



STEWARDSHIP PLAN

Prepared for: Indiana Karst Conservancy
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Section 4, T3N, R1E, Marion Township,
Lawrence County, Indiana



16.38 Stewardship Acres

Mission Statement

The Indiana Department of Natural Resources' Division of Forestry promotes and practices good stewardship of natural, recreational and cultural resources on Indiana's public and private forestlands. This stewardship produces continuing benefits, both tangible and intangible, for present and future generations.

Prepared by: Janet Eger, District Forester
14043 Williams Road
Shoals, IN 47581
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jejer@dnr.IN.gov

Date Prepared: November 19, 2019
Expiration Date: November 19, 2029

The Division of Forestry is an equal opportunity employer and service provider.

NOTE: This is the plan prepared for Keith Dunlap who has transferred the property, and the goals remain the same.

The stewardship goals for this property are:

- To provide watershed protection , especially the karst area.
- To improve wildlife habitat for a variety of species and increase diversity.
- To improve forest health by removing invasive species, maintaining trails for access, and harvesting timber at the time when it may be appropriate.
- This tract will eventually be acquired by the Indiana Karst Conservancy as it adjoins a current land holding by IKC, and will provide further protection of the karst area and its special features in this region.

PROPERTY OVERVIEW

PROPERTY ACCESS AND FOREST ROADS & TRAILS: Access to the property is from a driveway coming off the south side of Highway 60 east of Spring Mill State Park. There are also several nice trails through the tract.

BOUNDARY MARKINGS: Highway 60 forms most of the northeast boundary while a fence (and field) form the west boundary. The south line has been surveyed and some markers are present between this and the adjoining IKC property.

TOPOGRAPHY AND SOILS: The tract is karst with several large, non-well defined sinkholes, and at least two-three well defined sinks. One of the sinks is the entrance to a cave. The soil is a Crider-Frederick Silt Loam, Karst, 6-20% slopes, eroded (CtxD2), and is deep to very deep. The parent material is a thin loess, slope alluvium and clayey residuum. It is well drained. Sinkholes are common with this soil type.

WATER RESOURCES: There is no permanent source of surface water on the tract, and the drainage flows through the underground system.

Woodlands and other natural areas are extremely effective at filtering pollutants and minimizing erosion as water moves across the landscape. You can maintain this effectiveness by following basic Best Management Practices (BMPs) when using any type of heavy equipment in your natural areas. BMPs are especially important during timber harvesting operations. For more information on BMPs, go to www.DNR.in.gov/forestry.

PAST USE OF PROPERTY: Previous ownerships had some livestock on the property with grazing and pasture areas. The home and a few small outbuildings have been torn down since the recent acquisition. One metal shed will remain at this time to be used for equipment storage, etc. A fenced in area west of the old house site will have the fences removed over the next several months.

[Type here]

PREHISTORIC & HISTORIC FEATURES: Most land parcels within the State of Indiana may be environmentally suitable to contain archaeological deposits but have not been investigated in order to verify the presence or absence of cultural deposits. Indiana Code 14-21-1 provides protection to archaeological sites and cemeteries on both private and public land by prohibiting digging anywhere with the intent to recover artifacts and disturbing the ground within 100 ft. of a cemetery without an approved plan from the IDNR – Division of Historic Preservation and Archaeology. In addition, if archaeological artifacts (an object made or modified prior to 1870), features (non-portable evidence of human occupations, such as a well), or human remains are uncovered during ground disturbing activities, state law requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. Landowners who need to report archaeological sites or who are interested in learning more about cultural sites should contact the Division of Historic Preservation and Archaeology at 402 W. Washington St., Rm. W274, Indianapolis, IN 46204, 317-232-1646, dhpa@dnr.in.gov, or at <http://www.in.gov/dnr/historic/index.htm>.

UNIQUE ANIMALS, PLANTS, & HABITATS: The DNR Natural Heritage Data Center is a program designed to track Indiana's special plants, animals, and natural communities. It was contacted September 9, 2019, and there were several rare, threatened, and endangered species found on or in the vicinity of the tract. These include black vultures, red shouldered hawk, Henslow's sparrow, northern cave fish, Weingartners flatworm, southeastern bat, Indiana bat, gray bat, least weasel, and crow poison. Careful management of the site including maintaining good water quality, not harvesting trees during bat season, and maintaining the warm season grass field will help most of these endangered species continue to thrive. This does not eliminate the possibility of other species of concern existing on your property. Often, features on private lands, in particular, are missing from the database. You can find more information on this subject at the Division of Nature Preserves' website: <http://www.in.gov/dnr/naturepreserve/4725.htm>.

WILDLIFE RESOURCES: This property as a whole should be a fairly good area for a wide variety of wildlife. There is a good diversity of vegetation in the woods although water supplies are limited. Many of the common species of this area can be found on or passing through the tract. These may include white-tailed deer, wild turkey, woodpeckers, a variety of songbirds, reptiles and other amphibians, and various insects. Raptors such as red tailed, sharp shinned, Coopers, and broad wing hawks along with a variety of owls also utilize the area.

EXOTIC AND INVASIVE SPECIES CONCERNS: There are several invasive plant species located on the tract including autumn olive, privet, Japanese honeysuckle, multi-flora roses, burning bush, and barberry. All of these should be controlled to prevent further spread and degradation of the site. The level of intensity of the invasives is a medium/light/light over the entire tract. Emerald ash borers have killed most of the overstory ash tree, although ash does not appear to have been a large component of the woods.

Continue to be vigilant for other species that may appear such as garlic mustard, Japanese stilt grass, and ailanthus. Early detection and a rapid response to any invasions of exotic species is the key to controlling and eliminating these threats to the woodland ecosystem. For more information on exotic and invasive species, contact the District Forester, or visit www.sicim.info/ or www.bugwood.org.

Invasives have the ability to simply blot out native species, with serious and sometimes unanticipated results. Insects, birds and other animals native to Indiana have evolved along with native plants, and when the foreign plants take over, those animals can lose food sources or foraging grounds.

PROPERTY SETTING AND REGIONAL CONSERVATION CONCERNS: This tract lies within the Highland Rim Natural Region of the Interior Plateau. It lies within the Mill Creek--Mosquito Creek watershed, and activities on the tract have the potential to affect water quality.

FOREST RESILIENCE AND CARBON SEQUESTRATION: A forest that is healthy and vigorously growing will be better able to contend environmental extremes. Managing the forest through harvesting timber, timber stand improvement, and controlling invasive species will help to maintain the forest in a healthy state. Proper harvesting of timber and regenerating forests can also result in net carbon sequestration in wood products and new forest growth.

AREA DESCRIPTION AND MANAGEMENT RECOMMENDATIONS

AREA NAME: Field

RESOURCE DESCRIPTION: This small field extends west of the building, with part of the area having been recently disturbed due to removal of some buildings. The far western end of the open field has a mix of Indian grass, broom sedge, forbs, and some fescue. Some hardwoods and cedars are sprinkled through parts of the field.

DESIRED FUTURE CONDITION: The desired future condition is to join it with the field on the IKC land to the south, and keep the area open.

ACTIVITIES TO ACHIEVE DESIRED FUTURE CONDITION: Continue to cut the cedars (and utilize for other purposes if desired) to help expand the field. To help maintain the warm season grasses, periodic burning along with some mowing can be used. When using fire to maintain the area, always have an approved burn plan done by a qualified professional, and follow the plan in regards to weather, fuels, etc. There are a couple of consulting foresters who are qualified to write the plan as well as the district wildlife biologist. The consulting foresters are also qualified to do the actual burning, if desired.

AREA NAME: Woods

RESOURCE DESCRIPTION: The western end of the woods was likely grazed in the past, then left to revert to trees and shrubs. Some of the larger timber is located in the middle and eastern parts of the woods, especially in the sinkhole areas. Trees range in size from post/pole to medium sawtimber with most in the small to medium sawtimber size classes. The height of the trees is average to above average, and the quality is good. There are areas with grapevines. Tree and shrub species found on the tract include hackberry, shingle oak, yellow poplar, black oak, eastern red cedar, persimmon, Virginia pine, white ash, red oak, chinkapin oak, black walnut, red elm, white oak, American elm, red elm, blue beech, pignut hickory, boxelder, American beech, sassafras, crab apple, paw paw, spicebush, and blue beech.

DESIRED FUTURE CONDITION: The desired future condition is to have a healthy woodland that helps protect the karst area.

ACTIVITIES TO ACHIEVE DESIRED FUTURE CONDITION: Continue to maintain the trails, and expand if desired. The invasive species are not overwhelming at this time, but will continue to spread if left untreated. Some work has already been done on the invasives, with more planned for the future. Continue to protect the area around the cave entrance as well as the other sinkhole areas. Some work should be done on the grapevines, leaving some at the edges as well as in the interior of the forest where they are not spreading into a more desirable tree and causing harm.

For Timber Stand Improvement (TSI), invasives control, and other woodland projects, there may be cost-share funds available to help off-set the cost of doing the practice. Check with the Natural Resources Conservation Service (NRCS) office or the district forester for fund availability.

The tract is many years away from having a timber harvest. When it is appropriate, using a professional forester and qualified logger when undertaking a timber sale and harvest will result in a more desired outcome. High grading (the removal of the highest grade timber, leaving only lower quality, less desirable trees) is not a valid management option. A diameter limit harvest is also not a valid management option, and should not be used in your forest.

You must call your District Forester before you begin planning your timber sale. It is important for you to meet with your District Forester before a timber sale to discuss important details for your harvest including any BMP issues that may need to be addressed, and any environmentally sensitive areas that may need to be avoided

FUTURE LONG-TERM LAND CONSERVATION: Lands enrolled in the Classified Forest and Wildlands Program received a significantly lowered property tax assessment, periodic forester inspections, and an option to participate in and sell forest products as being 'green certified'. In return, you agree to care for the land and its resources according to program standards and the approved plan tailored to your objectives and

property resources. There are 16.38 acres within this property that can be classified at any time.

CONSERVATION-BASED ESTATE PLANNING: The first step to ensuring the personal and family legacy of you land is to talk about its future. This includes the co-owners, heirs, or others affected by the transfer of ownership. Common legacy tools include Family Partnerships, Gift or Sell to Heirs, Land Trusts, Last Will and Testament, Limited Liability Company (LLC), and Conservation Easements among others. Each method of transfer has its advantages and drawbacks. Discussion of these tools with the future owners is necessary to ensure the land is conserved for future generations.

In the case of storm, fire, pest outbreak, or other widespread damage, consult with your forester to adjust management activities and recommendations to put the property back on track to meet your goals.

CONTACTS: This plan offers general guidelines to manage your natural resources and some recommended or required action(s) is (are) needed. The use of a professional forester is encouraged as you undertake significant or unfamiliar land management actions. This is especially true with timber resources, where missteps can have consequences lasting for decades. A list of consultant foresters and industry foresters is available at www.findindianaforester.org.

A wildlife biologist can help refine plans and provide detailed guidance where needed for specific wildlife issues and habitats of interest. The State District Wildlife Biologist for this county is Mark Bennett and he can be reached at (812)849-4586, or mbennett@dnr.IN.gov.

For cost-share information, contact Evan Smith, District Conservationist, in the NRCS office in Bedford. He can be contacted at (812)279-8117, Ext. 3, or e-mail at Evan.Smith2@usda.gov.

MANAGEMENT PROJECT SUMMARY

SCHEDULED YEAR	AREA NAME or NUMBER	PROJECT DESCRIPTION	ACRES	IMPORTANCE
2020	Tract	Begin invasives control	16.38	High
2020	Field	Begin to expand open field	~1.5	High
2021	Woods	Deaden grapevines	~14.00	Medium
2021	Field	Burn/mow WSG area	~1.5	Medium
2022	Tract	Continue invasives control	16.38	High

ADDITIONAL RESOURCES:
SICIM Calendar of Control

ACKNOWLEDGEMENTS

I have reviewed the attached Stewardship Plan dated November 21, 2019, and agree with its recommendations for reaching my management objectives. I also agree to follow this plan as written, unless circumstances arise that amendments need to be made. The administrating State District Forester must agree upon any amendments in the plan.

Landowner's Name: Indiana Karst Conservancy

"Shawnee KP2"

County: Lawrence

Landowner's Acceptance: _____
(Signature)

Date Signed: _____

Plan Preparer: _____ Janet Eger

District Forester: Janet Eger
Janet Eger

Date Signed: UP-dated to IKC 1-7-2024

Please sign this page and return it to:

Janet Eger, District Forester
14043 Williams Road
Shoals, IN 47581



MANAGEMENT ACTIVITY TRACKING LOG

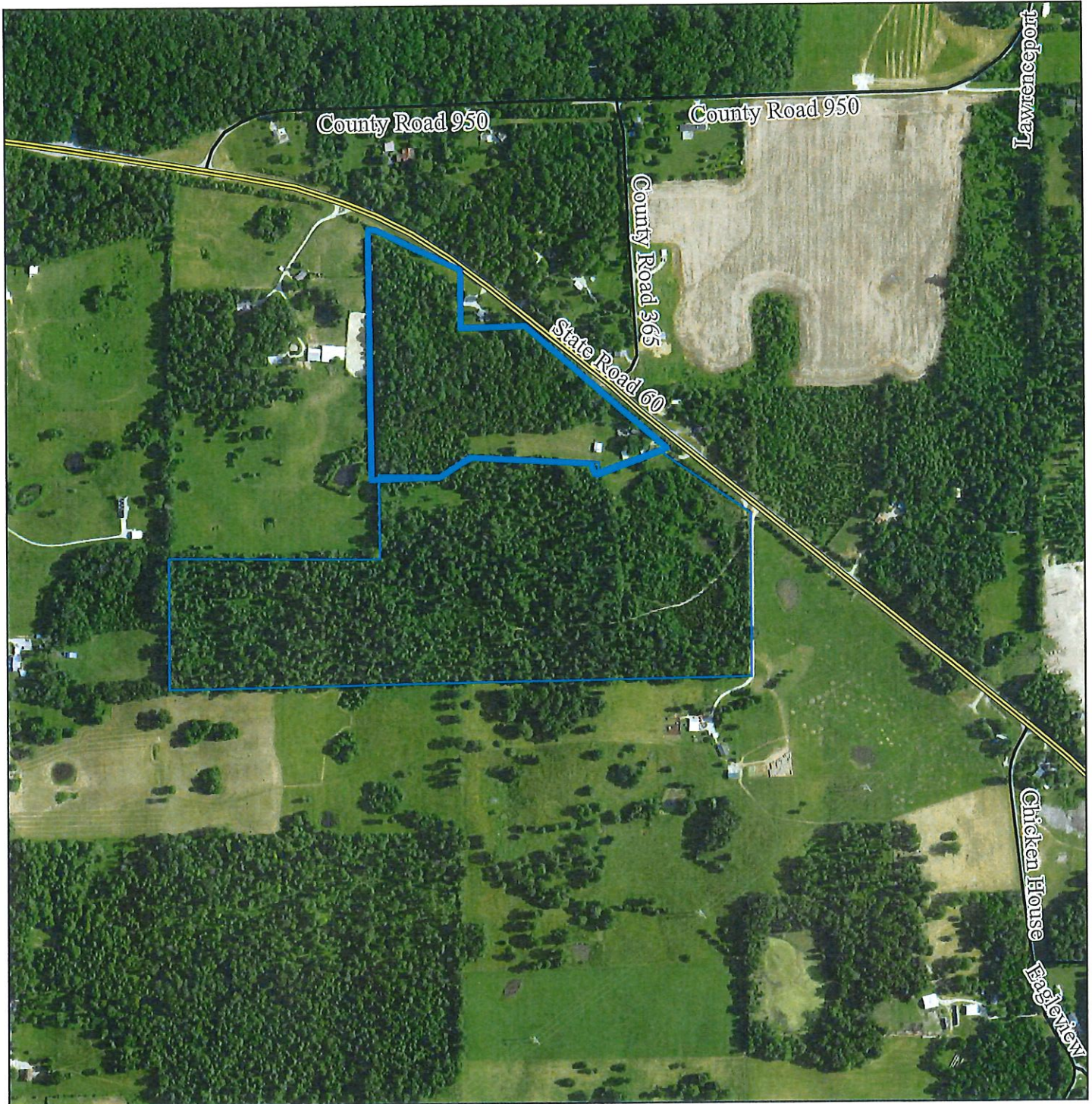
SCHEDULED YEAR	AREA NAME or NUMBER	PROJECT DESCRIPTION	ACRES	IMPORTANCE	DATE COMPLETED	ACRES COMPLETED	CHEMICALS USED	COMMENTS	NON-NATIVE PLANTS/SEEDS USED
2020	Tract	Begin invasives control	16.38	High					
2020	Field	Begin to expand field	~1.5	Medium					
2021	Tract	Begin to deaden grapevines	~14.0	Medium					
2021	Field	Burn/mow WSG	~1.5	Medium					
2022	Tract	Continue invasives control	16.38	High					

If planning an activity not on this list, please contact your District Forester.



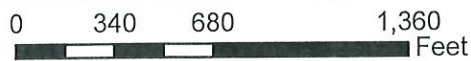
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Lawrence County
Marion Township
Section 4, T3N, R1E

Prepared By:
Janet Eger
District Forester
Date: 10/15/2019



Legend

 Property Boundary



1:7,920

1 inch = 660 feet

Acres: 16.38



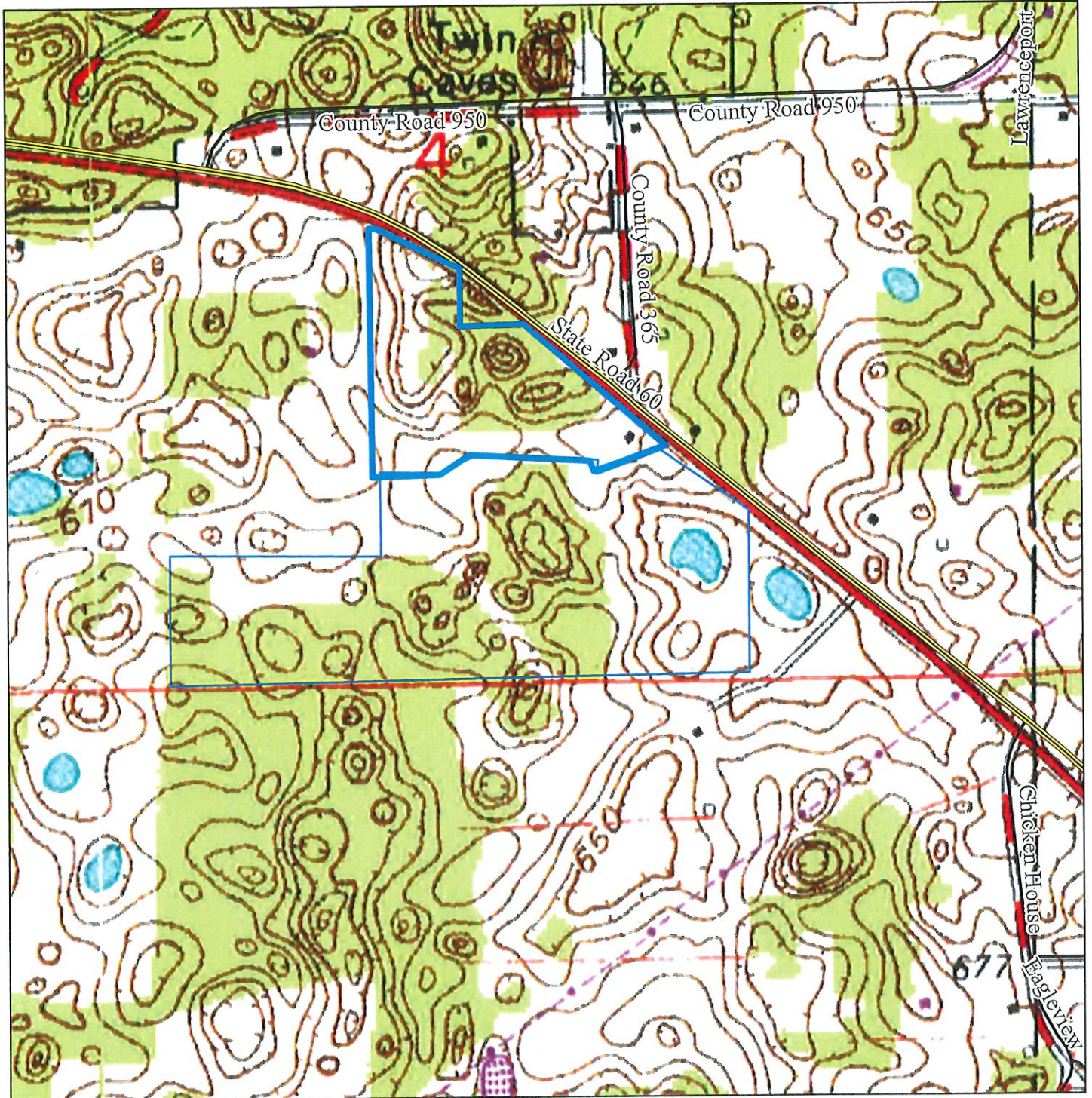
All Boundaries Are Approximated

(Original Map Scale)



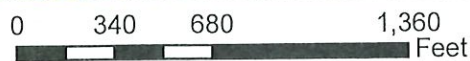
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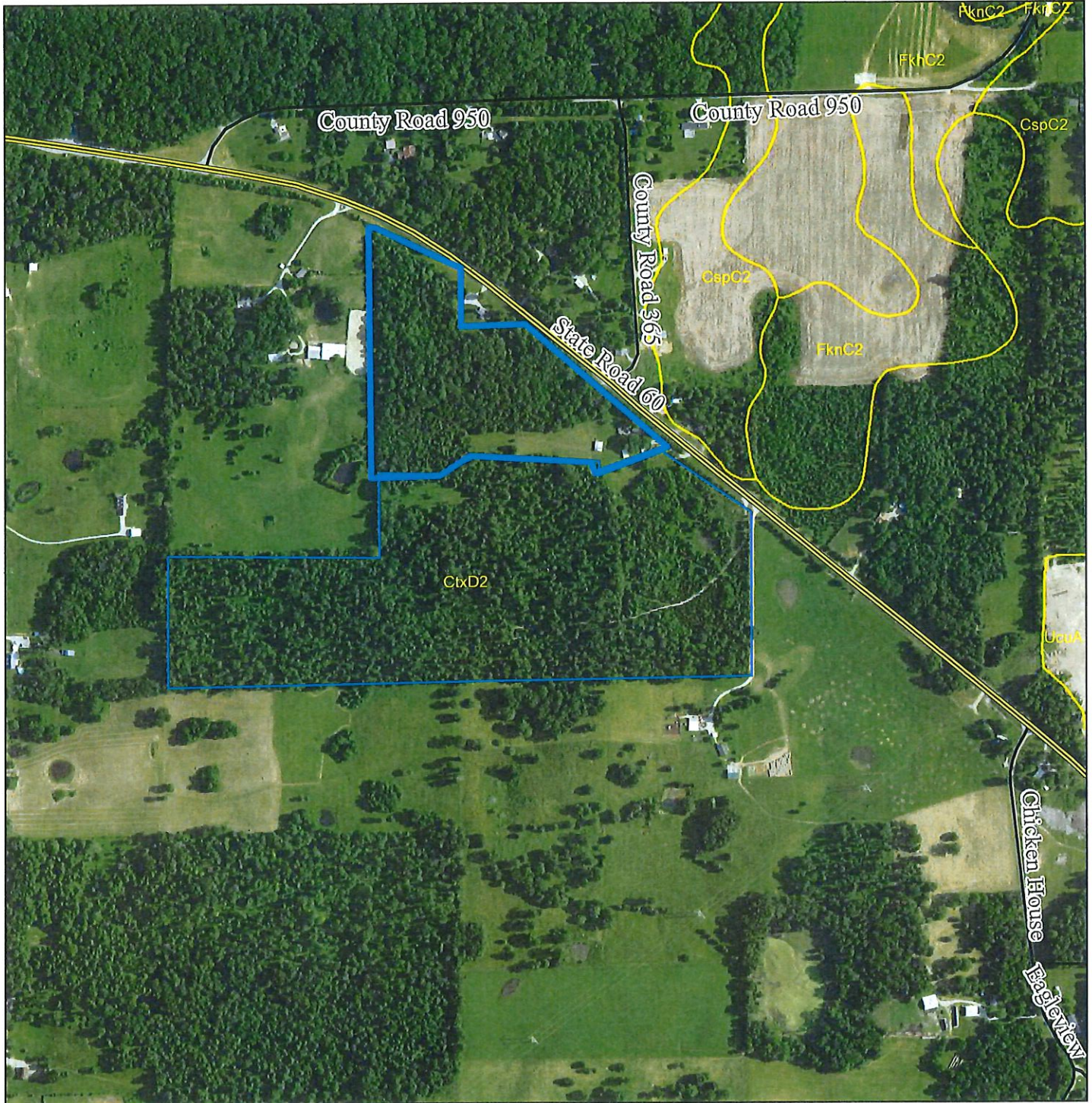
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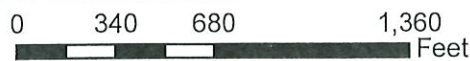
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