

### Woodland Evaluation for-Whitestown Public Library Expansion



**Google Maps Aerial showing Site and Woodlands** 

Prepared For
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**December 7, 2021** 

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Jamia Alexander Ball Branch Manager Whitestown Branch Hussey-Mayfield Memorial Public Library

# **Re: Woodland Evaluation for the Proposed Whitestown Public Library Expansion**

#### **Assignment**

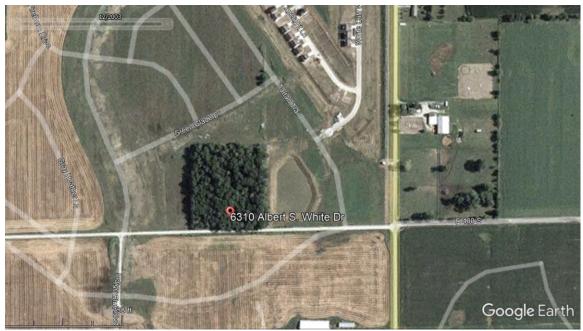
I was asked to visit the future development site, with the goal to perform a woodland evaluation, for the property. This evaluation was to discuss the vegetation on the site.

I was also agreed to mark the "obviously dead" trees on the site, which would normally be outside the scope of a woodland evaluation such as this, but which I agreed to do as a courtesy.

History of the Site



March 1998 US Geological Survey Aerial from Google Earth of the site



August 2003 Google Earth Aerial showing the first lake after installed



#### **Woodland Evaluation**

The Woodland Evaluation was to identify:

- The dominant tree species (majority of the species in the area).
- Regenerating tree species (Smaller specimens found).
- The composition of the understory of the area (plant material taking up the area under the trees).
- I also agreed to mark "obviously dead" trees.

#### **Observations**

On December 2, 2021, I visited the site and spent time organizing the property into four (4) distinct areas. I then inspected each area and took photographs to assist in reporting a general impression of each area.

It was reported to me that this property was previously part of the Whitestown Parks Department. It is a large square woodland feature, that is to be retained as a new library is developed, south of it.

In my opinion, the site is second growth as compared to virgin timber. The woodland features present a medium stocking of trees, with few large trees. Unfortunately there are a lot of dead ash trees throughout the woodlands

I divided the property into the following four distinct areas for clarity of this report.

#### The areas are:

- 1- Area A
- 2- Area B
- 3- Area C
- 4- Area D

**Aerial of Project with Study Areas Overlayed- (Boxes show study Areas)** 



A discussion of each area follows.

#### **Area A- The Southwest Quadrant**

#### **Species found in Area A**- (Note not a complete inventory)

<b>Dominant Species</b>	Scientific name
Mulberry, white	Morus alba
Hackberry, common	Celtis occidentalis
Hawthorn	Crataegus var.
Walnut, black	Juglans nigra
Basswood, American	Tilia americana
Oak, red and white	Quercus var.
Ash, white- DEAD	Fraxinus americana

Regenerating SpeciesScientific nameCherry, blackPrunus serotinaBasswood, AmericanTilia americanaHackberry, commonCeltis occidentalisPear, CalleryPyrus calleryana

#### Understory

Turf Weeds

#### **Description of Area A**

Area A has a nice walking trail throughout which meanders through the whole woodlands. The Area is currently filled with weedy undergrowth. There is a fairly open area in the south portion of this quadrant that would be a good place for a playground feature.

There are many sizable dead ash trees throughout all four quadrants. They should be removed as a public safety measure. Some smaller dead trees could be retained for woodpeckers if they are situated away from the trail.

One item that will need to be addressed is: Should the weeds be cut or should they be left? One option might be to mow the interior of the Area, and leave the small shrubs and trees on the perimeter, for cover for wildlife.

Area A could be restocked with native Indiana trees and shrubs to help restore the woodland for the future.

# **Photos of Area A**



**Weedy interior could be mowed- Try to leave any regenerating trees** 



There is a trail that runs through the woodlands



Open area where a play structure could be placed



Dead ash trees found throughout all four Areas



Some of the dead ash trees are very large



Some of the dead ash trees are very rotted

#### **Area B- The Northwest Quadrant**

#### **Species found in Area B**- (Note not a complete inventory)

<b>Dominant Species</b>	Scientific name
Walnut, black	Juglans nigra
Hackberry, common	Celtis occidentalis
Hawthorn	Crataegus var.
Basswood, American	Tilia americana
Mulberry, white	Morus alba

Ash, white- DEAD Fraxinus americana

# Regenerating SpeciesScientific nameCherry, blackPrunus serotinaBasswood, AmericanTilia americanaHackberry, commonCeltis occidentalisDogwood, greyCornus racemosaPear, CalleryPyrus calleryana

#### Understory

Weeds Poison ivy

#### **Description of Area B**

Area B is denser that Area A with more regenerating smaller trees and shrubs. There are some honeysuckle (Lonicera) and some callery pear (Pyrus calleryana) that should be cleared out because they are invasive species and will take over.

The perimeter of this area could be left thick to allow for wildlife and to retain the woodland feel.

The dead ash should be removed and native Indiana trees and shrubs could be added.

# **Photos of Area B**



There are larger trees found in this area



There is thicker underbrush found on the outer edges



In the summer the outer edge of shrubbery will screen the houses



Some thick underbrush could be retained for wildlife

#### **Area C- Northeast Quadrant**

#### **Species found in Area C**- (Note not a complete inventory)

<b>Dominant Species</b>	Scientific name
Walnut, black	Juglans nigra
Oak, red and white	Quercus var
Hickory, shagbark	Carya ovata
Ash, white- DEAD	Fraxinus americana

#### **Regenerating Species**

Basswood, American *Tilia americana*Mulberry, white *Morus alba* 

#### Understory

Weeds Honeysuckle

#### **Description of Area C**

Again there is a denser stocking of larger trees with more underbrush in this Area. Some fallen trees could be retained for wildlife, as well as some smaller dead trees for woodpeckers.

A woodlands such as this will require periodic inspections to remove dead and structurally unsound trees. I recommend an annual budget line be created for tree care, and that a business relationship be started with a local arboricultural company, to maintain the property. Three companies I would recommend would be

- SavATree
- Bartlett Tree
- Brownsburg Tree Care

#### **Photos of Area C**



The walking trail meanders through the woods. Leaving trees on the outer perimeter would allow for a woodland getaway, in the midst of the surrounding neighborhoods.



Portions of the interior could be mowed or left as desired



Lots of younger walnuts found in the north end of this Area



There is a fairly think and dense perimeter

#### **Area D- The Southeast Quadrant**

#### **Species found in Area D**- (Note not a complete inventory)

<b>Dominant Species</b>	Scientific name
Walnut, black	Juglans nigra
Oak, red and white	Quercus var
Hickory, shagbark	Carya ovata
Buckeye, Ohio	Aesculus glabra
Ash, white- DEAD	Fraxinus americana

#### **Regenerating Species**

Basswood, American *Tilia americana* Mulberry, white *Morus alba* 

#### Understory

Weeds Honeysuckle

#### **Description of Area D**

Area D has a large group of mulberries along the eastern edge. Eventually these could be removed, and native Indiana species trees and shrubs could be installed.

There are many Ohio buckeye trees in this Area, the fruit of which are a favorite pocket item for kids.

There is a significant large oak in the center of this area. It appears to be a Swamp white oak (Quercus bicolor). It could be the logo tree for the library.

There are other red and white oaks in this area, as well as hickories.

There is a row of Black walnuts that run along the south border of Area A and Area D. If these can be retained, they would be a nice buffer for the future library. It should be noted the walnut fruit can be dirty and stain concrete.

# **Photos of Area D**



Larger trees found in this Area



Some buckeyes on this side of the woods will allow for fun items for kids to pickup



Scrubby edge on east could be reforested in the future



Row of walnuts along the south end would be nice to retain if possible

#### **General Discussion**

#### **Marking of Obviously Dead Trees**

Further discussion is needed as to how the woodlands should be managed in regard to dead trees. This discussion is outside the scope of this report. I attach a white paper entitled Premises Liability and Your Trees!, which I co-authored for review.

I was asked to "mark obviously dead trees" and as a courtesy I added an orange spray painted dot to many of the obviously dead trees. This portion of the analysis should not be seen as an exhaustive Tree Risk Assessment, but rather as a Level I assessment of obviously dead trees, performed as a courtesy. I recommend periodic tree assessments with the task to provide further inspections of trees using Level II, and as needed Level III assessment protocols.

There are also trees with large dead limbs and broken hanging limbs that should be pruned out as well as hollow trees that should receive further analysis. I recommend an annual budget line be created for tree care, and that a business relationship be initiated with a local arboricultural company, to maintain the trees on the property. Three companies I would recommend would be:

- SavATree
- Bartlett Tree
- Brownsburg Tree Care

#### **Examples of other issues**



Large hangers in trees



A tree that needs further analysis

#### **Recommendations for future plantings**

I am a firm believer in planting native Indiana species trees and shrubs in a woodands such as this. A teaching element could be added to the woodlands with trees marked showing species and general species information.

When it comes to adding new trees there is a general rule:

#### The 10-20-30 Tree Planting Rule

A general rule for urban tree planting includes:

- plant no more than 10 percent of any species,
- no more than 20 percent of any genus, and
- no more than 30 percent of any family.

This rule if followed keeps a property owner from developing mono-cultures which can be nightmares when aggressive pests/diseases arrive. Had this rule been followed in the 1980's there would have been less problems with dead ash trees and failing Bradford pears.

A good source for further information about tree planting would be the Boone County Extension agent, Purdue University and the Indiana Native Plant and Wildlife Society.

A good source for future trees and shrubs would be Woody Warehouse in Lizton Indiana.

#### **Suggested Planting List**

The woods has plenty of hackberry, basswood, hawthorn, walnut, and mulberry. Species that could be added are:

- Sugar maple (Acer saccharum)
- American beech (Fagus americana)
- Eastern redbud (Cercis canadensis)
- Serviceberry (Amelanchier)
- Oaks, white, bur and swamp white (Quercus var)
- Tuliptree (Liriodendron tulipifera)
- Sweetgum (Liquidambar styraciflua)
- Bald cypress (Taxodium distichum)
- American sycamore (Platanus occidentalis)
- Sour gum (Nyssa sylvatica)

Also, in the future the honeysuckle could be removed, and native shrubs, and grasses installed. Some suggestions are:

- Grey dogwood (Cornus racemosa)
- Viburnum (Viburnum, multiple species)
- Spicebush (Lindera benzoin)
- Witch hazel (Hamamelis virginiana)
- Native grasses and perennials.

Thank you for the opportunity to provide this report. Should you have any questions please feel free to contact me.

I certify that all the statements of fact in this report are true, complete and correct to the best of my knowledge and belief, and that they are made in good faith.

Note: This is not an inspection of the trees for safety. A hazard inspection of the trees,

and their structural integrity has not been performed.

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#### STATEMENT OF QUALIFICATIONS

#### **Jud Scott**

Registered Consulting Arborist #392, American Society of Consulting Arborists

Certified Arborist #IN-0287A, International Society of Arboriculture

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Indiana Licensed Nursery Dealer #ND0741600

Indiana Licensed Timber Buyer #FTB001098

Indiana Licensed Timber Agent #FTA002471

Trained Severe Weather Spotter, NOAA Weather

OSHA 10-Hour Certificate- Construction

President- 2007, American Society of Consulting Arborists

President- 1980-2019, Vine & Branch Inc.

2010-Present, Registered Consulting Arborist Jud Scott Consulting Arborist LLC

#### **Education**

1980 Wabash College, Bachelor of Arts International Society of Arboriculture, Certified Arborist IN-0287A American Society of Consulting Arborists, Academy Graduate American Society of Consulting Arborists, Registered Consulting Arborist #392

#### **Professional Association Membership**

American Society of Consulting Arborists (ASCA)
Arboricultural Association of U.K. (AA)
Indiana Arborists Association (IAA)
Indiana Academy of Science
Indiana Nurserymen's and Landscape Association (INLA) 1988-2019
Indianapolis Landscape Association (ILA)
International Society of Arboriculture (ISA)
National Society of Professional Insurance Investigators (NSPII)
Tree Care Industry Association (TCIA) 1987-2020
Utility Arborist Association (UAA)

