

Michigan Natural Resources Trust Fund Application 2018
Organization: Oakland Charter Township
Section A: Applicant Site and Project Information: Paint Creek Junction

TF18-0098

*Is the application for site development <u>or</u> land acquisition? ✓ Development Acquisition			
*Name of Applicant (Government Unit) Oakland Charter Township		*Federal ID Number 38-2004632	*County Oakland County
*Name of Authorized Representative Melinda Milos-Dale		*Title Parks and Recreation Director	
*Address 4393 Collins Road		*Telephone (248) 651-7810	
*City Rochester		*State MI	*ZIP 48306
		*E-mail mmdale@oaklandtownship.org	
*State House District District 46		*State Senate District District 12	*U.S. Congress District District 8

*Proposal Title (Not to exceed 60 characters) Iron Belle -Paint Creek Trail Northern Trailhead Development
--

*Proposal Description Development of the Iron Belle - Paint Creek Trail Northern Trailhead at Paint Creek Junction Park to provide access, parking and rest facilities for Paint Creek Trail users including pedestrians, bicyclists, skiers, and equestrians on the 1.5-mile section between Adams Road and Clarkston Road. This project will include a 35-space universally accessible parking lot, 12' wide access trail, two unisex universally accessible vault toilets, an accessible well for potable water and a picnic area, native planting areas, a recycling bin and necessary signage. This trailhead will meet several needs: 1. Vehicular parking and rest area facilities on the only section of the Paint Creek Trail that does not have those facilities, 2. the first Paint Creek Trail parking lot designed to incorporate horse trailer parking, and 3. vehicular parking and support facilities near the MDNR's proposed trail connection from Bald Mountain Recreation Area to the Paint Creek trail via a bridge over Paint Creek.
--

*Address of Site 10-18-177-006 & 007 2210, 2280 Orion Rd	*City, Village or Township of Site Oakland	*Zip 48363
*County in which Site is located Oakland	*Town, Range and Section Numbers of Site Location <i>Letters must be upper-case: (examples: T02N, R13E, 22)</i> (Town) T04N (Range)R11E (Section)18	*Latitude/Longitude at park entrance 42.764398 -83.210945
*Park Name Paint Creek Junction		

Michigan Natural Resources Trust Fund Application 2018
Organization: Oakland Charter Township
Section B: Project Funding and Explanation of Match Sources

TF18-0098

SOURCES OF MATCHING FUNDS

PROJECT COST AMOUNTS

*Grant amount requested (round to the nearest hundred dollars)	\$219,600.00
Total Match	\$75,000.00
Total Project Cost	\$294,600.00
Percentage of match commitment (Must be at least 25% of total project cost)	25%
a) General Funds or Local Restricted Funds (Applicant's own cash)	\$75,000.00
b) Force Account Labor/Materials (Applicant's own paid labor or materials)	
c) Federal or State Funds	

You have entered a value for item c). Please provide the information below for each federal or state program from which matching funds will be provided. COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) AND RECREATIONAL TRAILS PROGRAM (RTP) ARE THE ONLY FEDERAL FUNDS THAT CAN BE USED AS MATCH:

*(1) Program Name	*Administering Agency	
*Contact Name for Administering Agency	*Telephone	*Amount

***Type of Funds**

Grant funds awarded

Date grant funds approved

Grant funds applied for, not yet approved

Estimated approval date

Appropriated funds

Date appropriated

Other, explain

***Is documentation containing the scope of work and budget for the other grant funds included with application?**

Yes No

***Is documentation (such as grant approval letter) that verifies the availability of funds included in the application?**

Yes No

Check to add program information for additional State of Federal funds that will be used as Match.

Michigan Natural Resources Trust Fund Application 2018
Organization: Oakland Charter Township
Section B: Project Funding and Explanation of Match Sources

TF18-0098

(2) Program Name	Administering Agency	
Contact Name for Administering Agency	Telephone	Amount

Type of Funds

Grant funds awarded

Date grant funds approved

Grant funds applied for, not yet approved

Estimated approval date

Appropriated funds

Date appropriated

Other, explain

Is documentation containing the scope of work and budget for the other grant funds included with application?

Yes No

Is documentation (such as grant approval letter) that verifies the availability of funds included in the application?

Yes No

Check to add program information for additional State of Federal funds that will be used as Match.

(3) Program Name	Administering Agency	
Contact Name for Administering Agency	Telephone	Amount

Type of Funds

Grant funds awarded

Date grant funds approved

Grant funds applied for, not yet approved

Estimated approval date

Appropriated funds

Date appropriated

Other, explain

Is documentation containing the scope of work and budget for the other grant funds included with application?

Yes No

Is documentation (such as grant approval letter) that verifies the availability of funds included in the application?

Yes No

d) Cash Donations

Michigan Natural Resources Trust Fund Application 2018
Organization: Oakland Charter Township
Section B: Project Funding and Explanation of Match Sources

TF18-0098

You have entered a value for item d). Please list the individual sources and the amounts to be donated below.

SOURCE	AMOUNT
*	
Total	\$0

*Is a letter of intent from each donor included with the application?
 Yes No

e) Donated Labor and/or Materials

You have entered a value for item e). Please include each item to be donated, the source, dollar value, and how the dollar value was determined.

ITEM	SOURCE	DOLLAR VALUE	VALUATION METHOD
*			
Total		\$0	

*Is a letter of intent from each donor included with application?
 Yes No

f) Donated Land Value (acquisition applications only)

You have entered a value for item f). Please describe how the value of the land donation was determined.

*

*Is a letter from the landowner committing to the donation of a portion of fair market value and any conditions placed upon their commitment included with application?
 Yes No

Section C2: Project Details

Development Applications ONLY

*Applicant's current control of the site:

- ✓ Fee Simple
- Lease
- Easement
- Other (describe)

*Age of Park 14 Years

*Acres 5.69

Project Cost Estimate Table

<u>SCOPE ITEM</u>	<u>DNR ONLY</u> <u>Accessibility Guidelines</u>	<u>QUANTITY</u>	<u>TOTAL ESTIMATED</u> <u>COST</u>
Vault/Pit Toilet(s)		2	\$80,000.00
Crushed Stone Parking Lot		1	\$83,000.00
Access Pathway 6' wide or more		1	\$19,000.00
Picnic Table		1	\$2,000.00
Recycle Bin(s)		1	\$1,500.00
Signage		10	\$11,000.00

(New rows will appear as rows are completed and Saved)

Other: Site Preparation and Restoration		1	\$50,000.00
Other: Hand Pump Well for Potable Water		1	\$9,000.00
Other: Prairie Restoration Area Native Planting		1	\$6,000.00
Other: Bioswale		1	\$2,800.00

Do not list the aspects of project execution, such as labor, construction equipment, contingency or raw materials. (New rows will appear as rows are completed and Saved)

Permit Fees	\$5,000.00
MNRTF Sign	\$300.00
Subtotal	\$269,600.00
Engineering (These fees may not exceed 15% of subtotal)	\$25,000.00

Michigan Natural Resources Trust Fund Application 2018

Organization: Oakland Charter Township

TF18-0098

Section C2: Project Details

Total Estimated Cost (*Must equal Total Project Cost amount on
Section B page.*)

\$294,600.00

Michigan Natural Resources Trust Fund Application 2018

Organization: Oakland Charter Township

TF18-0098

Section D: Justification of Need

- *1) If you are submitting multiple acquisition or development applications, what is the priority for this application? (1 = highest) 1
- *2) What page(s) of your recreation plan is the need for the proposed project discussed? From: 89 To: 89
If proposed project is on only one page, please enter the page number in both boxes
- *3) What was the date(s) of public meeting to discuss submission of the grant application? 3/14/2018
Additional dates: 3/30/2018, 3/27/2018
- *4) Did you gather public input from individuals with disabilities, their families, or advocates? No Yes
- *5) Are you the primary provider of recreation services to any surrounding communities, as documented in your recreation plan? No Yes
List Communities:
- *6) Was the application developed through collaboration with adjacent communities or school districts? No Yes

Michigan Natural Resources Trust Fund Application 2018

Organization: Oakland Charter Township

TF18-0098

Section E: Application History and Stewardship

0

NO YES

1) *Questions 1 is for acquisition applications only - for development projects, leave blank and move to question 2.*

✓

Will the applicant have adequate funds on hand to complete the acquisition transaction without any third party assistance (i.e. loans, lines of credit, etc.) **until partial reimbursement and final audit is completed** (approximately 180 days after closing)?

If yes, please provide documentation that supports this on the Required Attachments page .

* 2) Has applicant received DNR recreation grant(s) in the past?

✓

If yes, does applicant currently have an open, active grant?

✓

*3) Has applicant closed, sold, or transferred any parkland or recreation facilities in the past 5 years?

✓

*4) Does applicant have a known unresolved conversion of grant-assisted parkland? (a conversion is a change from public outdoor recreation use to some other use)

✓

*5) Does applicant have a "residents only" policy for this park or other parks or recreation facilities?

✓

*6) Do you now or do you intend in the future to charge an entrance fee to the project site?

✓

If yes, fee schedule and policy for reduced entrance fees for low-income users included with application?

If yes, attach supporting Documentation on Required Attachments page .

*7) What is the applicant's current year budget for parks and recreation?

\$2,054,400.0
0

*8) What are the estimated operation and maintenance costs associated with the project?

\$11,328.00

Comments:

Regarding Question 2, Oakland Township has an executed project agreement for TF 16-0009 to acquire 208 acres for the expansion of Stony Creek Ravine Nature Park. We have commissioned two appraisals for this property and will be submitting them to the MDNR for review in near future.

Regarding Question 7, Oakland Township's Parks and Recreation millage funds the improvements, operation and maintenance of the 5+ miles of the Paint Creek Trail that are located in Oakland Township. Oakland Township's 2017/2018 Parks and Recreation Millage budget for these services will total \$38,200 plus \$36,500 is also being reserved from this budget each year in preparation for the 2018/2019 resurfacing of the entire Paint Creek Trail.

Regarding Question 8, The attached maintenance plan includes details regarding the trailhead's annual \$11,328 maintenance cost and projected total life cycle costs.

Section F: Site Conditions

	<u>NO</u>	<u>YES</u>	<u>UNKNOWN</u>
*1) Does the applicant, landowner, or others have knowledge that any portion of the property is or has been used for industrial purposes, including manufacturing and/or mineralsâ€™ processing or extraction (sand, gravel, oil, or gas) at this time or in the past?	✓		
*2) Does the applicant, landowner, or others have knowledge that any portion of the property is currently being used or has been used in the past for a gas station, motor vehicle service or repair facility, commercial printing facility, dry cleaners, photo developing lab, junkyard, landfill, waste treatment, storage, processing or recycling or disposal facility?	✓		
*3) Does the applicant, landowner, or others have knowledge that any of the following are or have in the past been stored, discarded, or used on the property â€“ automotive or industrial batteries, pesticides or other chemicals used in agricultural practices, paints, industrial waste, or other chemicals in drums or other containers?	✓		
*4) Does the applicant, landowner, or others have knowledge that fill dirt or other fill material of unknown origin is on this property or has in the past been placed on the property?	✓		
*5) Does the applicant, landowner, or others have knowledge of any evidence of leaks, spills, or stains from a substance other than water at this time or in the past?	✓		
*6) Does the applicant, landowner, or others have knowledge that there are or have in the past been waste disposal pits, lagoons, or ponds on the property?	✓		
*7) Does the applicant, landowner, or others have knowledge that there are at this time or have in the past been registered or unregistered storage tanks on the property?	✓		
*8) Does the applicant, landowner, or others have knowledge that contaminated groundwater lies below the property?	✓		
*9) If there is a water well on the property, does the applicant, landowner, or others have knowledge that contaminants have been identified in the well that exceeded legal standards or has the well been identified as contaminated by a government agency?	✓		

Section F: Site Conditions

- *10) Has the landowner been notified about any current violations of environmental laws pertaining to activities on the property or does applicant, landowner, or others have knowledge about past violations? ✓
- *11) Has the landowner been notified of any environmental assessments of the property that identified a) the presence of hazardous substances, petroleum products, or contamination; or b) the need for further assessment? ✓
- *12) Does the applicant, landowner, or others have knowledge that any hazardous substances, unidentified waste materials, tires, or automotive or industrial batteries have been dumped above ground, buried, or burned on the property? ✓
- *13) Is the property listed on any federal or state list of contaminated sites, including the site of a leaking underground storage tank? ✓
- *14) Does the applicant, landowner, or others have knowledge that any of the adjoining properties are currently being used or have been used in the past for the purposes listed in the previous questions 1-13? ✓
- *15) Has an environmental assessment been completed for the site?
If yes, provide the most current on the Required Attachments page. ✓
- *16) Are permits required for the development of the site?
If yes, please complete the following table:

<u>NO</u>	<u>YES</u>	<u>UNKNOWN</u>
	✓	

TYPE OF PERMIT	PERMITTING AGENCY	EFFORTS TAKEN TO OBTAIN PERMIT OR DETERMINING PERMIT REQUIREMENTS
Soil Erosion Permit	Oakland County Health Department	Review with Township Engineer
Road ROW Permit	Oakland County Road Commission	Review with Township Engineer

If 'Yes' or 'Unknown' was selected for any of the questions on this page, please explain here:
Regarding Question 16, the Oakland County Health Department will also require a permit for the Type II b. Non-Community Well and an Onsite

Section F: Site Conditions

Wastewater Treatment System permit for the Vault Toilets.

Section G: Natural Features of The Project Site

To the best of your knowledge, does the project site include:

***Great Lakes shoreline or Great Lakes connecting water frontage?** ✓ No Yes

If yes, name of Great Lake or Great Lakes connecting water:

How many linear feet of shoreline or frontage?

***Inland lake frontage?** ✓ No Yes

If yes, name of water body:

What is the size of the total water body in acres?

How many linear feet of frontage are on site?

***River and/or tributary frontage?** ✓ No Yes

If yes, name of water body:

How many linear feet of frontage?

Is the river or tributary a state natural river or a federally dedicated wild and scenic river? No Yes

***Wetland acreage or frontage?** No ✓ Yes

If yes, please list the number of acres of the type(s) of wetland(s) on site:

Marsh	Bog		Dune and swale complex
Prairie	Forest	2	Boreal Forest
Fen	Shrub		Type unknown

Is documentation of type and quality with application? No ✓ Yes

If yes, source of information:

2003 Wetland Determination Report

***Other water acreage or frontage?** ✓ No Yes

If yes, name of other water body:

Is the entire water body completely within the site boundaries? No Yes

How many linear feet of frontage or acres of water are on site?

***Sand dunes?** ✓ No Yes

If yes, list the number of acres of sand dunes on the site:

Critical Not designed as critical, or designation unknown

Is documentation of type and quality provided with application? No Yes

If yes, source of information:

***Dedicated state or federal listed wilderness or dedicated natural area or Pigeon River County State Forest land or inholding?** ✓ No Yes

If yes, name of area:

How many acres on site?

Section G: Natural Features of The Project Site

***Rare species or any other significant feature as defined by the Michigan Natural Features Inventory?**

✓ No Yes

If yes, list species or feature and status.

if too many to list here, include in the application narrative.

Population/range locations denoted on site plan or other map?

No Yes

Section H: Wildlife Values of The Project Site

Will the proposed park or park development:

*** Protect wildlife habitat** (for example, breeding grounds, winter deeryards, den sites)?

No **Yes**

If yes, list species:

How many acres of habitat does the site provide?

*** Act as a wildlife corridor between existing protected areas or buffer an existing protected area?**

No **Yes**

If yes, name the existing park(s) or protected area(s):

Paint Creek Trail
Parcel
18-18-503-007

How many acres are currently in protected status?

14.82

Is documentation of the ecological value of adjacent protected areas and/or the ability of the project site to act as a corridor/buffer provided with application?

No **Yes**

If yes, source of information:

Oakland County
Green Infrastructure
Map, MNFI Natural
Areas Map

Section I: Natural Resource Recreation Opportunities

Will the proposed park or park development provide new or additional:

*Water recreation opportunities? ✓ No Yes

*Motorized recreation opportunities (ORV and/or Snowmobile)? ✓ No Yes

*Hunting Opportunities? ✓ No Yes

If yes, what seasons will be available? (for example, deer/firearm)

How many acres will be available for hunting?

*Fishing opportunities? No ✓ Yes

If yes, what type of fishing opportunities will be provided? (species/methods)

Better access for Brown Trout Fly fishing and spin casting

*Bird watching or other nature viewing opportunities? No ✓ Yes

If yes, what species can be viewed?

See Attached documentation.

*Nature interpretation or education opportunities? No ✓ Yes

If yes, how are the interpretation or education opportunities provided? (check all that apply)

- ✓ Interpretive signage
✓ Interpretive brochures
Nature center
✓ Part time or volunteer naturalist
Full time naturalist

Have you formed a partnership with another organization to provide interpretive/educational services? ✓ No Yes

If yes, name of organization

Provided examples of interpretive materials, descriptions of classes, and other documentation on the interpretive/educational services provided with application:

Please find attached several pages from the Oakland Township Parks and Recreation Newsletter that include nature programs which we currently offer for children, families and adults. There are also pages of Natural Areas Stewardship programs and volunteer workday opportunities which include workshops regarding Prescribed Fire and Oakland Township Prairies along the Paint Creek Trail, invasive plant removal workdays and weekly bird walks. In addition, we have attached brochures titled "Prairie Restoration along the Paint Creek Trail" and "Wildflowers along the Paint Creek Trail" which detail the habitats and native plants found near the area of this project. We have also attached the Paint Creek trail brochure that includes trail information, rules, points of interest and a map of the trail as well as "A Fisherman's Guide to the Paint Creek" which shows fishing access locations.

Section I: Natural Resource Recreation Opportunities

Proposed nature program ideas for the project area would include interpretation of the Paint Creek corridor wildlife including the trout fishery, mink, muskrat, beaver, and birds. We are also proposing the addition of interpretive signage that will incorporate the trail's natural and cultural background ; sharing information about the Paint Creek Trail's Railroad history, Paint Creek Junction's section of the Detroit Urban Railroad , and how railroads contributed to the preservation of native prairie areas

Michigan Natural Resources Trust Fund Application 2018

Organization: Oakland Charter Township

TF18-0098

Section J: Public Access Opportunities

* Will the site be open to the general public?

No Yes

List the hours open to the public:

	From	To	Closed
Sunday	Sunrise	Sunset	
Monday	Sunrise	Sunset	
Tuesday	Sunrise	Sunset	
Wednesday	Sunrise	Sunset	
Thursday	Sunrise	Sunset	
Friday	Sunrise	Sunset	
Saturday	Sunrise	Sunset	
Holidays	Sunrise	Sunset	

Comment:

How will the public reasonably be able to access this site?

Automobile

Boat

Public Transportation

Motorized Trail

Non-Motorized Trail including Mountain Bike and Hiking Trails

Sidewalk or Pathway

Other (describe)

Michigan Natural Resources Trust Fund Application 2018

Organization: Oakland Charter Township

TF18-0098

Section K: Trails

* Is the proposed site a trail?

No Yes

Who is the primary intended user? (Check one)

- Hikers/Pedestrians
- ✓ Mountain Bicyclists
- Other motorized vehicle users
- Road Bicyclists
- Cross-Country Skiers
- Other, explain:
- Equestrians
- Snowmobilers

Who are the secondary users?

- ✓ Hikers/Pedestrians
- Mountain Bicyclists
- Other motorized vehicle users
- ✓ Road Bicyclists
- ✓ Cross-Country Skiers
- ✓ Other, explain:
- ✓ Equestrians
- Snowmobilers
- Anglers

Is the trail connected to another trail(s) or part of a larger trail network?

No Yes

If yes, what is the name of the network?

Oakland County Oak Routes

How long is the trail?

- 46992 Total linear feet
- 1320 Linear feet bituminous (paved)
- Linear feet boardwalk (if applicable)
- Linear feet sidewalk
- 45672 Linear feet other hard surface

What is the width of the trail?

8 Linear feet

* Is this proposed project part of the Iron Belle Trail (Governor's Showcase Trail)?

Yes No

Application Narrative

***I. Project Justification and Support:**

Need – This trailhead will meet several needs: 1. Vehicular parking and rest facilities on the only section of the Paint Creek Trail that lacks them, 2. the first Paint Creek Trail parking lot designed to incorporate horse trailer parking, and 3. vehicular parking near the proposed trail connection from Bald Mountain Recreation Area to the Paint Creek Trail. Each community that participates in the Paint Creek Trail is responsible for the improvement and maintenance of their geographic section, including Oakland Township. This project is listed on page 89 of the Oakland Township Parks and Recreation Capital Improvement Plan in year 2015. The need for a parking facility and rest area near the Adams Road Paint Creek trail crossing is repeated numerous times in the 2014 – 2018 Paint Creek Trail Master Plan and this project is listed in the Action Program on pages 147 and 148 (Paint Creek Junction Park was then known as the Marshview Connector). The need for additional safe trail access and rest facilities is also discussed on pages 116 – 120.

Alignment with SCORP and MNRTF Priorities - The Paint Creek Trail, a popular regional rail trail, is a key link in Oakland County's Oak Routes Network as well as the Iron Belle Trail. This project will provide parking and rest facilities for anglers, pedestrians, bicyclists, equestrians and skiers on the only section of the trail that does not provide any support facilities.

Collaboration - See attached intergovernmental agreement for Paint Creek Trail and Reaffirmation of Understanding of Maintenance Responsibilities and In-Kind Services, both of which describe how member municipalities, including Oakland Township, collaborate to improve, manage and operate the Paint Creek Trail. Improvements and maintenance projects are funded and performed by the municipality in which they are located.

Public Input - Input was received on this grant application at a Paint Creek Trailways Commission and two Oakland Township meetings held March 14, March 20 and March 27 after it was made available for review on two websites, social media, and at three public locations.

Public Support - This project is expected to receive support from government, non-profit, business, and user group organizations. Letters of support have been requested from Clinton River Watershed Council, Clinton Valley Chapter of Trout Unlimited, Friends of the Paint Creek Trail, Oakland County Trails, Water & Land Alliance, Michigan Trails & Greenway Alliance, Oakland Twp Trails & Safety Path Committee, Dinosaur Hill Nature Preserve, League of Michigan Bicyclists, Rochester Avon Recreation Authority, Orion Township Safety Path Committee, Rochester Bike Committee, Lake Orion DDA, Rochester DDA, Six Rivers Land Conservancy, and users of the Paint Creek Trail.

Accessibility and Universal Design - information will be added in future after meeting with accessibility advocates.

Renovation – Not Applicable.

***II. Project Description:**

Project scope items include:

Universally Accessible Parking Lot – Two 2-way entrance drives and aggregate 35-space parking lot including three asphalt-paved ADA accessible spaces and two “pull-in” horse trailer parking spaces.

Application Narrative

Access Pathways – 12' wide limestone-surfaced access route with a maximum 5% slope will connect directly from the ADA accessible parking spaces to the Paint Creek Trail. Equestrians will use separate mowed trail to minimize user conflicts.

Picnic Area – Located on the accessible route, includes picnic table with a clear sitting space.

Universally Accessible Vault Toilets - A double waterless restroom will be located near the accessible parking spaces. The cedar-sided structure with an all-weather porch includes two unisex restrooms; each containing a 1000 gallon impervious polyethylene underground waste vault. Accessible door pulls, toilet risers, and turning radii are standard.

Hand Pump Well – Potable water will be provided by an ADA accessible hand pump requiring minimal force to generate a strong water flow.

Bioswale and Prairie Planting – A bioswale and surrounding prairie restoration area will be planted with native plants that will detain and clean stormwater runoff from the parking lot.

Recycle Bin – Constructed of composite wood material will be located on the accessible route.

Signage – Includes Wayfinding, Entrance, Iron Belle and Paint Creek Trail Informational, Directional, Parking and Interpretive signs.

Environmentally friendly technology: 1. recycling bin, 2. landscaping with native prairie plants, 3. solar energy to power restrooms' exhaust fans and lighting, and 4. management of stormwater with bioswale.

ADA vs UD – Parking Lot and Vault Toilets will meet Universal Design standards. Other scope items including access pathway, hand pump well, picnic area, recycle bin and signage will meet ADA requirements. The 30-space parking lot includes more than minimum number ADA spaces connected directly to accessible route. Both restroom units will be accessible, unisex, located near activity areas, and have accessible door pulls and water faucets.

Trail Project – Paint Creek Trail is part of the Oakland County Oak Routes Trail Network and the Iron Belle Trail. The Trail is 8' feet wide, surfaced with crushed limestone, and 8.9 miles long, with 5.3 miles in Oakland Township. The trail receives over 100,000 users annually comprised of cyclists, pedestrians, equestrians, nature enthusiasts, and anglers. The trail connects to Rochester, Goodison, and Lake Orion business districts, and directly to Bald Mountain State Recreation Area. The addition of this trailhead will greatly improve accessibility in the only section of the Paint Creek Trail that lacks a parking lot and rest area; providing access to a new trail connection with Bald Mountain State Recreation Area and an existing fishing access which are approximately 1500 l.f. and 500 l.f. south of trailhead property.

***III. Natural Resource Access and Protection:**

Natural Features Description - This trailhead will provide new access to the Paint Creek, southeast Michigan's premier cold-water trout stream and to MNFI Priority 2 natural areas at Bald Mountain State Recreation Area as shown on the MNFI Natural Areas map. The trailhead property is designated as a Hub in the Green

Application Narrative

Infrastructure area that includes the Paint Creek and Bald Mountain State Recreation Area, as shown on the attached Oakland County Green Infrastructure Plan. The addition of this trailhead will greatly improve accessibility in the 1.5-mile section of the Paint Creek Trail that lacks a parking lot and rest area; also providing access to a new trail connection with Bald Mountain State Recreation Area located respectively 1500 l.f. south of the trailhead property.

Oakland Township manages the sections of Paint Creek which lie within the Paint Creek Trail right-of-way. Most creek maintenance includes supporting the trout fishery, addressing creek shoreline erosion including removal of log jams and maintaining fishing access routes. In addition to providing excellent fishing opportunities, this stretch of Paint Creek provides opportunities to view wildlife including mink, muskrat, beaver and birds (shown on attached ornithological inventory).

Type of Natural Resources Accessed - The trailhead will provide anglers with convenient access to this wade-able trout stream. The DNR stocks the creek with 5,600 brown trout annually to maintain the brown trout fishery that has limited natural reproduction. There are stairs located 500' south of the trailhead which provide a safe path for anglers to and from the water's edge. Oakland Township recently restored this stairway and stabilized the streambank in this area with ledge rock and river rock with the approval of MDNR Fisheries division and the MDEQ.

Quality and Quantity of the natural resource - Paint Creek is one of the few cold-water streams in SE Michigan. It has high water quality with temperatures rarely exceeding 70°F. The stream averages 26.3 feet and much of it is wade-able water allowing anglers the ability to move throughout the stream. The combination of high gradient, good groundwater inflow, and public access make this one of the best river stretches in the Clinton River watershed for fisheries management activities. The buffer zones around the stream allow for stretches of Paint Creek to provide anglers with an "up north" feel even though they are fishing in a highly urbanized area.

Sustainability - Any maintenance or improvements performed on the Paint Creek adheres to the MDEQ requirements including closure during the trout spawning season. We maintain shoreline vegetation which, when partially submerged, deflects and slows the current, reducing the erosive energy, as well as overhanging vegetation which provides shade, cover, and substrate for fish habitat, their food, and to reduce (marginally at this scale) water temperature.

*IV. Other Information:

Crime Prevention

Park safety and crime prevention starts with the appropriate design, location, and management. The proposed parking lot and restroom building will be visible from Orion Road, a major north/south collector road. This location supports surveillance of the park by deputies from the Oakland County Sheriff's Department, who act as enforcement officers for Oakland Township. Paint Creek Trail and Paint Creek Junction Park rules and regulations, including hours of operation (dusk to dawn), will be posted at all park entrances. The restrooms will have both interior and exterior lighting.

Programming and Marketing

The opening of these new support facilities will be celebrated with a ribbon-cutting at either the Paint Creek

Application Narrative

Trail's National Trails Day or Labor Day Bridge Walk/Run events. These events, which offer free entertainment, activities and food, are widely advertised in the media across the region. In addition, these new facilities will be highlighted in our local newspaper; the Rochester Post, Oakland Township municipal newsletters, on both the Paint Creek Trail and Oakland Township websites, in trail and park map brochures, and in conjunction with any programming or events that are offered at this site.

Formal Recreation Department

Oakland Township Parks and Recreation department's 10 employees report to a 7-member elected Parks and Recreation Commission. Both the Commission and Department are described on pages 18 and 19 of the 2015 – 2019 5-year Master Plan.

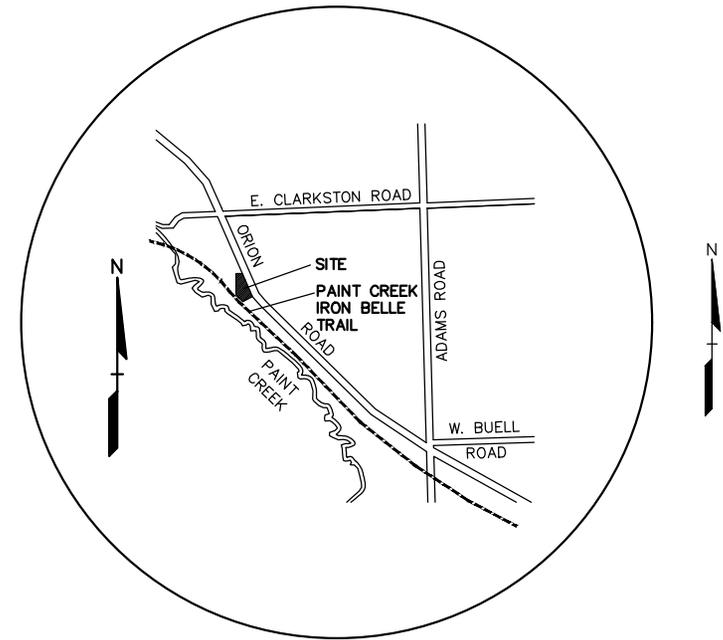
Additional Information about Interpretive Signage

Interpretive signage will incorporate the trail's natural and cultural background; sharing information about the Paint Creek Trail's Railroad history, Paint Creek Junction's section of the Detroit Urban Railroad, and how railroads contributed to the preservation of native prairie areas

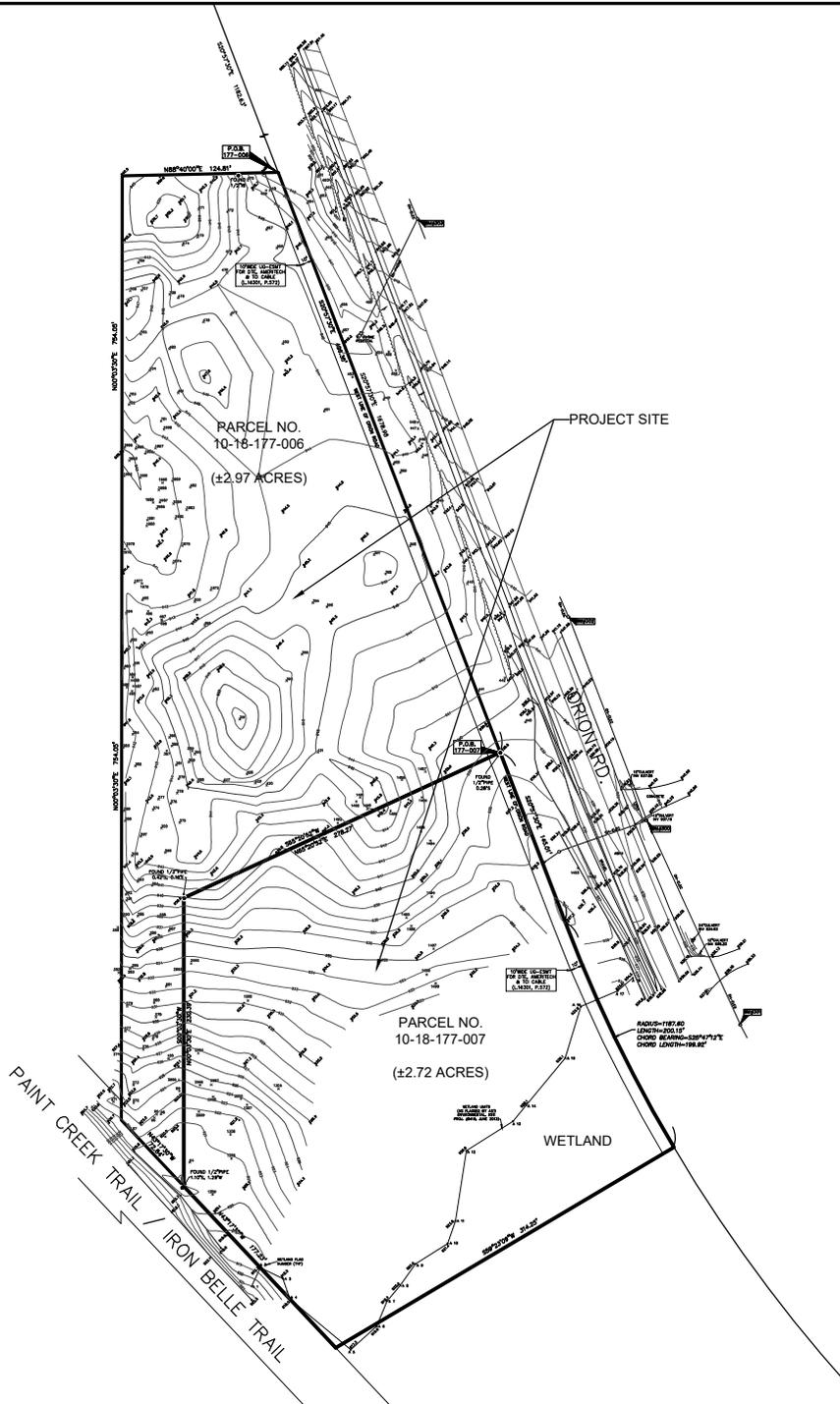
APPLICANT:

CHARTER TOWNSHIP OF OAKLAND
 4393 COLLINS ROAD ROCHESTER, MI
 48306 CONTACT: MELINDA
 MILOS-DALE PHONE: (248)
 651-7810 EMAIL:
 mmdale@oaklandtownship.org

PROJECT LOCATION MAP:



LOCATION MAP - NO SCALE



PROJECT LOCATION MAP

SCALE: 1"=150'

CHARTER TOWNSHIP OF OAKLAND
 4393 COLLINS ROAD
 ROCHESTER, MICHIGAN 48306

PROJECT LOCATION MAP
 TF18-0098
 IRON BELLE- PAINT CREEK TRAIL
 NORTHERN TRAILHEAD DEVELOPMENT

CHARTER TOWNSHIP OF OAKLAND, OAKLAND COUNTY, MICHIGAN

DES. JTS	SUR. PEA	SCALE 1"=150'	JOB NO. OA1808
DN. JTS	P.M. JTS	DATE 03-01-18	DWG. NO. 1



PEA, Inc.

2430 Rochester Ct., Ste. 100
 Troy, MI 48063-1872
 t: 248.689.9090
 f: 248.689.1044
 www.peainc.com

PAINT CREEK / IRON BELLE TRAIL REGIONAL CONTEXT MAP

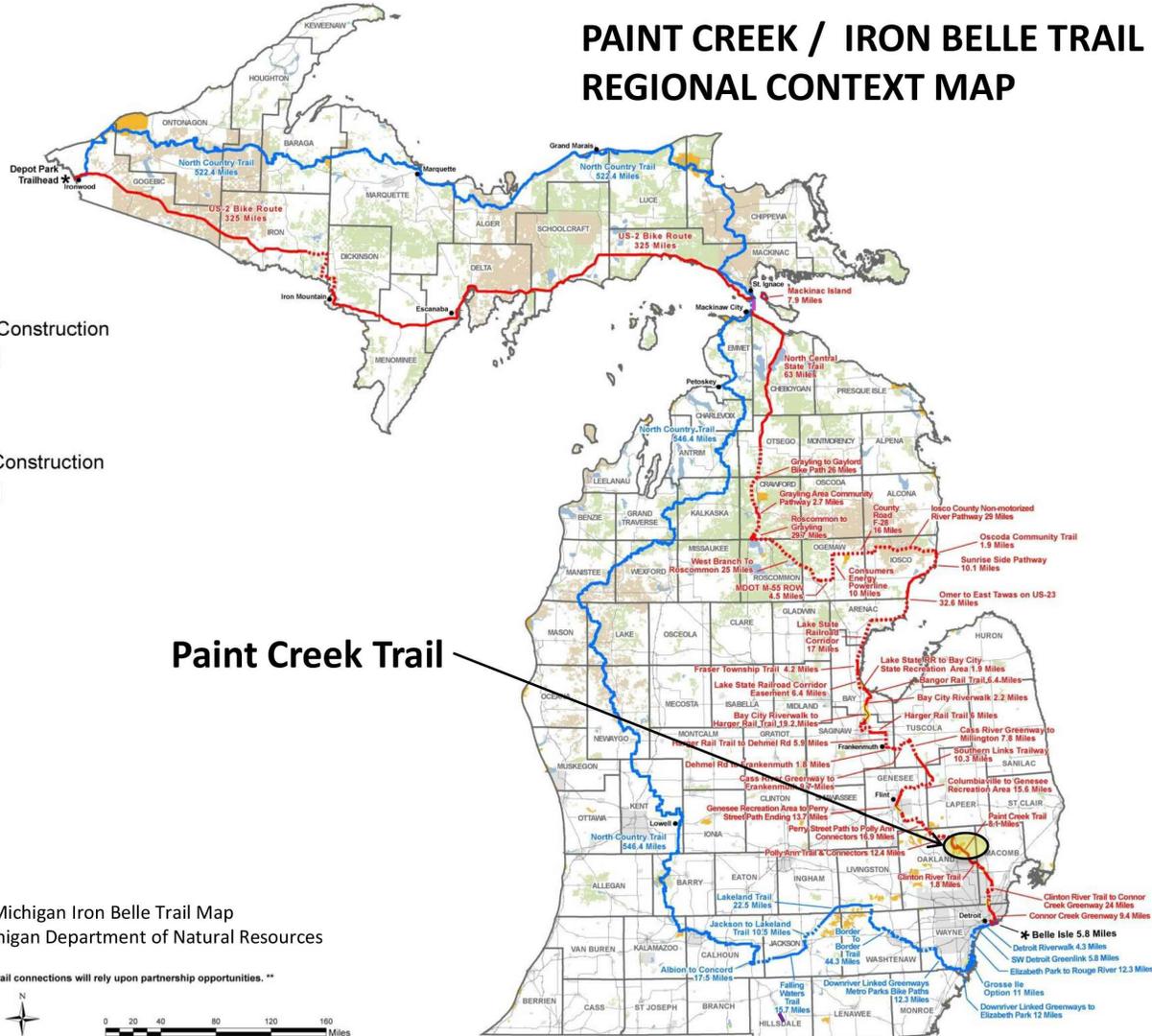
Michigan's Iron Belle Trail

Biking Trail

- Biking - Existing Trail
- Biking - Approved For Construction
- ⋯ Biking - Proposed Trail

Hiking Trail

- Hiking - Existing Trail
- Hiking - Approved for Construction
- ⋯ Hiking - Proposed Trail



Paint Creek Trail



Base information – Michigan Iron Belle Trail Map
Provided by the Michigan Department of Natural Resources

** The illustrated hike and bicycle trail connections will rely upon partnership opportunities. **



January 29, 2019
Michigan Department of Natural Resources
Forest Resources Division
Resource Assessment Section



CHARTER TOWNSHIP OF OAKLAND
4393 COLLINS ROAD
ROCHESTER, MICHIGAN 48306

OVERALL MAP
TF18-0098
IRON BELLE – PAINT CREEK TRAIL
NORTHERN TRAILHEAD DEVELOPMENT

CHARTER TOWNSHIP OF OAKLAND, OAKLAND COUNTY, MICHIGAN

DES. JTS	SUR. PEA	SCALE N/A	JOB NO. OA1808
DN. JTS	P.M. JTS	DATE 03-01-18	DWG. NO. 2



PEA, Inc.

2430 Rochester Ct., Ste. 100
Troy, MI 48063-1872
t: 248.689.9090
f: 248.689.1044
www.peainc.com



Paint Creek Trail Map

A Rails-to-Trails Project, owned and managed by Paint Creek Trailways Commission
 Rochester • Rochester Hills • Oakland Township • Orion Township • Village of Lake Orion

- Parking
- Restroom
- Cider Mill
- Historic Site
- Prairie Restoration
- Rochester River Walk
- Rochester Hills Public Library
- Drinking Fountain
- Dinosaur Hill Nature Preserve
- Municipal Office
- Orion Township Safety Path
- Paint Creek Trailways Office
- Shopping
- Restaurant
- Scenic Overlook



Project Area

- Parking is located at:**
- Kern & Clarkston
 - Silverbell Road
 - Tienken Road
 - Gallagher Road
 - Oakland Twp. Offices
 - Rochester Municipal Park
 - South of Atwater Street
 - Paint Creek Trail Office
- Restrooms are available at:**
- Rochester Municipal Park
 - Rochester Hills Public Library
 - Dinosaur Hill Nature Preserve
 - Oakland Twp. Offices
 - Paint Creek Trail Office
 - Trail Restroom Facility at Kern & Clarkston
- Road-to-Road Mileage (8.9 miles total):**
- Atwater to Kern/Clarkston: 1.5
 - Kern/Clarkston to Adams: 1.5
 - Adams to Gunn: 1.4
 - Gunn to Gallagher: 0.8
 - Gallagher to Silverbell: 0.6
 - Silverbell to Dutton: 1.0
 - Dutton to Tienken: 1.2
 - Tienken to Roch. Municipal Park: 0.9

Paint Creek Trailways
 Commission Office
 4493 Orton Rd Rochester, MI 48306
 Mailing Address: 4793 Collins Rd.
 Rochester, MI 48306
 (248) 651-9200
 10000north@pea.com
 www.paintcreektrail.org
 Please Recycle Brochures



CHARTER TOWNSHIP OF OAKLAND
 4393 COLLINS ROAD
 ROCHESTER, MICHIGAN 48306

PAINT CREEK TRAIL MAP
 TF18-0098
 IRON BELLE- PAINT CREEK TRAIL
 NORTHERN TRAILHEAD DEVELOPMENT

CHARTER TOWNSHIP OF OAKLAND, OAKLAND COUNTY, MICHIGAN

DES.	JTS	SUR.	PEA	SCALE	N/A	JOB NO.	OA1808
DN.	JTS	P.M.	JTS	DATE	03-01-18	DWG. NO.	3



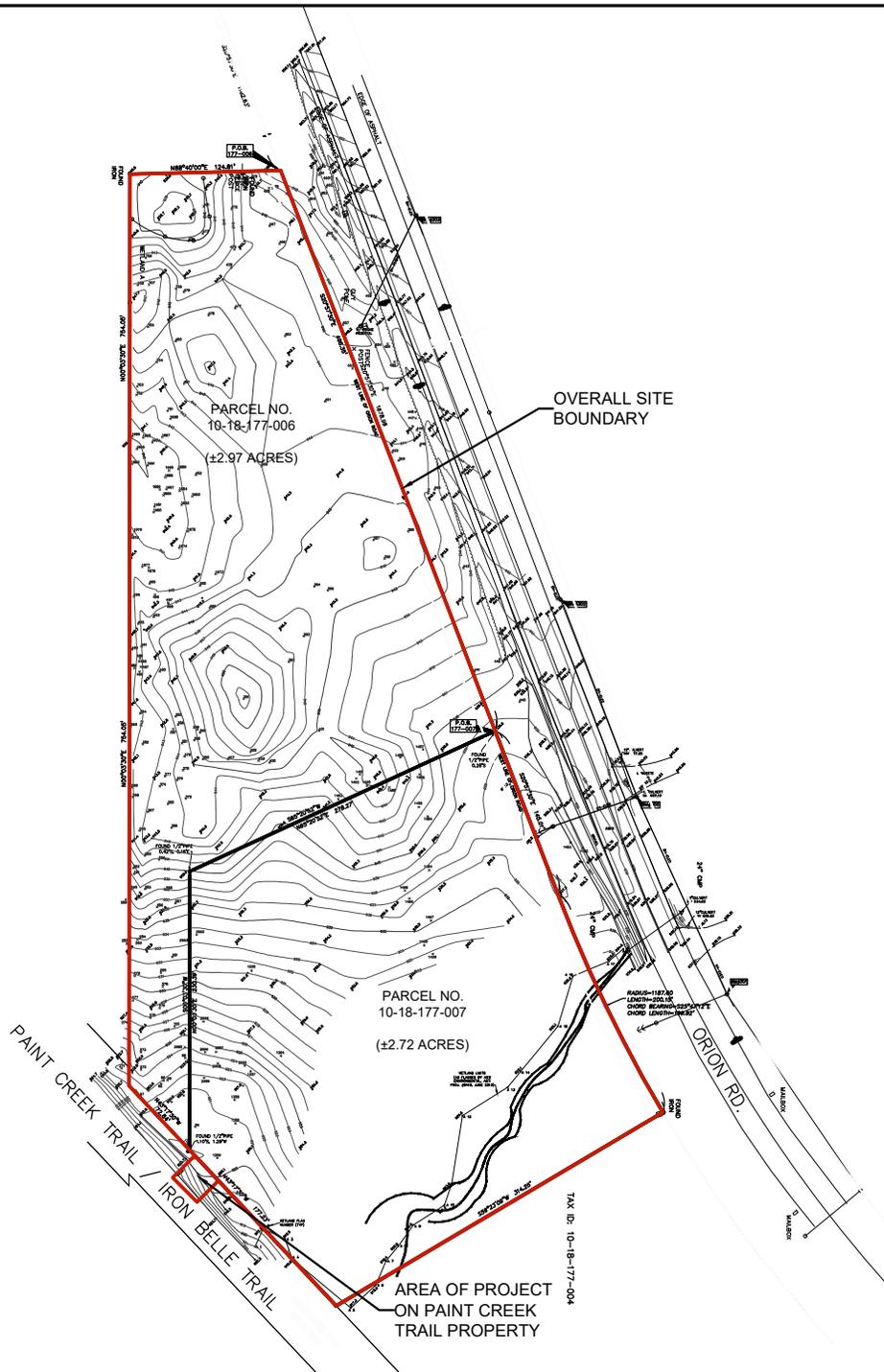
PEA, Inc.
 2430 Rochester Ct., Ste. 100
 Troy, MI 48063-1872
 t: 248.689.9090
 f: 248.689.1044
 www.peainc.com

NOTE:
 PROJECT SITE IS OWNED BY CHARTER TOWNSHIP OF OAKLAND WITH THE EXCEPTION OF THE CONNECTION TO THE PAINT CREEK TRAIL, WHICH IS OWNED BY THE PAINT CREEK TRAIL

5.69 ACRES: TOTAL SITE AREA

2.97 ACRES: ON CHARTER TOWNSHIP OF OAKLAND PARCEL 10-18-177-006

2.72 ACRES: ON CHARTER TOWNSHIP OF OAKLAND PARCEL 10-18-177-007



SITE BOUNDARY MAP

SCALE: 1"=150'

CHARTER TOWNSHIP OF OAKLAND
 4393 COLLINS ROAD
 ROCHESTER, MICHIGAN 48306

SITE BOUNDARY MAP
 TF18-0098
 IRON BELLE- PAINT CREEK TRAIL
 NORTHERN TRAILHEAD DEVELOPMENT

CHARTER TOWNSHIP OF OAKLAND, OAKLAND COUNTY, MICHIGAN

DES. JTS	SUR. PEA	SCALE 1"=150'	JOB NO. OA1808
DN. JTS	P.M. JTS	DATE 03-01-18	DWG. NO. 4



PEA, Inc.

2430 Rochester Ct., Ste. 100
 Troy, MI 48063-1872
 t: 248.689.9090
 f: 248.689.1044
 www.peainc.com

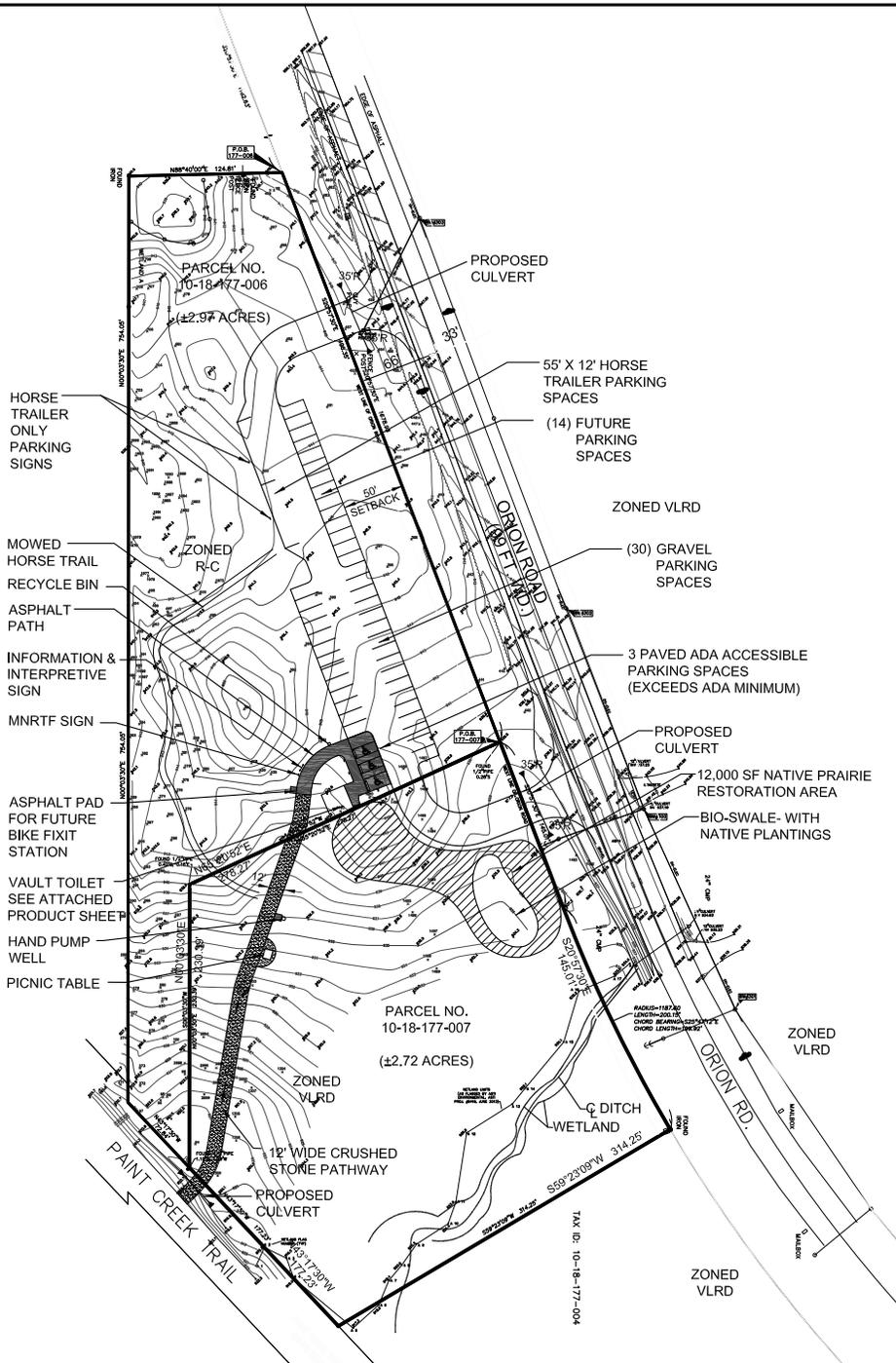
NOTE:
 PROJECT SITE IS OWNED BY CHARTER TOWNSHIP OF OAKLAND WITH THE EXCEPTION OF THE CONNECTION TO THE PAINT CREEK TRAIL, WHICH IS OWNED BY THE PAINT CREEK TRAIL

5.69 ACRES: TOTAL SITE AREA

2.97 ACRES: ON CHARTER TOWNSHIP OF OAKLAND PARCEL 10-18-177-006

2.72 ACRES: ON CHARTER TOWNSHIP OF OAKLAND PARCEL 10-18-177-007

STORMWATER AND EROSION CONTROL WILL BE IN ACCORDANCE WITH THE OAKLAND COUNTY DRAIN COMMISSIONER'S REQUIREMENTS



SITE DEVELOPMENT PLAN

SCALE: 1"=150'

CHARTER TOWNSHIP OF OAKLAND
 4393 COLLINS ROAD
 ROCHESTER, MICHIGAN 48306

SITE DEVELOPMENT PLAN
 TF18-0098
 IRON BELLE- PAINT CREEK TRAIL
 NORTHERN TRAILHEAD DEVELOPMENT

CHARTER TOWNSHIP OF OAKLAND, OAKLAND COUNTY, MICHIGAN

DES. JTS	SUR. PEA	SCALE 1"=150'	JOB NO. OA1808
DN. JTS	P.M. JTS	DATE 03-01-18	DWG. NO. 5

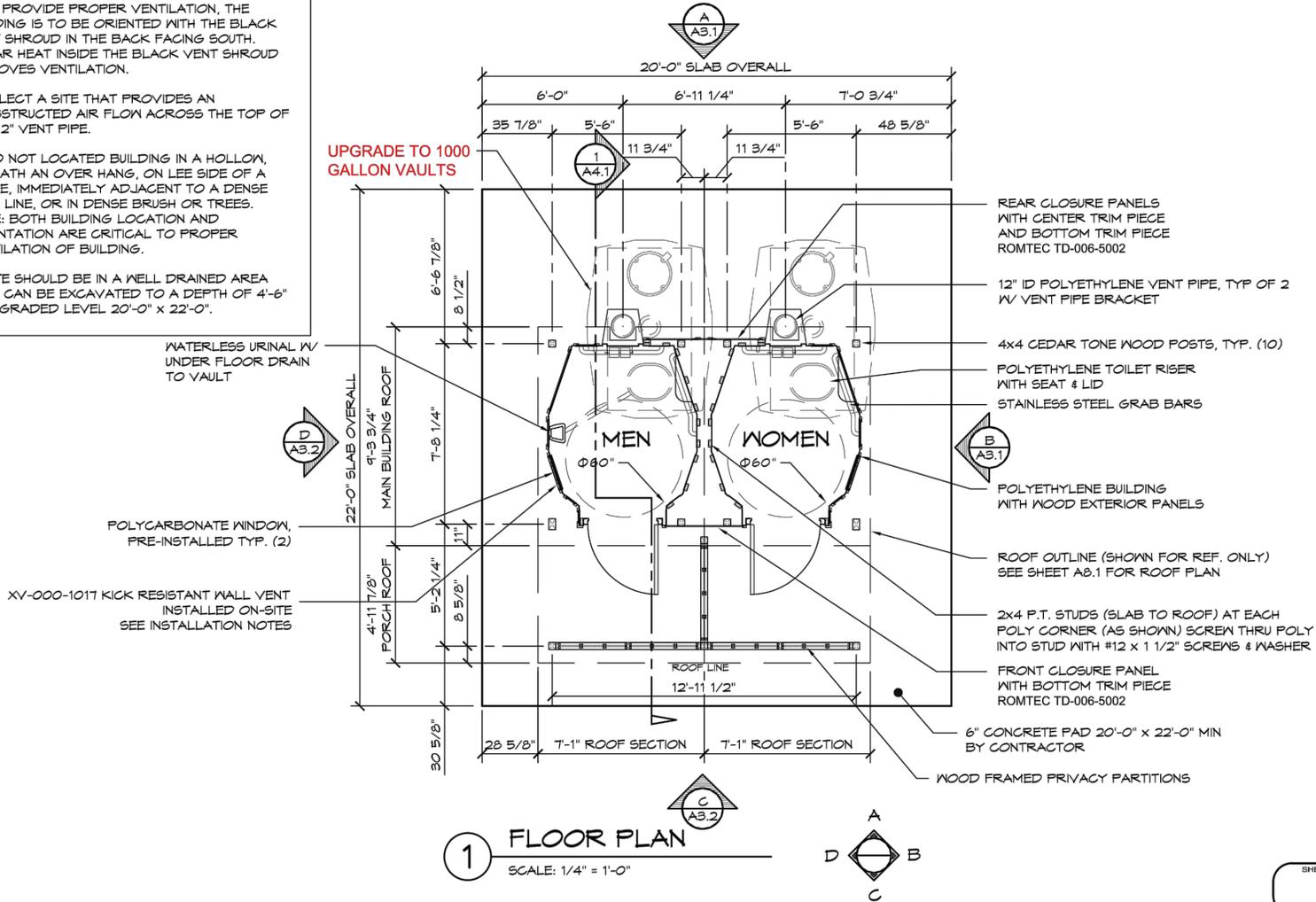


PEA, Inc.

2430 Rochester Ct., Ste. 100
 Troy, MI 48063-1872
 t: 248.689.9090
 f: 248.689.1044
 www.peainc.com

BUILDING LOCATION INSTALLATION NOTES:

1. TO PROVIDE PROPER VENTILATION, THE BUILDING IS TO BE ORIENTED WITH THE BLACK VENT SHROUD IN THE BACK FACING SOUTH. SOLAR HEAT INSIDE THE BLACK VENT SHROUD IMPROVES VENTILATION.
2. SELECT A SITE THAT PROVIDES AN UNOBSTRUCTED AIR FLOW ACROSS THE TOP OF THE 12" VENT PIPE.
3. DO NOT LOCATED BUILDING IN A HOLLOW, BENEATH AN OVER HANG, ON LEE SIDE OF A RIDGE, IMMEDIATELY ADJACENT TO A DENSE TREE LINE, OR IN DENSE BRUSH OR TREES. NOTE: BOTH BUILDING LOCATION AND ORIENTATION ARE CRITICAL TO PROPER VENTILATION OF BUILDING.
4. SITE SHOULD BE IN A WELL DRAINED AREA THAT CAN BE EXCAVATED TO A DEPTH OF 4'-6" AND GRADED LEVEL 20'-0" x 22'-0".



1 FLOOR PLAN
SCALE: 1/4" = 1'-0"

© 2017 ROMTEC, INC. ALL RIGHTS RESERVED. THESE PLANS AND DRAWINGS MAY NOT BE REPRODUCED, ADAPTED OR FURTHER DISTRIBUTED, AND NO BUILDINGS MAY BE CONSTRUCTED FROM THESE PLANS, WITHOUT THE WRITTEN PERMISSION OF ROMTEC, INC.
 PROJECT: 1008 851 TRADITIONAL DOUBLE ALL WEATHER PORCH
 SHEET NO. 1008
 DATE: 2017
 REVISIONS
 REV. DATE BY
 DRAWN BY: TH

ROMTEC
 18240 NORTH BANK ROAD
 ROSEBURG, OR 97470
 (541) 496-3541 FAX (541) 496-0803

INSTALL INSTRUCTIONS
 FLOOR PLAN
 750 GALLON POLY TANK

DATE: 2017		
REVISIONS		
REV.	DATE	BY
DRAWN BY: TH		

SHEET NO. **A2.1**

CHARTER TOWNSHIP OF OAKLAND
 4393 COLLINS ROAD
 ROCHESTER, MICHIGAN 48306

DETAILS
 TF18-0098
 IRON BELLE- PAINT CREEK TRAIL
 NORTHERN TRAILHEAD DEVELOPMENT

CHARTER TOWNSHIP OF OAKLAND, OAKLAND COUNTY, MICHIGAN

DES. JTS	SUR. PEA	SCALE N/A	JOB NO. OA1808
DN. JTS	P.M. JTS	DATE 03-01-18	DWG. NO. 6



PEA, Inc.
 2430 Rochester Ct., Ste. 100
 Troy, MI 48063-1872
 t: 248.689.9090
 f: 248.689.1044
 www.peainc.com



ROMTEC RESTROOM — PHOTOGRAPH

NTS

CHARTER TOWNSHIP OF OAKLAND
4393 COLLINS ROAD
ROCHESTER, MICHIGAN 48306

DETAILS
TF18-0098
IRON BELLE- PAINT CREEK TRAIL
NORTHERN TRAILHEAD DEVELOPMENT

CHARTER TOWNSHIP OF OAKLAND, OAKLAND COUNTY, MICHIGAN

DES.	JTS	SUR.	PEA	SCALE	N/A	JOB NO.	OA1808
DN.	JTS	P.M.	JTS	DATE	03-01-18	DWG. NO.	9



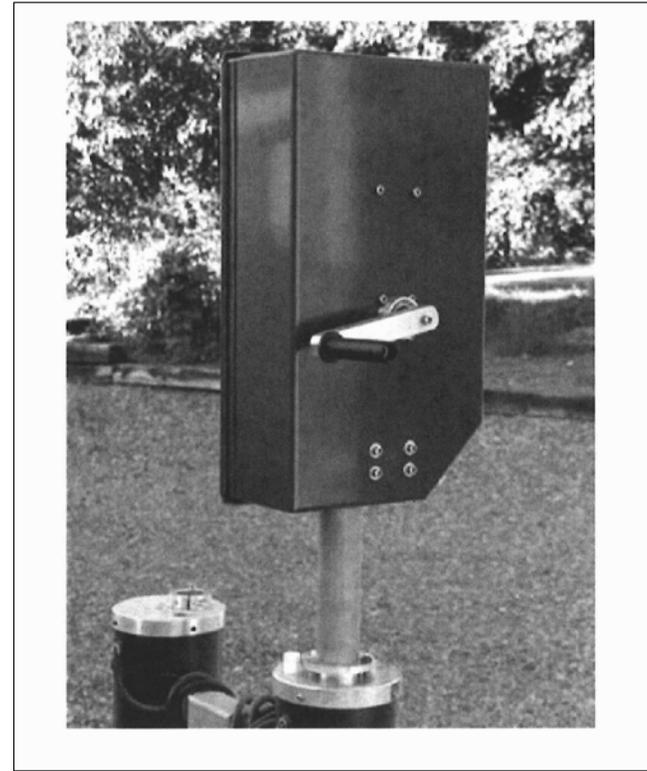
PEA, Inc.

2430 Rochester Ct., Ste. 100
Troy, MI 48063-1872
t: 248.689.9090
f: 248.689.1044
www.peainc.com



RECYCLE BIN

NTS



HAND PUMP WELL

NTS

ADA100 HAND PUMP
 BY: SIMPLEPUMP COMPANY, LLC
 MEETS ADA AND ABA REQUIREMENTS



PICNIC TABLE

NTS

PARK SERIES 72" PICNIC TABLE / ADA UNIVERSAL
 BY: RECYCLEDDESIGN, INC.
 MEETS ADA REQUIREMENTS

CHARTER TOWNSHIP OF OAKLAND
 4393 COLLINS ROAD
 ROCHESTER, MICHIGAN 48306

DETAILS
 TF18-0098

IRON BELLE- PAINT CREEK TRAIL
 NORTHERN TRAILHEAD DEVELOPMENT

CHARTER TOWNSHIP OF OAKLAND, OAKLAND COUNTY, MICHIGAN

DES.	JTS	SUR.	PEA	SCALE	N/A	JOB NO.	OA1808
DN.	JTS	P.M.	JTS	DATE	03-01-18	DWG. NO.	10



PEA, Inc.
 2430 Rochester Ct., Ste. 100
 Troy, MI 48063-1872
 t: 248.689.9090
 f: 248.689.1044
 www.peainc.com



SoundPost[®] systems

When your story is bigger than your sign, add cannon fire, battle hymns, soldiers reading letters from home.

Digital SoundPost systems from Vista Group let outdoor signs do more. They welcome your visitors to current attractions. They become naturalists helping visitors recognize bird songs. The clear crisp messages benefit everyone and provide access for the blind.

With the combination of weatherproof graphic structures and today's maintenance free audio technology, your special story will be ready for every visitor.

Typical SoundPost:

- Messages are stored on digital message repeaters. No moving parts to wear out.
- Push buttons start messages.
- Weatherproof speakers.
- Durable, coated aluminum base and graphic panel frame.
- Electric line level, battery or solar powered.
- Concrete pad or in ground mounted.

Sample Application:

The award winning Peace Garden designed to honor Mattie Stepanek's short life features natural forms and water themes and includes a solar powered SoundPost from Vista Group. Despite Mattie's ever-present illness, he became a nationally known poet and public voice for peace. The SoundPost lets visitors to his memorial hear Mattie reading favorite selections. Discreet in appearance, the SoundPost lets the focus be on the sculpture of Mattie and his dog, but provides a touch of life that otherwise would not be possible.

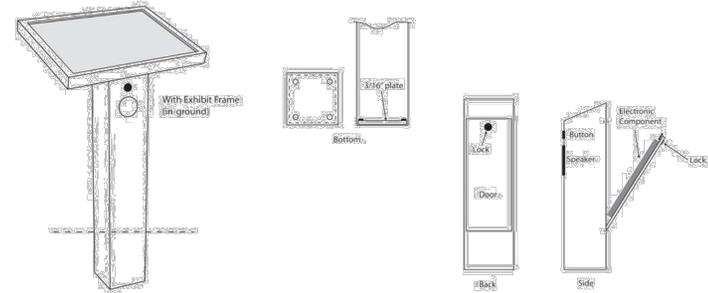
Vista Group also manufactures the popular family of hand-held SoundStik® products for museums, libraries, historical societies, halls of fame, nature centers, tradeshow and corporations, and provides services for tour guides and self-guided audio tours.

Vista Group International

25 Van Zant Street, Unit 8D, Norwalk, CT 06855
800-866-2113 / 203-852-5557 FAX: 203-852-5559
www.VistaGroupInternational.com
email: info@vistagroupinternational.com

SoundPost[®] systems

www.VistaGroupInternational.com



SoundPost Basics

Deck Mount SoundPost The typical SoundPost structure is 12" w x 8" deep and 32" tall to the front of the 30° sloping panel which rises to 36". Made of 1/8" aluminum and powder painted, the SoundPost is designed to look good after years of visitor use and abuse.

A weatherproof speaker and one or more vandal resistant pushbuttons are mounted on the column.

Start Options Push button, token, keypad, or motion detector start are available.

Removable Equipment Panel The electronics are mounted to a removable, securely locked aluminum panel for easy message updates and maintenance.

Message Repeaters Industrial quality digital message repeaters give clear, crisp sound year after year. They are on-site recordable for frequently changing messages. The message is saved even if the power goes off.

Graphic Panels Weatherproof graphic panels are usually made from client-supplied artwork conforming to the production process appropriate for the material selected. Design support is available. Clients may also supply their own panels.

SoundPost Color Options Colors of gray, green, brown and black are standard. Color samples are available. Custom colors optional at additional cost.

Power Source Options SoundPosts may be powered by electric stub, rechargeable batteries or solar power.

- **Electric Stub:** Line level electric is the easiest way to power the SoundPost. The message repeaters require very little power, 10 milliamps in idle and about .5 amps when playing. They come with a 12V regulated power adapter.
- **Rechargeable Batteries:** When used, twin batteries are placed on a removable wooden platform. A switch enables maintenance staff to transfer power to a fresh battery from a drained battery eliminating down time while recharging. Ideal for remote sites with light usage.
- **Solar Power:** A solar panel mounted on a nearby pole outputs to a 12V lead-acid battery placed on a shelf in the base. An over-charge controller prevents excessive charging that can damage the battery. The solar panel and mounting kit are provided. The client supplied pole that supports the solar panel is usually about 15' high to deter vandalism. Some locations may not be suitable for solar power.

Installation: Installation is by client; complete documentation is provided.

CHARTER TOWNSHIP OF OAKLAND
4393 COLLINS ROAD
ROCHESTER, MICHIGAN 48306

DETAILS
TF18-0098

IRON BELLE- PAINT CREEK TRAIL
NORTHERN TRAILHEAD DEVELOPMENT

CHARTER TOWNSHIP OF OAKLAND, OAKLAND COUNTY, MICHIGAN

DES.	JTS	SUR.	PEA	SCALE	N/A	JOB NO.	OA1808
DN.	JTS	P.M.	JTS	DATE	03-01-18	DWG. NO.	11



PEA, Inc.

2430 Rochester Ct., Ste. 100
Troy, MI 48063-1872
t: 248.689.9090
f: 248.689.1044
www.peainc.com

OAKLAND COUNTY TREASURERS CERTIFICATE
I HEREBY CERTIFY that there are no TAX LIENS or TITLES held by the state or any individual against the within description and all TAXES on same are paid for five years previous to the date of this instrument as appears by the records in the office except as stated.

0119417
LIBER: 32405 PAGE: 065
\$10.00 DEED - COMBINED
\$4.00 REMONUMENTATION
\$2,795.00 TRANSFER TX COMBINED
03/05/2004 04:39:30 P.M. RECEIPT# 0028888
PAID RECORDED - OAKLAND COUNTY
G. WILLIAM CADDELL, CLERK/REGISTER OF DEEDS

Mar 05 2004

1.00 E-File Sec. 135, Act 206, 1893 as amended
PATRICK M. DOHANY, County Treasurer

STATE OF MICHIGAN



REAL ESTATE
TRANSFER TAX

OAKLAND
03/05/2004
0028888

\$357.50 CO
\$2,437.50 ST
300208

1362.80

WARRANTY DEED

(Statutory Form - Individuals)

Know all persons by these presents; that Dave M. Lane and Lola Lane, husband and wife whose address is 23530 Morton, Oak Park, MI 48237

Convey(s) and Warrant(s) to, Charter Township of Oakland, a Michigan municipal corporation, whose address is 4393 Collins Road, Oakland, MI 48363

the following described premises situated in the Township of Oakland, County of Oakland, State of Michigan to-wit:

Part of the Northwest 1/4 of Section 18, Town 4 North, Range 11 East, Oakland Township, Oakland County, Michigan is described as: Beginning at a point on the West line of Orion Road being 66 feet West of the centerline of Orion Road, said point located North 87 degrees 58 minutes 00 seconds East along the North line of said Section 18, a distance of 856.18 feet and South 20 degrees 57 minutes 30 seconds East along said West line 1182.63 feet from the Northwest corner of said Section 18; thence continuing South 20 degrees 57 minutes 30 seconds East 641.36 feet; thence on a curve to the left (radius=1187.60 feet, chord bears South 25 degrees 47 minutes 12 seconds East 199.92 feet) a distance of 200.15 feet; thence South 59 degrees 23 minutes 09 seconds West 314.25 feet to the East line of the Paint Creek Trail; thence North 43 degrees 17 minutes 30 seconds West along said East line 250.07 feet; thence North 00 degrees 03 minutes 30 seconds East 754.05 feet; thence North 88 degrees 40 minutes 00 seconds East 124.81 feet to the point of beginning.

Commonly known as: Vacant Orion Road
Parcel I.D. Number: 10-18-177-003

This property may be located within the vicinity of farmland or a farm operation. Generally accepted agricultural and management practices which may generate noise, dust, odors, and other associated conditions may be used and are protected by the Michigan Right to Farm Act.

For the full consideration of Three Hundred Twenty Five Thousand and 00/100 (\$ 325,000.00)
Subject to existing building and use restrictions, easements, and zoning ordinances, if any.

Dated: December 19, 2003

Dave M. Lane
Dave M. Lane

Lola Lane
Lola Lane

State of Michigan
County of Oakland

The foregoing instrument was acknowledged before me on this 19 day of December, 2003, by Dave M. Lane and Lola Lane, husband and wife known to be the person(s) described in, and who executed the same as their free act and deed.

Cynthia A. Radabaugh
CYNTHIA A. RADABAUGH Notary Public
OAKLAND County, Michigan

CYNTHIA A. RADABAUGH
Notary Public, Oakland County, MI
My Commission Expires: 4-16-2006

My Commission Expires: 4-16-2006

Drafted by:
Dave M. Lane
Assisted by: Flagstar Title Ins. Agency
5151 Corporate Drive
Troy, MI 48098

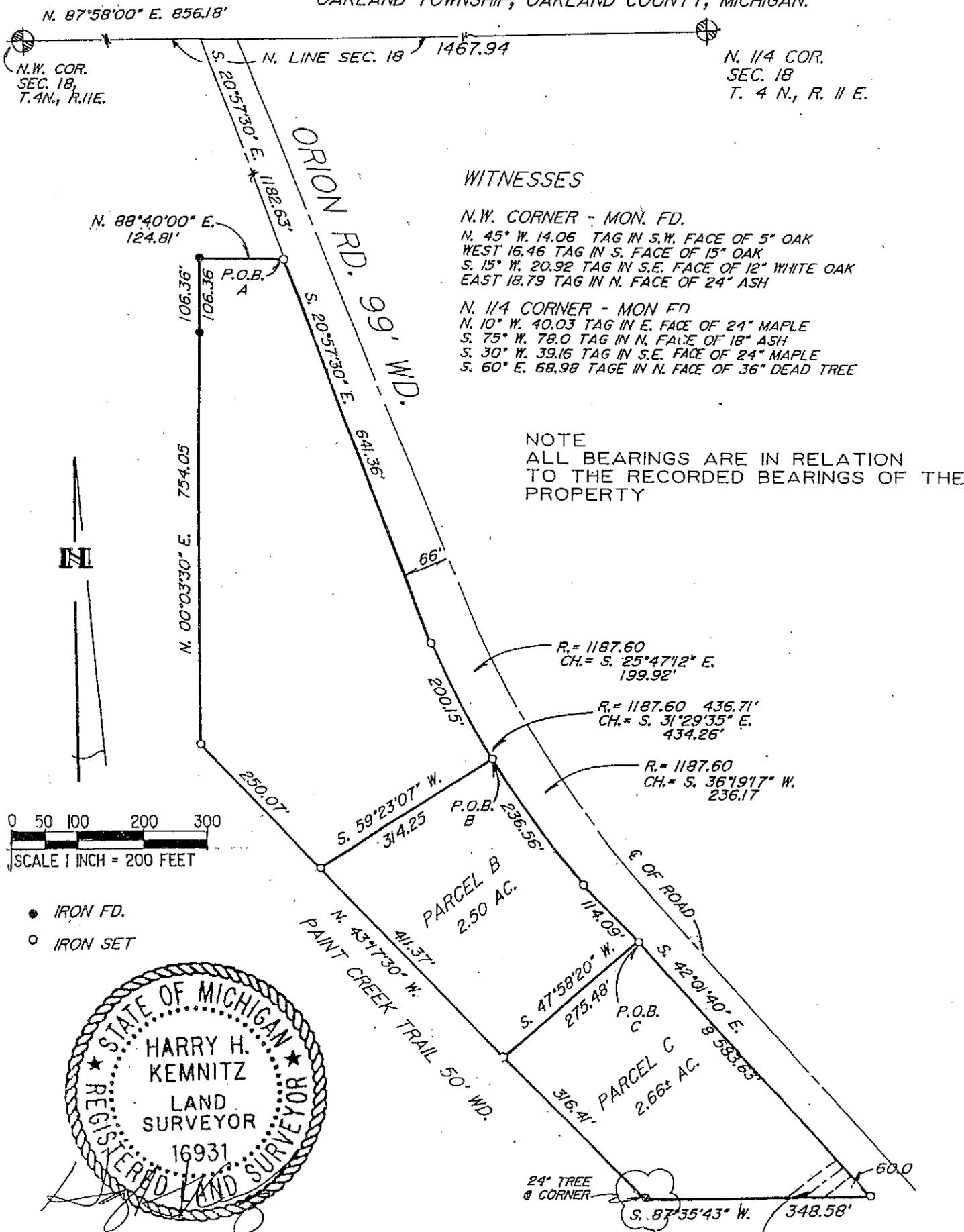
Return to:
Charter Township of Oakland
4393 Collins Road
Oakland, Michigan 48363

Send Tax Bills to:
Charter Township of Oakland
4393 Collins Road
Oakland, Michigan 48363

Recording Fee: 15.00 State Transfer Tax: 2437.50 County Transfer Tax: 357.50
Parcel I. D. No. 10-18-177-003
Case No. 03-111983

Certificate of Land Survey

PART OF THE N.W. 1/4 OF SECTION 18, T. 4 N., R. 11 E.,
OAKLAND TOWNSHIP, OAKLAND COUNTY, MICHIGAN.



WITNESSES

N.W. CORNER - MON. FD.
 N. 45° W. 14.06 TAG IN S.W. FACE OF 5" OAK
 WEST 16.46 TAG IN S. FACE OF 15" OAK
 S. 15° W. 20.92 TAG IN S.E. FACE OF 12" WHITE OAK
 EAST 18.79 TAG IN N. FACE OF 24" ASH

N. 1/4 CORNER - MON. FD.
 N. 10° W. 40.03 TAG IN E. FACE OF 24" MAPLE
 S. 75° W. 78.0 TAG IN N. FACE OF 18" ASH
 S. 30° W. 39.16 TAG IN S.E. FACE OF 24" MAPLE
 S. 60° E. 68.98 TAG IN N. FACE OF 36" DEAD TREE

NOTE
 ALL BEARINGS ARE IN RELATION
 TO THE RECORDED BEARINGS OF THE
 PROPERTY

N

0 50 100 200 300
 SCALE 1 INCH = 200 FEET

- IRON FD.
- IRON SET



The unadjusted error of closure is 1 in 12,980, which is within the accuracy of survey as required in Act No. 288 of Public Acts of 1967. This survey complies with the requirements of Sec. 3, Public Act 132, of 1970, as amended.

Harry H. Kemnitz
 HARRY H. KEMNITZ L.S. NO. 16931

JOB NO. 4343 SCALE 1"=200'
 DATE 12-29-94 SURVEYED 12-29-94

DEL-TEC
 Surveying & Engineering
 5800 Twelve Mile Rd.
 Warren, MI 48092
 (313) 573-8288



West Property Line: Large Oaks in Fence Row



Large Bur Oak x Swamp White Oak



Prairie Groundcover: Native Pasture Rose



Stiff Goldenrod and Mountain Mint



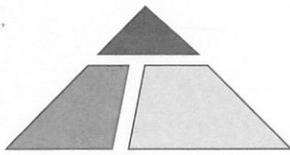
Understory near Western Boundary Line



Walking from northwest corner of parcel south to Paint Creek Trail.



Looking toward Orion Road in old Detroit Urban Railroad Right-of-Way showing lack of large trees.



Tilton & Associates, Inc.

Wetland Management
Ecological Restoration
Landscape Architecture
Resource Policy

WETLAND DETERMINATION REPORT

Project Name: Parks Department Property Acquisition – Orion Road
Location: Orion Road, Section 18, Oakland Township
Site Visit Date: 30 October 2003
Report Date: 31 October 2003
Conducted by: Jane Tesner Kleiner - Tilton & Associates, Inc. (TAI)

Introduction and Methods

Tilton & Associates, Inc. (TAI) has completed a wetland delineation at the proposed Parks Department acquisition in Oakland Township. The purpose of the delineation is to identify all wetland resources on the property for use in site planning by the developer. The following references were used to help prepare this investigation:

Barnes, B. V., and W.H. Wagner. 1981. *Michigan Trees: a guide to the trees of Michigan and the Great Lakes Region*. University of Michigan Press, Ann Arbor, MI.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats in the United States*. U.S. Department of Interior, Fish and Wildlife Service, Office of Biological Services, Washington, DC

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual – Technical Report Y-87-1*. U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS.

Feenstra, J.E. 1982. *Soil Survey of Oakland County, Michigan*. United States Department of Agriculture, Soil Conservation Service, Washington, DC.

Herman, K.D., L.A. Masters, M.A. Penskar, A.A. Reznicek, G.S. Wilhelm, and W.W. Brodowicz. 2001. *Floristic quality assessment with wetland categories and computer application programs for the State of Michigan 2nd ed.*. Michigan Department of Natural Resources, Wildlife Division, Natural Heritage Program. Lansing, MI. 21pp. + Appendices.

Michigan Department of Environmental Quality. 2001. *MDEQ Wetland Identification Manual: A Technical Manual for Identifying Wetlands in Michigan*. MDEQ Land and Water Management Division, Lansing, MI.

National Wetland Inventory. 1980. Michigan Geographic Data Library (online)
<http://www.mcgi.state.mi.us/mgdl/?action=thm>

Natural Resources and Environmental Protection Act 451 of 1994, *Part 303 Wetlands Protection* (as amended).

Penskar, M.R., A.A. Reznicek, W.W. Brodowicz, G.S. Wilhelm, L.A. Masters, and K.D. Herman, K.P. Gardiner. 2001. *Michigan Plants Database*, Appendix C1-56. In: K.D. Herman, L.A. Masters, M.A. Penskar, A.A. Reznicek, G.S. Wilhelm, and W.W. Brodowicz *Floristic quality assessment with*

wetland categories and computer application programs for the State of Michigan 2nd ed.. Michigan Department of Natural Resources, Wildlife Division, Natural Heritage Program. Lansing, MI.

Reed, P.B. 1988. *National List of Plant Species that Occur in Wetlands: North Central (Region 3)*. Fish and Wildlife Service Biological Report 88(26.3), U.S. Department of Interior, Washington, DC.

United States Department of Agriculture, Natural Resources Conservation Service. 1998. *Field Indicators of Hydric Soils in the United States, Version 4.0*. G.W. Hurt, Whited, P.M. and Pringle, R.F. (eds.), USDA, NRCS, Ft. Worth TX.

The methodology used to identify wetlands was typical of Michigan Department of Environmental Quality (MDEQ) wetland determinations. An evaluation was conducted using three diagnostic parameters: vegetation, soils, and hydrology. Plant species associated with wetland versus upland conditions were identified and checked against either the *National List of Plant Species* (Reed, 1988) or the *Michigan Plant Database* (Penskar, et al. 2001). Soil profiles were examined by using a hand auger to dig to a depth of approximately 18 inches below the ground surface. Soil morphologies were examined for horizon thickness, color, texture, and presence of hydromorphic (wet soil) features and compared against the *Field Indicators of Hydric Soils in the United States* (USDA-NRCS 1998 and MDEQ 2001). Primary and secondary indicators of hydrology as described in the US Army Corps of Engineers *Wetland Delineation Manual* (Environmental Laboratory, 1987) and *MDEQ Wetland Identification Manual* (MDEQ, 2001) were used as criteria to confirm wetland hydrology.

General Comments

The proposed project site generally consists of gently rolling topography (Figure 1). The higher ground is mostly covered with “old field” early successional weedy ground cover with some trees and shrubs. The lower elevations are wooded or shrubby areas. Two wetland areas were identified on the parcel.

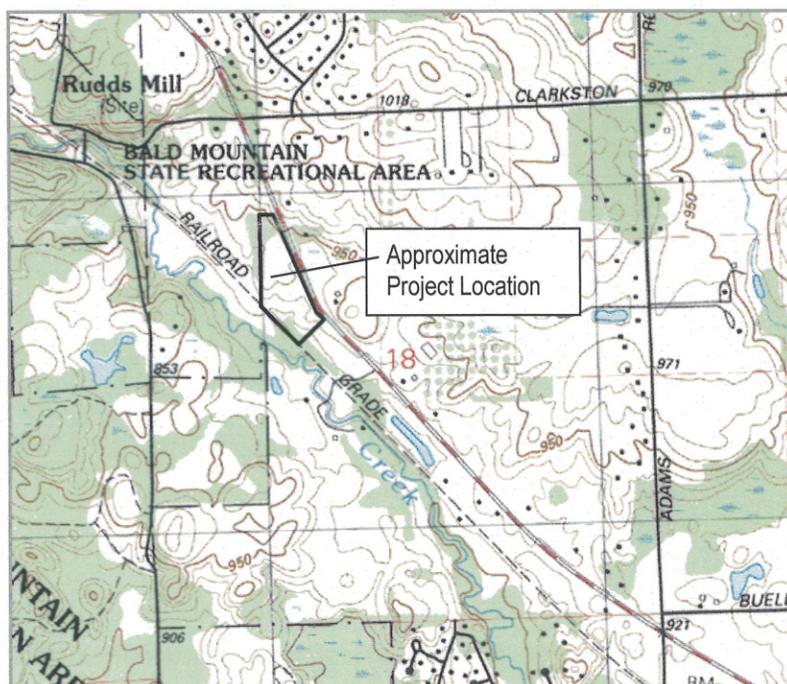


Figure 1. Topographic Map (USGS, Lake Orion, 1991) of the site. North at top of figure, no scale.

The *Soil Survey Oakland County* (Feenstra, 1982) shows one main soil map units (Figure 2) for the site, and one main soil map unit in the adjacent Paint Creek corridor, as follows:

Map Unit	Name	Drainage Class	Hydric Soil
10C	Marlette Sandy loam, 6-12% slope	well to moderately poor drained	no
68	Cohoctah-Fox association	poorly drained	yes

Land use at the site is currently idle. The upland loamy soils were probably used historically for farming or grazing. The presence of young trees and shrubby materials suggests the lack of disturbance to the area. The lower areas include large trees (suggesting limited use area) and a hedge row along the western edge of the property.

Results

Two wetland areas Wetlands A, B/C were flagged using pink and black “wetland delineation” tape (Figure 3). In general, our wetland boundary followed a previous delineation (faded flags were found on occasion). Wetland A consisted of a low-forested pocket on the northern edge of the parcel. The southern wetland was flagged with Wetland lines B (north edge) and C (southern edge). This wetland started at B/C-1 at Orion Road at a road cross-culvert. The wetland had an intermittent stream channel that was well defined with an occasional gravel bottom, drift lines on adjacent trees or roots, and saturated soils (minimal standing water in the low pockets).

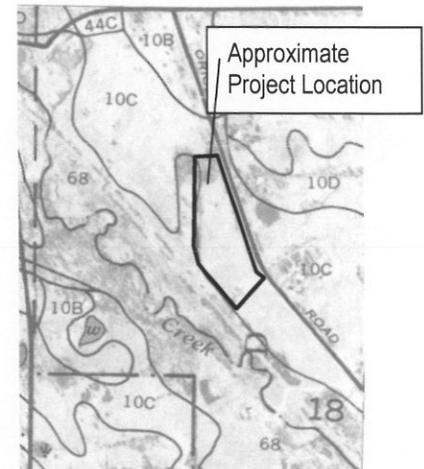


Figure 2. *Soil Survey* (Feenstra, 1982). North at top of figure, no scale.

Table 1. Characteristics of delineated wetlands.

Wetland ID and Flag Sequence	Wetland Type ¹	Hydric Soil Indicator ²	Wetland Hydrology Indicator ³	Dominant vegetation ⁴
A 1-5	PFO	A2 histic epipedon, dark grey(10YR 3/1) organics; S1 black to very dark gray (10YR 2/1 to 10YR 3/1) clayey loam with mottles (10YR4/6)	Buttressed tree roots, water stains on trees, drainage pattern.	Green ash (<i>Fraxinus pennsylvanica</i>) FACW Elm (<i>Ulmus americana</i>) FACW- False nettle (<i>Boehmeria cylindrica</i>) OBL
B 1-16 C 1-13	PFO/PSS	A2 histic epipedon, Black (10YR 2/1) organics Houghton and Adrian muck.	Water stained leaves, drainage pattern (defined intermittent channel), drift lines	Green ash (<i>Fraxinus pennsylvanica</i>) FACW Elm (<i>Ulmus americana</i>) FACW- Blue vervain (<i>Verbena hastata</i>) FACW+ Dogwood (<i>Cornus amomum</i>) FACW+ Glossy buckthorn (<i>Rhamnus frangula</i>) FAC+

¹ PSS=scrub-shrub wetland, PFO=forested wetland, PEM=Emergent wetland (Cowardin et al., 1979).

² *Field Indicators of Hydric Soils in the United States, Version 4.0.* (USDA-NRCS, 1998).

³ Environmental Laboratory (1987)

⁴ *National List of Plant Species that Occur in Wetlands: North Central (Region 3)* (1988).

Figure 3. Aerial photograph (Oakland County, 2002) of the site. North at top of figure, no scale



Note: All boundaries shown are approximate, as flagged.
(Not to scale)

 Approximate Wetland
Boundary as flagged by TAI
(Oct. 30, 2003)

Typical Upland Conditions

Upland areas were higher in elevation and lacked evidence of wetland hydrology. Field examination of upland soils generally corroborated the soil classifications shown in the *Soil Survey of Oakland County* (Feenstra, 1982). The Marlette loams were browner and lacked hydric indicators. Dominant plants in the upland include: grasses (*Poa spp.*), wild carrot (*Daucus carota*), red oak (*Quercus rubra*), grey dogwood (*Cornus foemina*), blackberry (*Rubus spp.*), rose (*Rosa spp.*), and goldenrod (*Solidago spp.*).

Conclusions and Regulatory Status

Based on the criteria outlined in *Part 303, Wetland Protection, of the Natural Resources and Environmental Protection Act of 1994* (1994 P.A. 451, as amended), and *Oakland Township Ordinance 44A, Floodplain and Wetlands Protection*, Wetlands B/C is regulated by the State of Michigan and Oakland Township. Regulatory status is based on proximity to Paint Creek (approximately 250 feet). Wetland A is probably not regulated by the State but is regulated by the Township given its wildlife value and stormwater storage functions. The applicant's engineer and/or surveyor should survey the exact locations of the flagging to better determine the regulatory status.

Floodplain considerations associated with Paint Creek were not addressed in this preliminary wetland analysis, however, if areas within the project area include the floodplain, then an MDEQ permit would likely be required.

The regulation of wetlands in Michigan is under the jurisdiction of the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, and the Michigan Department of Environmental Quality (MDEQ). These agencies make independent determinations as to what is and what is not a wetland. The determination of a wetland boundary by these agencies can vary depending upon many factors including, but not limited to, the agency representative conducting the determination, wetland policy, and the time of year the site was examined. In addition, the wetland boundaries and extent on the site can change from time to time depending upon numerous factors including, but not limited to, changes in vegetation, drainage, weather patterns and activities on adjacent parcels that may alter the pattern of the wetland on the subject property. The wetland determination is based on the condition of the site at the time of our investigation, our past experiences with regulatory agencies and current policy regarding the procedures used to delineate wetlands.

Respectfully submitted,

TILTON & ASSOCIATES, INC.



Jane Tesner Kleiner, RLA
Vice President

P:\Oakland Township\Parks Department\Wet. Det. report Parks Department.03.doc

TF18-0098 Iron Belle - Paint Creek Trail Northern Trailhead Maintenance Plan (March 1, 2018)

Proposed Trailhead Support Facilities and Natural Areas

A gravel parking lot consisting of 30 spaces, two entry drives, plus 3 asphalt-paved ADA accessible parking spaces and pathway, and two horse trailer parking spaces. Expected life of gravel surface is 10 years. Expected life of asphalt surfacing is 25 years.

ADA accessible 12’ wide aggregate pathway approximately 400 linear feet long.

A .5-acre bioswale and native prairie restoration area.

3.94 acres of natural areas (5.69 acre parcel minus 1.25 acres for development of facilities and minus .5 acre for bioswale/prairie planting).

Mowed horse trail approximately 450 linear feet long.

Double Restroom Cedar-sided Structure -1000 gallon Vault Toilets (approximately 15,000 uses per vault*). Life expectancy of vault toilet cedar-sided structure is 25 years and vault will be 35+ years.

Hand pump well. Life expectancy of well pump is 10 years.

*Gallagher Road to Clarkston Road Section of Paint Creek Trail Estimated 25,000 uses May – Sept. 2004

Current Maintenance Budget

Oakland Township’s Parks and Recreation Parks millage funds the improvements, operation and maintenance of the 5+ miles of the Paint Creek Trail that are located in Oakland Township. Oakland Township's 2017/2018 Parks and Recreation Millage budget for these services will total \$38,200 plus \$36,500 is also being reserved from this budget each year in preparation for the 2018/2019 resurfacing of the entire Paint Creek Trail.

Annual Maintenance Schedule and Costs for Iron Belle - Paint Creek Trail Northern Trailhead

TASK NAME	FREQUENCY	ESTIMATED CONTRACTOR COST	ANNUAL STAFF TIME (\$17/hr)	EQUIPMENT/ MATERIALS COST	COMMENTS
Park Inspection	Weekly		50 hours staff time 1 person		
Litter Control	Weekly		40 hours staff time 1 person	\$250	
Mowing trail and area surrounding parking lot and entrance drive	Biweekly	\$2500			

TASK NAME	FREQUENCY	ESTIMATED CONTRACTOR COST	ANNUAL STAFF TIME (\$17/hr)	EQUIPMENT/ MATERIALS COST	COMMENTS
Grading and Replenishment of Parking Lot and Trail Limestone Surface	Spring and Fall		18 hours staff time 1 person	\$250.00 for limestone delivered	
Parking Lot Snow Removal	As Needed		20 hours staff time 1 person	\$300	
Restroom Interior Cleaning and Paper Products	Weekly		200 hours staff time 1 person	\$500 for cleaning/paper supplies	
Pumping of restroom vaults	Yearly	\$500			
Well Winterization/ Spring Opening	Spring and Fall	\$300 in Spring	4 hours staff time 1 person in Fall		Contractor chlorinates in spring.
Well Water testing	Quarterly		8 hours staff time 1 person	\$30 for tests	
Management of Bioswale and native plantings	Annual		5 hours staff time 1 person	\$75	Spot treat invasives, overseeding
Invasive Plant Management	Annual		24 hours staff time 1 person	\$350	Spot treat invasives, overseeding
TOTALS		\$3,300	\$6,273	\$1,755	GRAND TOTAL <u>\$11,328</u>

Additional Maintenance Costs

TASK NAME	FREQUENCY	ANNUAL STAFF TIME	CONTRACTOR, EQUIPMENT/MATERIALS COST	TOTAL COST DURING 25 YEARS
Replacement of aggregate lot & trail surface	10 year cycle		\$10,000	\$20,000
Replacement of Well Pump	10 year cycle		\$500	\$1,000
Prescribed burning of bioswale and native planting	3 Year Cycle	Performed by contractor	\$1000	\$8,000
Staining of Restroom Siding	5 year cycle	16 hours staff time, 1 person	\$200	\$2,360
TOTAL 25-Year COSTS				<u>\$31,360</u>

Total Life Cycle Cost Estimate

TASK NAME	FREQUENCY	ANNUAL STAFF TIME	CONTRACTOR, EQUIPMENT/MATERIALS COST	TOTAL LIFE CYCLE COST DURING 25 YEARS
Design/Construction	Once			\$294,600
Annual Maintenance	Annual	\$6,273	\$5,055	\$283,200
Additional Maintenance	As Necessary			\$31,360
TOTAL 25-Year COST				<u>\$609,160</u>