercus Virginiana)

- 40" DBH.
- Tree proposed to be removed.
- Tree is in fair condition.
- Low branching with 90 degree angles.
- Lean to the SW 12 degrees.
- Poor acute limb angles.
- Sparse canopy.

Tree 6: Live Oak (Quercus Virginiana)

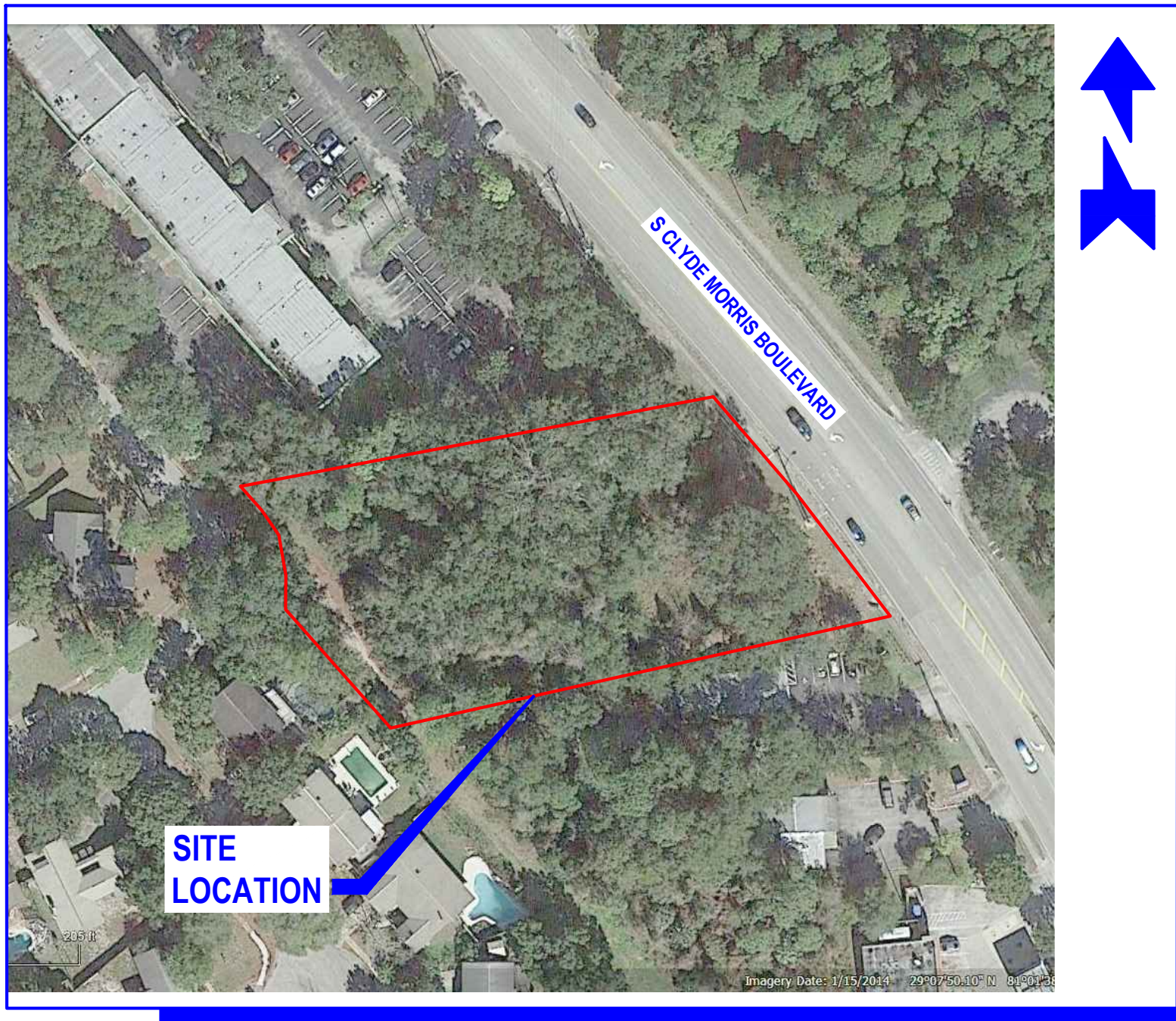
- 54" DBH.
- Tree to be saved and protected with a proposed tree conservation easement. During construction tree protection will be provided.
- Tree is in fair condition.
- No major leader.
- Good canopy and spread.
- A lot of low branching.
- Tree needs to be trimmed.

CONCLUSION

The Badcock Furniture and More development proposes to save three (3) of the six (6) existing historic live oak trees with this development. The site plan was designed specifically to save two (2) live oak trees along S Clyde Morris Boulevard frontage and one (1) live oak tree at the rear of the property. The three (3) live oak trees proposed to be removed are located within the building envelope and cannot be preserved. All three (3) trees proposed to be saved will not present a threat to the property or public. All saved trees will be protected during construction with tree protection and placed in tree conservation easements.

APPENDIX A

“Maps”



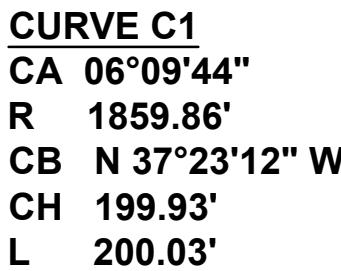
AERIAL MAP

APPENDIX B

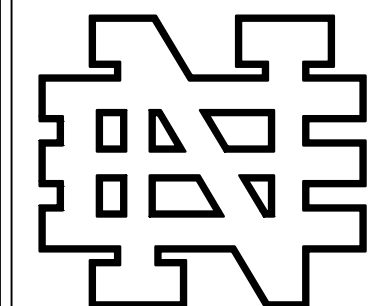
“Historic Tree Evaluation”



1 HISTORIC OAK TREE



REVISIONS	
DATE	DESCRIPTION
6/15/16	PER CITY AND COUNTY
	COMMENTS.

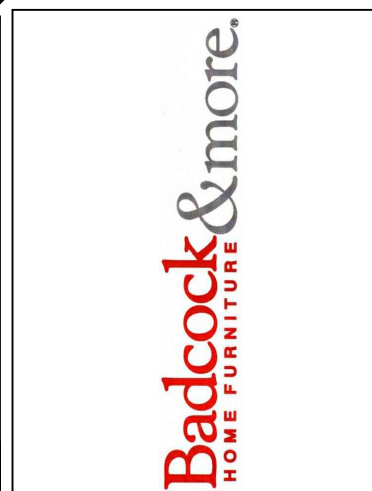


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ENGINEERING**

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Harry@Newkirk-Engineering.com

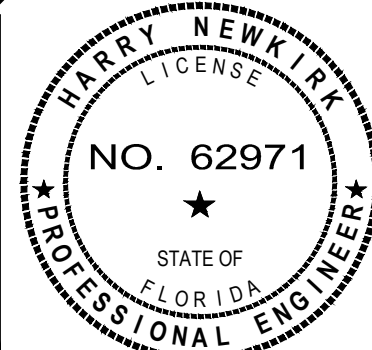
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Construction Engineering &
Inspection**



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HISTORIC TREE
LOCATION MAP
BADCOCK HOME FURNITURE
4610 S CLYDE MORRIS BOULEVARD
DOOR ORANGE, FL 32130



HARRY H. NEWKIRK, P.E. # 6297

PROJECT No:	2014-14
DATE:	APRIL 2016
DESIGN BY:	HHN
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	1"=20'

DRAWING NUMBER

1

Tree # 1, 48" Live Oak







Tree # 2, 48" Live Oak







Tree # 3, 38" Live Oak







Tree # 4, 42" Live Oak







Tree # 5, 40" Live Oak







Tree # 6, 54" Live Oak









APPENDIX C

“Site Layout Plan”

VOLUSIA COUNTY RIGHT-OF-WAY USE NOTES:

1. NOTIFY VOLUSIA COUNTY DEVELOPMENT ENGINEERING DIVISION AT 386-736-5926 24 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. VOLUSIA COUNTY TRAFFIC ENGINEERING IS NOT A MEMBER OF SUNSHINE ONE CALL. ALL TRAFFIC SIGNAL LOCATES SHALL BE REQUESTED FROM TRAFFIC ENGINEERING AT 386-736-5968.
3. DRIVING AND/OR STAGING OF CONSTRUCTION VEHICLES IS NOT PERMITTED ON ANY SIDEWALKS IN THE RIGHT-OF-WAY. ANY DAMAGE TO SIDEWALKS WILL BE REPAIRED AND/OR REPLACED IN LIKE KIND BY THE CONTRACTOR.
4. ANY SIDEWALK, LANE OR ROAD CLOSURE (INCLUDING FLAGGING OPERATIONS) REQUIRES REVIEW AND APPROVAL IN ADVANCE AND A SEVEN (7) DAY MINIMUM NOTICE TO VOLUSIA COUNTY TRAFFIC OPERATIONS (386-239-6535).
5. ALL EXISTING SIDEWALKS WITHIN COUNTY RIGHTS OF WAY SHALL REMAIN OPEN OR PROVISION OF A TEMPORARY WALKWAY SHALL BE PROVIDED IN ACCORDANCE WITH THE CURRENT VERSION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD INDEX No. 660 "MID-BLOCK CLOSURE WITH TEMPORARY WALKWAY" UNLESS OTHERWISE APPROVED BY THE COUNTY TRAFFIC ENGINEER. PLEASE NOTE THAT INDEX No. 660 MUST BE SHOWN ON THE USE PERMIT PLANS.

LEGEND

- TYPE 'F' SPILLOUT CURB AND GUTTER
- TYPE 'F' CURB AND GUTTER
- TRANSITION LOCATION FROM TYPE 'F' SPILLOUT CURB TO TYPE 'F' CURB AND GUTTER
- TYPE 'F' CURB CUT
- SITE LIGHTING (4 PLACES)

PAVING LEGEND

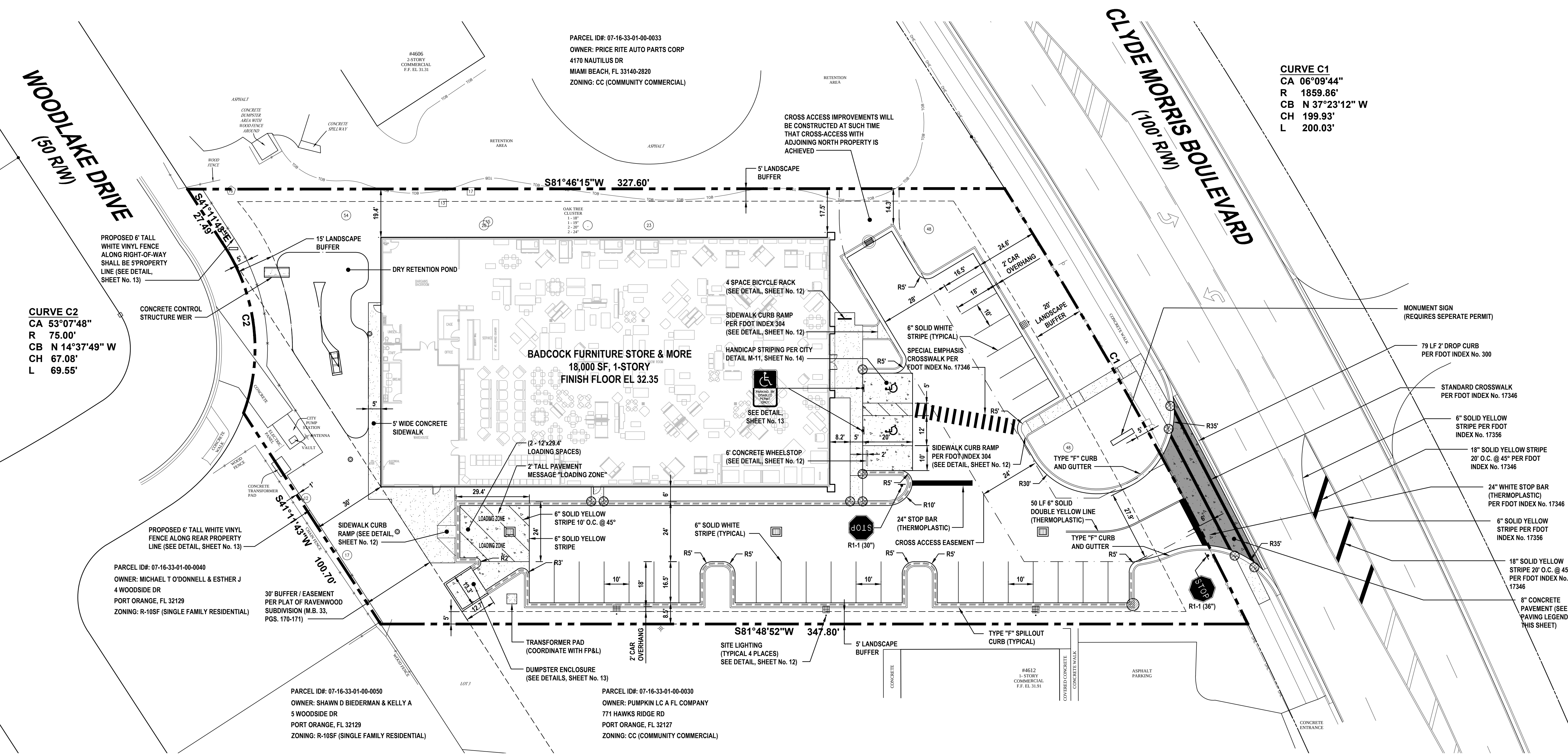
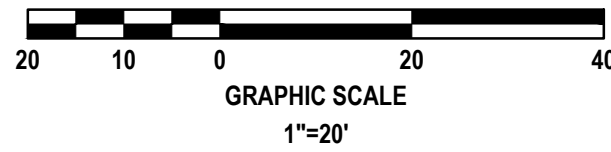
- ASPHALT PAVEMENT: 1.5" SP-9.5 WITH TACK COAT PER FDOT SPECIFICATIONS
6" LIMEROCK BASE (LBR=100) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" LIFTS)
12" STABILIZED SUBBASE (BR 40) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (TYPE B STABILIZATION)
*ALTERNATE: LIMEROCK BASE COURSE: 6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" LIFTS)
*ALTERNATE: 12" STABILIZED SUBBASE: 6" LIMEROCK (LBR=100) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 OR 6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180.
*ALTERNATE PAVEMENT TO ASPHALT IS CONCRETE PAVEMENT
- CLYDE MORRIS R/W CONCRETE PAVEMENT: 8" CONCRETE (3,000 P.S.I. @ 28 DAYS)
12" STABILIZED SUBGRADE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D1557, AASHTO T-180 (6" LIFTS)
10'x10' CONTROL JOINTS, 2" SAW CUT DEPTH
SEE CITY DETAIL R-19, SHEET No. 15 AND DETAIL SHEET No. 12.
- STANDARD CONCRETE PAVEMENT: 6" CONCRETE (3,000 P.S.I. @ 28 DAYS)
12" STABILIZED SUBGRADE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D1557, AASHTO T-180 (6" LIFTS)
10'x10' CONTROL JOINTS, 2" SAW CUT DEPTH
SEE CITY DETAIL R-19, SHEET No. 15 AND DETAIL SHEET No. 12.
- CONCRETE SIDEWALK: 4" THICK CONCRETE (3,000 P.S.I. @ 28 DAYS)
SEE CITY DETAIL M-3, SHEET No. 14 AND SIDEWALK DETAIL SHEET No. 12.

PAVEMENT MARKING NOTES:

1. PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
2. APPLY PAINTED PAVEMENT MARKINGS AT LAST STAGE OF CONSTRUCTION AFTER LANDSCAPE PLANTINGS ARE INSTALLED.
3. PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS.
4. ALL STOP BARS SHALL BE THERMOPLASTIC.
5. ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX No. 17352.
6. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX No. 17301 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
7. LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
8. FOR ADDITIONAL DETAILS SEE INDEX No. 11860, 11863, 17302, 17344 AND 17346.
9. ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS. ALL 36"x48" SIGNS SHALL BE .100 GA MINIMUM AND SHALL BE INSTALLED USING 3"x12" ROUND ALUMINUM POST. ALL STOP SIGNS SHALL BE 36" OCTAGON INSTALLED ON 12.3 LBS/FT "U" CHANNEL POST RAIL STEEL ONLY OR 3"x12" ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR SIGNS SMALLER THAN 36"x36". ALL SPEED LIMIT SIGNS SHALL BE 24"x30".

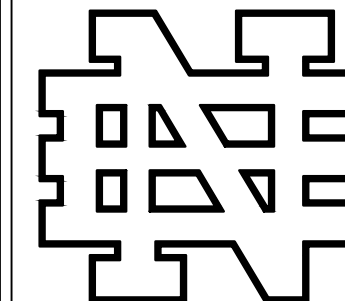
GENERAL NOTES:

1. CITY OF PORT ORANGE BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, FENCE AND MONUMENT SIGN. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, SHOP DRAWINGS, ETC.).
2. PERMITS ARE REQUIRED FOR: CONCRETE SLAB AT SOUTH SIDE OF BUILDING AND, DUMPSTER ENCLOSURE. CONTACT THE BUILDING DIVISION IF THERE ARE QUESTIONS OR CONCERNS ABOUT PERMIT REQUIREMENTS FOR WORK NOT SPECIFICALLY MENTIONED HEREIN.
3. ALL DIMENSIONS AND TIES ARE TO THE EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING.
4. ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION OR GPS. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR'S RISK.
5. THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJACENT BUSINESSES TO ENSURE THERE IS NO DISRUPTION TO THEIR RESPECTIVE OPERATIONS.
6. THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.
7. SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA SOD.
8. ALL CURB RAMPS SHALL COMPLY WITH SECTION 406 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
9. ALL PAVEMENT EDGE SHALL HAVE TYPE "D" CURBING UNLESS OTHERWISE NOTED ON THESE PLANS.



REVISIONS

DATE	DESCRIPTION
6/15/16	PER CITY AND COUNTY COMMENTS.

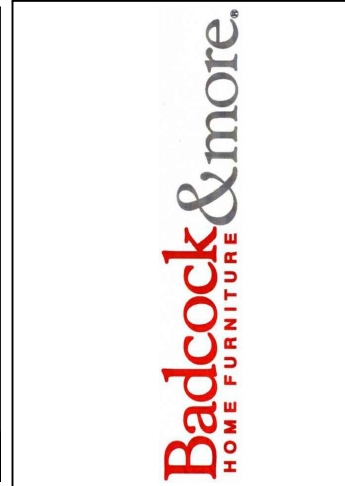


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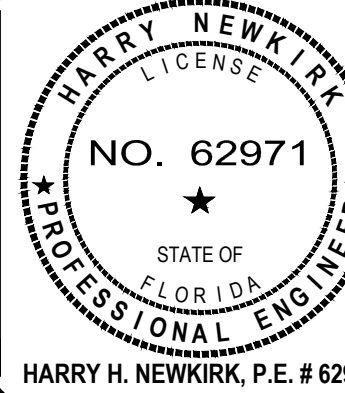
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SITE LAYOUT PLAN
BADCOCK HOME FURNITURE
4610 S CLYDE MORRIS BOULEVARD
PORT ORANGE, FL 32129



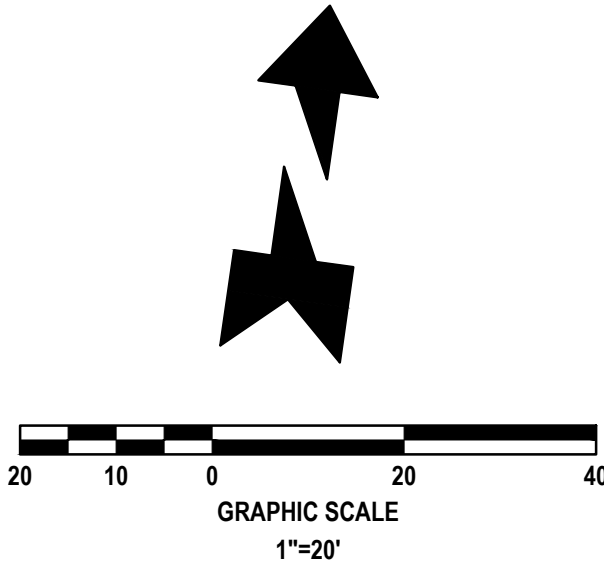
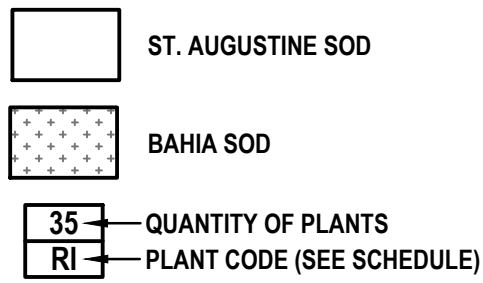
PROJECT No: 2016-14
DATE: APRIL 2016
DESIGN BY: HHN
DRAWN BY: DAB
CHECKED BY: HHN
SCALE: 1"=20'

DRAWING NUMBER
6

APPENDIX D

“Landscape Plan”

LEGEND



PLANT LIST

CODE	NO.	SCIENTIFIC NAME	COMMON NAME	SIZE REQUIREMENTS
CANOPY TREES				
MGD	10	MAGNOLIA SSP.	MAGNOLIA D.D. BLANCHARD	10' - 12" HGT., 2.5" CAL. @ 6"
QV	15	QUERCUS VIRGINIANA	LIVE OAK	10' - 12" HGT., FULL, 2.5" CAL. @ 6"
TD	5	TAXODIUM DISTICHUM	BALD CYPRESS	10' - 12" HGT., FULL, 2.5" CAL. @ 6"
WR	9	WASHINGTONIA ROBUSTA	WASHINGTONIA PALM	10' - 14, CT.
SUBTOTAL	39			
UNDERSTORY TREES				
IC	7	ILEX CASSINE	DAHOON HOLLY	8' - 10" HGT., FULL, 1.5" CAL. @ 6"
IO	9	ILEX ATTENUATA	EAST PALATKA HOLLY	8' - 10" HGT., FULL, 1.5" CAL. @ 6"
LI	18	LAGERSTROEMIA INDICA	CRAPE MYRTLE (PURPLE) STD.	8' - 10" HGT., FULL, 1.5" CAL. @ 6"
LIG	5	LIGUSTRUM JAPONICA	LIGUSTRUM TREE STD.	8' - 10" HGT., FULL, 1.5" CAL. @ 6"
SUBTOTAL	39			
SHRUBS				
HIB	23	HIUBUSCIS SSP	YELLOW HIBISCUS	3 GAL., 20" HGT., FULL, 36" O.C.
IF	69	ILICLIUM FLORIDANUM	FLORIDA ANISE	3 GAL., 20" HGT., FULL, 36" O.C.
MCR	69	PENNISETUM SETACEUM	PINK FOUNTAIN GRASS	3 GAL., 18" HGT., 36" O.C.
POM	85	PODOCARPUS MACROPHYLLUS	YEW PODOCARPUS	7 GAL., 30" HGT., 30" O.C.
RI	65	RAPHIOLEPIS INDICA	INDIAN HAWTHORNE	3 GAL., 18" HGT., FULL, 36" O.C.
ROSA	32	ROSA SSP.	RED KNOCKOUT ROSE	3 GAL., 18" HGT., FULL, 36" O.C.
SA	116	SCHIEFFLERA ARBORICOLA	GOLD CAPELLA	3 GAL., 24" HGT., 36" O.C.
VO	257	VIBURNUM ODERATISSIMUM	SWEET VIBURNUM	3 GAL., 24" HGT., 30" O.C.
VOW	51	VIBURNUM OBOVATUM	WHORLED CLASS	3 GAL., 24" HGT., 30" O.C.
SUBTOTAL	767			
GROUND COVER (G.C.)				
DT	125	DIANELLA TASMANICA	BLUE BERRY FLAX LILLY	1 GAL., 12" HGT., 18" O.C., FULL
TAS	331	TRACHELOSPERMUM ASIATICUM	DWARF JASMINE	1 GAL., 12" SPR., 24" O.C.
SUBTOTAL	456			
TOTAL	1301			

NOTE:

1. ALL TREES (NEW AND EXISTING) ARE TO HAVE A 3' DIAMETER MULCHED CIRCLE AROUND THE BASE UNLESS IT IS IN A PLANTING BED.

BUFFER CALCULATIONS:

REQUIRED NUMBER OF TREES
59,996 SF LOT AREA / 2,500 SF = 24 TREES REQUIRED
16 EXISTING TREES, 29 PROPOSED TREES,
32 PROPOSED UNDERSTORY TREES AND
9 PROPOSED PALM TREES

LANDSCAPING ADJACENT TO PROPERTY LINES

CLYDE MORRIS BOULEVARD: (EAST PROPERTY LINE)

20' WIDE LANDSCAPE BUFFER REQUIRED
(4) SHADE + (4) UNDERSTORY TREES + 40 SHRUBS PER 100 LF
160 LF / 100 = 1.6 X 4 = 7 7 SHADE TREES + 7 UNDERSTORY TREES + 64 SHRUBS

WEST PROPERTY LINE

10' WIDE LANDSCAPE BUFFER REQUIRED
(3) SHADE + (3) UNDERSTORY TREES + 30 SHRUBS PER 100 LF
198 LF / 100 = 1.98 X 3 = 5.94 6 SHADE TREES + 6 UNDERSTORY TREES + 60 SHRUBS

NORTH PROPERTY LINE:

5' WIDE LANDSCAPE BUFFER REQUIRED
(2) SHADE + (2) UNDERSTORY TREES + 20 SHRUBS PER 100 LF
328 LF / 100 = 3.28 X 2 = 6.56 7 SHADE TREES + 7 UNDERSTORY TREES + 66 SHRUBS

SOUTH PROPERTY LINE:

5' WIDE LANDSCAPE BUFFER REQUIRED
(2) SHADE + (2) UNDERSTORY TREES + 20 SHRUBS PER 100 LF
348 LF / 100 = 3.48 X 2 = 6.96 7 SHADE TREES + 7 UNDERSTORY TREES + 70 SHRUBS

VEHICULAR USE / PARKING LANDSCAPING

10% OF VEHICULAR USE ARE TO BE LANDSCAPED
17,922 SF X 10% = 1,792 SF OF INTERIOR LANDSCAPE REQUIRED
3,533 SF OF INTERIOR LANDSCAPE PROVIDED

FOUNDATION PLANTING

LANDSCAPING ADJACENT TO STRUCTURES
TWO FOUNDATION PLANTERS SHALL BE REQUIRED FOR EVERY THREE FEET AND 1 UNDERSTORY TREE
EVERY 30 FEET OF EXTERIOR BUILDING PERIMETER; EXCLUDING REAR BUILDING AREAS NOT DESIGNED
FOR PUBLIC VIEW OR ACCESS

100' / 30 = 4 UNDERSTORY TREES NEEDED FOR FOUNDATION
100' / 3 = 33.3 X 2 = 67 SHRUBS NEEDED FOR FOUNDATION
3 UNDERSTORY TREES PROVIDED FOR FOUNDATION PLANTING
117 SHRUBS PROVIDED FOR FOUNDATION PLANTING

FOUNDATION PLANTER AREA = 657 SF

INTERIOR LANDSCAPING

	SQ. FT.
INTERIOR LANDSCAPE	4,868
PAVEMENT	17,922
INTERIOR LANDSCAPE TO PAVEMENT RATIO	0.272 (27.2%)

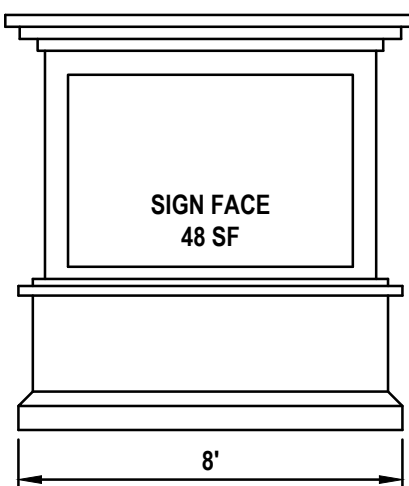
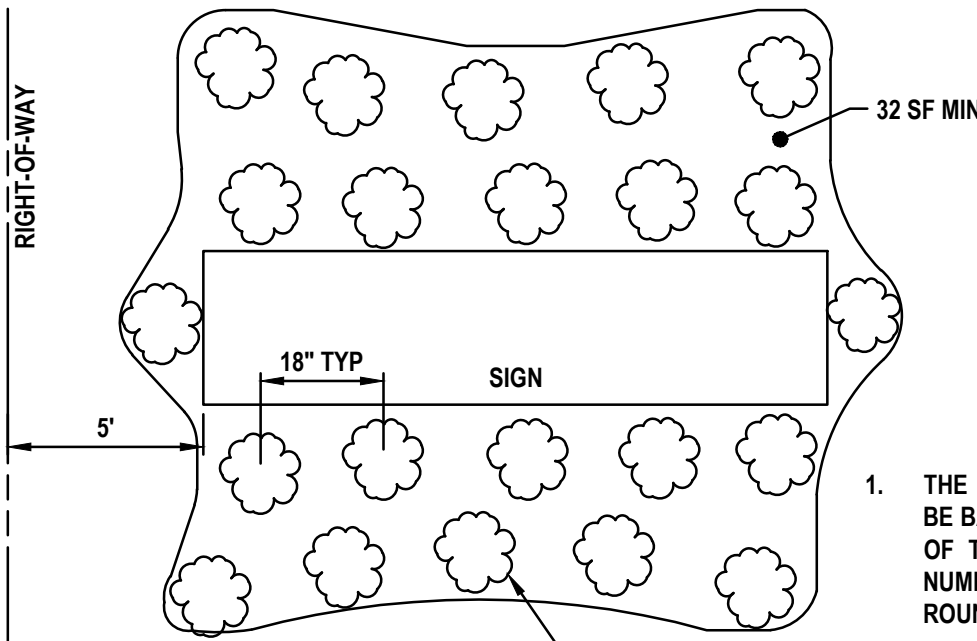
LANDSCAPE NOTES:

- ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS FOR FLORIDA #1 OR BETTER AS DESCRIBED IN THE CURRENT "GRADES AND STANDARDS FOR NURSERY PLANTS", STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, OR THEIR EQUAL AS DETERMINED BY THE LANDSCAPE ARCHITECT.
- ALL MULCH SHALL BE ALL NATURAL WOOD (NO CYPRESS).
- SOD SPECIFIED AS ST. AUGUSTINE "FLORITAM" SHALL BE 95% WEED-FREE. SOD SPECIFIED AS BAHIA SHALL BE 85% WEED-FREE. ALL SOD SHALL BE INSTALLED WITH TIGHT JOINTS, ROLLED AND FERTILIZED.
- SEED, IF ANY, TO MEET SOUTHERN SEED CERTIFICATION ASSOCIATION.
- ALL DIMENSIONS SHALL BE FIELD-CHECKED BY THE LANDSCAPE CONTRACTOR PRIOR TO CONSTRUCTION, WITH ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT.
- THE PLANT MATERIALS SCHEDULE IS PROVIDED FOR THE CONVENIENCE OF THE LANDSCAPE CONTRACTOR; SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN WILL PREVAIL.
- ALL MATERIALS MUST BE AS SPECIFIED ON THE LANDSCAPE PLAN. IF MATERIALS OR LABOR DO NOT ADHERE TO THE SPECIFICATIONS, THEY WILL BE REJECTED AT NO ADDITIONAL COST TO THE OWNER.
- ALL PLANTING BEDS SHALL BE TREATED WITH 'ROUND-UP' AND 'RONSTAR'. USE AS DIRECTED BY MANUFACTURERS.
- NO SUBSTITUTIONS OR CHANGES OF ANY KIND WILL BE ALLOWED AT THE TIME OF BIDDING SO AS TO PROVIDE FOR FAIR COMPARISON.
- EXISTING IRRIGATION SYSTEM SHALL BE REVAMPED TO PROVIDE 100% COVERAGE. THE CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND CONDITIONS PRIOR TO HIS COMMENCEMENT OF THE ANY WORK.
- ALL BUILDING MATERIALS AND LABOR SHALL CONFORM TO THE SOUTHERN BUILDING CODE AND ALSO TO ALL LOCAL CODES THAT HAVE JURISDICTION.
- ALL PERMIT AND VARIANCE APPLICATIONS SHALL BE MADE BY THE CONTRACTOR.
- PRIOR TO CONSTRUCTION OF PLANTING BEDS, ALL AREAS ARE TO HAVE SOIL TESTS CONDUCTED TO DETERMINE pH AND SOIL FERTILITY. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO AMEND THE SOIL TO MEET ADEQUATE FERTILITY AND pH FOR CORRESPONDING PLANT MATERIAL. ALL TEST RESULTS SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT.
- EQUIPMENT SHALL BE OPERATED IN A MANNER AS NOT TO INJURE OR DESTROY ANY TREES SHOWN TO REMAIN. CONTRACTOR SHALL NOT CAUSE OR ALLOW THE CLEANING OF EQUIPMENT OR MATERIAL WITHIN THE DRIP LINE OF ANY TREE OR GROUPS OF TREES TO BE RETAINED OR THOSE PROPOSED. NOR SHALL THE CONTRACTOR ALLOW THE DISPOSAL OF WASTE MATERIAL, SUCH AS PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY TREE OR GROUP OF TREES. NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS, OR PERMITS MAY BE FASTENED TO A TREE.
- ANY EXISTING TREES CREDITED TOWARDS REQUIRED BUFFERS OR LANDSCAPE REQUIREMENTS REMOVED FOR ANY REASON SHALL BE REPLACED WITH TREES MEETING CITY APPROVAL WITH REGARDS TO SPECIES AND SIZE.
- ALL QUESTIONS CONCERNING THE PLAN AND/OR SPECIFICATIONS SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT (386) 672-9515.
- ALL SHADE TREES AND SINGLE TRUNK UNDERSTORY TREES SHALL BE STAKED USING ARBORGUY STAKING SYSTEM FOR SINGLE STEM TREE AND ALL MULTI-TRUNK UNDERSTORY TREES SHALL BE STAKED WITH ARBORGUY MULTI-TRUNK SYSTEM.
- ANY CHANGE IN STAKING SYSTEM MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT BEFORE BEING INSTALLED.
- ALL UNIMPROVED AREA NOT OTHERWISE PLANTED OR MULCHED SHALL BE SODDED WITH ST. AUGUSTINE FLORITAM UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLAN.
- PLANT MATERIAL SHALL BE CLEARLY IDENTIFIED AS FLORIDA #1 OR BETTER ON EITHER LABELS OR INVOICES.
- ALL PLANT MATERIAL SHALL BE GUARANTEED ONE YEAR AFTER ACCEPTANCE BY OWNER.
- ALL TREES IN SOD TO BE IN A (4) FOOT MINIMUM-MULCHED RING AROUND.
- TREES SHALL BE PLANTED SO THAT THE TRUNK FLARE IS EXPOSED AND TOPMOST ROOT IN THE ROOTBALL ORIGINATING FROM THE TRUNK IS AT SOIL SURFACE OR WITHIN THE TOP INCH OF SOIL ON THE ROOTBALL.
- ALL PLANT SPECIFICATIONS MUST BE MET OR EXCEEDED.
- PLANT TREE SO THAT ROOTBALL IS 1'-2" ABOVE FINISH GRADE.
- REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASS, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED AND A MINIMUM OF 3' OF CLEAN SAND WITH A pH 5.5-6.5 SHALL BE INSTALLED PRIOR TO ANY INSTALLATION OF PLANTS OR TREES.
- FOR ALL NEW DEVELOPMENT, OR REDEVELOPMENT OF EXISTING PROPERTY, THE APPLICANT SHALL BE REQUIRED TO REMOVE ALL INVASIVE NONNATIVE PLANT SPECIES FROM THE PROPERTY PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
- ALL EXISTING TREES AND PALMS WILL BE PROPERLY PRUNED AND CLEANED OF DEADWOOD, BROKEN BRANCHES, DEAD FROND AND VINES AS NEEDED.

TREE PRUNING NOTE:

REMOVE ALL EXISTING UNDERBRUSH AND GROUND COVERS WITHIN LANDSCAPE BUFFERS. PRUNE ALL TREES TO REMAIN IN ACCORDANCE WITH ANSI A 300 PRUNING STANDARDS AS PERFORMED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) OR A REGISTERED CONSULTING ARBORIST WITH THE AMERICAN SOCIETY OF CONSULTING ARBORISTS (ASCA).

CURVE C1
CA 06°09'44"
R 1859.86'
CB N 37°23'12" W
CH 199.93'
L 200.03'

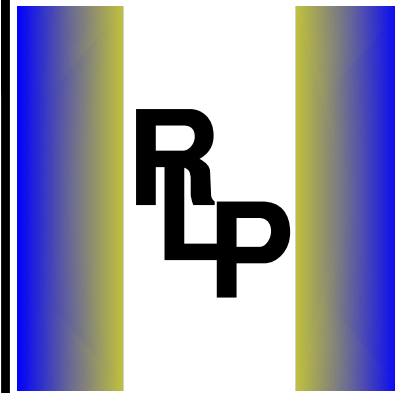


MONUMENT SIGN DETAIL

NOT TO SCALE

REVISIONS

DATE	DESCRIPTION
6/15/16	PER CITY AND COUNTY COMMENTS.



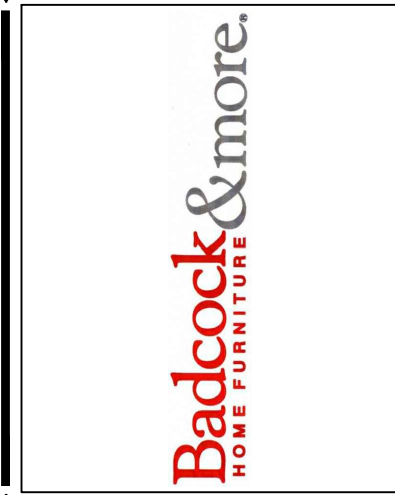
RICHARD L. POORE, LA

PLANNER & LANDSCAPE ARCHITECT

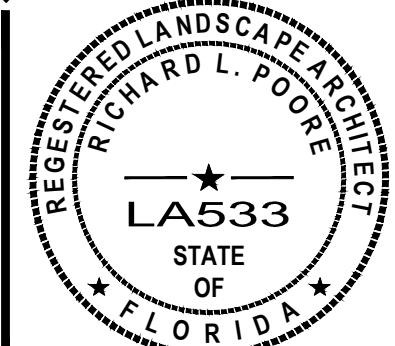
301 GATEWOOD COURT - ORLANDO BEACH, FLORIDA 32714

CELL: (386) 212-8491 • RLPA# 0000533

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LANDSCAPE PLAN
BADCOCK HOME FURNITURE
4610 S CLYDE MORRIS BOULEVARD
PORT ORANGE, FL 32129



RICHARD L. POORE, L.A. # LA533

PROJECT No: 2016-14

DATE: JANUARY 2016

DESIGN BY: RLP

DRAWN BY: DAB

CHECKED BY: RLP

SCALE:

DRAWING NUMBER

19