



INDEPENDENCE OAKS BASELINE PARK ANALYSIS

UPDATED: 4/24/17

CONTENTS

Park Location	4
Community Context.....	4
Oakland County	5
Independence Township	5
Drive-Time Service Area	6
Site Analysis	10
Parcel Analysis	10
Physical Characteristics.....	12
Regional Context.....	12
Land Use	13
Park History	14
Early History.....	14
Park History	17
Past Master Plans	18
Grant History	21
Natural Resources.....	23
Park Infrastructure and Assets	28
Park Maps	31
References	37
Notes	38

TABLES

Table 1: Population Trends - 16-minute drive-time of Independence Oaks	7
Table 2: Race and Ethnicity - 16 minute drive-time of Independence Oaks.....	7
Table 3: Market Potential – 16-minute drive-time of Independence Oaks	8
Table 4: Parcel Table for Independence Oaks	10
Table 5: Natural Communities at Independence Oaks	23

FIGURES

Figure A: Independence Oaks Drive-Time Map	6
Figure B: Population by Age – 16-minute drive-time of Independence Oaks	7
Figure C: Natural Communities at Independence Oaks.....	27
Figure D: Acquisition Grant Map	32
Figure E: Development Grant Map	33
Figure F: Independence Oaks Trail Map	34
Figure G: Independence Oaks Winter Trail Map	35
Figure H: Planning Unit Map.....	36

Park Location

Independence Oaks County Park is a 1,286-acre park located in northern Oakland County in Independence Township¹.

Park Contact Information

9501 Sashabaw Road

Clarkston, MI 48348

Park Office: (248) 625-0877

www.DestinationOakland.com

Township and Range

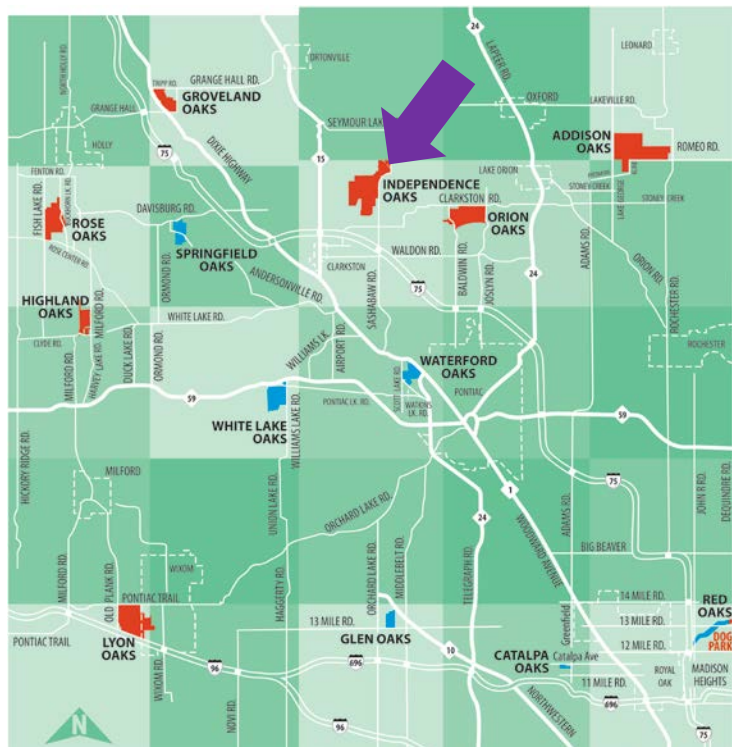
T4N R9E, Sections 3, 4, 9, 10, 15, and 16



Community Context

The characteristics of Independence Oaks are unique and reflect the character of the local communities. It is important to understand the park within the context of its communities – Michigan, Oakland County, and Independence Township – for multiple reasons:

- To convey a ‘sense of place’ that is harmonious and complementary to the local environment
- To ensure that Oakland County Parks is not duplicating services provided by local recreational authorities or by the private, non-profit, or larger regional/state providers
- To collaborate with units of governments and organizations related to the Oakland County Parks mission to manage open space and natural areas and provide recreational facilities and programs on an inter-community, county and/or multi-county basis
- To develop facilities and programs that contribute to the implementation of local and county plans
- To ensure compliance with local and county regulations



¹ See *Planning Map Set*, page 3 – Location Map

Oakland County

Oakland County is located in southeast Michigan, approximately 20 miles northwest of Detroit, and covers **907** square miles (SEMCOG, 2015). The estimated population in 2015 was **1,242,304**. In 2010-2015, median household income was **\$66,426**. An estimated **10%** of the population lives in poverty¹ (U.S. Census Bureau, 2015).

According to Advantage Oakland, Oakland County employs nearly 690,000 workers with more than 260,000 commuting from outside the county. The top three employment sectors are Professional and Business Services (26%), Trade, Transportation and Utilities (18%), and Private Education and Health Services (16%). The county is home to nearly 1,000 firms from 39 foreign countries (EDCA).

Within the county, there are 30 cities, 21 townships, and 11 incorporated villages, in urban, suburban, and rural landscapes. The county is home to the headwaters of five major rivers, the Clinton, Flint, Huron, Rouge, and Shiawassee Rivers, all of which are important to the long-term health of the Great Lakes Ecosystem. Many diverse ecosystems are located in the county due to the area's complex topography and geological history and are an important element in the character of the county (OCPRC, 2013).

Oakland County Parks and Recreation

Oakland County Parks and Recreation (OCPR) provides parks and recreation services within the geographic boundaries of Oakland County, but are also open to visitors to the county. Since 1966, OCPR has expanded and diversified the park system from four parks to thirteen, now totaling over 6,700 acres. Key attractions include managed natural areas, nature centers, waterparks, golf courses, conference centers, campgrounds, fairgrounds and over 65 miles of park trails. OCPR also offers a variety of entertaining and educational recreation programs and services for various ages and abilities (OCPRC, 2013).

Independence Township

Independence Oaks County Park is located in Independence Township in the northwest quadrant of Oakland County. The township covers **34.99 square miles**. The estimated population in 2014 was **36,145** and the median household income was **\$76,628**. (U.S. Census Bureau, 2015).

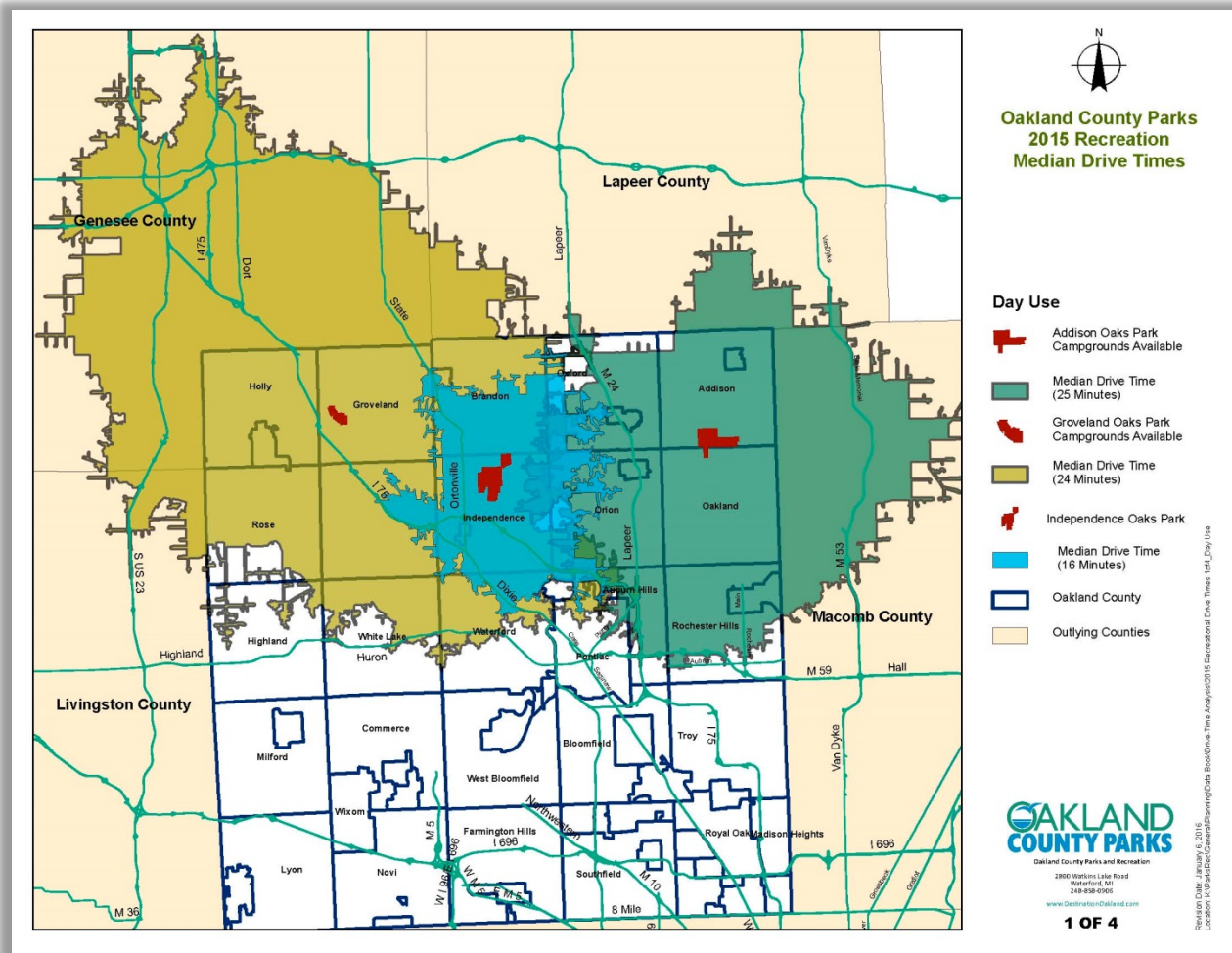
Description from Advantage Oakland: "Independence Township can be characterized as a growing residential community situated in a rural atmosphere. Surrounded by thousands of acres of rolling hills, lakes, woodlands, farms, quiet country roads and marshes, the area is a rustic hideaway. Located along the I-75 corridor between Pontiac and Flint, containing headwaters for the Clinton River, the Township of Independence has proven to be a very desirable place to live. Shopping centers and professional services have sprung up along the main thoroughfares to provide all the local conveniences. Condos, apartments and single-family homes sit alongside old farm houses, some having been converted into country estates. Large farms exist though few are functional any longer. Listed in the Michigan National Features Inventory are the extant buildings of the old Henry Ford farm used for testing tractors. Independence Oaks County Park, DTE outdoor music theatre, and the Pine Knob ski area offer extensive public recreation opportunities." (Oakland County, 2012)

Drive-Time Service Area

This purpose of this section is to outline the geographic area that draws the majority of visitors to a specific park or facility (drive-time service area) and describe the demographic and socio-economic characteristics of the people who live there.

The drive-time analysis is conducted using park visitor home zip codes that are collected at point-of-sale. Please see the 2015 *Annual Dashboard and Data Book* for a detailed description of drive-time analysis methods (OCPRC, 2015). The median drive-time – indicating that half of all visitors drive for a specific length of time or less – is used to approximate the service area for each park and facility. In 2015, the median drive time for visitors was 16 minutes.

Figure A: Independence Oaks Drive-Time Map



Population and Income Trends

Population and income profiles are generated for the drive-time service area using Esri² ArcGIS Online. The estimated population in the drive-time service area in 2015 was 135,564 with a 0.54% annual increase in population forecast between 2015 and 2020. The population is becoming more diverse in race and ethnicity. The population profile and forecast reflects an aging population with the population 65 and older increasing by 23% from 2015 to 2020. Median age is 40.7 in 2015 and forecast to be 41.4 in 2020. The median household income in 2015 is estimated at \$76,132 and is forecast to increase at an annual rate of 2.95% between 2015 and 2020.

Table 1: Population Trends - 16-minute drive-time of Independence Oaks

Summary	Census 2010	2015	2020
Population	133,596	135,564	139,293
Households	49,828	50,919	52,386
Families	36,395	36,812	37,646
Average Household Size	2.67	2.65	2.64
Owner Occupied Housing Units	40,170	40,462	41,493
Renter Occupied Housing Units	9,658	10,457	10,893
Median Age	39.4	40.7	41.4
Trends: 2015 - 2020 Annual Rate	Area	State	National
Population	0.54%	0.15%	0.75%
Households	0.57%	0.21%	0.77%
Families	0.45%	0.06%	0.69%
Owner HHs	0.50%	0.19%	0.70%
Median Household Income	2.95%	2.79%	2.66%

Figure B: Population by Age – 16-minute drive-time of Independence Oaks

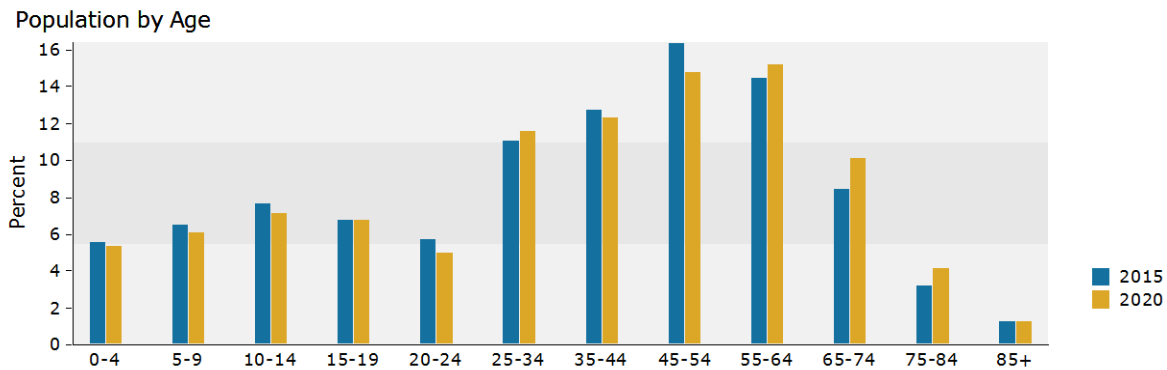


Table 2: Race and Ethnicity - 16 minute drive-time of Independence Oaks

Race and Ethnicity	Census 2010		2015		2020	
	Number	Percent	Number	Percent	Number	Percent
White Alone	119,701	89.6%	119,399	88.1%	120,494	86.5%
Black Alone	6,199	4.6%	7,177	5.3%	8,335	6.0%
American Indian Alone	512	0.4%	546	0.4%	583	0.4%
Asian Alone	2,060	1.5%	2,501	1.8%	3,033	2.2%
Pacific Islander Alone	40	0.0%	46	0.0%	53	0.0%
Some Other Race Alone	2,332	1.7%	2,676	2.0%	3,049	2.2%
Two or More Races	2,752	2.1%	3,220	2.4%	3,747	2.7%
Hispanic Origin (Any Race)	7,778	5.8%	8,936	6.6%	10,373	7.4%

Market Potential Index – Recreation and Pet-Related Expenditures

ESRI's Market Potential Index (MPI) measures the relative likelihood of the adults or households in the specified trade area to exhibit certain consumer behavior or purchasing patterns compared to the U.S. An MPI of 100 represents the U.S. average.

Table 3: Market Potential – 16-minute drive-time of Independence Oaks

Product / Consumer Behavior	Percent of Population	MPI
Bicycling (Road) in past 12 months	11.7%	120
Canoeing Kayaking in past 12 months	6.6%	122
Fishing (Fresh Water) in past 12 months	14.3%	115
Golf in past 12 months	12.6%	133
Hiking in past 12 months	11.3%	113
Horseback Riding in past 12 months	2.8%	113
Jogging/Running in past 12 months	13.8%	108
Walking for Exercise in past 12 months	31.4%	112
Overnight Camping Trip in past 12 months	14.6%	115
Households owning 1 dog	27.8%	116
Households owning 2 or more dogs	18.3%	115

Tapestry Segmentation

Tapestry Segmentation classifies neighborhoods into 67 unique segments based not only on demographics but also socioeconomic characteristics. It describes US neighborhoods in easy-to-visualize terms to help understand residents' lifestyle choices, what they buy, and how they spend their free time and help identify best customers, optimal sites, and underserved markets.ⁱ

The Esri Dominant Tapestry Map shows the tapestry segments within and surrounding the drive-time radius and provides a list of the Tapestry segments with hyperlinks to detailed descriptions. See *Planning Map Set*, pages 21-22 – Esri Dominant Tapestry Map.

The top five Tapestry segments within the drive-time radius are shown below. Each segment name is hyper-linked to the detailed Esri profile. After the name, we show the percentage of households that are included in each segment – within the drive-time radius and nationally. The Tapestry segment summary from the Esri profile is included with each entry.

[Savvy Suburbanites \(1D\)](#)

Describes 18.0% of households within the drive-time radius; 3.0% of households in the U.S.

Savvy Suburbanites residents are well educated, well read, and well capitalized. Families include empty nesters and empty nester wannabes, who still have adult children at home. Located in older neighborhoods outside the urban core, their suburban lifestyle includes home remodeling and gardening plus the active pursuit of sports and exercise. They enjoy good food and wine, plus the amenities of the city's cultural events.

[Green Acres \(6A\)](#)

Describes 14.0% of households within the drive-time radius; 3.2% of households in the U.S.

ⁱ <http://www.esri.com/data/tapestry>

The Green Acres lifestyle features country living and self-reliance. They are avid do-it-yourselfers, maintaining and remodeling their homes, with all the necessary power tools to accomplish the jobs. Gardening, especially growing vegetables, is also a priority, again with the right tools, tillers, tractors, and riding mowers. Outdoor living also features a variety of sports: hunting and fishing, motorcycling, hiking and camping, and even golf. Self-described conservatives, residents of Green Acres remain pessimistic about the near future yet are heavily invested in it.

[Rustbelt Traditions \(5D\)](#)

Describes 12.6% of households within the drive-time radius; 2.2% of households in the U.S.

The backbone of older industrial cities in states surrounding the Great Lakes, Rustbelt Traditions residents are a mix of married-couple families and singles living in older developments of single-family homes. While varied, the work force is primarily white collar, with a higher concentration of skilled workers in manufacturing, retail trade, and health care. Rustbelt Traditions represents a large market of stable, hard-working consumers with modest incomes but above average net worth (Index 111). Family oriented, they value time spent at home. Most have lived, worked, and played in the same area for years..

[Soccer Moms \(4A\)](#)

Describes 9.2% of households within the drive-time radius; 2.8% of households in the U.S.

Soccer Moms is an affluent, family-oriented market with a country flavor. Residents are partial to new housing away from the bustle of the city but close enough to commute to professional job centers. Life in this suburban wilderness offsets the hectic pace of two working parents with growing children. They favor time-saving devices, like banking online or housekeeping services, and family-oriented pursuits..

[Comfortable Empty Nesters \(5A\)](#)

Describes 9.0% of households within the drive-time radius; 2.5% of households in the U.S.

Residents in this large, growing segment are older, with more than half of all householders aged 55 or older; many still live in the suburbs where they grew up. Most are professionals working in government, health care, or manufacturing. These Baby Boomers are earning a comfortable living and benefitting from years of prudent investing and saving. Their net worth is well above average (Index 363). Many are enjoying the transition from child rearing to retirement. They value their health and financial well-being.

Site Analysis

Parcel Analysis

Independence Oaks County Park is composed of 5 parcels totaling 1,286 acres. Copies of all documents cited in the Parcel Analysis are maintained in the Planning and Resource Development files.

Table 4: Parcel Table for Independence Oaks

Parcel ID	Acres	Deed/ Lease/ Easement / Agreement	Liber and Page
08-03-201-006 From -003 and -004 (IND-North)	22.8	2006- MNRTF Acquisition Grant Agreement- Grant #TF06-199	*
		1968- Deed, Barrett to DTE (info. on tower line, 60' roadway easement) also-007	5164/504
		2010- Deed- also -007	42495/380
		2010- Deed- also -007	42495/386
		2011- Deed/ Arnold (TF06-199) -mineral interest deed (186.9 acres)—also -007	43278/161
08-03-201-007 From -001 and 100-012 (IND-North)	164.1	2006- MNRTF Acquisition Grant Agreement- Grant #TF06-199	*
		2010- Deed (0.29 triangle)	42495/374
		2010- Deed- also -006	42495/380
		2010- Deed- also -006	42495/386
		2011- Deed/ Arnold (TF06-199) -mineral interest deed (186.9 acres)— also -006	43278/161
08-03-401-004 (IND-North)	2.4	2010- Warranty Deed/ Ducks Unlimited	42687/311
08-09-200-004 From -003 and 08-10-300-005 (IND-Main)	1,058	1982- MNRTF Acquisition Grant Agreement- Grant #TF603 (250 acres w/ 08-15-100-007)	*
		1968- 1976- Land and Water Conservation Fund Grant #LWCF 26-00129, -00230, -00502 and -00780.	*
		1970- Deed/ Brock; Pew 337 acres (LWCF—129)	5480/624
		1972- Deed/ Woodford Apt. (Cohn) 422 acres (LWCF—230)	5885/319
		1974 –Deed/ Jewish Welfare Federation (Cohn) 23 acres (LWCF -502)	6329/887
		1974- Deed/ Lotan 2 acres	6236/641
		1976- Deed/ Gray 50 acres (LWCF—780)	6655/682
		1981- Deed (OC to Rumph) -1.72 acres	07995/778
		1985- Deed/ Sashabaw Realty (parcels 1,3, and 4) 146.3 acres (TF 603)	08921/025
		1986- Deed/ Independence Twp. 20 acres (TF 603	9751/193

Parcel ID	Acres	Deed/ Lease/ Easement / Agreement	Liber and Page
08-15-100-007 From -001 (IND-Main)	36.7	"B")	
		1986- Deed/ Sabat-Iannelli 47.5 acres (TF 603)	9608/414
		1988- Deed – Paulson 5 acres	10723/662
		1988- Deed to RCOC "Sashabaw Road Project parcel 4" unknown acreage	10636/844
		1990- Mineral Deed (65%)	11277/370
		1998- Deed to RCOC -0.49 acres	18045/572
		1999- Easement (underground R-O-W DTE/Ameritech)	20582/138
		1982- MNRTF Acquisition Grant Agreement- Grant #TF603 (250 acres w/ 08-09-200-004)	*
		1985- Deed/ Sashabaw Realty (parcel 2)	08921/025
		1985- Survey	08960/449
		1985-Mineral Deed (65%)	09191/505

* Contact OCPR Planning and Resource Development Department for documents.

Total park acreage is determined using Oakland County's GIS-based parcel database; this acreage may differ from the sum of acreages listed on individual deeds.

Physical Characteristics

Geologyⁱ

The property lies within the Washtenaw Subsection Ecoregion³ and the Jackson Interlobate Sub-subsection⁴. This area is found between three glacial lobes and is characterized by ice-contact topography⁵ and glacial deposits⁶ (Albert, 1995). The landscape of the park was shaped by glaciers and is situated in the interlobate region, a region of glacial landforms including ground and end moraines, kettle lakes and drainage streams. Crooked Lake may be an ice-block depression lake, a lake created by the depression left by an isolated block of glacial ice. The majority of the park is within a glacial outwash plain of stratified sand and gravel; the west portion of the park is an end moraine of coarse-textured till.

Soilsⁱⁱ

Fourteen soil types are found on the property, ranging from very poorly-drained peat and muck soils in the wetlands and ponds, to well-drained sand and loam soils in the uplands.

Topographyⁱⁱⁱ

Elevations rise 168' over the property, ranging from 1026' along the Clinton River headwater stream to 1194' on knoll west of Crooked Lake.

Hydrography^{iv}

Two lakes are the main water features of the park, the 68-acre Crooked Lake at Independence Main, and 31-acre Upper Bushman Lake at Independence North. A ½-acre pond with swimming beach, is west of Crooked Lake. There are many headwaters streams and springs flowing mostly in a southerly direction that feed into wetlands and ponds. Ephemeral or vernal ponds are found throughout the park.

Presettlement Plant Communities^v

The pre-settlement habitat (circa 1816-1856) was a mix of Black Oak Barren and Mixed Conifer Swamp. Mixed Hardwood Swamp was near the southwest corner and Shrub Swamp/Emergent Marsh along the south boundary (Comer & Albert, 1997).

Regional Context

Potential Natural Areas^{vi}

Michigan Natural Features Inventory (MNFI) has identified a Priority One Natural Area⁷ over the majority of the property. Old fields and built environments are excluded.

Watershed^{vii}

Independence Oaks is within the Clinton River Watershed and Upper Clinton Subwatershed.

ⁱ See *Planning Map Set*, page 4 – Surface Geology

ⁱⁱ See *Planning Map Set*, page 5 – Soils

ⁱⁱⁱ See *Planning Map Set*, page 6 – Ten Foot Contours

^{iv} See *Planning Map Set*, page 7 – Hydrography

^v See *Planning Map Set*, page 8 – Presettlement Vegetation

^{vi} See *Planning Map Set*, page 9 – MNFI Potential Natural Area

^{vii} See *Planning Map Set*, page 10 – Oakland County Subwatersheds

Green Infrastructureⁱ

Most of Independence Oaks County Park is included in Oakland County's Green Infrastructure Vision. Excluded areas include Independence North old fields, Moraine Knoll and Twin Chimneys picnic areas, paved roads, and developed areas

Independence Oaks is directly connected to the 120-acre Clintonwood Park (Independence Township). Other parks and open spaces in proximity include Bay Court Park and undeveloped open space (Independence Township), Brandon Township Nature Sanctuary (Michigan Nature Association), Pine Knob Ski Resort and DTE Energy Music Theatre, Clarkston Community Schools open space and subdivision open spaces.

Land Useⁱⁱ

Zoning

The park property is zoned Recreation (REC) at Independence- Main and Rural Residential (R-1R) at Independence-North (Independence Township).

Current Land Use

The property is currently used for recreation and natural resource conservation.

Surrounding Land Use

The majority of the properties neighboring Independence Oaks are single-family residential with increasing development in the surrounding area.

Past Land Useⁱⁱⁱ

Historical aerial photographs provide a snapshot of past land uses and of the development of the park over the decades.

ⁱ See *Planning Map Set*, page 11 – Green Infrastructure

ⁱⁱ See *Planning Map Set*, page 12 – 2015 Land Use

ⁱⁱⁱ See *Planning Map Set*, pages 13-20 for views of the park from 1940 through 2015

Park History

Early History

Independence Oaks is located in parts of Sections 3, 4, 9, 10, 15 and 16 in the geographic township of Independence.

The 1872 Oakland County atlas shows the future park consisting of multiple properties ranging in size from 17 to 80 acres¹. Property owners of the future park included the Bailey family, whose homestead can be seen on the north side of Sashabaw Road (#1 on map right).

Map on Right: Independence Township Sections 3, 4, 9, 10, 15 and 16 from the 1872 Oakland County Atlas. Mud Lake and Crooked Lake seen in the atlas were later known as Middle and Lower Bushman lakes. Today the lakes are called Upper Bushman Lake and Crooked Lake.

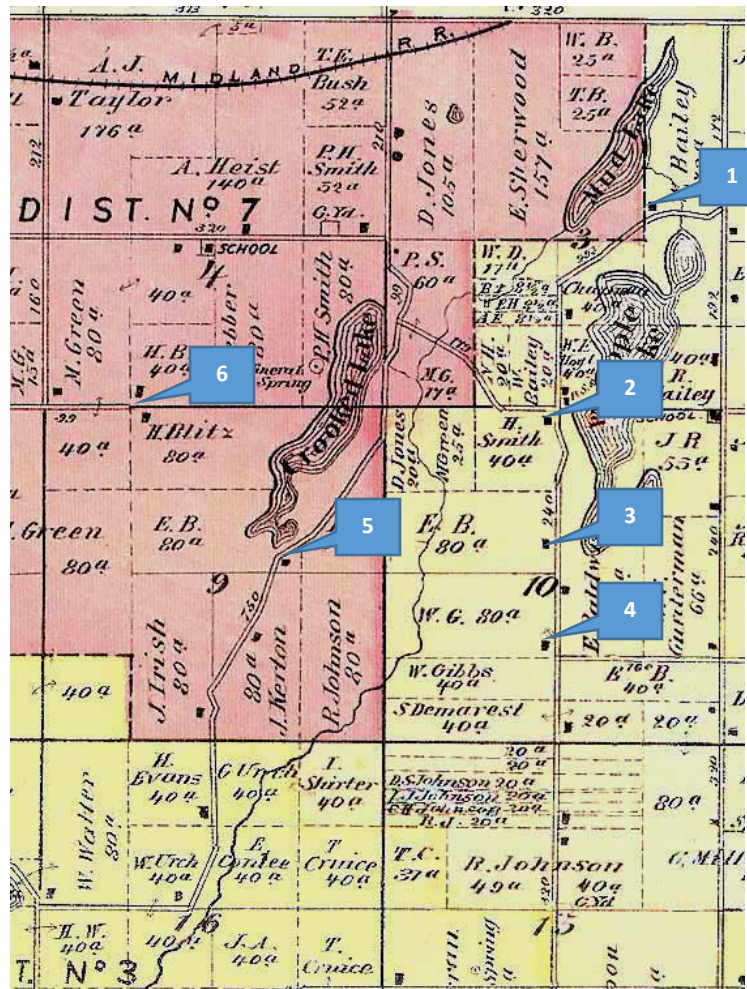
Another homestead is seen at the corner of Sashabaw and (former) Hoyt Road on the 40-acre property owned by H. Smith (#2 on map right). Hoyt Road corresponds with the current maintenance entrance to the park.

This property was owned by William Darling and the house noted on the 1896 and 1908 atlases (Kace Publishing Company, 1896) (Geo A. Ogle and Co., 1908). This and adjoining properties were owned by Bushman from 1917. Bill Kelley lived in the house for five years, around 1917, when the property was owned by Bushman (Stafford, 1996). The house was subsequently torn down and the current park house erected in the location in YEAR.

The Baldwin family homestead was located near the current main park entrance (#3 on map above). The buildings were used by tenants when the property was part of the Palmer Bee Company Farm in the 1940s. The buildings were removed when the park was acquired.

The 1872 map shows a building at the south end of Crooked Lake, east of (former) Perry Lake Road. It does not show up in the 1896 or 1908, when the property was owned by Ebeneius Baldwin (Kace Publishing Company, 1896) (Kace Publishing Company, 1896). The 1947 atlas shows the property being part of the Palmer Bee Company Farm.

Two structures appearing in the 1872 atlas are on the property then owned by H. Blitz. Structures are seen on the north and south sides of Rattalee Lake Road. The structure on the north side is gone in the 1896 atlas.



¹ This map can also be downloaded at <http://www.memoriallibrary.com/MI/Oakland/PLATS/1872independence.htm>

The house on the corner of Sashabaw and Oak Hill was apparently built after 1872; it appears in the 1896 and 1908 atlases on a 25-acre parcel owned by Frank Bailey. In the 1947 atlas, the parcel was owned by Norman Locke.

"Bee Lodge" circa 1960, now Twin Chimneys pavilion



[Twin Chimneys and Surrounding Area](#)

The original structure of the building now known as Twin Chimneys Pavilion is assumed to have been built by George Bee as a summer home. Mr. Bee's company, the Palmer-Bee Company owned the property from 1944 through 1960. Mr. I.I. Cohn purchased the 390 acres of the property in 1960 and the structure (known as the Lodge) became the gathering place for members of the Glen Acres Hunt Club that was operated on the property. After the Oakland County Parks and Recreation Commission purchased the property, the Lodge was vandalized and destroyed by fire, leaving only the two fireplaces and part of the slate floor. The Twin Chimneys Pavilion was reconstructed by OCPRC in 1977 from the remains of the Lodge. The current driveway is in approximately in the same location as the original circular drive. The restroom building location was formerly occupied by a caretaker's house. (Stafford, 1996).

[Independence North](#)

Historical ownership of the 186 acres comprising Independence Oaks-North can be traced back to 1857, when the property and many other parcels surrounding it was owned by William Bailey. The Bailey family continued to own the property through the early 1900s. Other early owners between 1927 and 1948 included W.R. McBride, F. E. Bushman, and H. Locke, and Occidental Life Insurance Company.

In 1940, Arnold L. and Harriette Gray Barrett purchased 175 acres of the property from E. V. Bailey. This included the old farmhouse at 9975 Sashabaw Road. The Barrett's maintained a stable renter in this house.

In 1941, Mr. and Mrs. Barrett began construction of their new manor-style home and moved to the property to live year-round. One-room additions to the house were made throughout the 1940s. They had one surviving daughter, Maria Barrett, who was born in 1946. Mr. and Mrs. Barrett purchased an additional 25 acres from the Locke family in 1948, which included the house at Sashabaw and Oak Hill. After Maria's parents passed away in

1980, she and her husband, Craig R. Arnold took ownership of the property in 1983 and moved there from Bloomfield Hills. They completed many renovations and additions to their home. They retained renters in the other two homes on the property. In 2010, Mr. and Mrs. Arnold sold the 186 acres of their property to Oakland County Parks and Recreation. (OCPRC/PRD, 2011)

Bailey House

The Bailey House is situated on property that is part of the Bailey family's original US Government land grant of 1856. In addition to sections 2 and 3 in Independence Township, the Bailey family also settled land in Brandon and Oxford Township (Bacak-Egbo, May 2015). The settlement of Independence Township lands by the Bailey family is an illustration of the early 19th westward century migration that followed the opening of the Erie Canal¹.

The Independence Township Inventory surveyed the Bailey House in 1998, stating in their report, "It is also significant as one of the farm houses of the Bailey family. By 1896 members of the Bailey family were major land owners in sections 2 and 3, owning more than 494 acres." (Independence Township, 1998)

Around the land settled by the Robert Bailey family in Independence Township "a small community grew. The lake now known as Whipple Lake was then called Bailey Lake and soon that became the name of the settlement also. In newspaper accounts, references are made to the community of Bailey Lake as early as 1874 and as late as 1921. This was a community without a post office or a general store, but no less a community than those that had those features. It did have one important community building, Bailey lake School, which was located at the intersection of Whipple Lake Road and Pine Knob Road." (Bacak-Egbo, May 2015)

The Independence Township Inventory surveyed the Bailey House in 1998, stating in their report, "This house is significant because of its high degree of exterior architectural integrity. It is a good example of the T-plan farmhouse style built within the township in the late 1800s. (Independence Township, 1998)

A review of the structure in 2013 revealed additional architectural elements: "The previously identified farmhouse front exterior is also mixed with Gothic and Queen Anne details. The windows and doors have been trimmed with Gothic style crowns and the gables represent angles commonly found in Queen Anne designs. It's possible that additional Queen Anne elements had been placed within the gables and porch but those intricate wooden elements are often lost. This blend of styles is found consistently through Independence Township and Clarkston Village and represent a vernacular that is distinctly Clarkston. The mix of styles is more common in the Village and is more rare in the township farming area where many of the farmhouses from that era (1880) tend to be less decorative. This more uniquely elegant rural character continues on into the interior.

"The Bailey home's interior boasts original wood floors, elegant moldings, unique bead board, doors and casings and plaster walls. In addition, the kitchen pantry boasts original pantry carpentry with grain bins and cabinets made with mid-19th century carpentry methods. The original cabinetry is considered rare and has not been seen remaining in any other local structure."

The document goes on to state that the specific architectural characteristics are "unique, rare and thankfully still available. They are in remarkable good condition despite neglect, due to superior materials and craftsmanship." (Bacak-Egbo, May 2015)

Excerpt from PLANNING REVIEW – Independence Oaks: Bailey House (OCPR/PRD, 10/6/2016)

¹ Per discussion with Melissa Luginski, Oakland County Historical Commission

Oak Hill House

The house is situated on property that is part of a land patent registered to Wilson Bailey of Oakland County on August 18, 1837. Wilson Bailey was the oldest son of Robert and Malinda Bailey who came to Independence Township from New York in 1835. The 1872 plat shows a 173-acre parcel owned by W. Bailey.

There are varying reports on the age of this structure and it has most likely been significantly modified since the original structure was erected. A structure is first observed at the current location in the 1896 and 1908 plats on a 25-acre parcel owned by Frank Bailey. Franklin Bailey was the son of William and Clarissa Bailey. William was the second eldest son of Robert and Malinda Bailey. Franklin married Harriet (Hattie) Slocum. He passed away in 1903.

Franklin Bailey's widow, Hattie, married Norman Locke and continued to live in the small house on the farm until her death in 1942. The WPA Rural Property Inventory conducted in 1937 described the Oak Hill House as a one-story, four-room wood-frame house with a stone foundation and wood siding, built in 1926, on a 25-acre parcel owned by Mrs. Hattie Locke. The structure is observed in the 1947 plat, with the 25-acre parcel identified as owned by Norman Locke.

Arnold L. and Harriette Gray Barrett purchased the 25-acre property from the Locke family in 1948, which included the Oak Hill House. Barrett's daughter, Maria, and her husband Craig Arnold, took possession of the property in 1983. OCPR purchased the property from the Arnold family in 2010.

The Independence Township Inventory surveyed the Oak Hill House in 1998, describing it as a "One and on-half story vernacular farmhouse with anachronistic siding and an exterior chimney. The WPA Rural Property Inventory describes the house as a one-story building with a ten foot lean-to. If the description in the report is accurate, then a second floor has been added since 1939." The report lists the date of construction as 1910 (township tax records) and 1926 (WPA Rural Property Inventory). (Independence Township, 1998)

Excerpt from PLANNING REVIEW – Independence Oaks: Oak Hill House (OCPR/PRD, 12/6/2016)

Park History

Chronology of park history is under development.

Past Master Plans

1972 Site Plan

A site plan dated 1972 is cited in the 1995 Independence Oaks Master Plan (Carlisle Associates, 1995). This site plan includes only the original 337-acre acquisition and is limited to the west side of Crooked Lake.

1973 Site Plan

The 1995 Independence Oaks Master Plan (Carlisle Associates, 1995) cites a site plan developed in by Ellis, Arndt and Truesdell in 1973 when the park consisted of just over 830 acres. Many of the current amenities were located by this site plan, including the current swimming pond, boathouse, contact station, maintenance buildings and various day use/picnic areas. Proposed amenities on the east side of Crooked Lake that differ from the current layout are nature study areas in the north and south, multiple group camping areas and an Environmental Education Center located at the southeast end of Crooked Lake. Additionally, the site plan located a second swimming pond and family camping areas on the west side of Crooked Lake, where the Nature Center and trails are now located.

1995 Master Plan

The plan for Independence Oaks County Park was developed by Carlisle Associates, Inc. for the Oakland County Parks and Recreation Commission (Carlisle Associates, 1995). Independence Oaks consisted of 1,089 acres at that time, including land acquisitions that had been made in the 1970s, 1985 and 1988. Amenities in place at the time of master planning that correspond to current amenities include: Moraine Knoll, Nature Center, Trailside Shelter, Water's Edge Picnic Area, Lakeview Shelter, Twin Chimneys Shelter, Lake Point Picnic Area, Boat Launch, Boathouse, Hidden Springs Beach, Beach Cove Shelter and several fishing piers on Crooked Lake.

Vehicle permit holders were surveyed in 1994 as part of the 1995 park master planning process. The results indicated that people came to Independence Oaks for the following reasons:

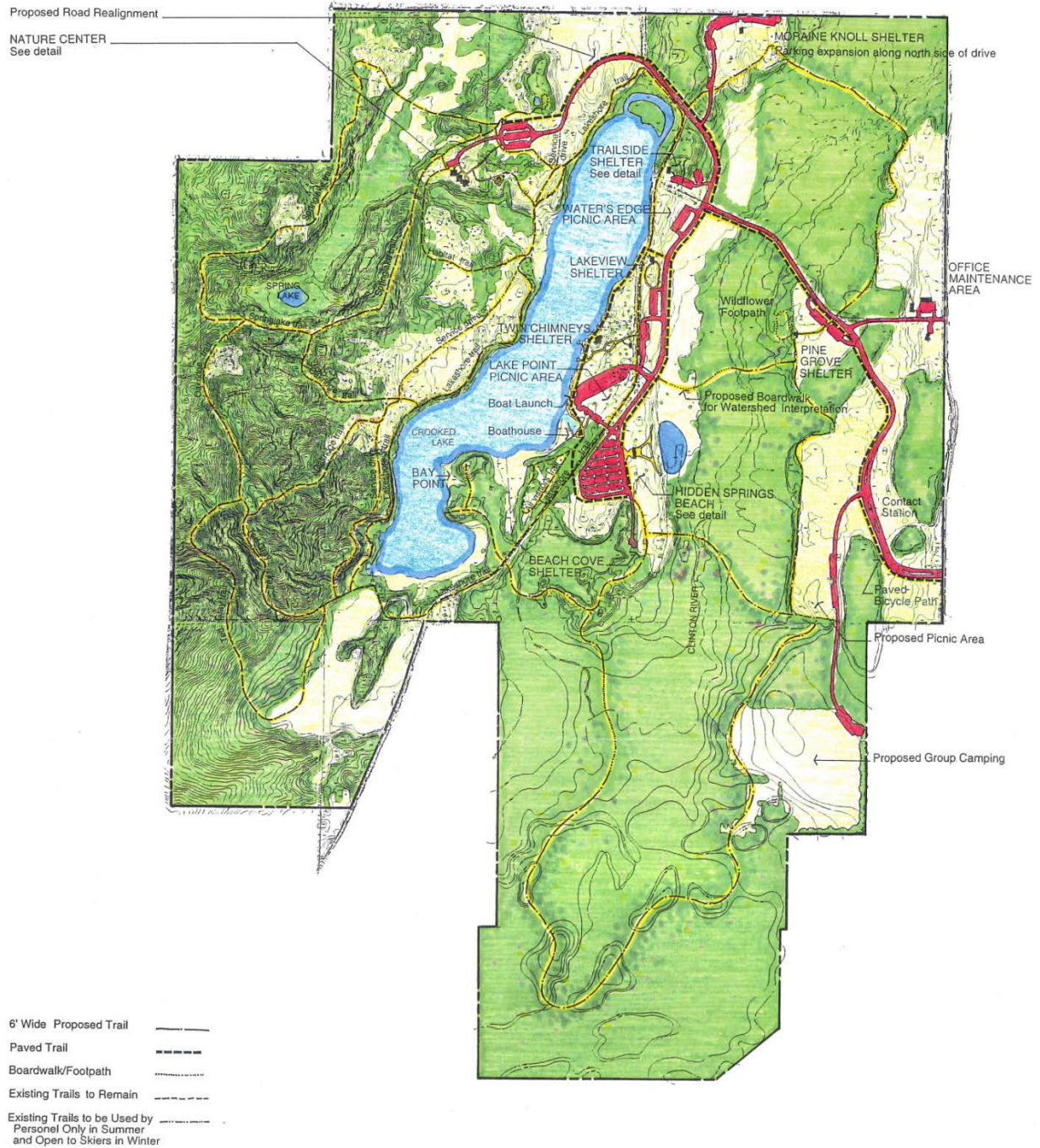
- Hiking and Walking (63%)
- Nature Center Use (53%)
- Picnicking (52%)
- Swimming (47%)

Public engagement results included a consensus among permit holders to leave the park as natural as possible. A query about possible activities for further park development had the following results:

- Bicycling (45%)
- Nature Trails (36%)
- Sledding (35%)
- Ski Trails (31%)
- Roller Blading (30%)

Major concerns by staff included the need for paving and improvement of roads. Staff preferred to leave the west side of Crooked Lake natural except for adding trails and boardwalks. They cited insufficient parking at Lakeview Shelter and Moraine Knoll Shelter. There were concerns about low usage of the Nature Center and the need to add amenities to make it attract more visitors. Overall trails concerns were expressed regarding paving, width, signage, and user conflicts. Park maintenance concerns included lake levels and quality, mowing frequency and control of invasive plants.

Design from 1995 Master Plan



The overall goals for the 1995 plan were expressed as four Resource Management Goals:

- Goal 1: Preserve wetlands and prime natural areas
- Goal 2: Prepare the base for future recreation needs
- Goal 3: Resolve facilities and operations concerns while retaining the existing natural character of the park
- Goal 4: Enhance Nature Center area and interpretive functions of the park.

The Design Plan proposed long-term physical improvements that would be cost-effective and responsive to current recreation demands, addressing circulation and parking, the Nature Center and trails. In addition to the overall site plan, the 1995 Master Plan provide detailed site plans for the Trailside Shelter Area, Beach Area, and Nature Center Area.

Table 1: Improvements proposed by the 1995 Master Plan

Circulation and Parking
▪ Main road pavement – from entrance to Nature Center and Beach
▪ Road realignment – vegetation clearing and base preparation
▪ Maintenance road pavement
▪ Trailside Shelter parking area pavement
▪ Other existing parking area pavement – Water’s Edge, Lakeview, Twin Chimneys, Boat Launch, and Boathouse areas
▪ Moraine Knoll access road and parking areas pavement
▪ Nature Center parking area, access drive and employee parking pavement
▪ Beach parking pavement
▪ Beach Cove access drive pavement
▪ New road to south Group Camping with parking areas pavement
▪ Trail construction – unpaved
▪ Trail construction – paved
Nature Center
▪ Pond dredging and clearing at Nature Center and site grading for sledding hill
▪ Boardwalk at Nature Center
▪ Boardwalk along trails
Miscellaneous
▪ Site furnishings in new Group camping and picnic areas
▪ Displays and sign systems (including path markers)
▪ Landscaping (screen planting on park boundary and various park plantings)

Grant History

Acquisition Grantsⁱ

1968: Land and Water Conservation Fund #26-00129

Project Scope: Acquisition of 337 acres

1971: Land and Water Conservation Fund #26-00230

Project Scope: Acquisition of 422 acres

1973: Land and Water Conservation Fund #26-00502

Project Scope: Acquisition of 22 acres

1976: Land and Water Conservation Fund #26-00780

Project Scope: Acquisition of 50 acres

1982: Michigan Natural Resources Trust Fund #TF603

Project Scope: Acquisition of 250 acres

2010: Michigan Natural Resources Trust Fund #TF06-199

Project Scope: Acquisition of 161.4 acres

Development Grantsⁱⁱ

1973: Land and Water Conservation Fund #26-00514

Project Scope: Main park road; entrance ways; contact station; bathhouse/concession building; Pine Grove shelter/restrooms/parking; Lakeview shelter/restrooms/parking; boat launch ramp; beach area; primitive campground; utilities; landscaping

1976: Land and Water Conservation Fund #26-00749

Project Scope: Moraine Knoll parking/road/shelter/restrooms/picnic equipment; Twin Chimneys parking/shelter/picnic equipment; boat rental building; piers/docks; landscaping

1983: Land and Water Conservation Fund #26-01259

Project Scope: Nature center; access road and parking; walkways; access bridge; lighting; landscaping

1993: Bond Fund #BF93-036

Project Scope: Nature center expansion; septic field; landscaping

1995: Michigan Natural Resources Trust Fund #TF95-052

Project Scope: Addition to restroom at boat house for accessibility

2001: Michigan Natural Resources Trust Fund #TF01-022

ⁱ See Figure F: Acquisition Grant Map – p. 32

ⁱⁱ See Figure G: Development Grant Map – p. 33

Project Scope: Septic fields; well; 2 shelters; boardwalk; trails; wooden tent platforms; security lighting; restroom/shower

2004: Michigan Natural Resources Trust Fund #TF04-003

Project Scope: Pedestrian bridge; trail; boardwalk

Natural Resources





The Michigan Natural Resources Inventory has described and abstracted 76 distinct natural community types within the State of Michigan (Kost, 2010). According to MNFI, 40 natural communities occur within Oakland County at varying degrees.









The natural areas of the park consist of rolling topography of upland woodlands, wetlands--both open and forested, and open fields. To date, 15 natural community types have been identified at Independence Oaks (see table below).




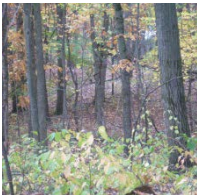

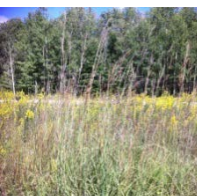
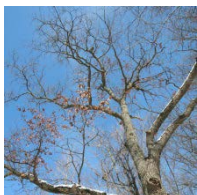
The eastern massasauga rattlesnake, a federally Threatened species; bog bluegrass, and red-shouldered hawk, both State Threatened species; and Blanding's turtle, unexpected tiger moth, purple twayblade, tamarack tree cricket, and pine tree cricket, all State Species of Special Concern, have been identified at the park (Kost, 2010) (Cuthrell & Holzheuer, 2011). Grassland habitat is managed for declining grassland birds.



Table 5: Natural Communities at Independence Oaks

Natural Community		Description
	Crooked Lake 1 – Crooked Lake	A linear spring-fed 68-acre lake within the headwaters of the Clinton River. Surrounded mostly by forested land. Deepest part of the lake is 65' deep. Fish species documented include bluegill, pumpkinseed, rock bass, green sunfish, yellow perch, largemouth bass, bullhead, and northern pike (Francis, 2004).
	Upper Bushman Lake 2 – Upper Bushman Lake	A 30-acre spring-fed kettle lake with a high-quality fish community. Fish species documented include large-mouth bass, bluegill, pumpkinseed sunfish, rock bass, bullhead catfish, northern pike and crappie (Francis, 2011). Has a catch-and-release only special designation.
	Swim Pond 3 – Swim Pond	A 0.5-acre man-made pond, east of Crooked Lake. A small beach is located along the west shoreline. Pond drained seasonally into Clinton River for vegetation management and nutrient control.
	Clinton River Dark-blue line	High-quality cold water headwater streams of the Clinton River run throughout the park. American beaver active in area.

Natural Community	Description
 <p>Submergent marsh Within 1-4</p>	<p>Located within lakes, ponds and open wetlands. Submerged rooted and non-rooted species include pondweed, water lily, pond lily and duckweed.</p>
 <p>Emergent marsh 4 – Wetland Complex</p>	<p>Part of the wetland complex scattered throughout non-developed areas of the park. Cat-tail and sedge dominated wetland found along lake and stream edges, especially along the Clinton River and southeast end of Crooked Lake. Other species include bulrush, arrowhead, and <i>Phragmites</i>.</p>
 <p>Southern wet meadow 4 –Wetland Complex</p>	<p>Part of wetland complex (Clinton River Wet Meadow) scattered throughout non-developed areas of the park. A sedge-dominated wetland found in lower areas of southern wet meadow/wet-mesic prairie complex. Species include tussock sedge, swamp milkweed, beggar-tick, Joe-Pye-weed, dock, and scattered shrubs.</p>
 <p>Wet-mesic prairie 4 – Wetland Complex</p>	<p>Part of the wetland complex (Clinton River Wet Meadow) scattered throughout non-developed areas of the park. A grass and sedge dominated wetland found in drier areas of southern wet meadow/wet-mesic prairie complex. Species include big bluestem, cordgrass, tussock sedge, grass-of-Parnassus, aster, and goldenrod.</p>
 <p>Prairie fen 4 – Wetland Complex</p>	<p>Part of the wetland complex (Crooked Lake Fen/ Nature Center Fen) scattered throughout non-developed areas of the park. A rare, calcareous wetland that includes sedge, rush, sphagnum, goldenrod, shrubby cinquefoil, poison sumac and tamarack. The Threatened eastern massasauga rattlesnake has been found in this community.</p>
 <p>Southern shrub-carr 4 – Wetland Complex</p>	<p>Part of the wetland complex (Clinton River Wet Meadow) scattered throughout non-developed areas of the park. The shrub-dominated wetland includes dogwood, nannyberry, ninebark, bog birch, and willow.</p>
 <p>Inundated Shrub Swamp 4 – Wetland Complex</p>	<p>Part of the wetland complex (Clinton River Wet Meadow) scattered throughout non-developed areas of the park, especially in the southeast corner. The shrub-dominated wetland is dominated by buttonbush. Other species include dogwood, willow, Michigan holly, black chokeberry, swamp rose and calla lily. Photo credit (ECT/HRM, 2015)</p>
 <p>Southern hardwood swamp 4 – Wooded Wetland Complex</p>	<p>Part of the wetland complex scattered throughout non-developed areas of the park. In low areas, especially in depressions and along stream edges. Species include red and silver maple, green and black ash (many dead or dying), yellow birch, oak and American elm.</p>

	Natural Community	Description
	Hardwood-conifer swamp 4 – Wooded Wetland Complex	Part of the wetland complex scattered throughout non-developed areas of the park, especially along the headwater streams of the Clinton River. Bog bluegrass, a state Threatened species, is identified in this community. Species include red maple, ash, red oak, yellow birch, American beech, northern white-cedar and white pine.
	Relict conifer swamp 4 – Wooded Wetland Complex	Part of the wetland complex (Spring Lake Swamp) scattered throughout non-developed areas of the park. The forested wetland with peat soils is found around lake margins. Species include black ash, American elm, red maple and few scattered tamarack. Habitat for the tamarack tree cricket and pine tree cricket, both state Species of Special Concern.
	Vernal pond within Wooded Wetland and Woodland Complex	Seasonal forested pools scattered throughout woodlands, especially wet woods, and within moraine woodlands at west half of park. Species include red maple, yellow birch, American elm, and ferns.
	Dry-mesic southern forest 5 – Woodland Complex	Upland woodlands on ridgetops and upper slopes found within west half (Oak Ridge Woodland) and smaller areas scattered within east half. Oak-dominated community includes white and black oak, hickory, black cherry, white ash, basswood, and American beech. Habitat for the purple twayblade, a State Species of Special Concern.
	Mesic southern forest 5 – Woodland Complex	A beech-sugar maple forest on lower elevations, especially at the south end of Independence-Main (Group Camp) and as 'islands' within hardwood-conifer swamp. Species include red oak, sugar maple, basswood, tulip tree and American beech. Habitat for the purple twayblade, a State Species of Special Concern.
	Old field 6 – Old Field	Open areas and former farmlands in east half of Independence-North and scattered areas at Independence-Main. Species include non-native grasses, big-bluestem, goldenrod, Queen-Anne's-lace, wild bergamot, and blackberry. Two sets of honey bee hives are in habitat at Independence-North.
	Historic Oak barrens – within Old Field	Open woodland on ridges and upper slopes along west side of Crooked Lake (Crooked Lake Barrens). Degraded by invasives, yet potential for oak barrens and woodland prairie restoration. Species include white and black oak, elm, black cherry, prairie grasses and forbs. Purple twayblade, a state Species of Special Concern, has been identified in this community.



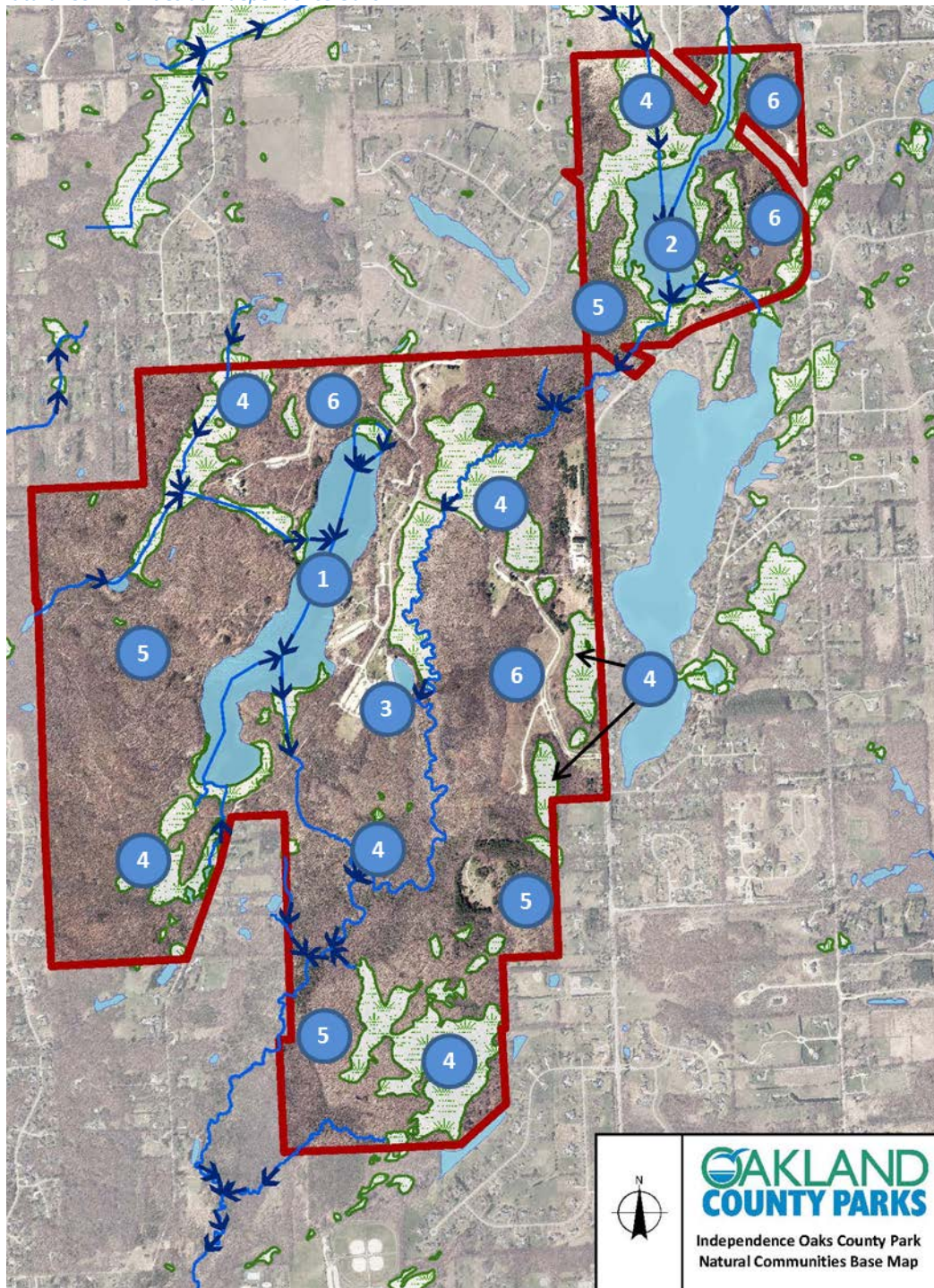
Natural Community		Description
	Native Seeding	Native plant seeding at front entrance, east side of Independence-North, and nature center old field. The prairie mix species include Indian grass, little blue-stem, butterfly weed, goldenrod, and wild bergamot. Shade mix and bottlebrush species seeded west and south of Crooked Lake. Planted species also includes sensory garden and native garden at Camp Wilderness.
	Pine plantings	Scotch/Austrian pines planted, especially at maintenance/nursery area, Camp Wilderness, and along driveway at Independence-North.

Figure C: Natural Communities at Independence Oaks



Park Infrastructure and Assetsⁱ

Park Entrances, Roadways and Parking

The main vehicle entrance to Independence Main is located on Sashabaw Road. A non-motorized entrance is located south of the main vehicle entrance and the Maintenance Entrance is located further north on Sashabaw. Other entrances to Independence Main include the Shappie Gate, which is located at the north side of the park and is used during events at the park, and an additional maintenance entrance on Perry Lake Road. The one Independence North Entrance is located on Sashabaw Road.

Independence Boulevard leads into the park in a northwest direction from the Contact Station. A small drive branching off to the south leads to Camp Wilderness. Farther north along Independence Boulevard a maintenance drive leads to the Maintenance Complex. Independence Boulevard ends at a “T” at Crooked Lake, with Beach Drive continuing to the southwest and Nature Center Drive to the northwest. A drive to the north off Beach Drive leads to Moraine Knoll picnic area.

There are multiple parking areas throughout the park. Locations of these parking areas are included with the descriptions of the various recreation areas. These include: Maintenance Area; Pine Grove Picnic Area; Moraine Knoll Picnic Area; Water’s Edge Picnic Area; Twin Chimney’s Picnic Area; Boathouse Area; Hidden Springs Beach Complex; Camp Wilderness; Lewis Wint Nature Center Area; Upper Bushman Fishing Area; and drives and parking spaces associated with residential houses

- Contact Station – 1986 (Asset ID 1343)

Maintenance, Utilities and Security

- Maintenance Building – 1985, 1993 (Asset ID 1345)
- Pole Barn (North Maintenance Building) – 1995 (Asset ID 1327)
- Wood Shop (West Maintenance Building) – 1980 (Asset ID 1326)
- Manor House Garage Storage - unknown (Asset ID 1724/246168)
- Wood Burning Unit Building – 2015 (no asset ID)

Technology

Independence Oaks does not currently have any Wi-Fi capabilities. There are two T-1 connection lines in the park, one at the Maintenance building and one at the Nature Center.

Non-Recreational Features

- Rental House – 9489 Sashabaw Road – 1980 (Asset ID 1312)
- Bailey House – 9965 Sashabaw Road – 1886 (Asset ID 1314)
- Bailey House Shed – 9965 Sashabaw Road – unknown (Asset ID 1313)
- Manor House and Garage Apartment – 10275 Sashabaw Road – 1941 (Asset ID 1315)
- REMOVED IN 2015: Guest House – 10275 Sashabaw Road – 1910 (probably older) (Asset ID 1316)
- Log Cabin Building – 10275 Sashabaw Road – unknown (no asset ID)

Park Trails and Non-Motorized Access

See Trail Map on page 34

ⁱ Park asset inventory is in the process of being updated – section is not complete

Planning Unit: Upper Bushman Boating and Fishing Area – *see Planning Unit Map on page 36*

- Fishing Docks – 2010
- Boat Launch – 2010

Planning Unit: Hidden Springs Beach and Picnic Area – *see Planning Unit Map on page 36*

- Concession and Bathhouse – 1986 (Asset ID 1336)
- Beach Gazebo – 2006 (Asset ID 1333)
- Beach Cove Pavilion – 1993 (Asset ID 1334)

Planning Unit: Crooked Lake Boating and Fishing Area – *see Planning Unit Map on page 36*

- Boathouse – 1978, 2001 (Asset ID 1335)
- Boat Docks
- Accessible Kayak Launch – 2016
- Trailside Dock – east side north end of Crooked Lake
- Dock south of Trailside Dock has been removed
- Lakeview Dock – east side of Crooked Lake
- Fire Circle Dock – east side of Crooked Lake
- Twin Chimneys Small Dock – east side of Crooked Lake
- Twin Chimneys Long Dock – east side of Crooked Lake
- Bayview Dock – east side of Crooked Lake
- Dock at south end of the east side has been removed
- Lakeshore Loop North Dock – west side of Crooked Lake
- Lakeshore Loop Center Dock – west side of Crooked Lake
- Lakeshore Loop South Dock – west side of Crooked Lake

Planning Unit: Twin Chimneys Area – *see Planning Unit Map on page 36*

- Twin Chimneys Restrooms – 1995 (Asset ID 1337)
- Twin Chimneys Pavilion – 1978 (Asset ID 1339)
- Twin Chimneys Gazebo – 2000 (Asset ID 2000)

Planning Unit: Pavilions and Group Reservation Areas – *see Planning Unit Map on page 36*

- Pine Grove Pavilion and Restrooms – 1986 (Asset ID 1328)
- Moraine Knoll Pavilion and Restrooms – 1978 (Asset ID 1329 and 1330)
- Trailside Pavilion – 1987 (Asset ID 1341)
- Trailside Restrooms – 1995 (Asset ID 1340)
- Water's Edge Play Lot – unknown (no asset ID)
- Lakeview Pavilion and Restrooms – 1986 (Asset ID 1331)
- Lakepoint Pavilion – 1998 (Asset ID 1332)

Planning Unit: Wint Nature Center Area – *see Planning Unit Map on page 36*

- Wint Nature Center – 1983, 1996 (Asset ID 1342)
- Garden Gazebo – 1990 (Asset ID 1346)
- Cohn Amphitheater – 1985 (Asset ID 1347)
- Amphitheater Gazebo – 1991 (Asset ID 1348)

Planning Unit: Camp Wilderness – *see Planning Unit Map on page 36*

- Camp Area 1 Pavilion (Asset ID 1325)

- Camp Area 2 Pavilion – 2004 (Asset ID 1318)
- Camp Restrooms – 2004 (Asset ID 1322)
- Tent Platform 1 – unknown (Asset ID 1323)
- Tent Platform 2 – unknown (Asset ID 1325)
- Tent Platform 3 – unknown (Asset ID 1344)
- Tent Platform 4 – unknown (Asset ID 1321)
- Tent Platform 5 – unknown (Asset ID 1320)
- Tent Platform 6 – unknown (Asset ID 1319)

Photos clockwise from left: Boathouse; bathhouse/beach entrance; fishing pier; aerial view of boardwalk and fishing piers at Upper Bushman Lake; Lewis Wint Nature Center building; entrance to Camp Wilderness



Park Maps

A standard set of planning maps are provided in a separate document - the *Planning Map Set*. This section provides other park maps, such as trails, campsites, and golf course features, which are specific to this park.

Figure D: Acquisition Grant Map

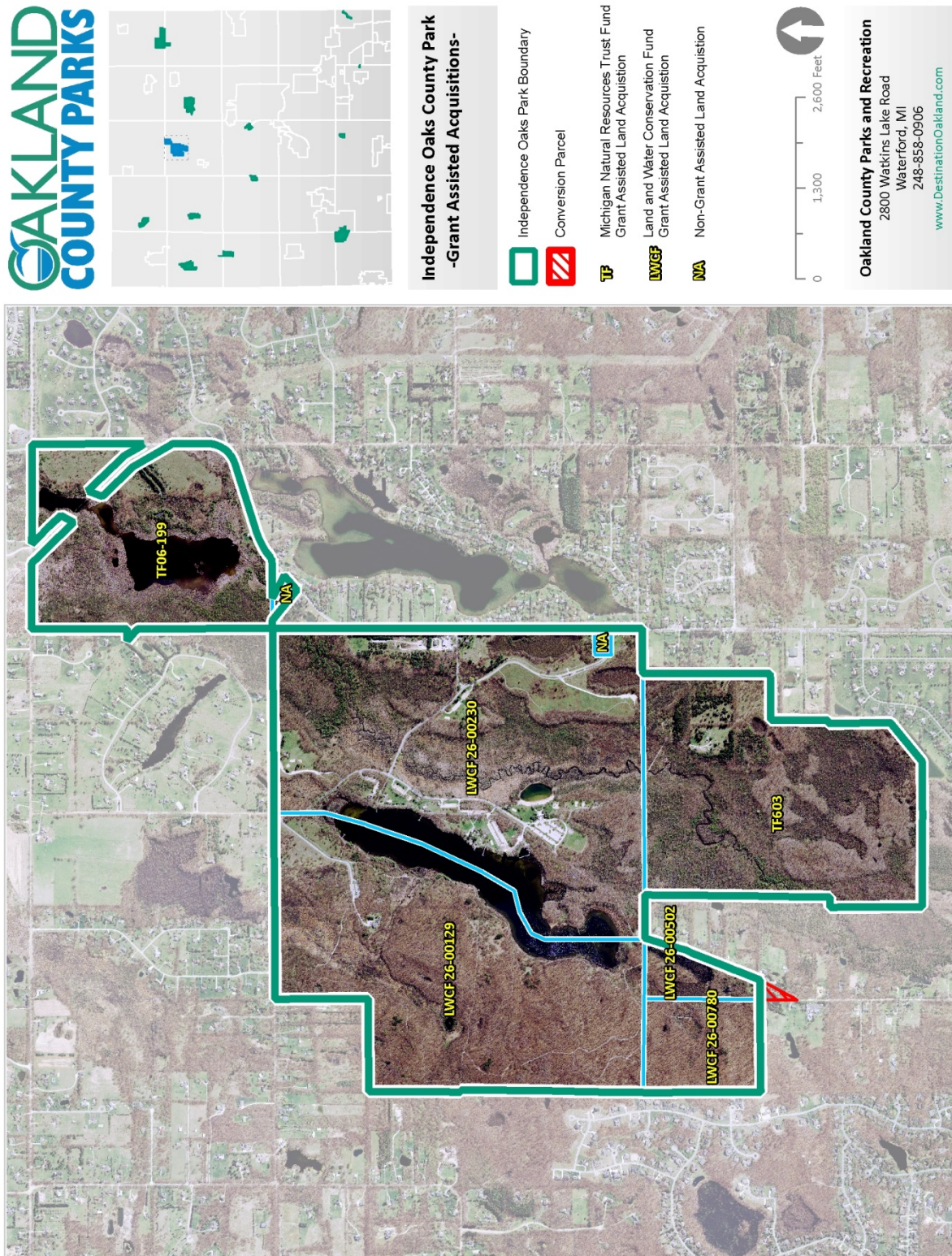


Figure E: Development Grant Map

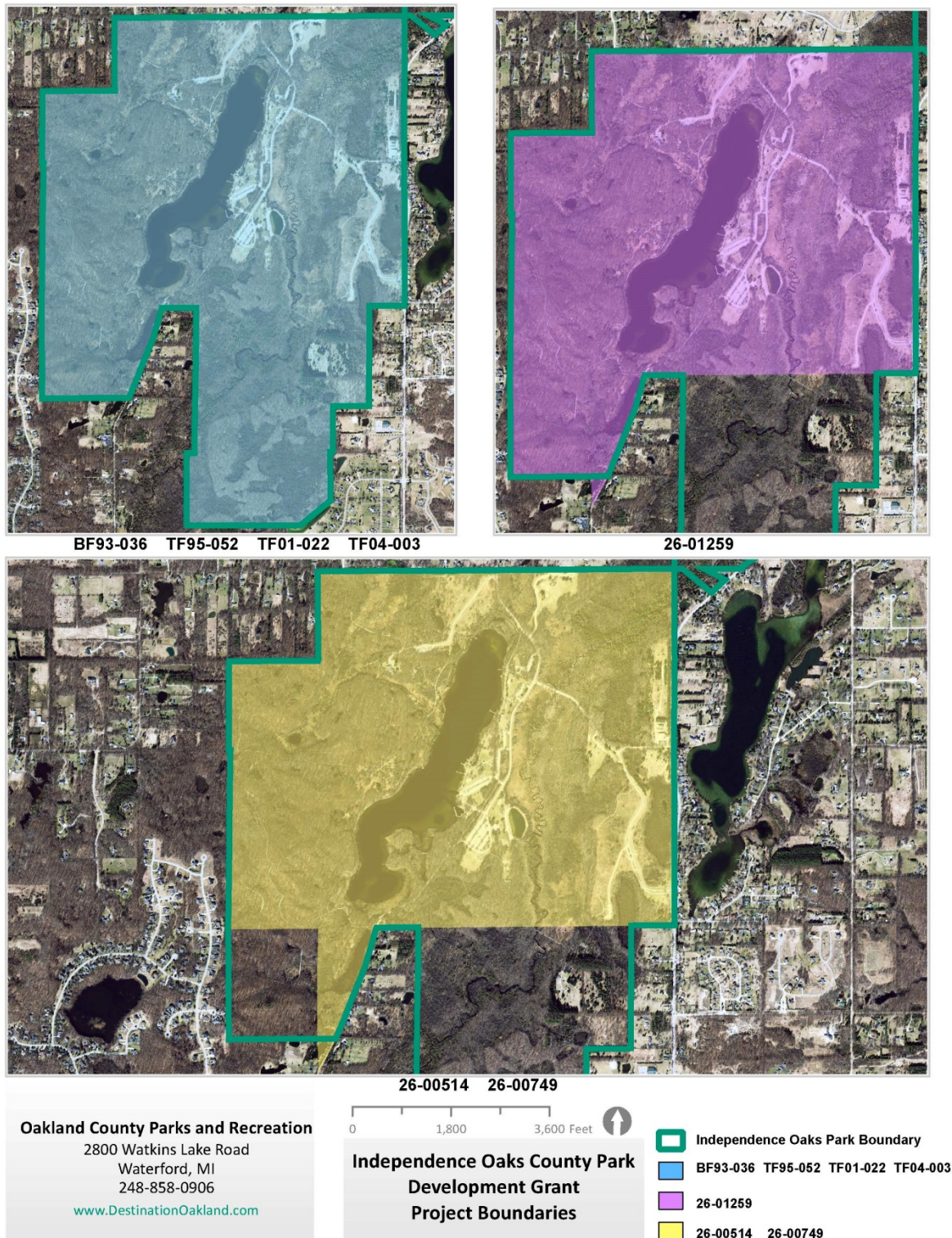


Figure F: Independence Oaks Trail Map

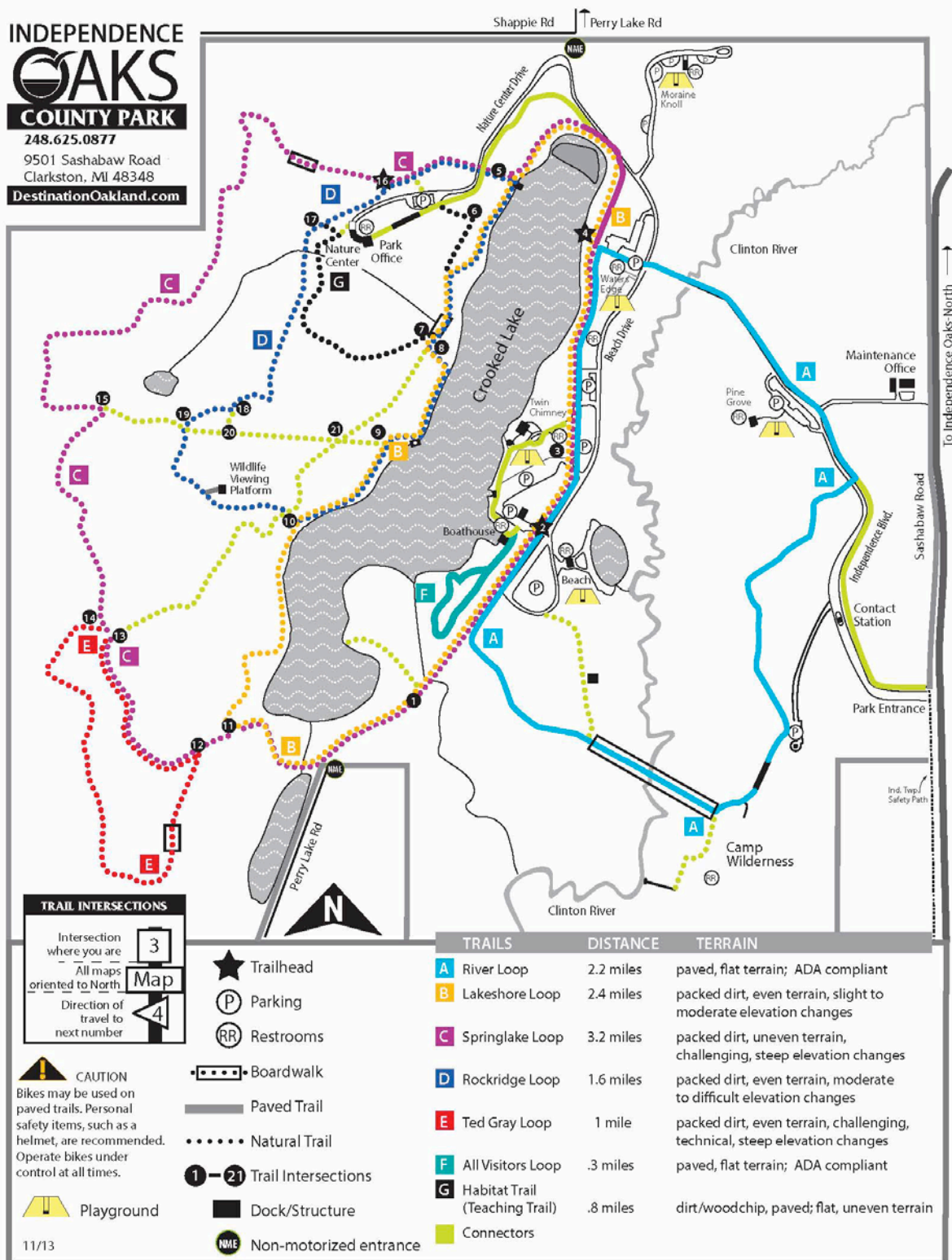


Figure G: Independence Oaks Winter Trail Map

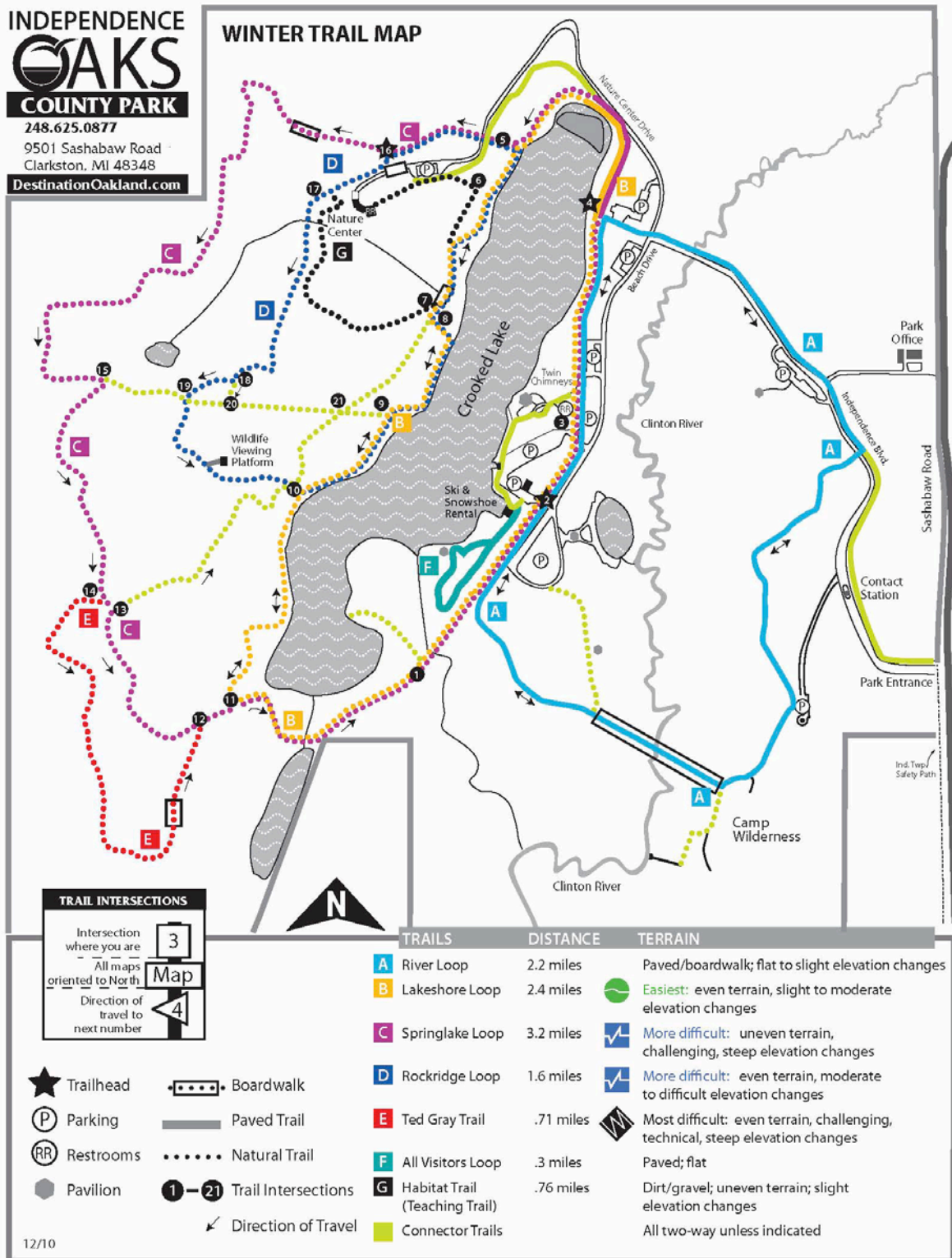
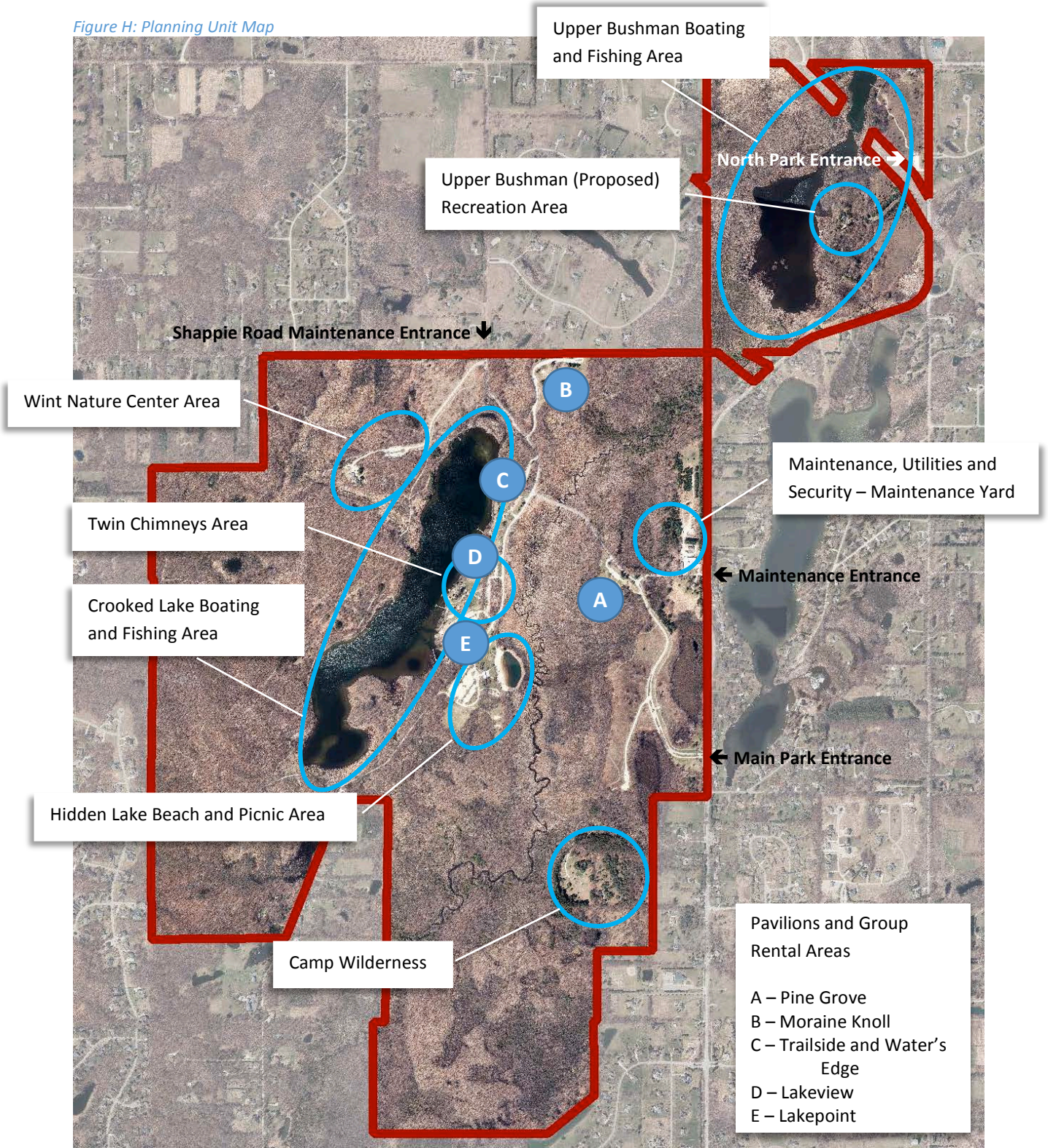


Figure H: Planning Unit Map



References

- Albert, D. A. (1995). Gen. Tech. Rep. NC-178. *Regional Landscape Ecosystems of Michigan, Minnesota and Wisconsin: a working map and classification, Tech. Rep. NC-178*. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station.
- Bacak-Egbo, C. (May 2015). *The Bailey Lake Settlement and the Robert Bailey Family*.
- Carlisle Associates. (1995). *Independence Oaks County Park Master Plan*. Waterford, MI: Oakland County Parks and Recreation Commission.
- Comer, P., & Albert, D. (1997). *Vegetation circa 1800 Maps*. Michigan Natural Features Inventory.
- Cuthrell, D., & Holzheuer, M. (2011). *Surveys to Determine Presence of Tamarack Tree Cricket (Oecanthus laricis) at Upper Bushman Lake in Independence Oakland County Park*. Lansing, MI : Michigan Natural Features Inventory.
- ECT/HRM. (2015). *Oakland County Parks Herpetological Inventory - Herpetological Resource and Management Technical Report*. Waterford, MI: Oakland County Parks and Recreation Commission.
- EDCA. (n.d.). *Facts & Stats*. Retrieved from Advantage Oakland - Economic Development & Community Affairs: <https://www.oakgov.com/advantageoakland/business/Pages/county-profile-default.aspx>
- F.W. Beers and Co. (1872). *Oakland County* . Retrieved from <http://www.historicmapworks.com/Atlas/US/7617/Oakland+County+1872/>
- Francis, J. T. (2004). *Crooked Lake Status of the Fishery Resource Report*. Lansing, MI: Michigan Department of Natural Resources.
- Francis, J. T. (2011). Lansing, MI: Michigan Department of Natural Resources.
- Geo A. Ogle and Co. (1908). *Standard Atlas of Oakland County, Michigan* . Geo A. Ogle and Co. Retrieved from <http://www.historicmapworks.com/Atlas/US/7659/>
- Independence Township. (1998). *Independence Township Historic Survey*. Clarkston, MI: Charter Township of Independence.
- Kace Publishing Company. (1896). *Illustrated Atlas of Oakland County* . Retrieved from <http://www.historicmapworks.com/Atlas/US/32464/Oakland+County+1896/>
- Kost, M. (2010). Report Number 2007-21. Version 1.2. *Natural Communities of Michigan: Classification and Description*. Lansing, MI: Michigan Natural Features Inventory.
- NRCS. (n.d.). *Web Soil Survey*. Retrieved from Natural Resource Conservation Service: <http://websoilsurvey.nrcs.usda.gov/app/>
- Oakland County. (2012). *Advantage Oakland Community Profiles*.
- OCPR/PRD. (10/6/2016). *PLANNING REVIEW - Independence Oaks: Bailey House*. Waterford MI: Oakland County Parks and Recreation Commission.

- OCPR/PRD. (12/6/2016). *PLANNING REVIEW - Independence Oaks: Oak Hill House*. Waterford MI: Oakland County Parks and Recreation Commission.
- OCPRC. (2013). *Five-Year Parks and Recreation Master Plan 2013-2017*. Waterford, MI: Oakland County Parks and Recreation Commission.
- OCPRC. (2015). *Annual Dashboard and Data Book*. Waterford, MI: Oakland County Parks and Recreation Commission.
- OCPRC/PRD. (2011). *Ind North Historical Synopsis 2011 07 14*. Retrieved from K:\ParksRec\General\Planning\Planning Archive\Independence Archive
- SEMCOG. (2015). *Community Profiles*. Retrieved from Southeast Michigan Council of Governments: <http://semcog.org/Data-and-Maps/Community-Profiles>
- Stafford, B. D. (1996). *Independence Oaks County Park Historical Research Project*. Waterford, MI: Oakland County Parks and Recreation Commission.
- U.S. Census Bureau. (2015). *Quick Facts*. Retrieved from United States Census Bureau: <http://www.census.gov/quickfacts/>
- USDA. (1982). *Soil Survey of Oakland County*. East Lansing, MI: United States Department of Agriculture.
- W.S. McAlpine Map Company. (1925). *Atlas of Southeastern Oakland County*. Retrieved from <http://www.historicmapworks.com/Atlas/US/27818/Oakland+County+1925/>
- W.S. McAlpine Map Company. (1947). *Oakland County*. W.S. McAlpine Map Co. Retrieved from <http://www.historicmapworks.com/Atlas/US/10602/Oakland+County+1947/>

Notes

¹ How the Census Bureau Measures Poverty: “Following the Office of Management and Budget’s (OMB) Statistical Policy Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family’s total income is less than the family’s threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index (CPI-U). The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps).” (U.S. Census Bureau, 2015)

² Esri builds ArcGIS, which “connects people with maps, data, and apps through geographic information systems (GIS). It is a location platform that’s accessible to anyone, anywhere, anytime”. <http://www.esri.com/about-esri#what-we-do>

³ Ecoregion: An ecoregion (ecological region), sometimes called a bioregion, is an ecologically and geographically defined area that is smaller than an ecozone and larger than an ecosystem. Ecoregions cover relatively large areas of land or water, and contain characteristic, geographically distinct assemblages of natural communities and species.

⁴ Sub-subsection: Based on differences in climate, bedrock geology, glacial landform, and soils, the section, subsection, and sub-subsection levels of an ecoregion represent areas with distinctive natural conditions affecting species composition and productivity).

⁵ Ice-Contact Topography: This is a general term that refers to glacier-modified landscapes and includes many specific types of landforms, such as kames, eskers, moraines, kettles and outwash, among others.

⁶ Glacial Deposits: This refers to the rock and soil that is picked up and transported by glaciers as they create new landscapes and are eventually deposited by melting and retreating glaciers.

⁷ Potential Priority Natural Area: Important ecological natural communities dominated by native vegetation identified by the Michigan Natural Features Inventory (MNFI). These sites represent the least disturbed natural areas remaining in the County. Initial delineation was done through aerial photo interpretation, with emphasis placed on intactness, wetlands and wetland complexes, riparian corridors, and forested tracts. Prioritization (ranked Priority One, Two and Three) is based on size, core area, stream corridors, land connectivity, vegetation quality, fragmentation and restorability of surrounding lands.