Master Plan
for the
Antrim Creek Natural Area

Antrim County, Michigan

prepared for:
Antrim County Board of Commissioners
Antrim Creek Natural Area Commission

prepared by:
Site Planning Development, Inc.
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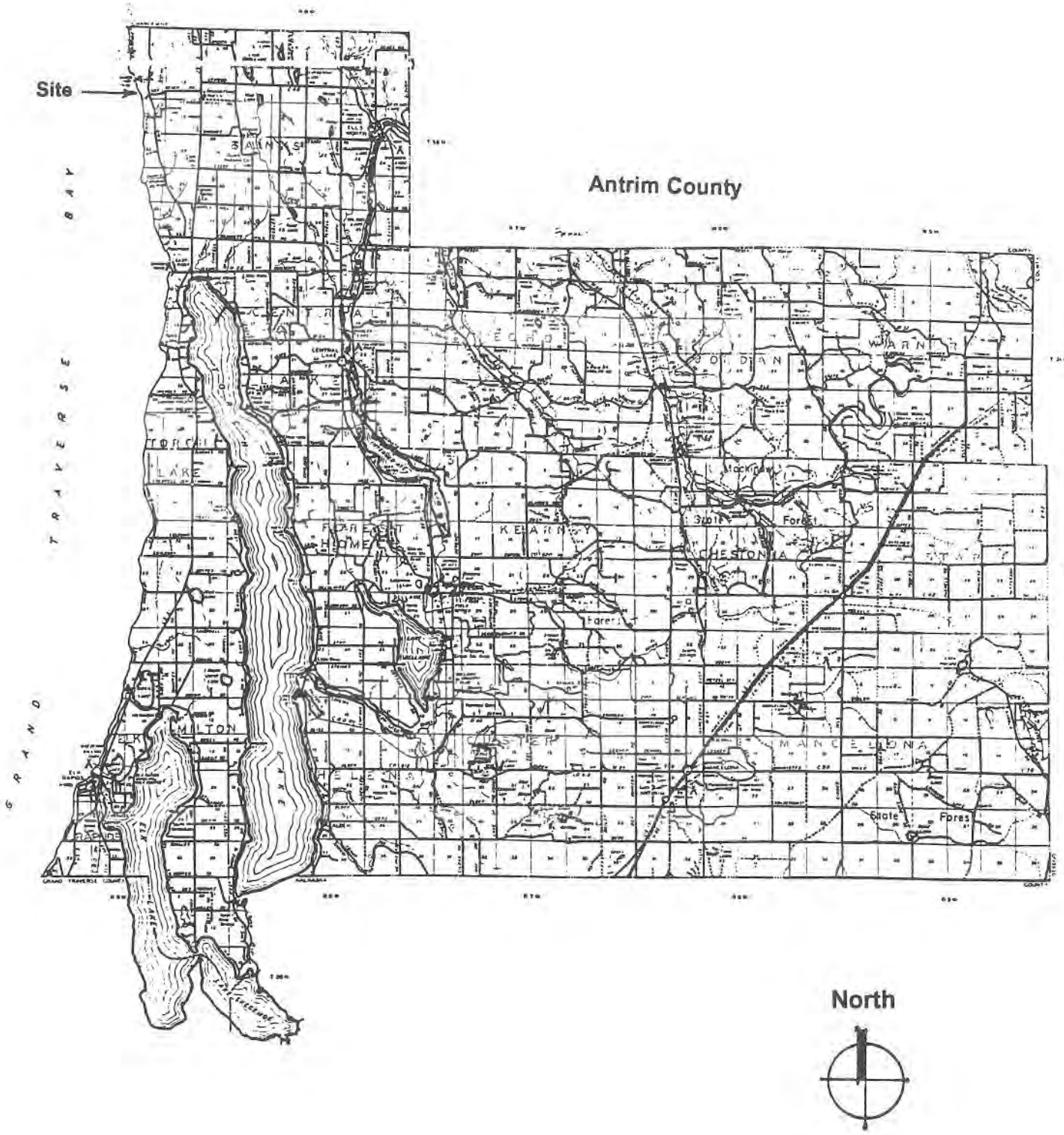


Antrim Creek Natural Area
Location Map

Introduction

This Master Plan is the final product of an eleven month planning effort by community members and leaders of Antrim County and surrounding areas, with the assistance of design consultant, Site Planning Development, Inc., for the purpose of providing guidance for growth, public improvement, and preservation of the Antrim Creek Natural Area, located in Banks Township, Antrim County.

This plan is prepared to assist in achieving the Antrim Creek Natural Area mission : "To manage the site as a natural area, to protect the diversity and fragile natural features found on the property and keep it accessible for recreational and educational use by the public".

The Antrim Creek Natural Area was acquired by Antrim County in 1996 with public monies provided by the Michigan Natural Resources Trust Fund (MNRTF). Accordingly, this plan is intended to be compatible with the MNRTF goals: developing and managing public access to the Antrim Creek Natural Area for recreational and educational uses consistent with preservation goals. It is a collection of works and information prepared by professionals and interested individuals over a two year period, and is the product of a strategic planning process conducted at the community level.

Property Description and Location

The Antrim Creek Natural Area is located in Banks Township, Antrim County 2 miles west of Atwood on Lake Michigan. A location map is attached.

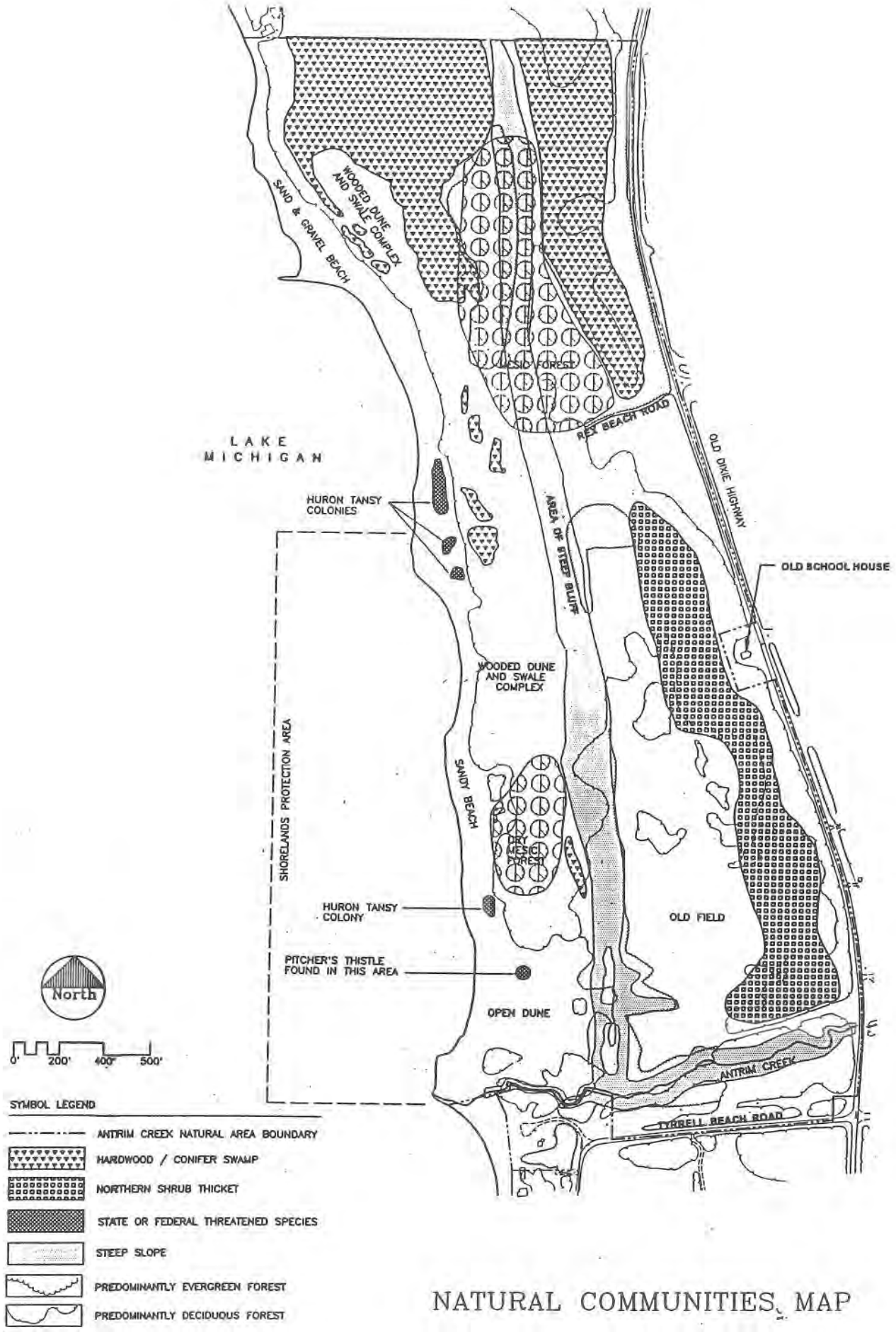
The property is comprised of 156 acres of land containing nearly one mile of shoreline on Grand Traverse Bay. This is the largest stretch of contiguous, undeveloped shoreline remaining within the entire 132 miles of bay coastline between Norwood and Northport. It supports an incredible array of natural diversity including hardwood forest, forested wetland, conifer swamp, shrub thicket, meadow, wet meadow and coastal dune. It supports a wide range of flora and fauna including federal and state listed threatened plant species. This is rare and unique coastal ecosystem without equal.

Natural Features

General Description

Looking at the Natural Features Map on the following page, you will notice a few distinct features which may be used as reference throughout this text.

- **A steep slope**, or bluff, bisects the property longitudinally, dividing the lower beach, dune and forest from an upper plateau containing both forest and meadows.
- **Rex Beach Road**, or more specifically a two-track extension thereof, is a seasonal county road dividing the property into nearly equal north and south halves.
- **Sandy beach** and dune areas predominate the southern shore area.
- **Cobble beach** predominates the northern shore areas.
- **An open dune** distinguishes the southern shore area with sharply undulating sandy landforms extending several hundred feet inland.



NATURAL COMMUNITIES MAP

Antrim Creek Natural Area

Site Planning Development, Inc.

This illustration was prepared for White Pine Associates by Site Planning Development, Inc., Charlevoix, Michigan

- **Antrim Creek** is a deeply carved streambed along the southern boundary of the natural area.

Protected Plant Species

At least sixteen plant species found at the Antrim Creek Natural Area are worthy of protection, according to a research and inventory report prepared by White Pine Associates, entitled Ecological Inventory of the Antrim Creek Natural Area.

Most noteworthy are Pitcher's Thistle and Lake Huron Tansy, found on the property in several places in the shore and dune areas. These are provided legal protection pursuant to the Federal Endangered Species Act of 1973 and the Endangered Species Act of Michigan, respectively. Permits are required prior to construction on the property, and plans must satisfy Federal and State requirements for protection of these plants.

The state act also identifies plants of special concern which, while not currently on the protection list, represent declining or rare populations in the state. If the trend continues, plants of special concern are planned for addition to the list. The Pale Sedge is one such plant found on the property.

Other plants found on the property are recognized by the MDNR as having precarious future existence and, while not legally protected, the Department is requesting they not be disturbed. These include: Starflower, Indian Pipe, Yellow Trout Lily, Wood Lily, Columbine, Twin Flower and Jack-in-the-Pulpit.

Wetlands

Wetlands, as defined by both State and Federal Statute, are present on the property. Dredging or filling of wetlands within the Antrim Creek Natural Area are regulated by both the Michigan Department of Environmental Qaulity and the U. S. Army Corps of Engineers. A permit to construct in these areas is required from the regulating agencies.

The general type and location of wetland areas are shown on the Natural Features Map incorporated in this plan. The delineation shown thereon is based solely upon remote interpretation including a review of aerial photographs and general soils information, and a preliminary cruise of the property. The Natural Features Map may not be relied upon when identifying wetland areas for construction. Detailed wetland delineations have been performed over some, but not all, of the property.

Soils

A range of soil types are found on the property, some of which are not suitable for building or recreational purposes. Wetland areas comprise the most limiting soil types for building and recreation, and should be avoided for all but educational uses and interpretive display.

For reference, soils types found on the property are described more fully in the appendix in an excerpt from an Ecological Inventory of the Antrim Creek Natural Area prepared by White Pine Associates.

Background Information

Historical and Current Uses

The Antrim Creek Natural Area , formerly known as the Jone's property, was purchased by Harry and Eleanor Jones in 1943 and kept undeveloped, in its natural condition, over the duration of the Jones family's 53 year stewardship. The property was used by the Joneses and by community members with the Joneses consent, for such activities as swimming, hiking, hunting, fishing, picnicking, cross country skiing, and snowshoeing. These uses have continued, and by some observer's account have intensified, since acquisition of the property by the County.

No buildings or structures are present on the property. The hiker or sportsman will find narrow paths through the woods in places historically traveled, but none are obvious nor marked. The open dune and creek area is cris-crossed with footsteps and barren earthen paths.

Predictably, the most intense use occurs during the summer months for such passive activities as swimming and picnicking and occur on the sandier beaches and dunes of the southern half of the property.

The beaches and dunes are currently used for ATV and four-wheel drive joy-riding, evidenced by tire tracks throughout the area, in some places damaging the Lake Huron Tansy and Pitcher's Thistle plant species protected by state and federal statute. ATV tracks have been observed running south from the Rex Beach access, crossing Antrim Creek, trespassing onto and across adjoining property and running over the beach ridge. Motorized vehicle use over beaches and dunes and across neighboring property is inconsistent with the terms of the acquisition grant agreement between the county and the state. Destruction of threatened or endangered plant species is a punishable offense pursuant to state and federal laws.

The northern half of the property is generally wetter with less popular beach areas, and used primarily for hiking and hunting.

Access

Currently, the most used access is via the two-track extension of Rex Beach Road, which runs to the shore near the center of the property and provides the easiest access for swimming, picnicking and small boat launching for fishermen. Anglers also have favored access near Antrim Creek, often parking on the Jones's private property, which is acknowledged as trespass and a nuisance.

The central "Rex Beach" access road runs through woodland on the upper plateau and traverses the slope over a steep and narrow roadway. This road was created with simple cut and fill techniques sometime in the past; we do not know when or by whom. Historically, the road has received little maintenance or improvement, including occasional grading by the County, and is known to be subject to erosion and failure of the cut slope. In 1997, a retaining wall and erosion control structures were built by the County in an attempt to stabilize the cut slope and control erosion. Although these measures were an improvement, recent observations reveal continuing longitudinal and cross-slope erosion, and the road remains in

need of additional attention for regular public use.

An existing "old farm lane" is located just north of Antrim Creek, running from Old Dixie highway to the crest of the bluff. This is a grassy two-track formerly used for farming the meadow area on the southern portion of the property. This lane was used only by the Joneses and their guests and was kept closed to the public. It is relatively stable and there is no sign of recent improvement.

Previous Planning and Analysis

Professional and community planning efforts have been implemented for the Antrim Creek Natural Area. An Ecological Inventory of the Antrim Creek Natural Area was prepared by White Pine Associates, Bellaire, Michigan, for the Grand Traverse Regional Land Conservancy. The final product of this study is an exhaustive report completed in October 1996, including much useful information for project planning and user education, such as geologic history, an inventory of plant communities and plant and animal species found on the property, as well as an outline of human history and influence. Selected portions of the White Pine Associates report (White Pine report) are attached to this plan for reference.

Other useful studies completed by interested community members have been used in this plan. The Antrim Creek Natural Area property is well known by several local residents who have for years enjoyed the property for hunting, fishing, hiking and beach activities. Many of these individuals combined to form "The Friends of Antrim Creek", an ad-hoc committee spending significant effort collecting information and analyzing such issues as signage, access, parking, and trail configurations. The record of their efforts reside in the minutes of their meetings, sometimes incorporated in minutes of the Antrim Creek Natural Area Committee. Research for this plan included meeting with principal members of the "Friends" to review their work and suggestions.

Historical Background and Significance

Antrim Creek and vicinity is believed to have been the site of prehistoric Native American activity and is known to be more recently the site of old Antrim City. The Antrim City Cemetery still remains at an adjoining site directly across Old Dixie Highway. Very little is known, however, about exact siting of settlement or structures on the property.

Records at The State Historic Preservation Office (SHPO) indicate there is one recorded site on the property, identified by its site number which is 20AN22. Conversation between Site Planning personnel and Dean Anderson, State Archeologist at SHPO, revealed this site was recorded as a result of phone calls received over a period of several years, wherein the callers either questioned or shared their belief that significant activity had occurred here. Site 20AN22 is not an exact spot on the property and is of unknown size and shape. A SHPO staff person has sent correspondence suggesting an archeological survey be conducted prior to site clearing or construction activity.

The State Archeologist may waive the need for the archeological survey if satisfied that historical and archeological resources are unlikely to be damaged by the proposed activity. It is anticipated that such will be the case here, as the very nature of this project is to minimize impact to the natural environment.

For historical background, an interesting outline was prepared by Mary Kay McDuffie for the White Pine report, titled "Historical Features Indicating Human Use" at the Antrim Creek Natural Area. A copy is attached in the appendix for reference.

Conservation Easement

A portion of the Antrim Creek Natural Area is subject to a conservation easement, created for the purpose of limiting impact upon the natural resource in that area. The easement area is generally located along Antrim Creek and the adjoining open dune area. This conservation easement is an agreement between the donors and Antrim County, successor to the Grand Traverse Regional Land Conservancy and is recorded in Liber 421, Page 282 at the Antrim County Register of Deeds. A review of the conservation easement agreement must be incorporated into the final design process.

The Planning Process

Strategic Planning

This master plan is the product of community input and professional assistance. Strategic planning, by its definition, is proactive rather than reactive, requires collaborative decision making, and creates a method for adopting a course of action. Also by definition, strategic planning is a dynamic process requiring periodic review and revision. Accordingly, a three year evaluation is expected, wherein the county will review progress, determine whether the plan and implementation is achieving project goals, and modify the plan and management practices as needed.

The planning process for the Antrim Creek Natural Area included several opportunities for public participation, including community workshops and public meetings. At each meeting, results and directives from the preceding meeting were evaluated, discussed and affirmed by the participants. The purpose of the community workshops was to collect public input used in creating project goals. The planning consultant's task is to achieve those goals to the extent possible, applying a knowledge of physical and biological sciences, and meeting obligations to protect public health, safety and welfare.

Public Participation Workshops

Public participation in the design of the Antrim Creek Natural Area is essential. To maintain effective stewardship of this natural area, the community must have a stake in its creation and feel a sense of ownership. Public design workshops are a way to achieve this goal.

Two public workshops were conducted for this project, the first in March and the second in July, the intent to provide full-time and seasonal residents an equal opportunity for participation. Advertising was extensive for these workshops: for the first workshop a notice was placed in every Banks Township property owner's tax bill, both workshops were advertised at numerous community events and notices posted in businesses throughout the county, all in addition to normal publishing for public hearings.

"Nominal group" and "large group" methods were employed at the workshops to encourage public participation and input. With the nominal group process, the audience is divided into small groups where active and moderated discussion is generated to discover public perceptions, ideas and issues. Comments generated during group discussion are then reviewed by the general audience and consolidated into a manageable number of main ideas or goals for the project. This method was used at the first workshop where the objective was to solicit input for creation of a local goals list.

The large group method was used at the second workshop, where a smaller number of participants made nominal group methods impractical. The objective of our second workshop was to review outcomes of the first workshop, to review and evaluate project goals, and to collect public input on specific plan concepts and features.

Each of the workshops was well attended. Additionally, monthly meetings of the Antrim Creek Natural Area Commission provided a forum for public participation. Meeting times and dates are routinely posted and available. A detailed review of the public workshops and their outcomes is attached in the appendix.

Project Goals

The primary project goals for the Antrim Creek Natural Area were established by the county in its application for acquisition funding. A separate listing of project goals was created as an outcome of the public participation workshops. Interestingly, the latter affirms the former, emphasizing environmental protection, public access and experience, education, and hunting & fishing.

The primary goals are:

1. Develop and manage the public access to the Antrim Creek Natural Area for recreational and educational uses consistent with preservation goals.

2. Protect the diversity and fragile natural features found at Antrim Creek Natural Area.

3. Facilitate environmental education experiences centered on the property's rich natural and historical features.

4. To keep the property accessible for recreational uses including fishing and hunting by the public.

5. Ensure all designs and plans for Antrim Creek Natural Area are constructed in a manner as to not disturb or alter the historical and natural uses of the property.

6. Enhance the safety and efficiency of vehicular ingress and egress to the property, thus ultimately reducing the liability while still maintaining the accessibility to the property.

The goals identified as an outcome of the public participation workshops are:

1. Provide access to unimproved boat launch

2. Protect Natural Features

3. Create paths & trails

4. Provide adequate parking

5. Keep area open to hunting & fishing

6. Create public awareness & educational opportunities

Discussion

Clearly, the predominate goal shared by all of the stakeholders in this project is protection of natural features. This goal is repeatedly stated as top priority in the mission statement, the management goals, and the local goals. It is the overwhelming reason it was selected over many other competing projects in the state for such substantial MNRTF acquisition funding. Accordingly, where a public use is contemplated which might conflict with protection of the natural resource, protection must be the higher priority.

Potential conflicts exist in a few areas. For example, several sportsmen were so outspoken at public hearings over the issue of small boat launching that the county agreed to attempt keeping that use. How do we maintain access to the beach for small boat launching, while ensuring protection of the dunes and threatened plant species currently suffering from damage by vehicles in the dunes? One solution may be placement of physical barriers to prevent vehicles from traversing the beach and reaching the dune areas. Strict enforcement of "no vehicle" rules is essential. If the implemented solution is ineffective in preventing destruction of the natural resources, other effective methods must be found and employed.

Here is another example of potentially conflicting, but prescribed uses . Hunting and hiking might conflict with one another during the hunting season. How are these uses managed to promote safety ? Solutions may include seasonal hunting limitations, limitations on the area open to hunting, and seasonal posting of trails to notify hikers of hunting activity.

Camping, campfires, and horseback riding, are examples of uses potentially harmful or destructive to the natural environment.

Growth and Future Use Projections

As lakefront property is developed, public access becomes more scarce and more valued. Large "virgin" parcel are becoming rare. Already in this region there is an unprecedented pressure to create new, and to maintain existing, public access to the lakes. Therefore it is logical to expect ever-increasing use of land preserves in general, and especially those providing access to water.

There is a current trend towards land preservation in this region, and an appreciation of natural areas and preserves by a growing population. Demonstrating this trend is the recent growth in the number of land preserves administered by area land conservancies, such as The Grand Traverse Regional Land Conservancy in Traverse City and The Little Traverse Conservancy in

Petoskey.

Future use predictions for the Antrim Creek Natural Area might best be made by observing user counts at other local preserves and recreation facilities. At Grass River Natural Area, traffic counts reveal 13,000 cars visited the Grass River site over a twelve month period, according to Mark Randolph, director. Extrapolation of the count indicates approximately 20,000 visitors. This count does not include visitors coming by boat. Predictably, summer is by far the busiest time. Data reveals that 66% of park use occurs from the last week of June to the middle of August.

Data for Barnes Park, a nearby county campground facility, indicates a 2500% increase in revenues from 1969 to 1993. While revenues may not have a direct relationship to the number of users, it is a powerful indicator that the number is growing dramatically. Similar to Grass River, most use occurs in the summer between Memorial Day and Labor Day. These campers are likely candidates as Antrim Creek Natural Area users.

In general, area growth is demonstrated by population counts, including permanent residents, seasonal residents and overnight visitors. According to Census Counts for Michigan Regions and Counties the permanent residential counts for Antrim, Charlevoix, and Grand Traverse counties have grown 75%, 60% and 92% respectively over the 30 year period between 1960 and 1990. Significant increases in population are observed during the months of June, July and August when it is estimated that seasonal residents and overnight visitors increase populations by another 35%.

No visitor counts have been taken at the Antrim Creek Natural Area since acquisition in 1996, however, long-time residents and users of the property have shared the opinion that already, even before advertisement traffic has increased significantly, citing as many as 15 cars parked at the Rex Beach access.

Plan Features and Recommendations

Foreword

Management and improvement of the Antrim Creek Natural Area is intended comply with the mission statement:

"To manage the site as a natural area, to protect the diversity and fragile natural features found on the property and keep it accessible for recreational and educational use by the public.".

The goals established during the strategic planning process and confirmed by the county and community are the basis for design. Having heard local public opinions on the issues and ideas for plan features at workshops and hearings, the challenge is to incorporate as many of those ideas and features as possible while meeting the county's obligations to the state and its general obligation to protect the health, safety and welfare of the public at large.

A recurring phrase associated with the Antrim Creek Natural Area mission is, "to maximize access while minimizing impact". The implied obligation is to find that balance between satisfying the demands of a growing number of users while maintaining the natural environment

and providing adequate protection of the natural resource.

The value of the Antrim Creek Natural Area is in the diversity and uniqueness of its habitats, which is the overwhelming reason it was selected over many other competing projects in the state for such substantial MNRTF acquisition funding. For this reason, early phases of planned activity should weigh more heavily on the side of protection of the natural resource. Future evaluation, being a normal part of the strategic planning process, will provide the opportunity for revising plan features to achieve the proper balance of protection and use.

Entry Access

Access to the Antrim Creek Natural Area is planned at two locations: the existing Rex Beach Road, or "North Access", and the existing Old Farm Lane, or "South Access". The North Access provides ready access to the shore area by swimmers, picnickers, hikers and mobility-limited users. The South Access provides a more convenient, yet low impact, place for fishermen, swimmers and hikers to approach the creek, dune and beach areas. While both of these are existing or former drives, each will require some degree of improvement for regular public use.

In general, access roads shall keep their rural character: gravel surfacing and perhaps even a seeded cover to maintain a two-track appearance.

North Access improvements are anticipated to include fresh road gravel and grading throughout and, specifically where the road traverses the bluff, grading for proper drainage, installation of additional drainage structure, installation of a guardrail and resurfacing with a stable aggregate product compacted in place. It may be prudent to consider bituminous paving where the road traverse the bluff in order to prevent erosion and reduce maintenance requirements.

The North Access road is currently classified by the county as a one-lane "seasonal road", subject to normal seasonal-road limitations. It will not be plowed in the winter. Appropriate signage is suggested, notifying users of road conditions.

Current conditions where this north access traverses the bluff warrant study and recommendations by a qualified engineer before final design is implemented.

The South Access road is planned to keep its grassy two-track appearance. Improvements here are anticipated to include placement and grading of road gravel only where determined necessary for vehicle support. First phase work might omit new gravel in places already stable enough to support traffic. Seeding along road edges would be allowed to creep into the roadway to keep the "Old Farm Lane" appearance.

Parking

Parking at both the north and south access will be "slot" type instead of "lot" type. It is planned to be low impact, created where possible between existing trees and vegetation masses using clean fill and gravel. Because fill placement and soil compaction have an adverse affect on plant roots and health, judgements must be made onsite to determine exact location and the prudent number of spaces to construct in each slot.

Visitor Control

No gates or barriers are currently planned at entrances to the Antrim Creek Natural Area. No restrictions on the hours of operation are currently planned, so to allow visitors and seasonal hunters to quietly enjoy the natural area any time of the day or night. Visitor control is presently planned to consist of their honoring the rules for use, trail markers and directional signposts, and protective markers. The rules for use will be posted near parking areas at the access places. Enforcement of the rules shall be by designated personnel or representatives of the county.

Boater Control

The County is obligated to protect the diverse environments, the natural resources present on this property and access to the natural resources, and must implement measures needed to provide that protection.

At the north access, where fishermen have launched small boats over the beach area, special provisions are needed to protect the threatened plant species there and to prevent vehicle access along the shore area. The first phase of work will include the installation of large boulders in the beach area, placed perpendicular to the shore with a random and natural appearance, in a fashion to prevent vehicle access outside the launching area. Should these provisions fail to prevent vehicle access along the shore or into the dune area, or if maintenance associated with keeping these provisions effective proves impractical or unreasonable, other measures preventing vehicle access must be implemented. Michigan statute prohibits vehicles in dune areas and, accordingly, rules for use will be posted prohibiting vehicles on the beach.

Near-shore use of personal water craft, commonly referred to as "waverunners" or "jet-skis" along the shore area, and the noise and nuisance associated with them is inconsistent with the quiet and passive uses associated with the Antrim Creek Natural Area. Accordingly, their use will be discouraged to the extent possible, including but not limited to signage expressing such discouragement of their use in this area.

Barrier-Free Access

Barrier-free features shall be incorporated into the Antrim Creek Natural Area, including vehicle access design, parking design and designations, trail loops, decks or overlooks and toilet facilities, using A.D.A. and Michigan Barrier-Free Design Standards.

Visitor Education

The Antrim Creek Natural Area offers a unique experience to the visitor due primarily to the presence of its rare natural features, including diverse wildlife habitats and federally protected plant species.

Accordingly, the first phase of work will include sign displays describing the purpose of the natural area and providing directions for respectful use and protection. Signs will be grouped or individual as appropriate, and located in places the visitor must pass to enter areas of interest. Educational displays will include, for example:

- The Mission Statement
- The Visitor as Steward
- Rules for Use
- Identifying Endangered/Threatened Species (Photographic Display)
- Identification Plaques located at endangered plant colonies

Future phases of work should include additional interpretive display describing human history, geologic history and project history. These are suggested for location at the trail head at the South Access.

Structures

Structures at the Antrim Creek Natural Area are planned to be simple, durable and rustic in appearance. Heavy timber and/or log materials for all structures are appropriate, detailed to be consistent with a historic theme for the project. Finish and color selections should be durable and subtle, using high quality products, natural or muted shades wherever possible and bright, alarming colors only if required for safety.

Examples of structures include boundary markers, signs and signposts, trail markers, the "entry arbor" and toilet facilities.

Signage

Signage should be used sparingly and only where necessary for identification, direction or education. The need for directional signs is reduced by appropriate site plan layout. Instructional and educational signs should be grouped together wherever possible to reduce intrusion into the natural area. Signage for the project is anticipated to include the following:

- Project Identification at each access
- MNRTF recognition plaque at each access
- CZM recognition plaque at each access
- Directional signs
- Barrier-free parking
- "Steep Slope" & "One-Lane"
- Rules of Use (Stewardship Rules)
- Endangered Plant Species Identification
- Interpretive Displays and Educational Signage
- Site and Trail Map
- Trail and Boundary Markers
- No Lifeguard on Duty

The first phase of work must include project identification, MNRTF and CZM recognition, rules of use, barrier-free parking designation, boundary markers, trail markers (as prudent), and endangered plant species identification and boundary markers. Other educational and interpretive displays may be incorporated during first or subsequent phases.

Trails

A trail system is planned for the use and enjoyment of hikers, cross-country skiers and wildlife enthusiasts. Trails will be laid out in a fashion to introduce visitors to the variety of habitats and environments present on the property, approaching but not entering the most sensitive areas. Where appropriate, timber posts and identification signage should be used to direct and educate the visitor regarding special points of interest and environmental sensitivity.

A hierarchy of trail types is planned with only two levels. To maintain as natural an experience as possible, trails will consist fundamentally of a 2'-3' wide earthen path constructed by clearing a 5'-6' width, then grubbing, filling, smoothing and tamping the narrow footpath only as required to create safe footing.

Barrier-free and handicap accessible trail loops are planned to provide as broad an exposure and experience as feasible. Barrier-free trails are planned to consist of a 5' wide compacted stone chip surface with gradients measuring less than 5% slope. These loops will approach special points of interest including an Antrim Creek overlook, accessible from the south access, and the shore/beach area, accessible from the north access. Both loops will be near designated handicap parking spaces.

The proposed trail layout shown on the Master Site Plan is derived from White Pine Associates recommendations and intended to be modified in the field as prudent.

Path, Trail and Boundary Markers

Path, trail and boundary markers shall be simple timber or log posts. Boundary markers might include small but legible "Antrim Creek Natural Area" identification, and be installed at 100'-200' intervals. Trail markers are needed only where trails divide. The need for trail markers is reduced when trail layout is simple or when trail maps are provided or posted on the site at strategic locations.

Particular attention should be given the frequency and placement of boundary markers near the outlet and at strategic locations along the westerly portion of Antrim Creek. In this area, trespass onto neighboring property is becoming more common, and increased public use is likely to create an even greater nuisance. Signs in this area might warn natural area visitors, "Private Property beyond this Point", or something similar.

Threatened and Endangered Species Protection

Lake Huron Tansy (Tanacetum huronense), a threatened specie on the state list and Pitcher's Thistle (Cirsium pitcherii), a threatened specie on the federal list, are found in several places on the property. These are legally protected by federal and state law.

Methods for protection included in this plan are visitor education, identification and labeling of plants, and the placement of markers or posts at the fringe of plant colonies. Education will include photographic display, description of the plants' habitat and an explanation of the plants' rarity on the global scale. While some plant colonies are already found and mapped, qualified

personnel should be employed periodically to conduct new searches and evaluation of existing colonies.

Environmental Protection

Environmental protection is planned using four methods: identification, education, physical barriers, and enforcement of the rules for use.

Identification includes placement of plaques and markers at places needed, such as at found colonies of Pitchers Thistle and Lake Huron Tansy.

Education includes methods such as the Rules for Use and interpretive signs displaying photographs of threatened plant species and describing, for example, the importance of dune vegetation and wetland habitat. Hiring of a student-intern/caretaker conducting educational seminars or walks through the natural area might be a long-term goal for natural area management.

Physical barriers are appropriate where departure from assigned paths into sensitive areas might be anticipated or observed, such as over vegetation into the open dune area or over steep slopes subject to erosion if disturbed.

Enforcement of rules is self explanatory and essential to protection and proper stewardship of the natural area.

Environmental Rehabilitation

Wherever human influence is introduced into the natural environment, there is potential disturbance and even destruction of the natural resource or feature. Even permissible uses such as vehicle traffic (where planned), foot traffic, and trail construction present an opportunity for disturbance. Periodic assessments and evaluation should be conducted by qualified personnel, looking for such disturbances as erosion, destruction of plants, disturbance of the dune, errant "trail blazing" and any other harmful activity, then preparing a plan for repair and rehabilitation, if needed.

We recommend the county has an evaluation and report completed at 6 month intervals, or more frequently during heavy use, by qualified personnel with a background in botanical, biological or environmental sciences. Suggested resources for such a service might include private consultants, the Grand Traverse Regional Land Conservancy, and the Little Traverse Conservancy.

Restroom And Waste Disposal

Pit toilets are planned for each entry area. The toilets will be designed for durability, barrier-free accessibility and a rustic appearance. The Michigan Department of Natural Resources has standard plans available for such purpose, which appearance may be modified to fit the theme of the project. A contract should be secured with a local vendor for regular inspection and pumping of the pit.

A potable water supply is not planned.

Trash Removal and Control

Trash receptacles are intentionally omitted from the plan. Experience indicates that receptacles at this relatively remote site are likely to be more often abused than used by visitors, becoming the repository for large waste bags and household trash. Instead, educational and policy signs will request that visitors enjoy themselves, respect the natural area, and take their trash with them when they leave.

Rules for Use

General rules for use of the Antrim Creek Natural Area are modeled after other parks and natural areas in the neighborhood and are consistent with rules normally applied to state land preserves. The criteria for these regulations are safety and protection and preservation of the resource. For specific language, use the models attached in the appendix as a guide. Suggested rules are:

Permitted Uses within the natural area, Visitors may:

- hike or ski the trails
- sun and swim
- play on the beach
- hunt or fish during permitted seasons

Prohibited Uses within the natural area, Visitors may not:

- operate a motorized vehicle of any kind except on designated roads and parking areas
- operate any recreational vehicle, including snowmobiles and ATV's
- operate any bicycle except on designated roads and parking areas
- camp on the natural area
- allow a dog or any other animal in areas used for swimming or wading
- ride horses on the natural area
- bring glass containers onto the natural area
- dump or leave refuse of any kind
- destroy, damage or remove state property including vegetation of any kind
- build campfires anywhere on the natural area
- engage in violent, loud, boisterous, obscene or otherwise disorderly conduct

It is suggested that a special note be added to rules signage informing visitors how to report observed abuses. Example: "Be an active steward. Report abuse of this natural area by dialing 911".

Regulations Enforcement

Regulations are effective pursuant to municipal ordinance which must first be adopted by the county, specifying allowed and prohibited uses and penalties.

The agent of authority enforcing the county ordinance is the County Sheriff's Department. The state Conservation Officer is also an agent of authority, traditionally enforcing state statutes relative to such violations as poaching and motorized vehicles on the beach. At many natural

areas, a permanent or seasonal caretaker is employed to help ensure visitor compliance and respect for the rules, as well as educate visitors regarding stewardship.

Because there is a history of damages resulting from uncontrolled access to the beach area, primarily by vehicles running over threatened plant species and the sensitive dunes , a concerted effort is warranted by friends of the natural area and by the enforcing agents to identify and swiftly penalize violators and change current traditions which are damaging.

Maintenance

While the intent is to construct features that are durable and require minimal maintenance, a routine inspection and maintenance schedule will be developed as features are implemented. A maintenance schedule is anticipated to include the following:

- Frequent (daily or weekly) inspection and repair of vehicle barriers at the beach area
- 3-6 month periodic evaluation, report and rehabilitation plan by qualified personnel
- Annual inspection and grading of roads, parking and trails
- Routine cleaning of toilet facilities and regular pumping of toilet pits
- Regular inspection and periodic repair, refinishing or replacement of structures, signs and markers

Schoolhouse

The old Antrim City Schoolhouse, located on Old Dixie Highway and surrounded by the Antrim Creek Natural Area, is an attractive opportunity for an interpretive display and education center. While its acquisition has not been identified as a primary goal, a strong sentiment for acquisition was expressed by several participants in public workshops. There is merit to a plan for acquisition, based upon its historic significance and its potential as an interpretive and educational center for the Antrim Creek Natural Area. Its acquisition would "complete" the boundary of the natural area and, as its use would be controlled by management, would eliminate an existing impedance to hunting in that area resulting from safe clearances required for that use.

Natural Area Management

The County has established a Antrim Creek Natural Area Commission, which body makes recommendations to the County Board of Commissioners regarding proposed activities and management of the natural area. The Commission shall be comprised of five (5) members as follows:

3 members - County Nominations
2 members -Township Nominations

Nominations shall be made by each of the aforementioned bodies and approved by the County Board of Commissioners. Requests for nominations should be published, nominees screened, and selection made by the County Board. Members may serve for two or three year terms, rotating so that no more than two new members join the Commission each year.

Plan Phasing and Funding

Project goals are most effectively achieved by completing this project in a single construction phase. Funding single-phase construction may be possible using a combination of the Antrim Creek Natural Area endowment fund, Michigan Natural Resources Trust Fund (MNRTF) and Coastal Zone Management (CZM) grants in addition to other foundations and local contributions of capital and/or labor. If needed, the project might separated into two or three phases.

The state's CZM grants are made available for non-infrastructure intensive recreation projects, such as The Antrim Creek Natural Area. The CZM grant program tends to favor projects emphasizing resource protection, public access, overlooks, trails, and informational & interpretive displays. While no standard grant amount exists, there is a $35,000 cap on requests and it is not unusual for successfully competing projects to be granted $20,000 to $30,000. It is customary for the grantors to require matching local contributions of services or cash equaling 50% of the project amount. Currently, the application deadline is April 1 of each year.

The MNRTF also has monies available for recreational improvements development. MNRTF grantors favor new projects, such as the Antrim Creek Natural Area. Application deadlines are currently April 1 and September 1 of each year. MNRTF grant monies may be used to meet local match requirements of the CZM grant program.

Suggested Phasing

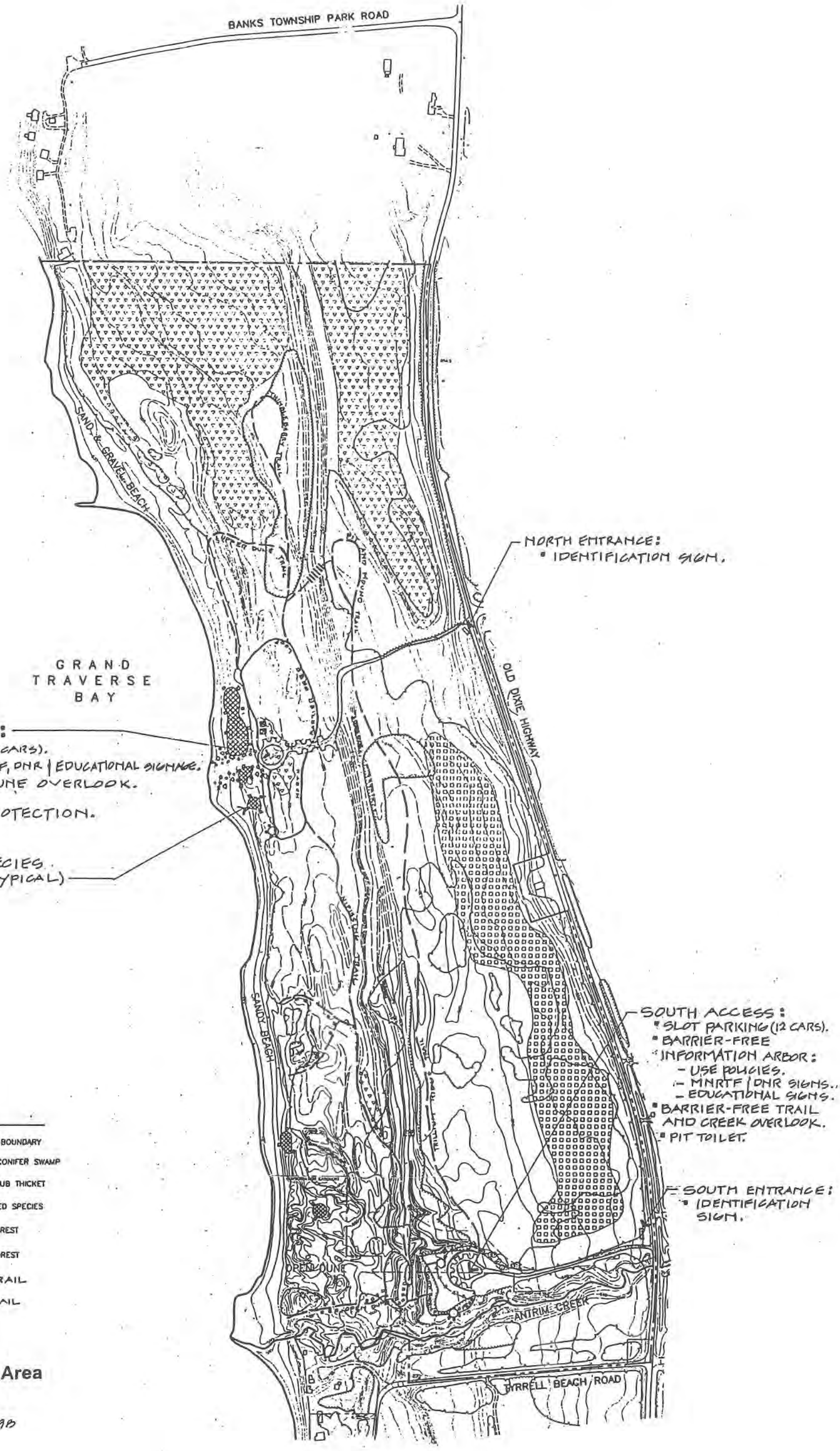
Year 1
- MNRTF grant application
- Concurrent CZM grant application
- Explore additional funding resources
- Design for Construction
- "Essential" Improvements
  - Vehicle Barriers
  - Guardrail at North Access
  - New road construction and Parking at North Access
  - Identification Signage and Boundary Markers
  - Directional and safety-related signage
  - Endangered Species Identification and Boundary Markers

Year 2
- All remaining Improvements

Project Cost Projections

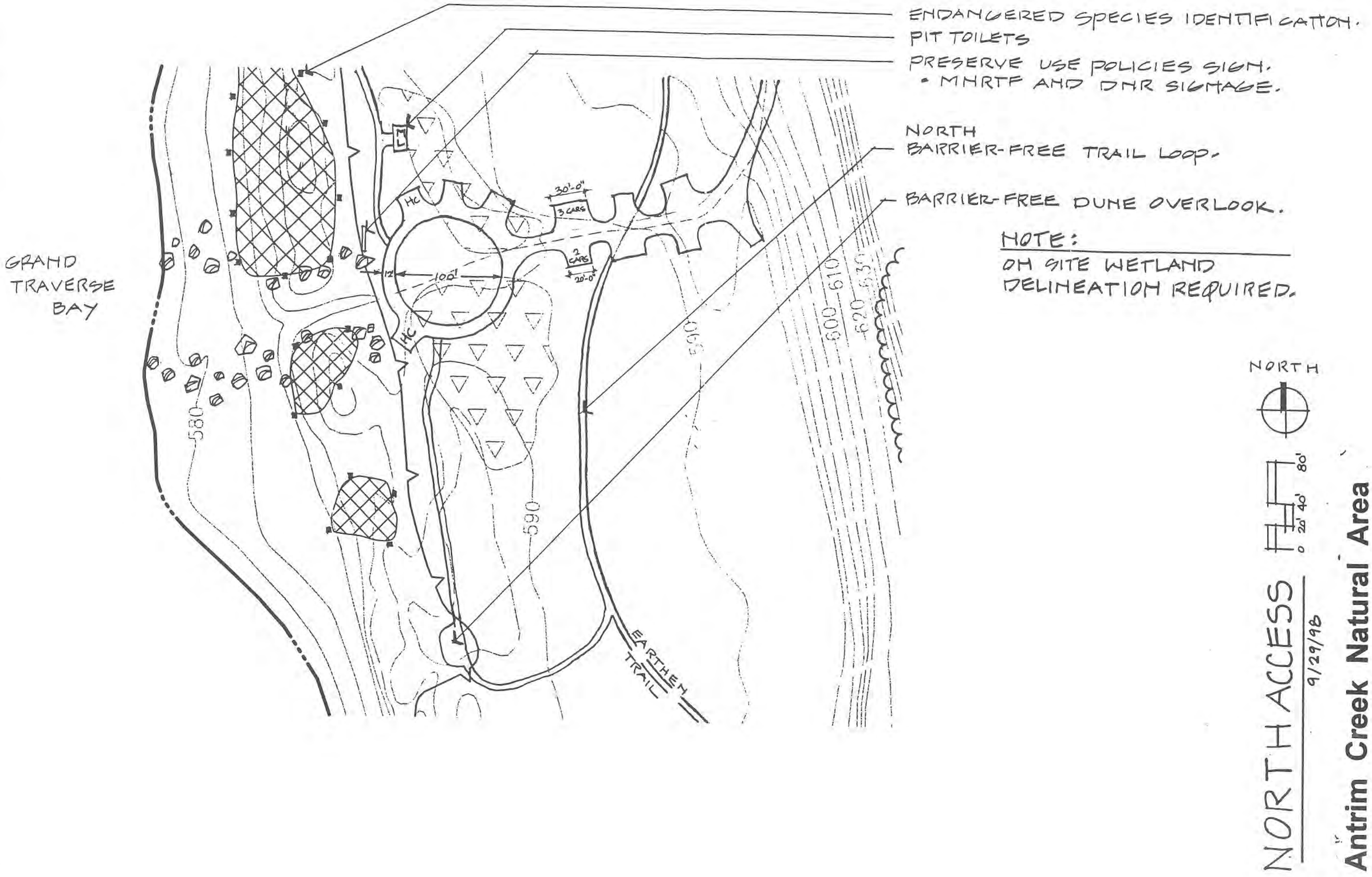
AREA	DESCRIPTION	QUAN	UNIT	UNIT PRICE	COST
North Access	Wetland Delineation	1	lump	1000.00	1,000.00
	Engineer Evaluation of Existing Road	1	lump	2500.00	2,500.00
	Road Clear, Fill, Gravel, Grade	1600	lf	16.00	25,600.00
	Guardrail	300	lf	30.00	9,000.00
	Paving	4800	sf	1.50	7,200.00
	Drainage Systems & Structures	1	lump	6000.00	6,000.00
	Gravel Parking Slots	20	ea	200.00	4,000.00
	Entrance Identification Sign	1	lump	1800.00	1,800.00
	Rules for Use Sign	1	lump	1500.00	1,500.00
	Endangered Species Interpretive Display	1	lump	2200.00	2,200.00
	Endangered Species Protection Markers	4	ea	100.00	400.00
	Trail Marker Allowance	1	lump	1000.00	1,000.00
	Beach Protection Boulders	40	ton	80.00	3,200.00
	Overlook	1	lump	5000.00	5,000.00
	Pit Toilet	1	lump	10000.00	10,000.00
South Access	Road Improvements	1070	lf	13.00	13,910.00
	Gravel Parking Slots	12	ea	150.00	1,800.00
	Seeding Allowance	1	lump	1000.00	1,000.00
	Entrance Identification Sign	1	lump	1800.00	1,800.00
	Rules of Use Sign	1	lump	1500.00	1,500.00
	Information Entry Arbor, heavy timber	450	sf	35.00	15,750.00
	Endangered Species & Historical Display	1	lump	10000.00	10,000.00
	Endangered Species Protection Markers	2	ea	100.00	200.00
	Trail Marker Allowance	1	lump	1000.00	1,000.00
	Overlook	1	lump	6000.00	6,000.00
	Pit Toilet	1	lump	7000.00	7,000.00
	Timber Rail Fence, heavy	600	lf	25.00	15,000.00
	Planting trees for vehicle barrier, seedlings	1	lump	2000.00	2,000.00
Trails	North Barrier Free Loop	2000	lf	6.00	12,000.00
	South Barrier Free Loop	800	lf	6.00	4,800.00
	Thimbleberry Trail	1500	lf	2.00	3,000.00
	Back Dune Trail	1000	lf	2.00	2,000.00
	Pit / Mound Trail	1000	lf	2.00	2,000.00
	Trillium Ridge Trail	2750	lf	2.00	5,500.00
	Nispissing Trail	3200	lf	2.00	6,400.00
	Open Dune Trail	600	lf	2.00	1,200.00
Misc	Project Boundary Markers	30	ea	50.00	1,500.00
	Directional Sign Allowance	1	lump	500.00	500.00

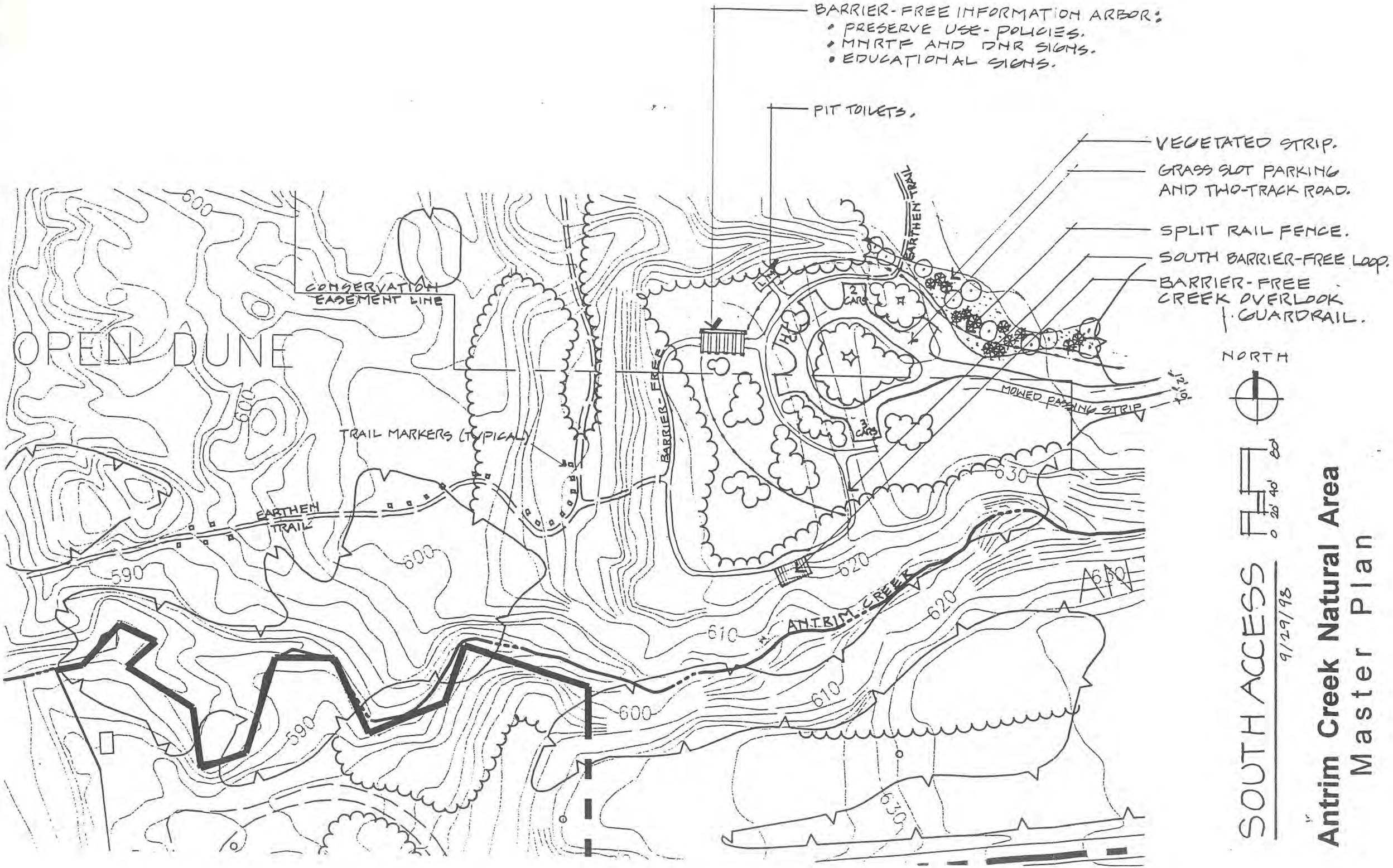
	Archeological Survey	1	lump	2500.00	2,500.00
	Porta - Pottie, barrier-free style, temporary	2	ea/year	2000.00	4,000.00
	Subtotal construction cost projection				$202,760.00
	Contingency allowance 10%				$20,276.00
Total	**Total construction cost projection**				**$223,036.00**
	plus				
Design	**Construction Design Allowance 12%**				**$26,764.32**
	Construction Administration 8%				**$17,842.88**



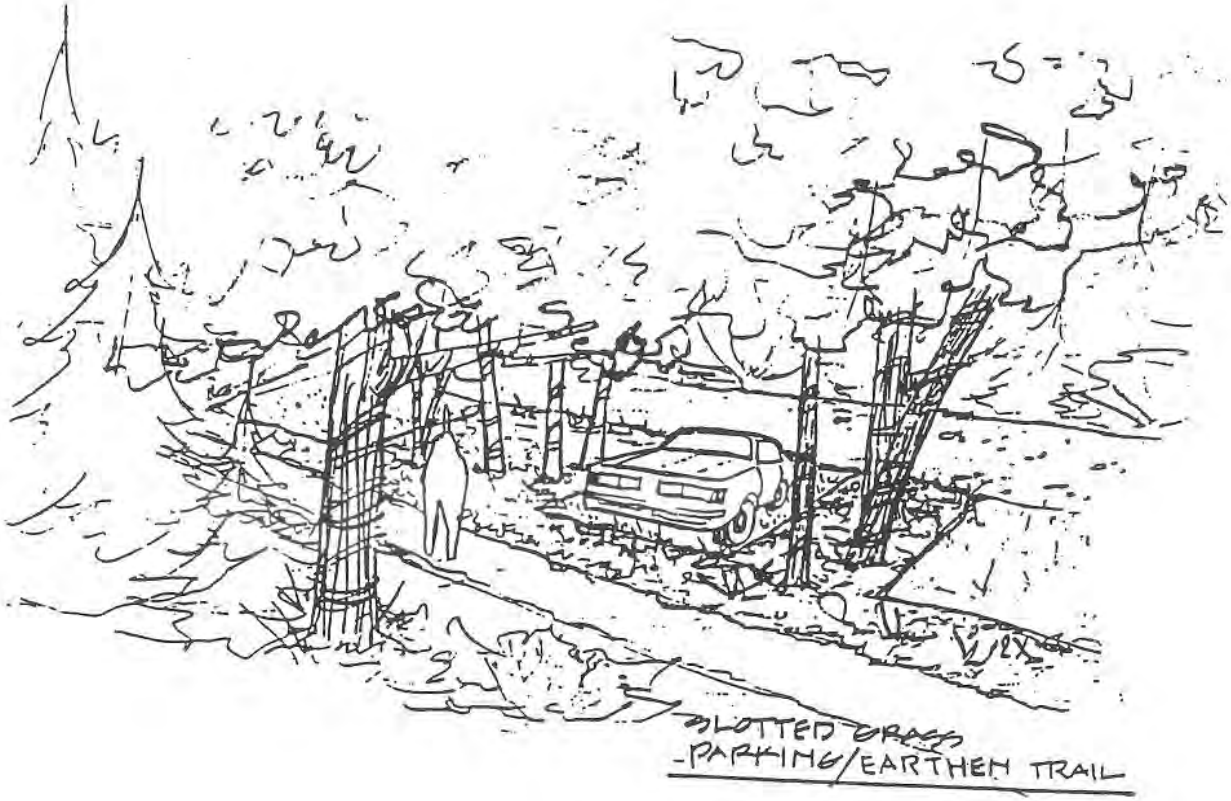
Antrim Creek Natural Area
Master Plan

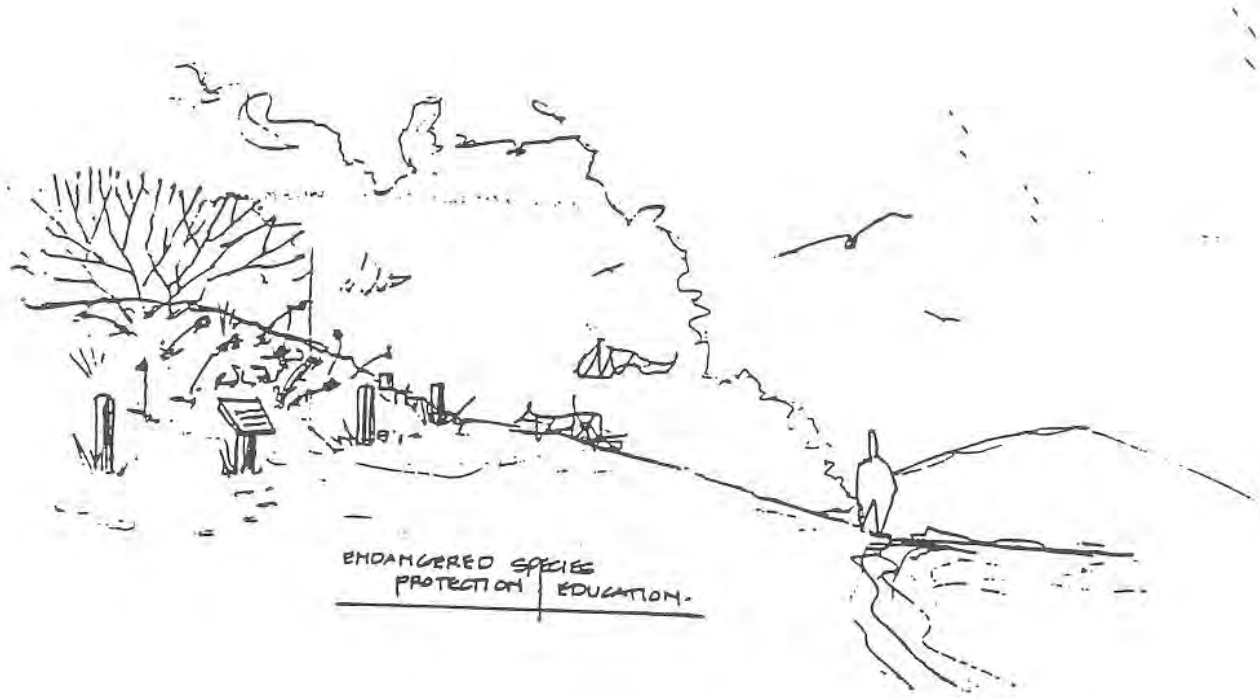
DATE : 9/29/98

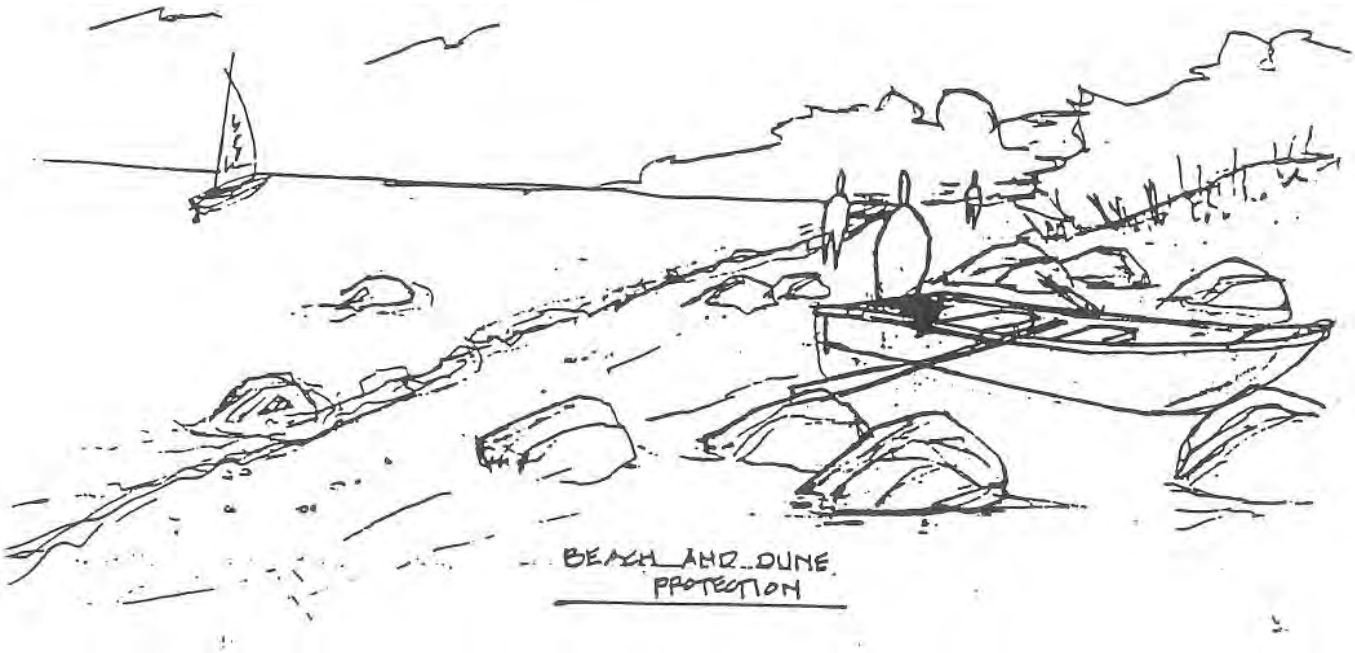

ENDANGERED SPECIES IDENTIFICATION.
PIT TOILETS
PRESERVE USE POLICIES SIGN.
• MHRTF AND DNR SIGNAGE.
NORTH
BARRIER-FREE TRAIL LOOP.
BARRIER-FREE DUNE OVERLOOK.
NOTE:
ON SITE WETLAND
DELINEATION REQUIRED.
GRAND
TRAVERSE
BAY
30'-0"
3 CARS
2
CARS
20'-0"
100'
12
HC
HC
580
590
600
610
620
630
EARTHEN
TRAIL
NORTH
0 20' 40' 80'
NORTH ACCESS
9/29/98
Antrim Creek Natural Area
Master Plan

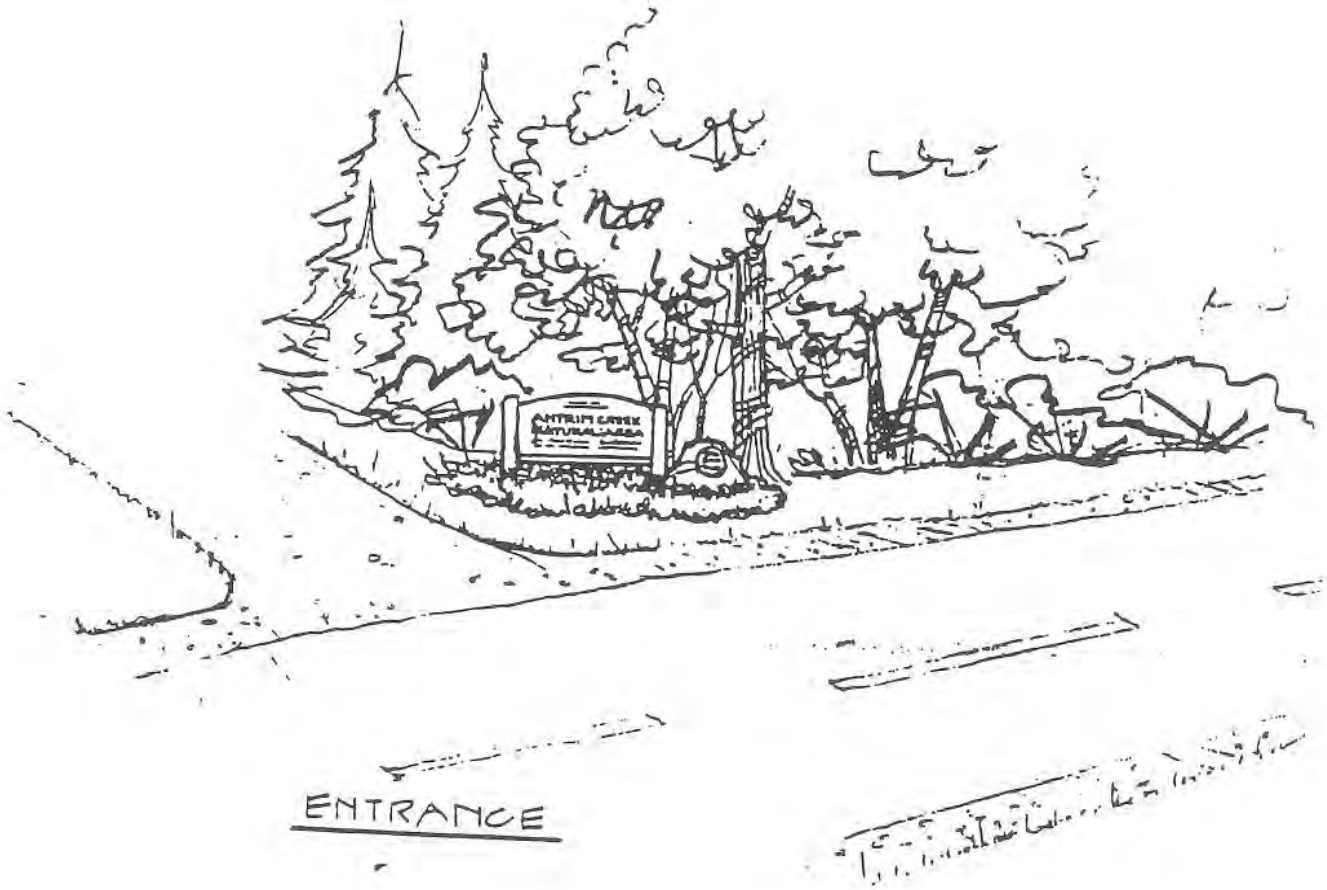

BARRIER-FREE INFORMATION ARBOR:
• PRESERVE USE-POLICIES.
• MNRTF AND DNR SIGNS.
• EDUCATIONAL SIGNS.
PIT TOILETS.
VEGETATED STRIP.
GRASS SLOT PARKING AND TWO-TRACK ROAD.
SPLIT RAIL FENCE.
SOUTH BARRIER-FREE LOOP.
BARRIER-FREE CREEK OVERLOOK GUARDRAIL.
NORTH
OPEN DUNE
CONSERVATION EASEMENT LINE
TRAIL MARKERS (TYPICAL)
EARTHEN TRAIL
BARRIER-FREE
2 CARS
3 CARS
MOWED PARKING STRIP
ANTRIM CREEK
590
600
610
620
630
SOUTH ACCESS
9/29/98
0 20' 40' 80'
Antrim Creek Natural Area
Master Plan

SLOTTED GRASS
PARKING/EARTHEN TRAIL

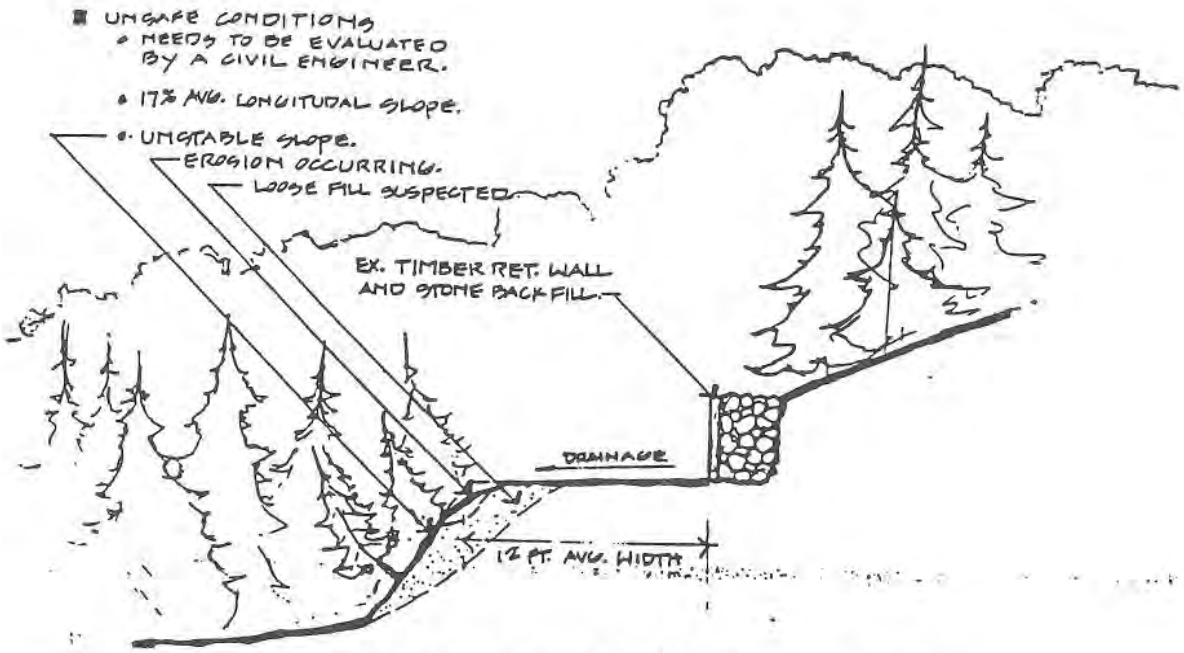

SLOTTED GRASS
-PARKING/EARTHEN TRAIL


ENDANGERED SPECIES
PROTECTION | EDUCATION.

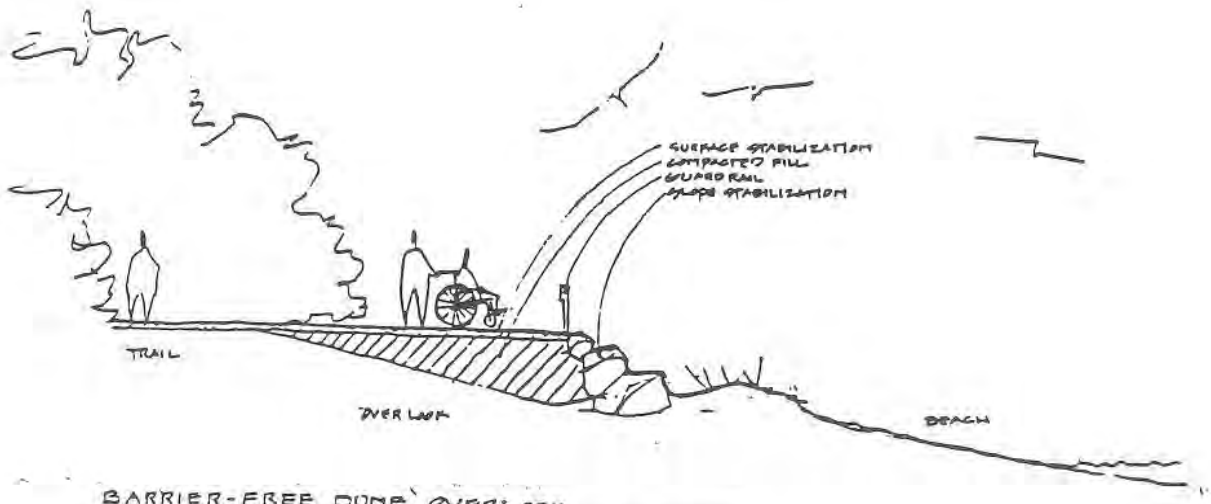

BEACH AND DUNE
PROTECTION



ENTRANCE

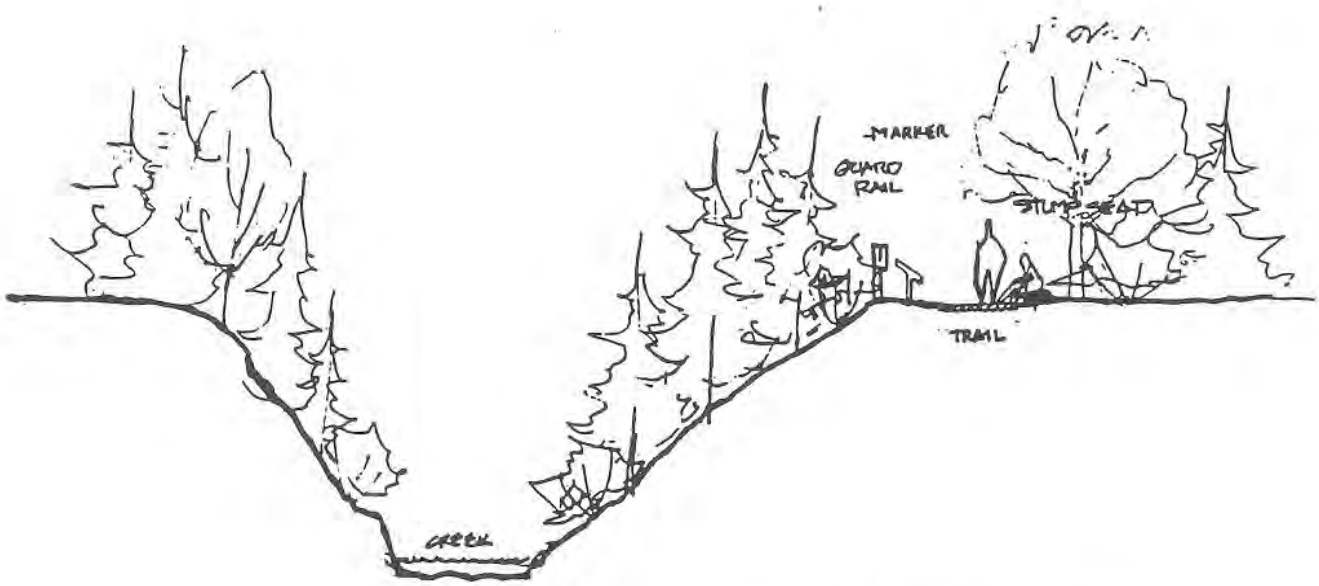


NORTH ACCESS ROAD 10/1/98
EXISTING CONDITIONS (NO SCALE.)



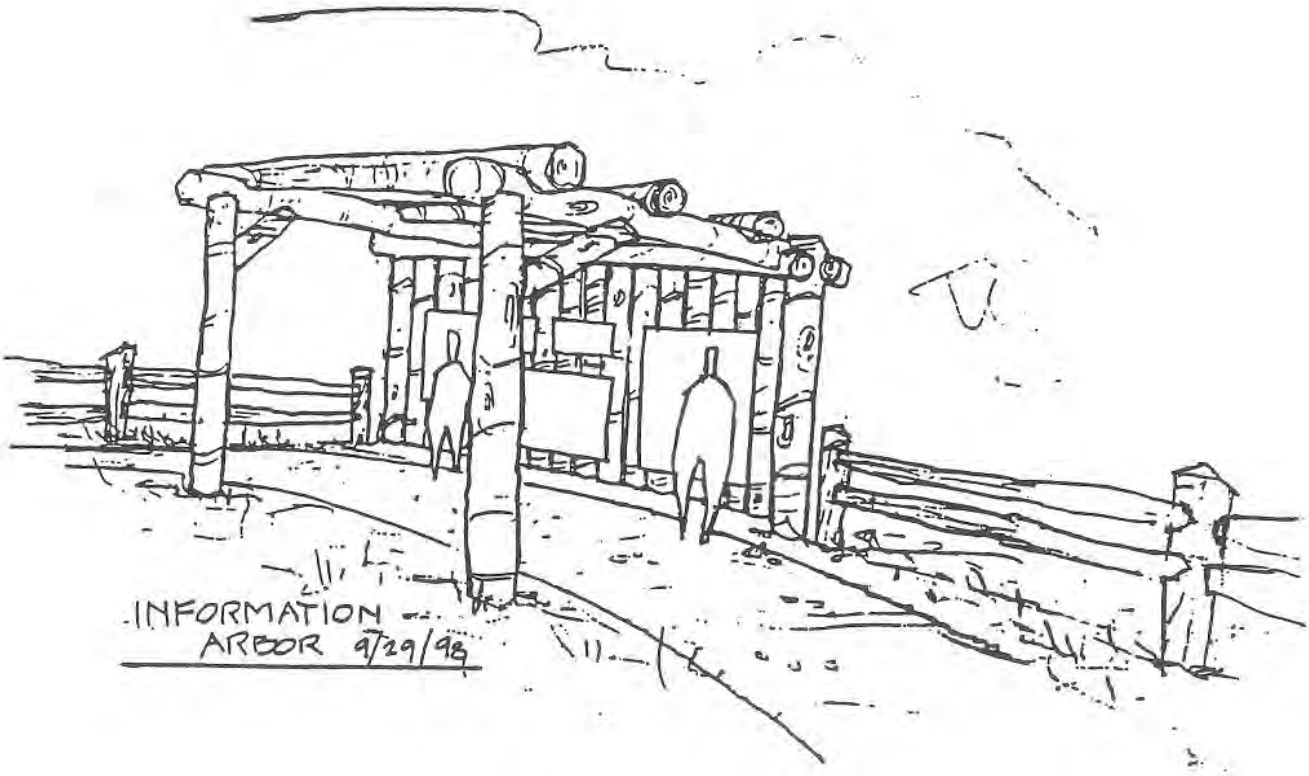
BARRIER-FREE DUNE OVERLOOK

(NO SCALE)



CREEK OVERLOOK

EARTHEN TRAILS.


INFORMATION
ARBOR 9/29/98

Antrim Creek Natural Area
Strategic Planning Workshop #1
Banks Township Hall, Ellsworth March 18, 1998

Summary of Small Group Input

Prepared by Traver Wood, Site Planning Development, Inc.

Following are collated notes of the Strategic Planning Workshop, and a tabulation of project goals identified in small group sessions.

The purpose of this workshop was to use consensus-building techniques to collect public input which would be used in creating project goals. The "nominal group" process was employed as to encourage public participation and input. In the nominal group process, the audience is divided into small groups where active and moderated discussion is generated to discover public perceptions, ideas and issues. Comments generated during group discussion are then reviewed by the general audience and consolidated into a manageable number of main ideas or goals for the project.

The general audience consisted of 105 public attendees, a few of whom departed when discovering the workshop was participatory.

Following introductions, project orientation and description of the process, attendees were divided into thirteen (13) groups. Groups were created using a random numbering system to encourage the diverse composition which is more likely to generate active discussion. A moderator and a note taker were selected by the members of each group. Each group was asked to create a list of individual and corporate concerns, then through moderated discussion achieve consensus, agree upon and identify 5 primary goals for the project. Each group recorded its 5 goals on large sheets which were then posted on the wall for general audience observation. Each group was given the opportunity to report briefly on its discussion to the general audience.

Each member of the general audience was then instructed to review the entire list of 65 statements and identify four (4) statements representing the four goals he or she finds most important. Each participant was given four colored stickers to indicate his or her votes.

Particpants in the workshop share surprisingly similar goals. In simple summary, the overwhelming emphasis comprises maintaining general access to the property, preservation of natural features such as the beach and dune area, and creating sufficient parking. There is a stong feeling about keeping "small boat" access available, and the repeated message dictates no improvements be made to the launch area. While addressing the goals of accessibility, there seems agreement the development strategy might be described by the phrase: "less is more".

The summary which follows was created by tabulating participant's votes cast in the workshop session. Statements of similar content or issue have been consolidated under a singular description. creating a total number of six (6) identified goals. Detailed description of the tabulation and consolidation is attached. The six primary goals identified by participants at the workshop are:

- **Provide access to an unimproved boat launch.**
- **Protect natural features.**
- **Create paths and trails.**
- **Provide adequate parking.**
- **Keep area open to hunting and fishing.**
- **Create public awareness and educational opportunities.**

Other Items of Interest:

Provide access to the beach.
Limit publicity.
Provide recreational, educational and rest room facilities.
Provide adequate signage.
Purchase near by properties.

Antrim Creek Natural Area
Strategic Planning Workshop #1
Banks Township Hall, Ellsworth March 18, 1998

Supporting Information

Participants in the strategic planning workshop identified their goals for the Atrim Creek Natural Area. The goal statements were the outcome of a small group session. There were 13 groups of 6-8 persons, each group reaching consensus on 5 goals. All of the statements were posted and then voted upon by individual participants.

The outline below indicates the number of individual "votes" received for each stated goal. Similar stated goals have been grouped under a single descriptive heading. Stated goals with duplicate meaning may be referenced under more than one descriptive heading. The numeral in parentheses right of the heading indicates the number of groups referencing this goal.

Top 6 Goals:

Provide access to an unimproved boat launch. (13 groups)

3	Water access for all (remove rocks).
3	Boat Access/ Launch.
7	Permanent vehicle access to an unimproved launch.
3	Have access for boat launch with vehicle access.
2	Boat launch original.
7	Maintain permanent primitive boat access. No development.
3	Reopen boat launch.
13	Boat access no improvements.
5	Utilize boulders in path to water to allow access for boats.
12	Access to launch boats but no pavement or concrete.
9	Return launch to original condition.
1	Boat access.
0	Create boat access, rustic, no construction, small boats only.

Protect natural Features. (7 groups)

1	Leave dunes and beach natural but accessible to the public.
18	Beach development for proper use by the public and security of the natural resources.
18	No development of creek, dune or wetland areas.
13	Remain undeveloped, keep it as a natural area (no park development).
8	Protect fragile ecosystems/ minimize construction and regulation.
3	Manage and protect Important habitats and resources.
11	Leave property as natural as it is now.
0	Protect as natural, family area with picnic area(s).
5	No motorized vehicles in dune/ beach area.
6	Keep vehicles off beach other than launch.

Create paths and trails. (8 groups)

3	Limited trails handicap accessible. Yes to foot traffic and skiing.
1	Trail without vehicular access.
1	Nature trails handicap accessible.
1	Restricted trail development.
1	Designate and maintain trails.
1	Develop trail system for education and pleasure.
8	Walking/ hiking trails. No motorized vehicles.
3	Promoting educational opportunities, educational trails, self guided at first maybe add Naturalist in future.

Provide adequate parking. (5 groups)

3	Road access and parking to the beach.
2	Parking as near lake as possible.
0	Location of parking.
6	Designated parking at end of road.
0	Adequate parking lower level north end, secondary parking south end.

Keep area open to hunting and fishing. (6 groups)

9	Leave entire area open to hunting and fishing.
11	Hunting and fishing. (All species).
0	No limited hunting.
0	Keep open for hunting.
3	Area open to hunting and fishing.
1	Open to hunting.

Create public awareness and educational opportunities. (4 groups)

2	Public awareness and educational programs.
0	Maximize environmental education opportunities.
1	Develop trail system for education and pleasure.
5	Promoting educational opportunities, educational trails, self guided at first, maybe add Naturalist in future.
4	Acquire old school for nature center.

Other Items of Interest:

Provide access to beach. (3 groups)

1	Leave dunes and beach natural but accessible to the public.
18	Water access. (writer's note: this used also in Boat Launch)

Limit publicity. (2 groups)

12 Limit publicity.
6 Do not advertize the area.

Provide recreational, educational and rest room facilities. (3 groups)

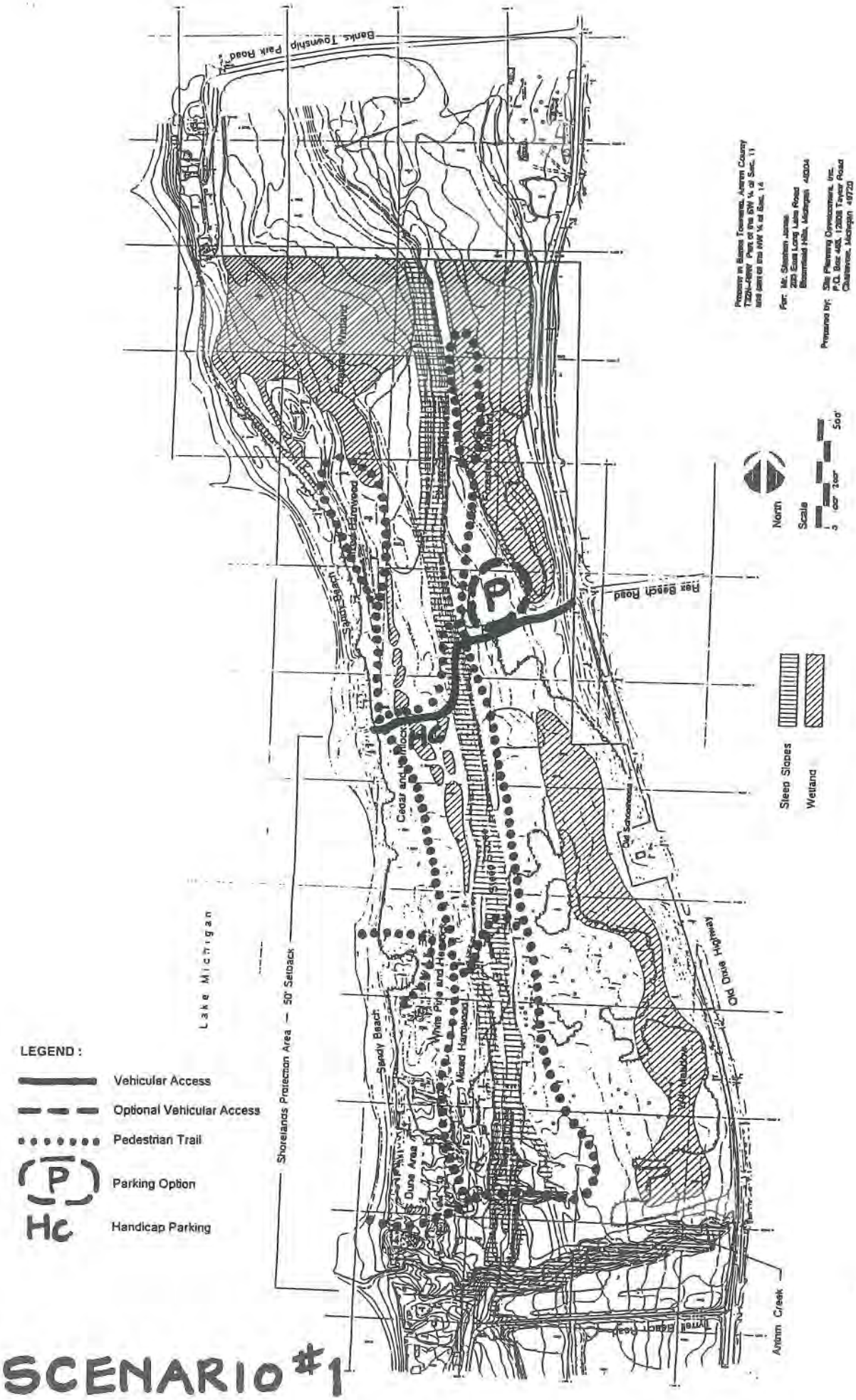
1 Primitive rest room facilities.
2 Daytime picnic area - handicap accessible with facilities.

Provide adequate signage. (2 groups)

1 Limited signage.
2 Public posting ' Fishing Boats Only' (No Wave Runners).

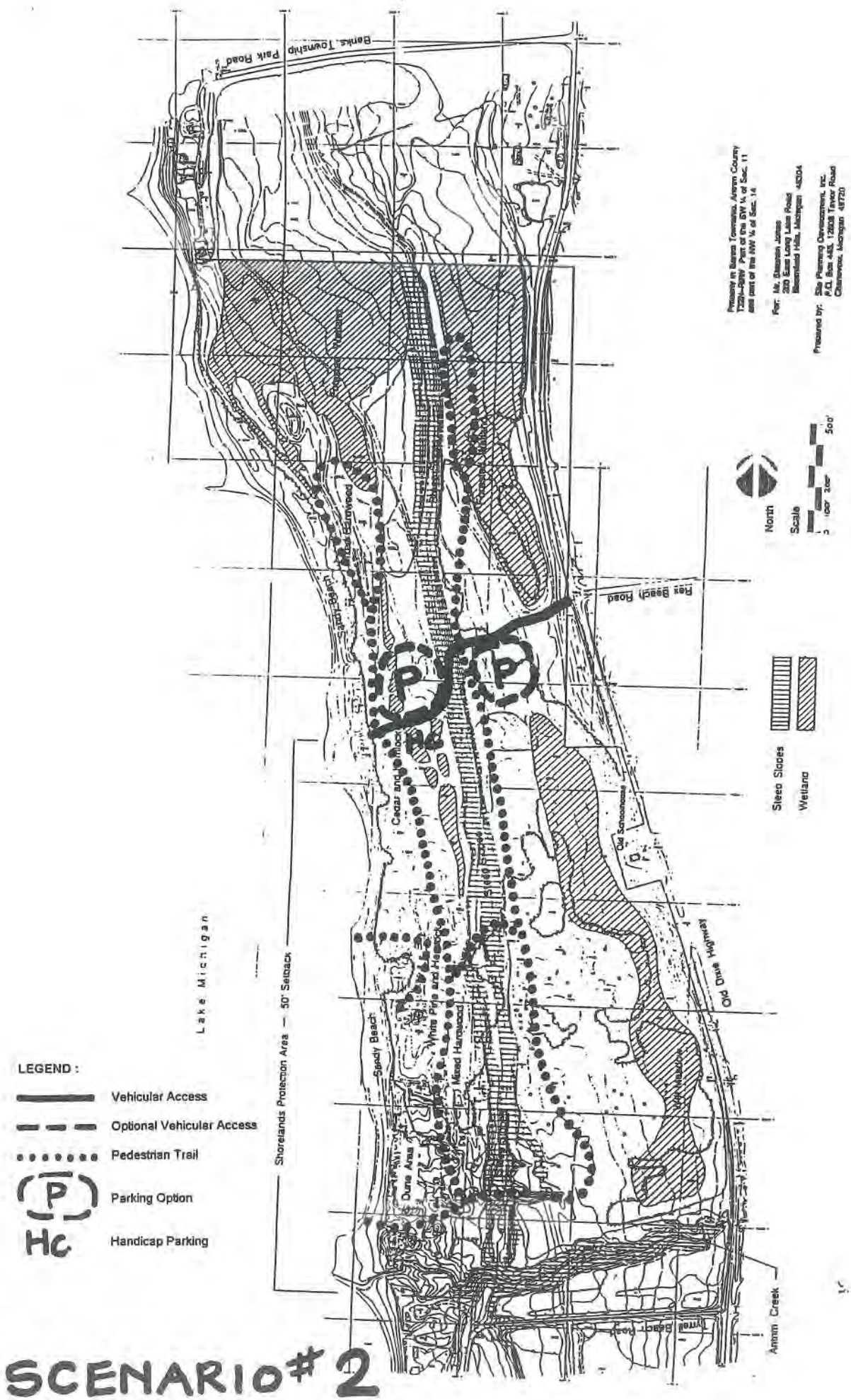
Purchase nearby properties. (3 groups)

0 Acquire old school house and Brooks property.
2 Review the need for an intensive management plan. No park type development. Utilize endowment (trust fund) money to purchase nearby properties rather than development.
4 Acquire old school for nature center.

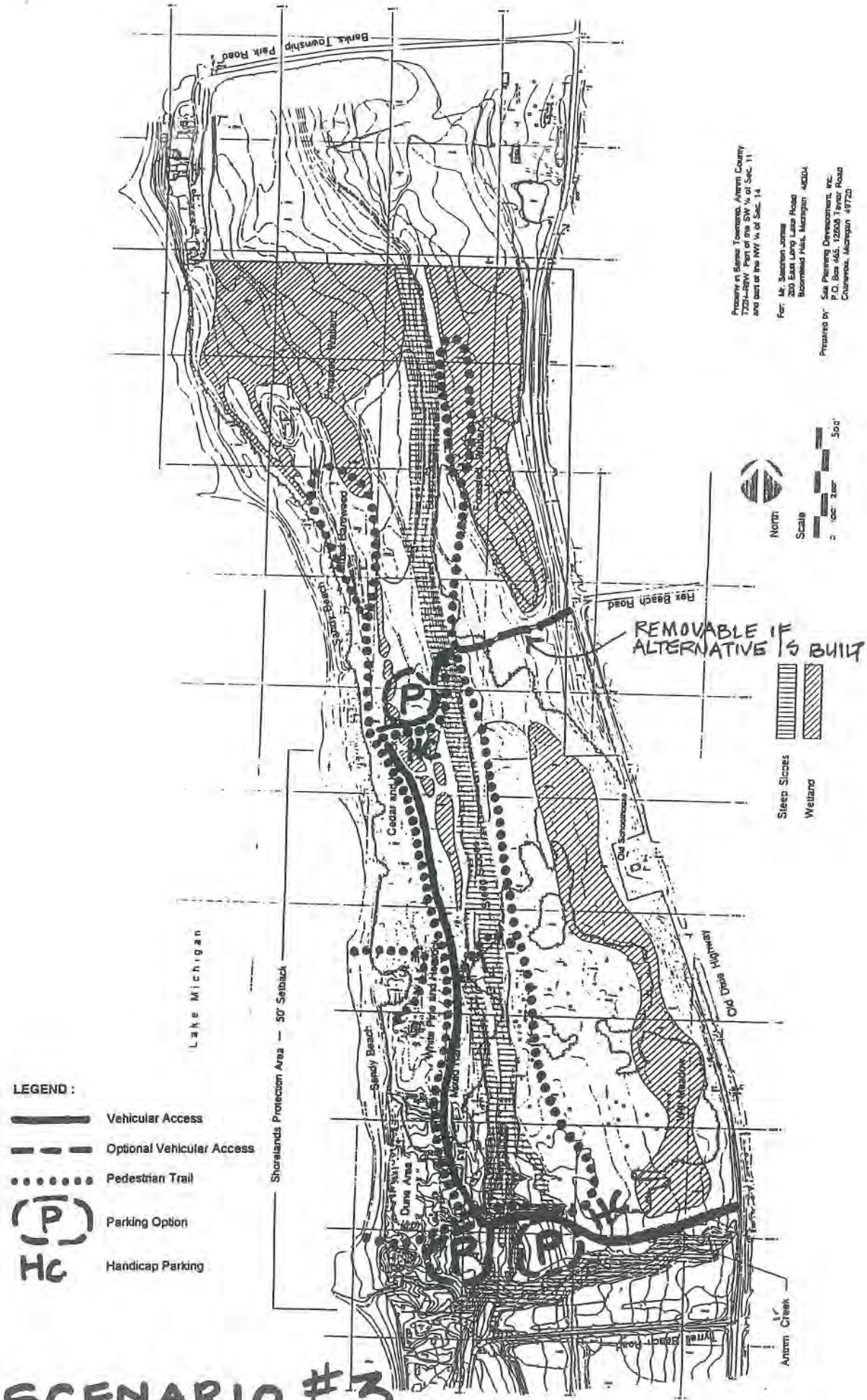


Banks Township Park Road
Rex Beach Road
Lake Michigan
Shorelands Protection Area — 50' Setback
Sandy Beach
Dune Area
Mixed Hardwood
Old Dixie Highway
Old Schoolhouse
Antrim Creek
Tyrrell Beach Road
Cedar and Hemlock
Forested Wetland
Sandy Beach
Mixed Hardwood
Steep Slopes
Wetland
North
Scale
LEGEND :
Vehicular Access
Optional Vehicular Access
Pedestrian Trail
Parking Option
Handicap Parking

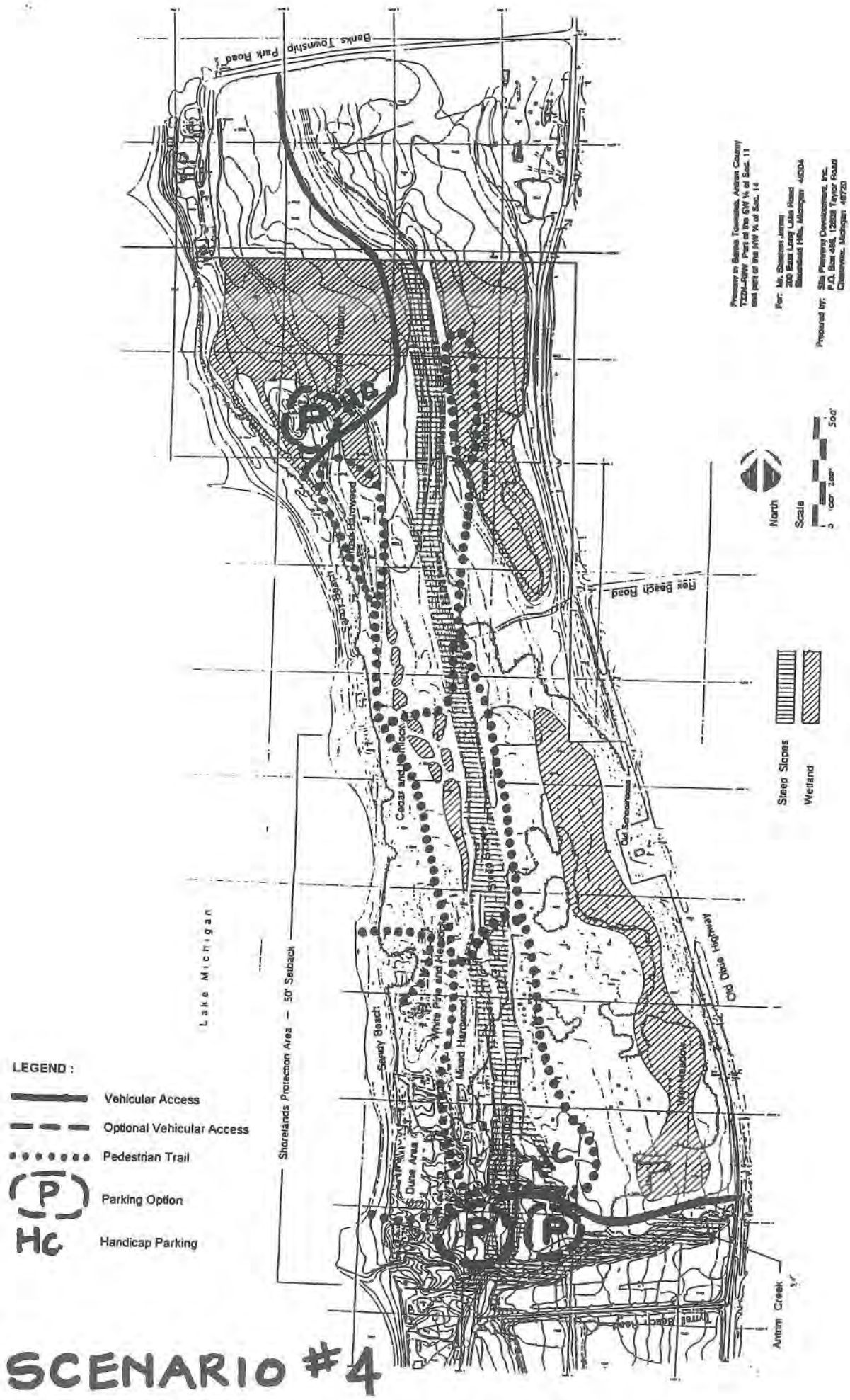
SCENARIO #1


Banks Township Park Road
Rex Beach Road
Old Dixie Highway
Tyrrell Beach Road
Lake Michigan
Shorelands Protection Area — 50' Setback
Sandy Beach
Cedar and Hemlock
White Pine and Hemlock
Mixed Hardwood
Dune Area
Old Schoolhouse
Antrim Creek
P
Hc
North
Scale
Steep Slopes
Wetland
LEGEND :
Vehicular Access
Optional Vehicular Access
Pedestrian Trail
Parking Option
Handicap Parking

SCENARIO# 2


Banks Township Park Road
Rex Beach Road
Lake Michigan
Shorelands Protection Area — 50' Setback
Sandy Beach
Dune Area
Old Schoolhouse
Old Dixie Highway
Tyrrell Beach Road
Antrim Creek
REMOVABLE IF ALTERNATIVE IS BUILT
North
Scale
Steep Slopes
Wetland
LEGEND :
Vehicular Access
Optional Vehicular Access
Pedestrian Trail
Parking Option
Handicap Parking

SCENARIO #3


Banks Township Park Road
Rex Beach Road
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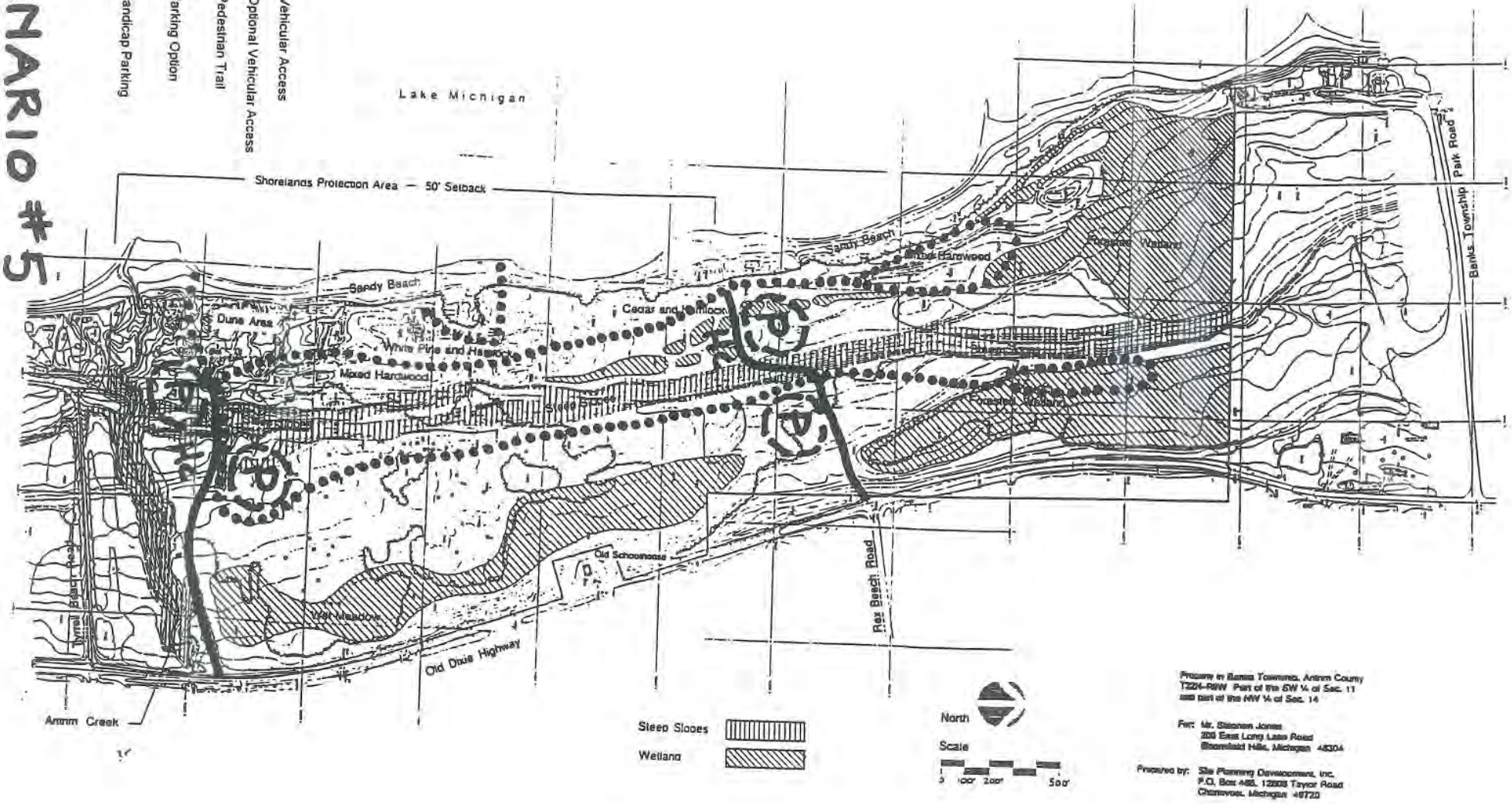
Shorelands Protection Area — 50' Setback
Sandy Beach
Dune Area
Cedar and Hemlock
White Pine and Hemlock
Mixed Hardwood
Old Schoolhouse
Antrim Creek
Tyrrell Beach Road
North
Scale
Steep Slopes
Wetland
LEGEND :
Vehicular Access
Optional Vehicular Access
Pedestrian Trail
Parking Option
Handicap Parking

SCENARIO #4

SCENARIO #5

LEGEND:

- Vehicular Access
- Optional Vehicular Access
- Pedestrian Trail
- Parking Option
- Handicap Parking



Preserve in Banks Township, Antrim County
T32N-R9W Part of the SW ¼ of Sec. 11
and part of the NW ¼ of Sec. 14

For: Mr. Stephen Jones
200 East Long Lake Road
Bloomfield Hills, Michigan 48304

Prepared by: Site Planning Developments, Inc.
P.O. Box 468, 12008 Taylor Road
Chelsea, Michigan 48118

To: Antrim Creek Natural Area Commission

Antrim Creek Natural Area
Strategic Planning Workshop #2
Banks Township Hall, Ellsworth July 13, 1998

Summary of Workshop #2

Prepared by Traver Wood, Site Planning Development, Inc

The second of two Strategic Planning Workshops was conducted on July 13,1998 at the Banks Township Hall in Ellsworth. The workshop was advertised in local newspapers, by posting notifications at municipal buildings and businesses throughout the county, and by displays and flyers at several special events.

This second public "Town Hall" meeting was designed to achieve the following:

- Provide a second forum for public input and discussion prior to design
- Present and review the outcomes of the first town hall meeting, including Local Goals
- Inform the public of responsibilities and requirements pursuant to the acquisition grant
- Affirm Goals, issues and planning process
- Collect public input regarding specific site plan concepts for incorporation into the master site plan

This second workshop had 25 attendees. While fewer in number than at the first meeting, those attending, were representative of a variety of local interests, were vocal, and were enthusiastic participants in the planning process. This workshop opened similarly to the previous meeting with a welcoming by Bob McLeod, Chairman Antrim Creek Natural Area Commission, and pictorial tour of the property by Peter Garwood, Antrim County project Coordinator/Planner.

Outcomes of the first workshop - Local Goals

Outcomes of the first workshop were presented by Traver Wood, Site Planning Development, Inc. The essential outcome of the first meeting is the naming of six goals identified by participants as highest priorities, these being: Keep access to an unimproved boat launch; Protect natural features; Create paths and trails; Provide adequate parking; Keep entire area open to hunting and fishing; and Create public awareness and educational opportunities.

Management Goals, MNRTF and CZM Responsibilities

Local goals are not exclusive. Antrim County is obligated to achieve other goals pursuant to conditions of the acquisition grant from Michigan Natural Resources Trust Fund (MNRTF) . These goals are defined in the County's application for acquisition funding as "Management Goals" and are found in the MNRTF Rules in sections related to goals, policies and responsibilities. Additionally, grants from the Michigan Natural Resources Coastal Zone Management program are conditioned upon certain similar goals. The aforementioned goals were presented at the workshop and are attached hereto.

It was explained that Local Goals are consistent with Management, MNRTF, and CZM Goals, with one exception. A conflict exists between the local goal of keeping vehicular access to the shore for small boat launching while, at the same time, preventing vehicular access to the shore to effectively protect the sensitive dune areas from destruction as required. While the Antrim County Board of Commissioners has stated its intent to keep the unimproved boat launch, pursuant to conditions attached to the acquisition funding, access to the shore cannot be kept at the expense of the dune environment and the threatened and endangered plant species found there. There is substantial documentation of such abuse during the summer of 1998.

Affirmation of Goals

Planning facilitator, Jim Weising led the group in a detailed analysis and discussion of the stated goals.

Pertinent comments and questions were shared by the group relative to local goals. Much discussion focused on the issue of boat launching, recognizing the conflict between vehicular beach access and the protection of natural resources.

The group agreed that this site is not well suited for boat launching. Proponents of keeping the launch, including local fishermen, clearly stated this is not a good launch site, and that any other similar launch site in the area would be preferred, and should be pursued.

Analysis of local goals - suggested refinements

1) Consider relocation of boat launch:
   shallow water condition recognized
   road and access concerns (steep road, vehicles on beach)
   conflicting uses- boating access vs. nature preserve
   existing launch area could be reclaimed/restored
2) Protect natural history and Native American features
3) Keep some of the natural area completely undeveloped
4) Liability associated with road access and boat launching

Another question seemed to resurface repeatedly, and is described, along with Jim Weising's response :

"Why can't we keep the property totally natural.... do nothing.. make no improvements ?"

This approach is not possible. The property was acquired with public funds for preservation and enjoyment by the general public. Public use will increase (is already increasing, according to most observers) and visitors must be directed and educated how to safely use the property in a way that protects the natural features. Jim Weising reminded us that the alternative to "development" as a natural area, including such things as parking, trails and interpretive display, was closing public access forever following imminent development as a private residential subdivision. The property simply cannot be kept as-is for the few local residents who before had been welcomed by the Joneses.

Mindful of the suggested refinements, the group expressed its unanimous affirmation of the goals by open, oral vote.

Site Plan "Scenarios"

Traver Wood presented five (5) conceptual site plans, or "scenarios" prepared by Site Planning Development, Inc. The scenarios included differing ideas for such features as road access, parking and trails. Copies of the scenarios are attached hereto for reference. This exercise was intended, and succeeded in generating constructive public comment and discussion.

While our plan had been to conduct small group discussion as done in the March workshop, the smaller number of participants in this second workshop was better suited for large group discussion and analysis. This analysis session, led by facilitator Jim Weising, included detailed review of each scenario. Constructive discussion of the issues ensued. The positive and negative attributes of each plan were discussed and recorded. The plans were posted on the wall for viewing.

The scenarios explored the pros and cons of several features, such as:

- singular access, at the Rex Beach location or the Creek location
- multiple access including both of the aforementioned
- contemplation of a new access road from the north end of the property
- parking at the bottom of the bluff
- parking at the top of the bluff
- parking at both locations
- parking "lot" versus parking "slot" configurations
- parking capacity vs. preservation
- creating a vehicular loop from Antrim Creek to Rex Beach

- creating a second "bluff road" for a vehicular loop at Rex Beach
- extent of trail development
- barrier free accessibility

One scenario emerged as the group's clear favorite. Modifications for improvement, suggested by the audience, were noted on the plan, thereby refining the concept. Using one sticky dot each, participants visibly affirmed their favorite plan by voting nearly unanimously for this modified scenario plan. Here are a few of the features plan's features and the group's rationale:

Road Access:

Provide two access points to the property, one at the existing Rex Beach Road in the central portion and one on "the old farm lane", a grassy two-track located at the southern end just north of Antrim Creek.

Two access points diffuses impact by spreading parking and pedestrian use over more of the property. Writer's Note: Two access points also makes visitor control and enforcement more difficult.

The existing Rex Beach Road provides immediate access near the beach and is historically used for swimming, picnicking and beach-walking access. It provides ready vehicular access to the shore area for handicapped and mobility-limited persons over a bluff too steep to negotiate safely. Near-beach, barrier free parking could be associated with trails, including old, historic trails in the north half of the property. (Writer's Note: Effective methods for prevention of damage to the dune environment must be found and employed here.)

The Old Farm Lane location provides more convenient creek access for fishermen, and the potential for varied barrier-free experience.

Parking:

Provide "near-beach" parking at the Rex Beach access, specifically for mobility-limited use. Add parking at the top of the bluff only when proven necessary - there is a recognized conflict when both people and vehicles are expected to trave the same route. If parking is constructed at the upper elevation, the conflict must be resolved, likely by road improvement, alternate pedestrian routing, or elimination of lower-level parking.

"Slot" parking is preferred to "lot" parking. In early phases, parking for a dozen cars at each location is believed by the group to be sufficient.

Parking at the southern access must provide a method for discouraging vehicle access to the open meadow area.

Trails:

Keep trails to a minimum so as not to prematurely develop and disturb the property. Keep trails natural and unpaved.

Closing

By completing this strategic planning process, we have established the local goals for the Antrim Creek Natural Area and collected valuable public input and direction for the project. Our objective, and our challenge, is to incorporate these features in the master plan, while maintaining public health, safety and welfare, and observing conditions of the state's acquisition grant.

As Chairman, Bob McLeod, noted in his closing statement, "I feel good about the progress we have made throughout this strategic planning process and I am confident this work will culminate in a plan that will satisfy most people on most issues, but may not satisfy all people on all issues".

end of summary

SOILS

The soils of the Antrim Creek Natural Area are summarized in the Antrim Creek. Michigan Soil Survey (USDA - SCS, 1978). The majority of the following material is abstracted from the survey.

General Soil Type of the Antrim Creek Natural Area

The Antrim Creek Natural Area is composed of Deer Park-Roscommon soils. Deer Park-Roscommon soils consist of gently to moderately sloping sand dunes surrounded by wet lowlands. While the sand dunes have high drainage capacities, the lowlands have poor to very poor drainage. The dunes are characterized by light gray sands, the lowlands by a sandy muck. In general, these soils have poor potential for intense recreational activity. They also have poor potential for woodland production in the wet, lowlands.

Six major or minor soils types occur in the Antrim Creek Natural Area. Refer to FIGURE 4.1. They are as follows:

Be - Beaches

The beach area at Antrim Creek Natural Area consists of loose sand and loose sand and gravel that is nearly level to gently sloping. Due to the nature of the beach environment - wind, wave action, and long shore currents - much of this sand is very transient in nature and as a result, has not had time to form soil horizons.

Permeability is very high. The depth to the water table varies, but reaches depths of several feet near the back edges of the beach.

For details on the suitability of Beach sand for recreational development, habitat, building site development, and sanitary facilities. FIGURE 4.2.

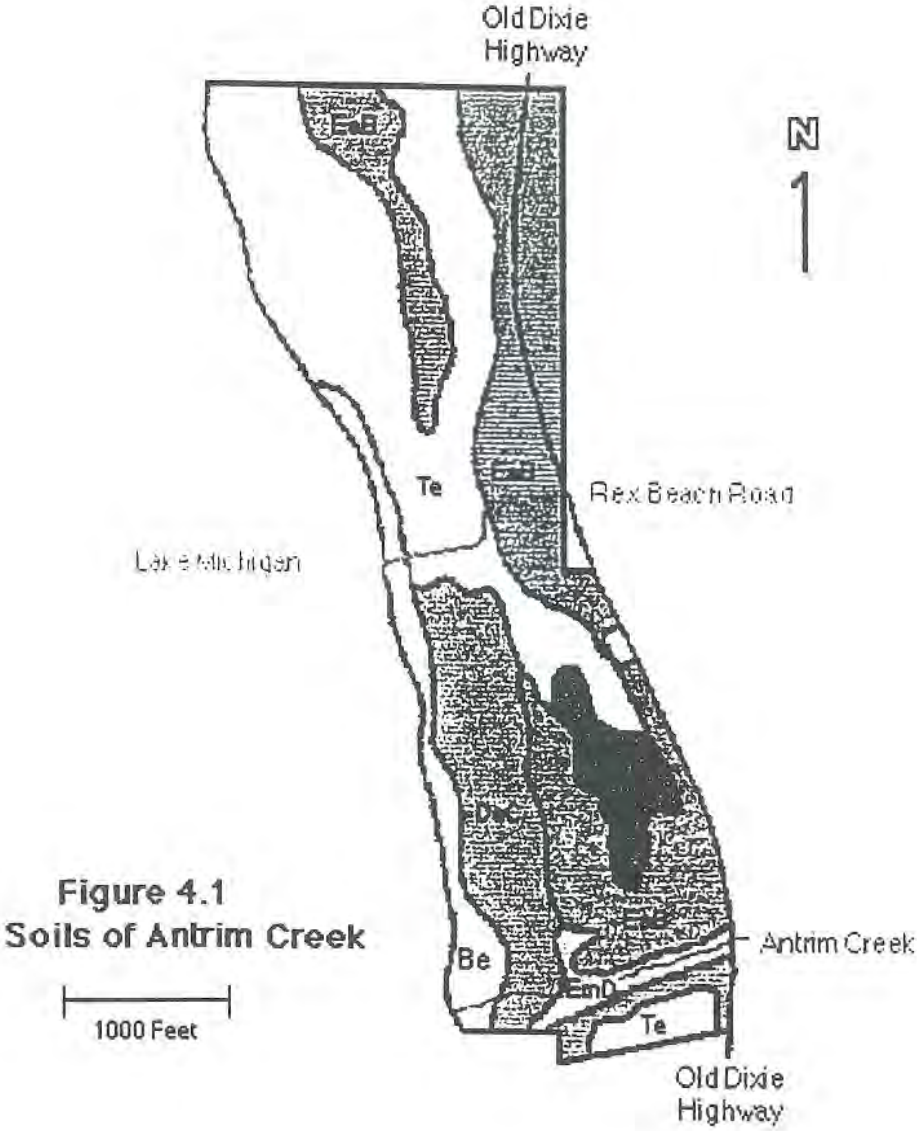
CbA - Charlevoix sandy loam - 0 to 4 percent slope

This soil occurs in the upland depressions. Drainage is somewhat poor.

The surface layer is normally about 9" thick, composed of very dark, grayish-brown, sandy loam. Beneath this is a layer of light, brownish-gray, mottled, sandy loam nearly 2" thick. The subsoil is a dark, reddish-brown to brown, mottled, sandy loam that is readily crumbled. This zone is approximately 22" thick. Below this is a layer of pale brown, sandy loam and gravelly sandy loam that extends to a depth of 60".

Charlevoix sandy loams have moderate to moderately rapid permeability rates. As a result, runoff is slow. Water capacity is moderate. Typically, the water table is high from November through May, occurring within 0.5 feet to 1.5 feet of the surface.

FIGURE 4.1
SOILS OF ANTRIM CREEK
NATURAL AREA



Suitability of Soils for Recreational Development						
	Be	CbA	DeC	EaB	EmD	Te
camp areas	1	SEVERE: wetness	SEVERE: too sandy	MODERATE: too sandy	SEVERE: slope	SEVERE: wetness, floods, excess humus
picnic areas	1	SEVERE: wetness	SEVERE: too sandy	MODERATE: too sandy	SEVERE: slope	SEVERE: wetness, excess humus
playground	1	SEVERE: wetness	SEVERE: slope	SEVERE: small stones	SEVERE: slope	SEVERE: wetness, floods, excess humus
paths and trails	1	MODERATE: wetness	SEVERE: too sandy	MODERATE: too sandy	SEVERE: slope	SEVERE: wetness, excess humus
erosion hazard	1	SLIGHT	SLIGHT	SLIGHT	MODERATE	SLIGHT
drainage	1	NOT NEEDED	NOT NEEDED	NOT NEEDED	NOT NEEDED	Floods, frost action

1 Beach sands are highly susceptible to wind erosion and wave action. As a result, they are not placed in a Michigan soil management group. Their potential use is limited to recreation and esthetic purposes.

Table 4.2a

Potential of Soils for Habitat Elements						
	Be	CbA	DeC	EaB	EmD	Te
wild herbaceous plants	1	good	poor	fair	good	poor
hardwood trees	1	good	very poor	fair	good	poor
coniferous plants	1	good	very poor	fair	good	poor
wetland plants	1	fair	very poor	poor	very poor	good

1 Beach sands are highly susceptible to wind erosion and wave action. As a result, they are not placed in a Michigan soil management group. Their potential use is limited to recreation and esthetic purposes.

Table 4.2b

Suitability of Soils for Building Site Development						
	Be	CbA	DeC	EaB	EmD	Te
shallow excavations	1	SEVERE: wetness	SEVERE: cutbanks cave	SEVERE: cutbanks cave	SEVERE: slope	SEVERE: cutbanks cave
dwellings without basements	1	SEVERE: wetness	MODERATE: slope	SLIGHT	SEVERE: slope	SEVERE: wetness, low strength, floods
dwellings with basements	1	SEVERE: wetness	MODERATE: slope	SLIGHT	SEVERE: slope	SEVERE: wetness, floods, low strength
local roads or streets	1	SEVERE: frost action, wetness	MODERATE: slope	SLIGHT	SEVERE: slope	SEVERE: wetness, low strength, floods

1 Beach sands are highly susceptible to wind erosion and wave action. As a result, they are not placed in a Michigan soil management group. Their potential use is limited to recreation and esthetic purposes.

Table 4.2c

Suitability of Soils for Sanitary Facilities						
	Be	CbA	DeC	EaB	EmD	Te
septic and absorption fields	1	SEVERE: wetness	MODERATE: slope	SLIGHT	SEVERE: slope	SEVERE: wetness, floods

1 Beach sands are highly susceptible to wind erosion and wave action. As a result, they are not placed in a Michigan soil management group. Their potential use is limited to recreation and esthetic purposes.

Table 4.2d

For details on the suitability of Charlevoix sandy loam for recreational development, habitat, building site development, and sanitary facilities. FIGURE 4.2.

DeC - Deer Park sand - 2 to 20 percent slope

Deer Park sand is commonly found in the back dunes adjacent to Lake Michigan. Slopes can be fairly steep. The surface layer is typically a light gray sand, 9" deep. Below this is a very poorly developed subsoil and underlying layer of multi-colored, loose sand.

Permeability rates are high resulting in low runoff rates. Water capacity is low. Typically, the water table occurs at depths over 6 feet. High water tables rarely, if ever, occur. Droughty conditions are common in these soils. Potential for frost action is low.

For details on the suitability of Deer Park sand for recreational development, habitat, building site development, and sanitary facilities. FIGURE 4.2.

EaB - East Lake gravelly loamy sand - 0 to 6 percent slope

The surface layer is a very dark-gray gravelly loamy sand, nearly 7" thick. Below is a 19" thick subsoil that can be divided into an upper and lower layer. The upper layer consists of a readily crumbed yellowish-red to dark, reddish-brown, gravelly, loamy sand. The lower layer is a yellowish-brown, loose sand. Below this is a layer of multicolored, stratified, sand and gravel to a depth of 60".

Permeability rates are very high, runoff rates are low, and available water capacity is very low.

The water table typically occurs at depths greater than 6 feet. High water tables are rarely, if ever, a problem. The potential for frost action is low.

For details on the suitability of East Lake gravelly loamy sand for recreational development, habitat, building site development, and sanitary facilities. FIGURE 4.2.

EmD - Emmet-Montcalm complex - 12 to 40 percent slope

Typical of strongly sloping to steeply sloping, well-drained soils, this soil type borders Antrim Creek. Associations of Emmet and Montcalm soils are intermixed to the point that mapping of separate soil types is not done.

Emmet soils have a 4" thick surface layer of black, sandy loam. A subsurface layer of light, brownish-gray, loamy sand nearly 3" thick exists below the surface layer. A three layered, 34" subsoil follows. All layers are very crumbly altering in color from a reddish-brown sandy loam in the uppermost layer to a pinkish loamy sand in the middle layer to a reddish-brown sandy clay loam in the lowermost layer. Beneath this is a crumbly, brown loamy sand.

Montcalm sands differ in having a surface layer of pinkish-gray loamy sand nearly 3" thick. Beneath this is a thick, 46" subsoil of very crumbly loamy sand. The upper regions are multicolored followed by interbedded layers of yellowish-brown loamy sand and reddish-brown sandy loam. Beneath this is a brown, crumbly loamy sand.

Permeability and available water capacity in Emmet soils is moderate. Runoff is medium. In Montcalm soils, permeability is rapid, available water capacity is moderate, and runoff is medium.

Typically, the water table is within 2.5 to 4 feet of the surface in winter and spring.

For details on the suitability of the Emmet-Montcalm complex for recreational development, habitat, building site development, and sanitary facilities, refer to FIGURE 4.2.

Te - Tawas-Ensley complex

Typical of the swampy northern end of the Antrim Creek Natural Area this is a nearly level, poorly to very poorly drained, soil.

In Tawas soils, the surface layer is a black muck approximately 16" deep. Below this is a dark, reddish-brown muck nearly 15" thick. The subsurface layer below this is a grayish-brown sand.

The surface layer of the Ensley soils is a very dark-gray, mucky, sandy loam about 8" thick. The nearly 28" subsoil can be divided into 3 general layers. The upper layer is very crumbly, light brownish-gray, mottled, loamy sand. The middle layer differs only by color, being more brown. The lower layer is a light reddish-brown, mottled, firm loam. Below this is a subsurface layer of light brownish-gray sandy loam and pale brown, gravelly loamy sand. Because of the mixing of the Tawas and Ensley soils, they are not separated in mapping.

Permeability in the muck layers is moderately slow to moderately rapid. In the underlying sands of the Tawas, permeability is rapid. In the underlying sands of the Ensley, permeability is moderate. Water capacity of the Tawas soils is high, that of the Ensley soils is moderate.

In the Tawas soils, the water table occurs at a depth of 0.0 feet to 0.5 feet. High water tables occur seasonally from November to May. Flooding also occurs frequently (on the average more than once every 2 years) on Tawas soils, again with a seasonally occurrence from November to May. Duration of these floods is classified as long, meaning they typically last for periods longer than a week.

In the Ensley soils, the water table occurs at a depth of 0.0 feet to 1.0 feet. High water tables occur seasonally from November to June. Flooding occurs frequently (on the average more than once every 2 years) on Ensley soils, with a seasonal occurrence from November to May. Duration of these floods is long, meaning they typically last for periods longer than a week.

During the summer of 1994 soil borings were taken to determine the depth of the water table. The location of these borings is presented in FIGURE 4.3. The description of the soil layers is given in FIGURE 4.4

Sources of Information

U.S.D.A. S.C.S. 1978. Soil survey of Antrim County, Michigan. In cooperation with the Michigan Agricultural Experiment Station. East Lansing, MI.

HISTORICAL FEATURES INDICATING HUMAN USE

ANTRIM CREEK NATURAL AREA
Banks Township, Antrim County
T32N-R9W
Part of the SW 1/4 of Sec. 11
Part of the NW 1/4 of Sec. 14

Probable dates and human uses of Antrim Creek Natural Area property:

NATIVE AMERICAN USE

A.D.600-1600 — Prehistoric Native American site dating to the Late Woodland period.

Antrim Creek site is one of a series of small archaeological sites along the Lake Michigan dunes in Antrim County. Based on the recovery of small triangular arrowheads and distinctive cordimpressed pottery fragments it probably is Late Woodland in age (ca. A.D. 600-A.D. 1600)

Exact dates unknown at this time — There is some indication of an arrow making site on the north side of Antrim Creek where flint chips and spalls have been found.

Native American sites were visited regularly to attend burial site or sites. Also, visits to care for a garden site where corn, pumpkins, beans, potatoes, apples and plums were grown along with medicinal herbs of many types. Seasonal occurrences such as hunting, sugar making and fishing are also likely.

Yearly visits to inspect and care for the burial sites.
Two Native American couples arrived by canoe each summer to camp for several days while caring for burial sites. Continuing up until the mid 1940s.

WHITE SETTLEMENT

1837 — Michigan admitted to the Union by Congress 1-26-1837.

1840 — Unorganized County of Megesee laid off - attached to Mackinac County as Omena Township.

1841 — Government Survey and Charting of Great Lakes

1843 — Named changed from Megesee County to Antrim County.

1850 — Pre-Settlement Vegetative Land Cover Map of Western Banks Township: Native American Settlement site located south east of Antrim Creek.

1853 — By legislative act, the unorganized county of Antrim was attached to Grand Traverse County for judicial and municipal purposes.

Antrim County consisted of a single township.
Kalkaska and Missaukee were attached to Antrim County for township purposes.

1856 First Government Land Survey of Antrim Creek area:
Surveyed by Edward D. Atwater, April 10, 1856
Approved by Surveyor Generals' Office, Detroit, Dec. 8, 1856
Old fish shanty, Indian fields, Indian trail and Indian graves in Antrim Creek area noted in both the surveyors notes and on map.

1859 Swamp Land Act - Michigan Legislature adopted a policy of appropriating swamp lands for the building of roads. Those who worked on state roads were able to take their pay in Swamp Land Script, contributing to the death of Antrim City before it was born.

1859 or 60 James Orr and his wife, Eleanor Susan Orr, located at site of future Antrim City, built a house and barn on north side of Antrim Creek.
Their son Richard Orr operated a "bachelor's hall" at the same location.
Mention of a "bachelors hall" indicates that probably lumbering had already begun in the Antrim Creek area by 1859.

1860 Population of Antrim County - 179
Banks Township Population - 0

1861 Common Road Act. March 18, 1861
Emmet and Grand Traverse State Road to run from Traverse City by Elk Rapids, Antrim City, Pine River and Little Traverse to Mackinac. Completed as far as Elk Rapids.

Wood, Pearl and Co. built first pier and began shipping operations just south of Antrim Creek.

1862 Patent - United States to James Orr, April I, 1862.
Recorded - December 31, 1862

Antrim City Post Office established - July 21, 1862
Richard D. Orr Post Master.

Antrim City consisted of: one log building, three dwellings built of slabs, one pier.

First burial at Antrim City Cemetery:
Lorenzo Randall - July 19, 1862.

1863 January 1. 1863 Homestead Act:
Offering 80 or 160 acres to settlers for a nominal sum
Richard Knight homestead recorded January I, 1863.

Banks Township organized March 1863, embracing all of the country lying north of the south line of Town 31 North

First Banks Township meeting to be held at the home of Gurden Geer, first Mon. of April 1864. James Orr, Thomas Flanigan and Rock W. Geer, shall be inspectors of election.

Lucius Pearl, O. W. Adams and J. W. Pearl build a new pier south of Antrim Creek in Antrim City - cost $7000.

1864 Antrim County population - 382

Antrim City Post Master, March 8, 1864 Lucius H. Pearl

Hannah and Lay pier and harbor for shipping timber built at west end of what is now Rex Beach Road.
Hill on west side of Old Dixie Highway used as rollway for timber.

Regular Steamship service to Antrim City begins:
Small steamer Sunny Side, owned by Hannah and Lay of Traverse City, making trips daily to all the more important settlements. Trips two times a week to Pine River and Antrim City.

Antrim City Methodist first quarterly conference Nov. 19

1865 Steamship service to Antrim City listed as six times weekly

Antrim City Post Master, Feb. 1, 1865 James N. Sickels

Wait and Wilks Store

Waldron and Orr's Mill

Stigar and Cherry Fishing establishment
Shipped to Chicago and Milwaukee.

O. D. Wood Shipping wood products.

September - Black smith has prospect of eight sets of sleds to iron and no other shop in 18-20 miles.

Norman Ayres built Grist Mill

1866 The Grand Traverse Region: A Report on the Geological and Industrial Resources of the Counties of Antrim, Grand Traverse, Benzie, and Leelanaw in the Lower Peninsula of Michigan By: Alexander Winchell
Antrim City mentioned and listed on Winchell map.

Antrim City Post Master, Feb. 28, 1866 Lucius H. Pearl.

Road Cut from Antrim City to Norwood.

Mail delivery once a week - carried on foot by an Indian who

traveled Traverse City to Mackinac route.

January - L. H. Pearl has 400-500 cords of wood cut and four teams hauling steadily.

1867 Methodist parsonage built on Orr property at Antrim City.

Antrim City Post Master, March 30, 1867 Lewis M. Kanagy.

O. D. Wood and Co. steam operated saw mill on Antrim Creek
Shipped 3000 cords of wood to market from Wood and Pearl Dock.

Dexter and Noble new store entrusted to J. N. Sickles.

Antrim City includes: Store, Post Office, Fishing establishment, Steam Mill, Wood Shipping, Pot Ash business, Two Churches, Grist Mill.

Sunny Side wrecked at Charlevoix in November.

Antrim City mentioned in The Traverse Region Historical and Descriptive, H. R. Page and Co., Chicago, Ill. 1894
January,1867 "This town bids fair to out-rival the other towns on the bay in the race for population, trade and wealth. It has a good start and important schemes are in embryo that when developed will tell with great effect on its growth and prosperity."

1868 Antrim City Post Master, July 31, 1868 James Orr.

First Antrim City School built - a log building on the south west corner of the O.D. Wood place.

Dexter and Noble Store, Mr. Sickles Manager.

1869-1897 High point in Michigan Logging industry.

1870 Lake Breeze, Englemann's East Shore Line propeller, ran regularly on Northport - Norwood route with stops at Antrim City, Brownstown, Elk Rapids, Old Mission and Traverse City.

1871 Autumn - exceptionally big draught

Antrim City Dock Company deeded.

1873 Methodist parsonage burned down

Michigan State Gazetteer and Business Directory:
Antrim City: a village of 200 inhabitants in Banks Township in north-west corner of Antrirm County. It is 22 miles north of Elk Rapids, and a half a mile from the shore of Grand Traverse Bay. It was first settled in 1861. It has a good farming country around it but at present exports only wood and bark.

Business Directory:

Ayers, N. R. - Miller
Orr, James - Post Master
Sickles, James N. - General Store
Stiger, Wm. L. Fisherman

1874 Antrim City Post Master, Jan. 16, 1874 Henry W. Beech.

Antrim City Post Master, Feb. 24, 1874 James Orr.

April 15, 1874 Indian reserves opened to homesteaders.

1875 Antrim City Post Master, Dec. 7, 1875 Richard D. Orr.

Michigan State Gazetteer and Business Directory:
Antrim City is situated on the east shore of Grand Traverse Bay in the northwest corner of Antrim County. It has one grist mill and one store. Shipments: wheat, hay, oats, bark and wood. Distance to Traverse City, its railroad shipping station, 40 miles; Elk Rapids, the county seat, is 22 miles south. Population 100. James Orr postmaster.

Business Directory:
Ayers, N. R. - grist mill
Beach, Mr. and Mrs. Artemas - music teachers
Beach, Mrs. Walter - sewing machine agent
Greer, Gurden - boot and shoe maker
Orr, Miss Lida L. - milliner
Sickles, James N. - general store
Smith, C. - surveyor
Stiger, Wm. L. - fisherman

Two and one half acres for Antrim City Cemetary deeded.
Five acres Antrim Creek Mill property deeded.

1876 Antrim City Post Master, March 8, 1876 James N. Sickels

Six acres Antrim City Mill property deeded.

Ten acres Antrim City Dock Company deeded.

1877 Michigan State Gazetteer and Business Directory:
Antrim City; a postoffice established in 1863, in Banks township, in the northwest corner of Antrim County, 22 miles from Elk Rapids, the county seat, 40 from Travers City, the nearest railroad station, and 354 by rail from Detroit. Its shipments are wheat, potatoes, hay, wood and bark. Stage to Traverse City and ElkRapids. Tri-weekly mail.
James N. Sickles, Post Master.

Business Directory:
Ayers, N. R. - grist mill
Collier, Rev. C. N. - Congregational
Kanagy, Lewis M. - Physician
Rodgers, Norman - flouring mill
Sickles, James N. - general store
Stiger, Wm. L. - fisherman

1879 April 7, 1879 vote to move county seat from Elk Rapids to Bellaire passed.

Spring 1879 - grist mill washed out with spring flood. Lake Michigan water level reportedly 14 inches higher than average.

1879-80 Michigan State Gazetteer and Business Directory:
Antrim City: Established in 1863 in Banks Township, northwest corner of Antrim County, 22 miles from Elk Rapids, the county seat, 40 from Traverse City, about the same distance from Petoskey, and 354 by rail from Detroit. Water power for operating a flour mill is derived from a small creek in the vicinity. Stage tri-weekly to Traverse, Charlevoix and Elk Rapids. Ship to Petoskey or Traverse City. Semi-weekly mail. James N. Sickels, Postmaster.

Business Directory:
Ayers, Norman R. - flour mill
Collier, Rev. C. N. - Congregational
Kanagy, Lewis M. - Physician
Sickels, James N. - General Store
Stiger, Wm. L. - Fisherman

1880 Antrim County population - 5237
Banks Township population - 611
Antrim City population - 125

Congregational Church built at Antrim City.

1881 Michigan State Gazetteer and Business Directory:
Antrim City was settled in 1863, in Banks township, northwest corner of Antrim county, 18 miles from Bellaire, the county seat, 40 from Traverse City, about the same distance from Petoskey, and 354 miles by rail from Detroit. Water power is derived from a small creek in the vicinity, and a good opening is presented for saw and flour mills, there being none near. Stage tri-weekly to Charlevoix and Elk Rapids, fare to former, $1.00, to latter, $1.50 . Ship to Petoskey or Traverse City. Semi-weekly mail. Population, 125. James N. Sickels, postmaster.

Business Directory:
Ayers, Norman R. - butcher
Collier, Rev. C. N. - Congregational
Kanagy, Lewis M. - physician
Sickels, James N. - general store
Stiger, Wm. L. - fisherman

1882 Antrim City Post Office discontinued - April 19, 1882
Mail and Papers forwarded to Norwood, Charlevoix Co..

Five acre Antrim City Mill pond recorded.

Antrim City shown on: Summer Resorts of the Mackinac Region map.

1883-84	Michigan State Gazetteer and Business Directory: Antrim City: formerly a postoffice, located in the northwest corner of Antrim County, 18 miles from Bellaire, the county seat. Petoskey, 36 miles east, the nearest railway approach
	The Traverse Region Historical and Descriptive, H. R. Page and Co., chapt. XXXIX discusses Antrim City 1866-1884
1889	Hannah and Lay sold their lumber industry
1890	Banks Township population - 802
1893	Five acre Antrim Creek Mill pond recorded.
1897	Antrim City listed - Antrim County Atlas
1898	Antrim City listed - Northern Michigan Handbook for Travelers Map.
1904	Five acres still deeded for Mill Pond and mill purposes on Antrim Creek.
1905	Antrim City area farmers each purchase one half mile of telephone wire and their own phone and, do their own installation.
1910	Antrim City listed - Antrim County Atlas
1911	Schoool district recorded
1914-15	Second cutting of timber. Cut and hauled by Nichols of Charlevoix.
1922	Lumber cut from Brooks property, sawed into lumber, hauled to shore, rafted out to waiting ship for shipment by water to Wells and Higman Co., fruit basket manufacturing company in Traverse City.
	Ceder bough business. Local men cut boughs for shipment to Chicago florists. Trucked by Arnold Redman of Kalkaska.
1923	Cemetery Association organized.
1926	M-11 moved east to become U.S. 31 shifting traffic away from the Flat Road or Old Dixie Highway and Antrim City.
	First Tyrrell purchase - August Brant to Edwin B. and Maud Tyrrell.
1929	Second Tyrrell purchase - John S. Smallegan and John H. Smith to Edwin B. and Maud Tyrrell.
	Tyrrell's Vacation Camp Built.
1930-37	Antrim Creek area logs cut and trucked to Michigan Maple Block Co. in Petoskey. Left over wood sold to natives $10 per acre.

1933	Schoolhouse used for a Sunday School sponsored by the American Sunday School Union.
1935	Ceder post cutting. Skidding from woods by horse team.
1930-40s	Contract work for Canning Factory in Ellsworth: Farmers paid to factory: $5 per acre plus $5 per pound for bean seeds. Received 1 cent per pound of beans picked.
1943	Harry and Eleanor Jones purchased Antrim Creek Natural Area land and surrounding land from Milfred Tyrrell, son of Edwin G. and Maud Tyrrell.
1949	First electrical service installed at the site of Antrim City.
1960-78	Spider Sand Dune Rides operated by Melvin Essenberg on Antrim Creek property.
1943-1996	Public use of Jones property for hunting, fishing, hiking, swimming, picnicking, boating, cross country skiing, snowshoeing, horse back riding and other recreational uses.
1994	First transfer of Jones property to Antrim County
1996	Mission statement of the Antrim Creek Natural Area: "To manage the site as a natural area, to protect the diversity and fragile natural features found on the property and keep it accessible for recreational and educational use by the public."

Submitted 12-10-1996

Mary Kay McDuffie
1340 S. E. Torch Lake Dr.
Bellaire, Mich. 49615
616-377-7307

Decendents of the very earliest Native Americans may very well still have been occupying their seasonal sites, tending and harvesting their gardens and caring for their burial ground in 1859 or 60 when Richard and Susan Orr and their son James arrived, bringing with them a major change of land use pattern.

Although not every name or place mentioned in this timeline was exactly within the boundries of the Antrim Creek Natural Area property, each mention had a direct effect of the life, and the death, of Antrim City and the Antrim Creek Natural Area neighborhood.

In accordance with the Antrim Creek Natural Area Mission Statement and the recommendation of Kathryn Eckert of the State Historic Preservation Office, I highly recommend that a Phase I archaeological survey be carried out by an archaeologist with credentials meeting federal requirements. Not only is there a likelihood of archaeological sites that may have been used by early Native Americans, but also sites used by the early white settlers. Sites that could give valuable information to future generations who might visit the Natural Area.

It is my opinion that prior to any final decision as to how the Antrim Creek Natural Area property should be used it is very important to take every possible step to gather what information an archaeological survey could add to the information we now have. The more informed the committee is, the better decisions they will make in carrying out future plans on use of the property.

Mary KAY McDuffie
December 10, 1996

Grass River Natural Area Rules and Regulations

- ☐ The Parking Lot is provided for your use. All Vehicles, including bicycles, should be left in the lot.
- ☐ Horses are prohibited in the Educational Area.
- ☐ We request pets stay home.
- ☐ Stay on the trails.
- ☐ Leave flowers and other plants undisturbed.
- ☐ Trash receptacles have been provided. Please use them for all refuse including cigar and cigarette butts.
- ☐ You will note that there are no picnic tables. We feel that there are more suitable areas elsewhere for picnicing.
- ☐ Open fires are strictly prohibited, as are alcoholic beverages.
- ☐ For additional rules see posted ordinance at the site.

Your tax-deductible gift of $25 or more helps support the work of GRNA, Inc., and entitles you to a year's membership in the organization. Please make the checks payable to: Grass River Natural Area, Inc.

Name _____ Amount _____

Address _____

City _____ State _____ Zip _____

☐ $25 Individual ☐ $50 Family ☐ $100 Sustaining
☐ $250 ☐ $500 Benefactor ☐ $1,000 Founder's Club
(If Memorial, to whom)

Mail to: Grass River Natural Area, Inc. P.O. Box 231 Bellaire, MI 49615
Phone: (616) 533-8314

--WELCOME TO GRASS RIVER --

In order to ensure a pleasant visit for yourselves and future visitors, please follow our guidelines...

The entire River is a no wake zone. (DNR Regulation 5 - Antrim County, MI Admin. Rule 281 705.1)

The area is open daylight to dusk.

Please stay on trails and walks.

Please leave plants and animals undisturbed and in place.

Smoking, camping and fires are prohibited.

Picnicing and littering are not allowed.

Antrim County Ordinance No. 1 of 1988

We hope you enjoy your visit and come back soon!

Restrooms available next to parking lot - 1/2 mile

WELCOME TO ANTRIM COUNTY'S ELK RAPIDS PARK

1. **Pets must be under immediate control on a leash not exceeding six (6) feet in length. <u>No pets are allowed on bathing beaches or in buildings</u>.**
2. **Owners are responsible for clean-up and disposal of dog messes.**
3. **<u>No</u> bicycle riding or skateboarding.**
4. **<u>No</u> glass containers allowed on the beach.**
5. **<u>No</u> fires other than those on the picnic grills.**
6. **We are taking picnic reservations at 599-2712. Twenty dollars ($20) <u>non-refundable</u> fee.**

Enjoy your visit <u>but please</u> leave the Park as you find it.

Antrim County Parks and Recreation Commission

RULES AND REGULATIONS – ANTRIM COUNTY BARNES PARK

1. A person shall not use a loudspeaker, public address system, or sound-amplifying equipment of any kind without written permission. A person shall not operate any motor; n vehicle, radio, television, phonograph, cd, tape recorder or any other device in such a manner as to create a noise that disturbs or annoys others. Quiet hours will be enforc 11:00 P.M. until 6:00 A.M..

2. A person shall not destroy, damage, cut, burn, remove County property, picnic tables, snowfence, trees, shrubs, wildflower, planted grasses, or other vegetation without first obtaining proper written permission.

3. A person shall not carry or have in possession a firearm unless unloaded in both barrel and magazine; shoot an air gun, gas gun, spring-loaded gun or slingshot; or shoot wi bow and arrow. No weapon capable of slinging, hurling, or shooting a projectile shall be left unattended unless the weapon is locked in a vehicle.

4. A person shall not engage in any violent, abusive, loud, boisterous, wanton, obscene, or otherwise disorderly conduct tending to create a breach of peace; disturb or annoy o litter, sit or lie upon walks, pathways, or steps thereby obstructing the free passage of others; remove, damage, or steal property of another.

5. A person shall not build fires except in designated places and/or except in stoves or grills that are approved by the park ranger; trench any campsite, or possess more than o table belonging to the County per campsite. No fires on beach.

6. A person shall not dump, place, throw or leave or cause or permit the dumping, placing, throwing or leaving of litter in any area of the park or waters, except in containers pro deposit refuse or waste material that has originated outside the park in a receptacle provided for park use; or place or burn garbage in fire ring or stove, or dispose of any fish cleanings in any park receptacle without first placing them in a plastic bag and securely tied closed.

7. A person shall not store or leave any boat, trailer, tent or camping equipment in the park or recreation area without first obtaining proper written permission. This subdivision d not apply to registered campers using the campground facilities during such time as they are properly registered.

8. A person shall not possess a glass container on the beach.

9. Parents, Guardians, or adults are held responsible for children in their care. They are responsible for insuring that such child comply with all park rules and will be held respon for any damage caused by such child.

10. A proper container must be used under any drain to gather liquid waste of any type and such waste gathered in a container must be disposed of at such place as designated b park ranger.

11. A person shall not camp for more than (15) consecutive nights, nor more than a total of thirty (30) night per calendar year.

12. A person shall not camp without a camping permit issued by the County. A person may camp in designated campgrounds or campsites only when the established fee is paid.

13. A person shall not walk into, or drive a vehicle through an occupied campsite.

14. A person shall not operate or park a motor vehicle except on designated roads or designated parking areas; operate a motor vehicle on a park road or parking lot at a speed in excess of fifteen (15) miles per hour, in an unsafe manner, at a speed greater than that posted, or disobey traffic signs; operate a minibike or trailbike within any area of the par

15. A person shall not possess a dog or other animal unless is it under immediate control on a leash not exceeding six (6) feet in length.

16. A person shall not allow a dog or other animal within a water or land area designated as a bathing beach or in any other water area used for swimming or wading; bring a dog, except leader dogs for the blind, or other animal into an enclosed park building or leave a dog or other animal unattended at any time; permit a dog or other animal to run loose create a disturbance; or to fail to properly control a dog or other animal. Any dog or other animal found not in the possession of, or under the immediate control of its owner or owner's agent or any dog or other animal creating a nuisance or disturbance may be removed from the park. The owner of the dog or other animal will be held responsible for damage caused by any dog or other animal.

17. Violation of any of the above park rules may result in revocation of permission to remain in the park and/or removal from the park and trespass charges for failure to leave toget with a forfeiture of all fees paid. A person evicted or leaving the park at the request of the

STATE PARKS AND RECREATION AREAS RULES

(By authority conferred on the commission of natural resources by sections 2 and 3a of Act No. 17 of the Public Acts of 1921, as amended, and by sections 9 and 252 of Act No. 380 of the Public Acts of 1965, as amended, being sections 299.2, 299.3a, 16.109, and 16.352 of the Michigan Compiled Laws)

R 299.321 State park and recreation lands; prohibited acts generally.

Rule 1. A person shall not do any of the following in a state park or recreation area:

(a) Enter, use, or occupy, state-owned lands or waters for any purposes when the lands are posted prohibiting such entry, use, or occupancy, as determined by the director of the department of natural resources.

(b) Destroy, damage, or remove state property, trees, shrubs, wildflowers, planted grasses, or other vegetation without first obtaining proper written permission. This subdivision does not apply to the picking and removal of mushrooms, berries, and edible fruits or nuts.

(c) Enter or remain in a campground, outdoor center, cabin area, or day campsite between the hours of 10 p.m. and 8 a.m., unless the person is a lawfully registered occupant. A person shall not enter or remain in a day-use area between the hours of 10 p.m. to 8 a.m. without first obtaining proper written permission.

(d) Peddle or systematically solicit business of any nature; distribute handbills or other advertising matter; post signs on any lands, waters, structures, or property; or use such areas as a base of commercial operations without first obtaining proper written permission.

(e) Use a loudspeaker, public address system, or sound-amplifying equipment of any kind without proper written permission. Permission shall not be granted if such equipment is capable of interfering with the use and enjoyment of the park by others. A person shall not operate any motor, motorboat, motor vehicle, radio, television, phonograph, tape recorder, or any other device in such a manner as to create excessive noise that disturbs or annoys others.

(f) Engage in any violent, abusive, loud, boisterous, wanton, obscene, or otherwise disorderly conduct tending to create a breach of the peach; disturb or annoy others; loiter, sit, or lie upon walks, passages, steps, or porches thereby obstructing the free passage of others; or remove, damage, or steal the property of another.

(g) Build fires, except in designated places or except in stoves or grills that are approved by an authorized representatives of the department of natural resources.

(h) Dump, place, throw, or leave, or cause or permit the dumping, placing, throwing, or leaving of, litter in any park, recreation land, or waters, except in containers provided; deposit refuse or waste material that has originated outside a park in receptacles provided for park uses; set fire to the contents of a refuse basket or trash container; or place or burn garbage in a fire ring or stove.

(i) Store or leave a boat, fish shanty, or other property in any park or recreation area without first obtaining proper written permission. This subdivision does not apply to registered campers using campground facilities.

(j) Possess a glass container within any land or water area that is designated as a bathing beach or a land or water area that is regularly used for sunbathing, swimming, or wading.

(k) Willfully obstruct, resist, oppose, or interfere with a commissioned state park officer or peace officer attempting to serve or execute any rule or order lawfully promulgated by the director of the department of natural resources.

(l) Transport or possess a controlled substance as defined by Section 7104 of Act No. 368 of the Public Acts of 1978, as amended, being section 333.7104 of the Michigan Compiled Laws.

History: 1982 AACS, Eff. July 30, 1982.

R 299.322 Camping; prohibited acts.

Rule 2. With respect to state parks and recreation areas, the following provisions apply:

(a) A person shall not camp without a camping permit issued by an authorized representative of the department of natural resources. A person may camp in a designated campground or campsite only when the established fee is paid.

(b) A person shall not obtain a camping permit for use by a camping party of which the person is not a member.

(c) A noncamper shall not visit campers between the hours of 10 p.m. and 8 a.m.

(d) A person shall not walk into, or drive a vehicle into or through, a controlled camping area. This provision does not apply to registered campers and their vehicles or to persons legitimately visiting a specific, registered camper.

(e) A registered camping party shall not leave a campsite continuously unoccupied during the first 24 hours of the permit period. A campsite is considered to be occupied if at least 1 member of the registered camping party is in attendance during the nighttime hours of the initial 24-hour period.

(f) A person shall not tow a rented trailer into a campground unless the towing vehicle is a part of a registered camp.

(g) A person shall not camp for more than 15 consecutive nights in any separately administered campground in a park or recreation area between May 15 and September 15. When any camping party is required to leave a campground, it is not eligible to return until five nights have elapsed.

(h) A person shall not use a campground for a permanent or semi-permanent residence or as a base for the operation of a business.

(i) No more than 1 single family nor more than 4 unrelated persons shall camp on 1 campsite. For the purposes of this rule, a single family shall include a mother or father and their children. A single family may include relatives if no more than 1 shelter is used.

(j) A camper shall not leave a campsite unoccupied for more than 24 hours during the period May 15 through labor day without written permission.

(k) A person shall not allow, place, or drive more than 2 motor vehicles onto 1 campsite or into a campground, except 4 motorcycles are permitted if each is operated by a registered camper.

History: 1979 AC, Eff. Aug. 11, 1979.

R 299.323 Motor vehicles; prohibitions.

Rule 3. A person shall not do any of the following in a state park or recreation area:

(a) Operate or park a motor vehicle, except on designated roads or designated parking areas, or operate a motor vehicle on a park road or parking lot at a speed in excess of 25 miles per hour, in an unsafe manner, at a speed greater than that posted, or so as to disobey traffic signs. Wen a motor vehicle is found parked in a state park or recreation area, the registration plate displayed on the motor vehicle shall constitute prima facie evidence that the owner of the vehicle is the person who parked it there.

(b) Operate a motor-driven vehicle or any motorized device, except on roads and parking lots constructed for the operation of licensed vehicles or on trail roads or areas designated for off-the-road vehicle use.

(c) Operate an unlicensed vehicle on a park road or parking lot.

(d) Transport or possess in a motor vehicle intoxicating liquor which is open or uncapped.

(e) Possess, transport, or have under a person's immediate control any intoxicating liquor, unless the person has attained the age of 21 years.

(f) Operate a motor vehicle without having a valid operator's of chauffeur's license in the person's immediate possession at all times. A person shall display the license on demand of a park officer or peace officer.

History: 1982 AACS, Eff. July 30, 1982.

R 299.324 Animals; prohibited acts.

Rule 4. A person shall not commit any of the following acts in a state park or recreations area:

(a) Possess a dog or other animal unless it is under immediate control on a leash not exceeding 6 feet in length. The leash provision does not apply to a dog while used in hunting, or in field trials, or while being trained, when upon lands open to such uses.

(b) Allow a dog or other animal within a water or land area designated as a bathing beach or in any other water area used for swimming or wading; bring a dog, except leader dogs for the blind, or other animal into an enclosed park building or leave a dog or other animal unattended at any time; permit a dog or other animal to run loose or create a disturbance; or to fail to properly control a dog or other animal. Any dog found not in the possession of, or under the immediate control of, its owner or the owner's agent, or any dog creating a nuisance or disturbance, may be removed from the park.

(c) Ride, permit, or allow horses or other riding animals without written permission, except on bridle trails and in horsemen's campgrounds designated by the department of natural resources, or under proper written permission issued for field dog trials.

History: 1979 AC, Eff. Aug. 11, 1979.

R 299.325 Firearms and hunting; prohibited acts.

Rule 5. (1) A person shall not commit any of the following acts in a state park or recreation area:

(a) Carry or have in possession a firearm unless unloaded in both barrel and magazine; shoot an air gun, gas gun, spring-loaded gun or slingshot; or shoot with a bow and arrow, except during established hunting seasons on lands open to hunting. This subdivision does not apply to a target range or archery range officially established by the department or to an officially sanctioned field trial. A person shall not engage in target shooting except on designated shooting ranges.

(b) Hunt, trap, kill, wound, capture, or intentionally disturb any bird, animal, or other wildlife, except during established hunting and trapping seasons and on lands open to hunting or trapping. This subdivision does not apply to the possible disturbance of wildlife while lawfully training a hunting dog on lands open to hunting and trapping.

(2) The commission of natural resources may except from the provisions of this rule state parks and recreation areas or parts thereof when, in the opinion of the commission, such exception best serves the public interest.

History: 1979 AC, Eff. Aug. 11, 1979.

R 299.326 Definitions.

Rule 6. As used in these rules:

(a) "Camp" means the use or intended use of any device, shelter, or equipment for the purpose of sleeping or shelter during the hours of 10 p.m. and 8 a.m.

(b) "Commissioned state park officer" means a duly commissioned conservation officer, special assistant, state park officer, ranger, manager, or similar special assistant commissioned by the director.

(c) "Day-use area" means a specific area of a state park or recreation area which is developed and maintained as an area to be used by the public for picnics, playground use, swimming, organized meetings or social gatherings, and educational displays and exhibits and which has a 450-foot buffer zone around the area, "Day-use area" also includes all park and recreation areas offices, out-buildings, garages, maintenance shops, museums, the 450-foot buffer zone around all such buildings, and any area of a state park or recreation area that the chief of the parks and recreation division designates as a "day-use area" either on a temporary or permanent basis, by posting the boundaries of that area as a "day-use area."

(d) "Proper written permission" means a written permit issued by the director of the department of natural resources or the director's authorized representative.

History: 1982 AACS, Eff. July 30, 1982; Am., 1994, MR 1, Eff. Jan. 20, 1994.

R 299.327 Penalties.

Rule 7. Violation of any park rule may result in revocation of a camping permit or eviction from the park, or both.

A person who violates a rule or order shall in accordance with Part 5 of Act 451, P.A. 1994 be deemed responsible for a State civil infraction, punishable by a fine of not more than $500.00.

History: 1979 AC, Eff. Aug. 11, 1979.

R 299.328 Persons exempt.

Rule 8. Department employees acting in the line of duty or persons performing specific acts authorized by written permission are exempt from the provisions of these rules.

History: 1979 AC, Eff. Aug. 11, 1979.

County of Antrim

Office of the Coordinator/Planner

Eric Cline
Associate Planner

Peter Garwood
Coordinator/Planner

Peggy Hamminga
Administrative Secretary

February 4, 1999

To: **Antrim County Commissioners**

From: **Pete Garwood, Coordinator/Planner**

Re: **Antrim Creek Natural Area Master Plan**

Enclosed is a copy of the final draft of the Antrim Creek Natural Area. Your approval of this Plan was contingent on a letter from the Banks Township Board agreeing with the Antrim Creek Natural Area Commission structure. Banks Township is not in agreement with this Commission structure.

The Antrim Creek Natural Area Commission will be meeting on Monday, February 8 and a recommendation will be forthcoming regarding this issue.

If you have any questions, please contact Bob McLeod, ACNA Commission Chair, or this office.

Thank you.

PG/ph

Enclosure

Antrim County Building P.O. Box 187
Bellaire, MI 49615

Phone: (616) 533-6265 Fax (616) 533-8111
E-mail: garwood1@freeway.net
ercline@freeway.net

Resolution #7 - continued

NOW THEREFORE BE IT RESOLVED that THE APPLICANT hereby makes its intentions known to provide public transportation services and to apply for state financial assistance with this annual plan, in accordance with Act 51; and

HEREBY, appoints Robert Straw, as the Transportation Coordinator, for all public transportation matters, who is authorized to provide such information as deemed necessary by the State Transportation Commission or department for its administration of Act 51 for 2000.

Yes - McLeod, Wilson, Bargy, Roote, Schuiteman, Stanek, Conway, Blackmore;
No - None;
Absent - White.

RESOLUTION #7 DECLARED ADOPTED.

It was moved by Blackmore, seconded by Schuiteman that the Chairman sign an agreement with TEMEX, INC. for consultation on building environmental improvement at the Antrim County Transportation Building. Motion carried by a yea and nay vote as follows: Yes - McLeod, Wilson, Bargy, Roote, Schuiteman, Stanek, Conway, Blackmore; No - None; Absent - White.

It was moved by Conway, seconded by Stanek that a policy be formulated for dispersal of electronic documents. Motion carried all members present voting yes.

Break 10:00 - 10:05

It was moved by Conway, seconded by Schuiteman that the Antrim County Natural Area strategic plan be approved with the change that the administration committee structure remain the same at 3 representatives from the county and 2 representatives from Banks Township. Motion carried by a yea and nay vote as follows: Yes - McLeod, Wilson, Bargy, Roote, Schuiteman, Stanek, Conway, Blackmore; No - None; Absent - White.

It was moved by Wilson, seconded by Conway that the end of the probationary period for William Murphy be approved and his salary be increased from $11,600 to $12,100 retroactive to January 1, 1999 and that the 1999 Emergency Services budget be adjusted to reflect this change. Motion carried by a yea and nay vote as follows: Yes - McLeod, Wilson, Bargy, Roote, Schuiteman, Stanek, Conway, Blackmore; No - None; Absent - White.

The Vice Chairman appointed Wanda Conway, Register of Deeds, to the Computer Committee.