

2.0 ALTERNATIVES CONSIDERED

A range of alternatives was evaluated to implement improvements within the Port Oneida Rural Historic District. The evaluation also included the No Action Alternative. Although the option of continuing with current management activities does not solve the need for improvements within Port Oneida, this alternative forms the basis from which all action alternatives are evaluated.

A Value Analysis workshop was held in May 2006 (NPS, 2006a) to evaluate a range of alternatives. During the Value Analysis, an interdisciplinary team analyzed the advantages and disadvantages of each design option. Several alternatives were considered and dismissed because they did not meet the project objectives or had the potential to produce an unacceptable level of adverse environmental or visitor use impacts. The alternatives dismissed from consideration are addressed in Section 2.4.

The workshop led to the identification of four action alternatives. Each action alternative is composed of several program elements including a visitor contact station, employee housing, circulation (parking, roadside pull-offs, trails, beach access), structure stabilization, and cultural landscape stabilization. There are various options for the visitor contact station, housing, and parking; however, roadside pull-offs, trails and beach access remain consistent for each alternative. The alternatives are summarized in Table 2-1.

2.1. ALTERNATIVE 1 – NO ACTION

The No Action Alternative would result in the continuation of management actions and existing facility use in Port Oneida (Figure 2-1). Currently, the house at the Dechow farmstead is used for employee housing. No visitor contact station exists within Port Oneida. If visitors want information, it must be obtained from the visitor center in Empire. At this time, a map is the only publication available from NPS.

Preserve Historic Sleeping Bear is a non-profit organization with an office in the home at the Charles Olsen farmstead. Preserve Historic Sleeping Bear provides interpretive materials for Port Oneida to visitors.

No changes to circulation would occur within Port Oneida; existing conditions would be maintained. Parking facilities are currently provided at the trailheads, one at Basch Road for Pyramid Point and a second along Thoreson Road for the Bayview Trail. No new pull-offs would be provided. One existing roadside pull-off, which is operated by the county, is located along Basch Road overlooking Vacation Valley. The existing trail system would be maintained under current management, with no new connections or trailheads being provided.

Landscape stabilization and restoration, and structure stabilization would continue under current management plans. Historic field edges have been determined by study of aerial photographs and field work. Clearing of non-historic, invasive plant material from important viewsheds currently occurs on a limited basis.

Structure stabilization would continue under the current management. Currently, structures are stabilized as needed, and as funding becomes available.

Table 2-1: Summary of Alternatives

Program Element		Alternatives				
		1	2	3	4	5
		No Action	C. Burfiend	C. Olsen	Dechow	Kelderhouse (Preferred)
Visitor Contact Station	Kelderhouse					●
	Charles Olsen			●		
	Dechow				●	
	Carsten Burfiend		●			
Employee Housing	Carsten Burfiend					●
	Peter Burfiend		●		●	
	Goffar			●		
	Dechow	●				
Pull-offs	Thoreson		●	●	●	●
	M-22		●	●	●	●
	Vacation Valley		●	●	●	●
Parking (6-8 cars)	Carsten Burfiend			●	●	●
	Eckhart/Olsen		●	●	●	●
	Kelderhouse		●	●	●	
Beach Access	Carsten Burfiend	●	●	●	●	●
Trails	Central Corridor		●	●	●	●

2.2. ACTION ALTERNATIVES

The following program elements are common to each action alternative. A house at one of the publicly owned farms would be adaptively rehabilitated for use as a visitor contact station. The visitor contact station site would include parking for 10 to 20 cars, restrooms, an outside gathering place for small groups, and a picnic area. The visitor contact station would include internal and external interpretive graphics, a staff desk, and storage. Informational and orientation materials would also be provided. A second house, also at a publicly owned farmstead, would be adaptively rehabilitated for use as staff housing. These houses would be rehabilitated in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (NPS, 1983).

Rehabilitation at the visitor contact station would include rehabilitation of exterior and interior features and spaces; historically sensitive modifications to meet functional requirements; modern mechanical, electrical and plumbing systems; and accessibility for disabled individuals, as needed. At the house to be rehabilitated for use as park staff housing, work would include exterior restoration; interior rehabilitation and historically sensitive interior modifications to accommodate tenants; and modern mechanical, electrical and plumbing systems to permit year-round occupancy, as needed.

Circulation throughout Port Oneida would be enhanced by providing (1) additional parking for 6 to 8 cars, (2) roadside pull-offs, (3) an improved trail system, and (4) landscape stabilization throughout Port Oneida. The location for the parking areas vary based on the location of the visitor contact station.

Roadside pull-offs would be located in three locations: overlooking the Thoreson farm on Thoreson Road, on the north side of M-22 between Port Oneida Road and Wheeler Road, and at the existing county roadside pull-off on Basch Road.

Landscape stabilization work in Port Oneida includes the maintenance of open field areas along the M-22 (Werner, Charles Olsen, Dechow and Lawr farms) and Port Oneida Road (Kelderhouse and Carsten Burfiend farms) corridors by the clearing of invasive trees and shrubs from open fields, windbreaks and pine plantations. Field edges and boundaries that are important to the character of Port Oneida have been determined through the study of aerial photographs and field verification. This treatment is intended to reestablish and preserve the overall patterns of open fields and woodlands, and preserve prominent views.

The visitor contact station sites were paired with the staff housing sites based on the results of the value analysis workshop, and the objective to have two staffed facilities at two separate locations in Port Oneida. The final pairings will be determined based on comments received during the environmental review process.

2.2.1 Alternative 2 – Carsten Burfiend

This alternative would use the Carsten Burfiend farm located on Port Oneida Road as the site for the visitor contact station (Figure 2-2). Two homes exist at the farmstead on the west side of Port Oneida Road along with a garage and a privy (Figure 2-3). Several outbuildings are located on the east side of the road, including a chicken coop, machine shed, granary/corn crib, and butchering shed. Parking for six to eight cars is located off of Port Oneida Road north of the entrance drive to the farm.

The visitor contact station site would include parking for 10 to 20 cars, restrooms, an outside gathering place for small groups, and a picnic area. The visitor contact station would be located in the north house and would include internal and external interpretive graphics, a staff desk, and storage. Informational and orientation materials would also be provided. Restrooms would likely be located in the garage. Figure 2-3 illustrates a concept for the visitor contact station at this farm. Landscape work at the visitor contact station site includes the restoration of ornamental foundation plantings, sugar maple plantings, and windbreaks. Other work includes reconstruction of fencing along historic fence lines, and the restoration of paths and concrete sidewalks. Views of Lake Michigan would be restored by selective thinning of plant material along the forested bluff.

In this alternative, staff housing would be located at the Peter Burfiend farm located on Basch Road (Figure 2-2). Use of the second house at the Carsten Burfiend farm was considered for employee housing, but project objectives emphasize having two separate staffed sites in Port Oneida. Additionally, employee housing would affect the visitor experience in this alternative. The Peter Burfiend house totals 1,660 square feet and has three bedrooms and one bath. The house would be adaptively rehabilitated as a housing site for park staff.

Circulation within Port Oneida would be enhanced by providing additional parking for 6 to 8 cars in the vicinity of the Eckhert and Ole Olsen farms on Basch Road and at the Kelderhouse farm on Port Oneida Road (Figure 2-2), roadside pull-offs, and an improved trail system.

The north house at the Carsten Burfiend farmstead would be adaptively rehabilitated for use as the visitor contact station. The Peter Burfiend house, to be used as housing, would be adaptively rehabilitated for its new use as staff housing. Other structures throughout Port Oneida would also be stabilized. The selection of structures for stabilization would be made at the discretion of the Sleeping Bear Dunes staff.

2.2.2 Alternative 3 – Charles Olsen

This alternative would use the Charles Olsen farm, located along M-22, as the site for the visitor contact station (Figure 2-4). The Charles Olsen farmstead consists of a home and a barn. Preserve Historic Sleeping Bear, a non-profit organization, has rehabilitated the home and is using it for their offices. Preserve Historic Sleeping Bear has installed basic exhibits, and has developed plans and secured partial funding for additional exhibits, to

Figure 2-2: Alternative 2 – Carsten Burfiend

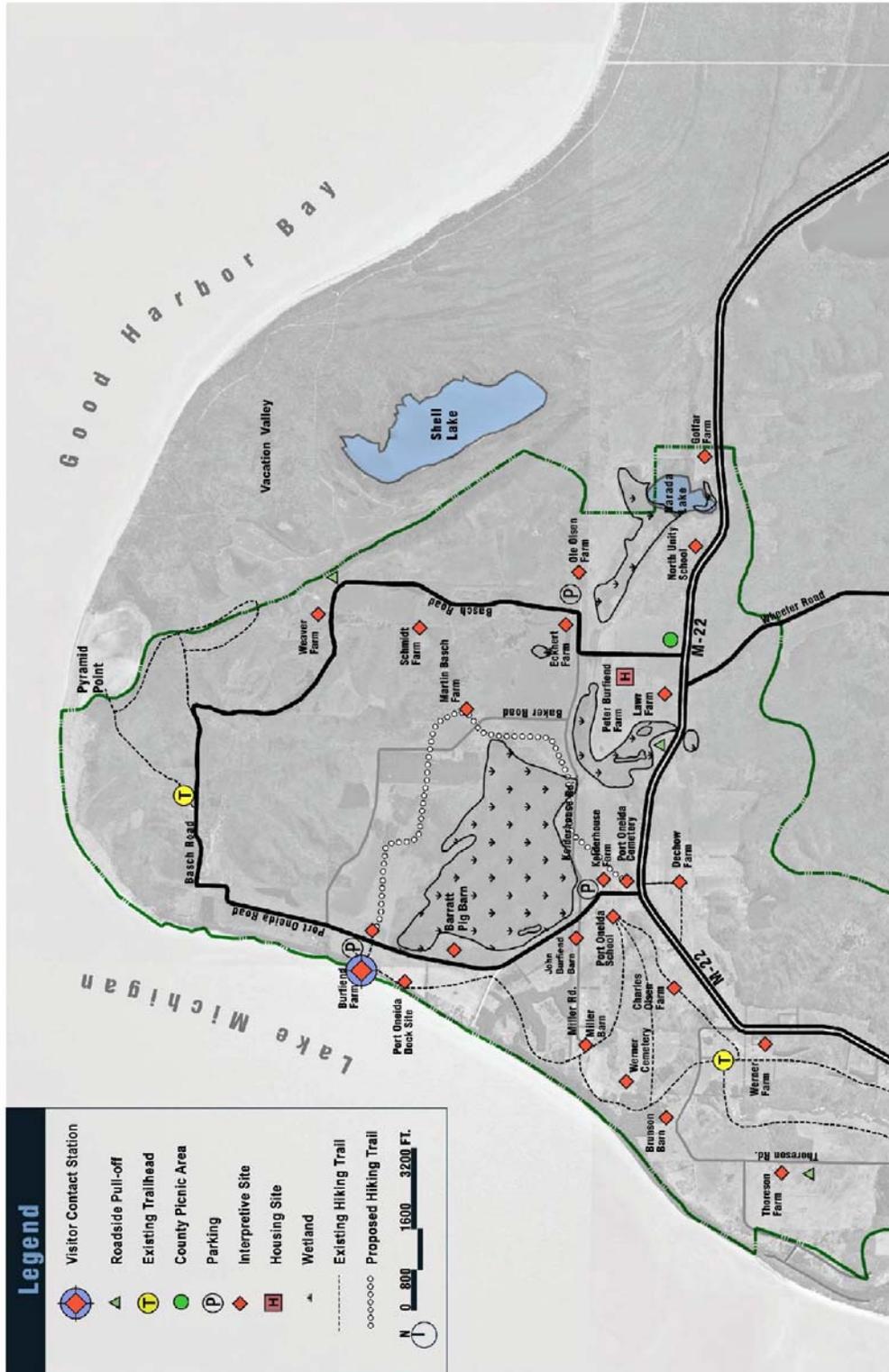
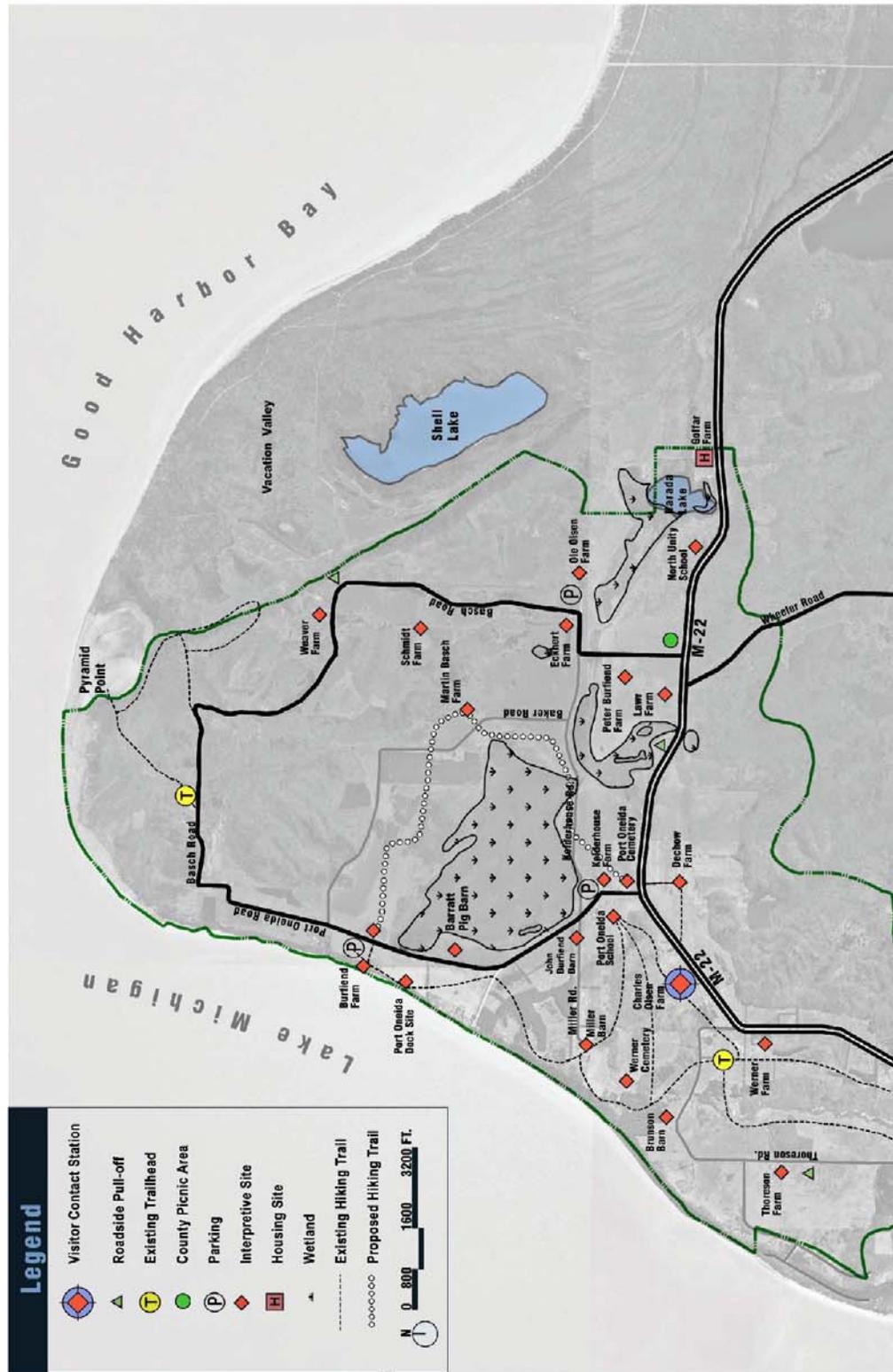


Figure 2-3: Burfiend Visitor Contact Station Concept



Figure 2-4: Alternative 3 – Charles Olsen



interpret the history of Port Oneida. Elements at the visitor contact station site that are common to all action alternatives include parking for 10 to 20 cars, restrooms, an outside gathering place for small groups, and a picnic area. The visitor contact station would be located in the house and would provide internal and external interpretive graphics, staff desk, storage, and informational and orientation materials. Restrooms would likely be located in the lean-to at the south end of the barn. Figure 2-5 illustrates a concept for the visitor contact station at this farm.

Landscape work at the visitor contact station site (Charles Olsen farm) includes the restoration of ornamental shrub plantings, sugar maple plantings, and windbreaks. Other work includes reconstruction of fencing along historic fence lines, and the restoration of paths, drives and concrete sidewalks. Views to the Charles Olsen barn and house would be restored by the thinning and selective removal of plant material in fields approaching the farm.

In this alternative, staff housing would be located at the Goffar farm (Figure 2-4). This home is currently under a reservation of use and occupancy that will expire in 2011. This 2,100 square foot house has four bedrooms and two baths. The house would be adaptively rehabilitated for its new use as staff housing. As with the other action alternatives, circulation within Port Oneida would be enhanced by providing additional parking, roadside pull-offs, and an improved trail system. New parking (6 to 8 cars) would be provided in the vicinity of the Eckhert and Ole Olsen farms on Basch Road, at the Kelderhouse farm on Port Oneida Road, and at the Carsten Burfiend farm on Port Oneida Road (Figure 2-4).

The Charles Olsen house has been stabilized previously, so no stabilization is necessary as part of this alternative. The Charles Olsen barn would be stabilized as part of the site's rehabilitation for its intended new use. The Goffar house, which would be used as housing in this alternative, would be stabilized as part of its rehabilitation for its intended new use. Additional structures would receive treatments of stabilization or higher treatments as part of this alternative. The park staff would determine which structures need to be stabilized during project implementation.

2.2.3 Alternative 4 – Dechow

Under this alternative, the visitor contact station site would be located at the Dechow farm on M-22 at the intersection with Port Oneida Road (Figure 2-6). The Dechow farmstead consists of a house, barn, garage, granary, brooder house, and chicken coop (Figure 2-6). Currently, the house at Dechow farmstead is being used for employee housing. Consistent with the other action alternatives, the visitor contact station site would include parking for 10 to 20 cars, restrooms, an outside gathering place for small groups, and a picnic area. The visitor contact station would be located in the house and would include internal and external interpretive graphics, a staff desk, and storage. Restrooms would likely be located in the garage located adjacent to the dairy barn. Informational and orientation materials would also be provided. Figure 2-7 illustrates a concept for the visitor contact station at this farm.

Figure 2-5: Olsen Visitor Contact Station Concept

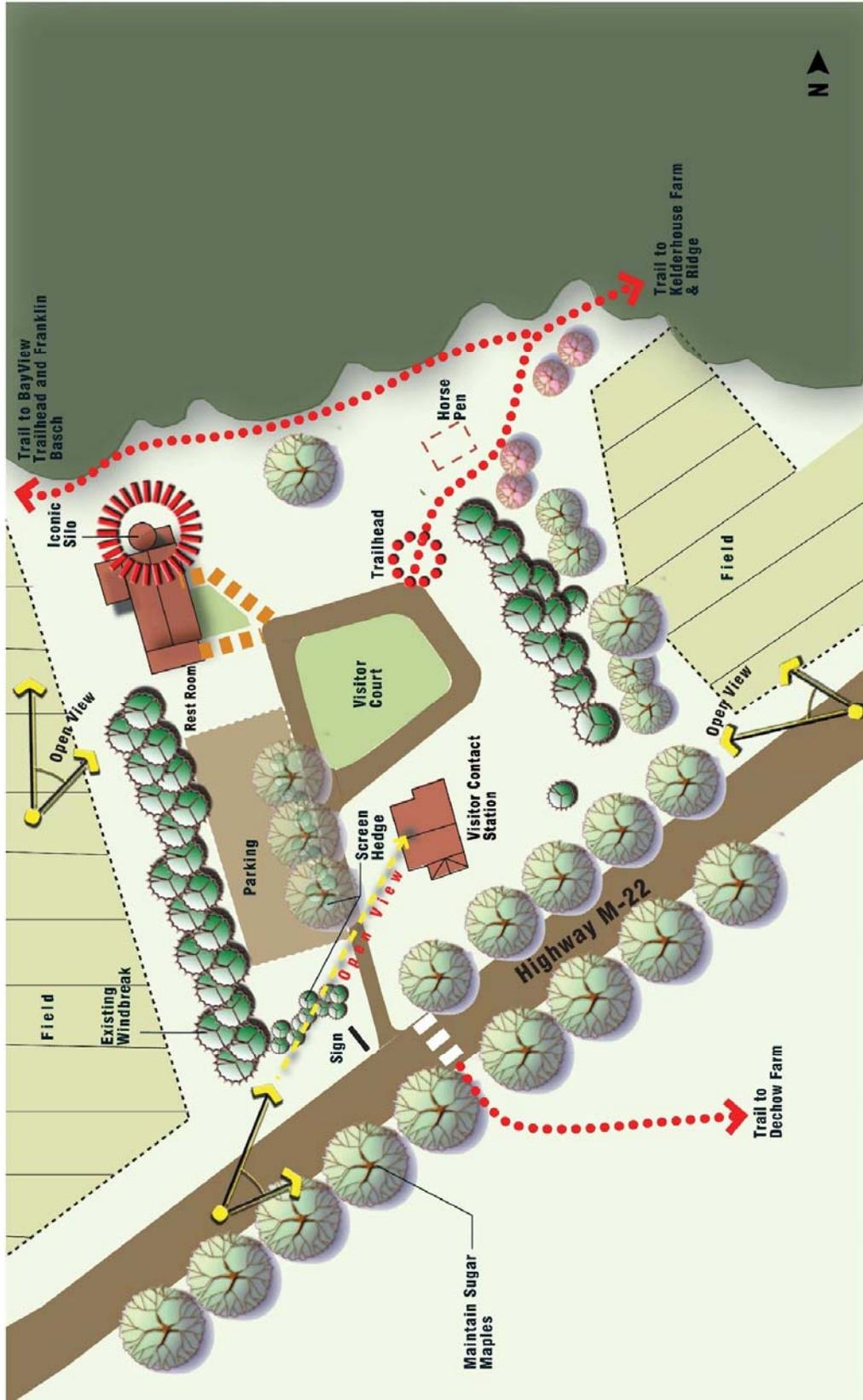
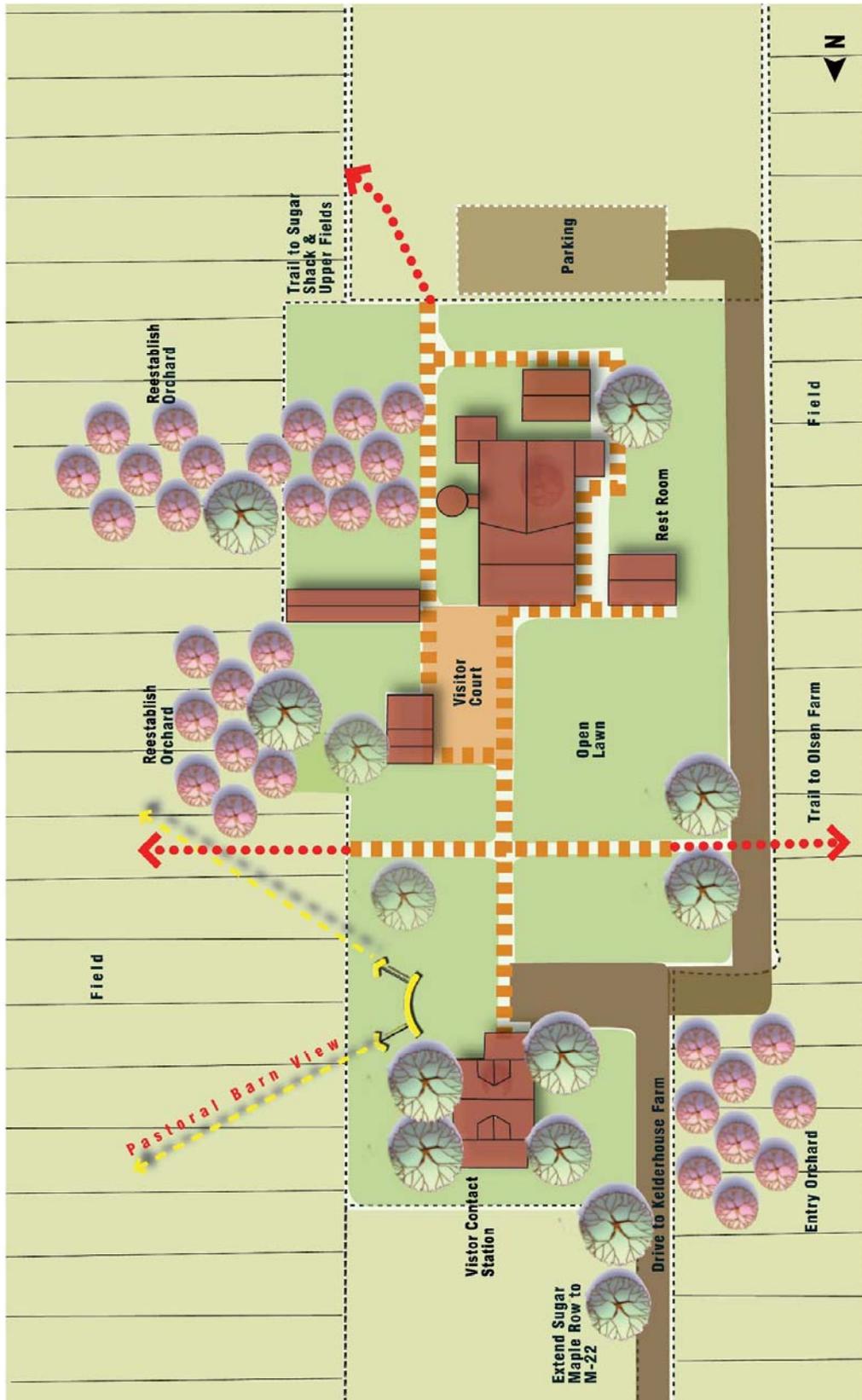


Figure 2-7: Dechow Visitor Contact Station Concept



Landscape work at the visitor contact station site includes the restoration of orchard plantings and ornamental shrub plantings. Other work includes restoration or reconstruction of fences, and the restoration of paths, drives and concrete sidewalks within the farmstead area.

In this alternative, staff housing would be located at the Peter Burfiend farmstead. This 1,660 square foot house has 3 bedrooms and one bath. The house would be adapted to serve as housing for park staff.

As with the other action alternatives, circulation within Port Oneida would be enhanced by providing additional parking, roadside pull-offs, and an improved trail system. New parking (6 to 8 cars) would be provided in the vicinity of the Eckherth and Ole Olsen farms on Basch Road, at Kelderhouse farm on Port Oneida Road, and at Carsten Burfiend farm on Port Oneida Road (Figure 2-6).

The Dechow house has been stabilized previously, so no stabilization would be required as part of this alternative. The Peter Burfiend house, which would be used as housing in this alternative, would be stabilized as part of its rehabilitation for its intended new use. Other structures would receive treatments of stabilization or higher treatments as part of this alternative. The selection of structures for stabilization would be made at the discretion of the Sleeping Bear Dunes staff.

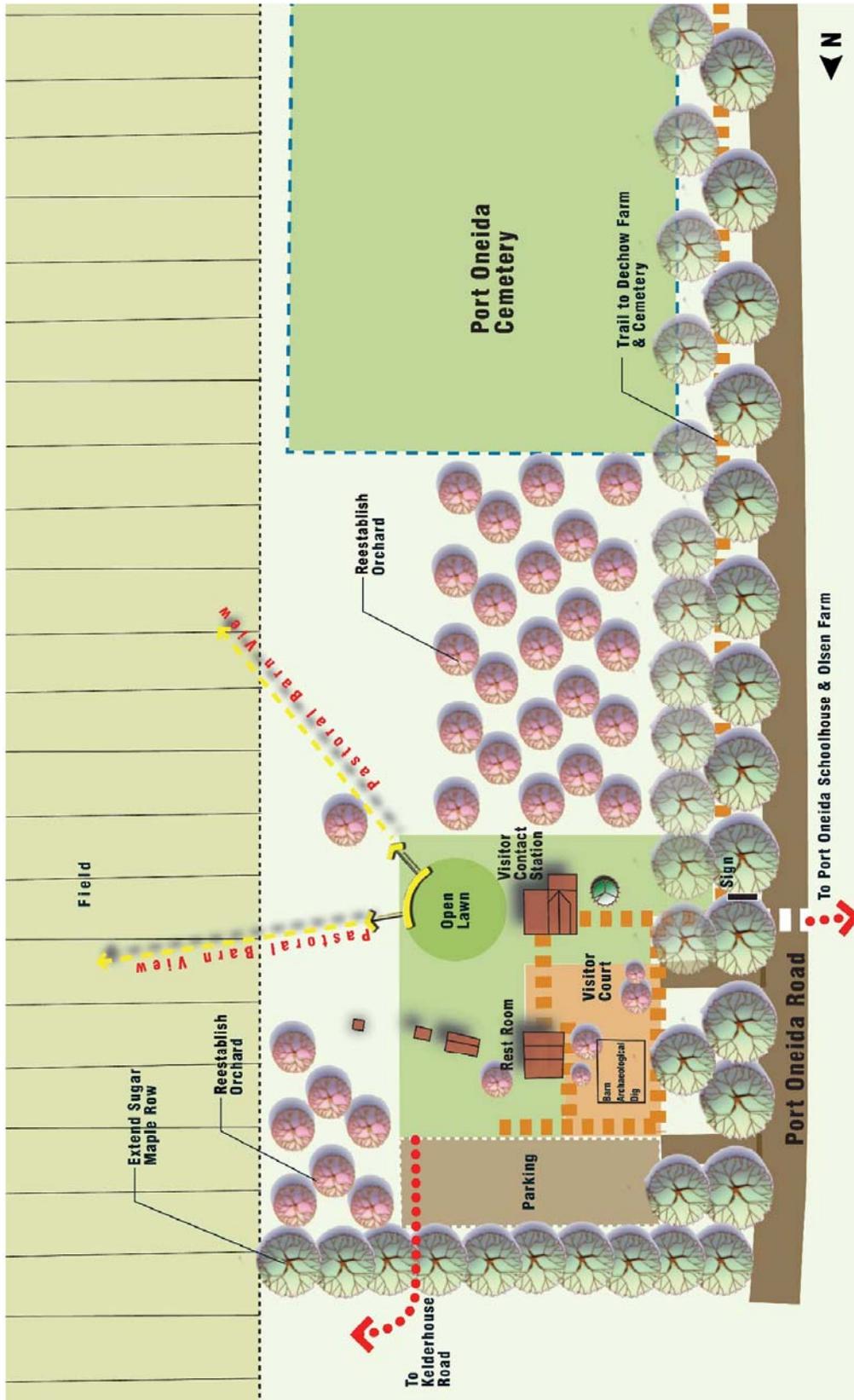
2.2.4 Alternative 5 – Kelderhouse (Preferred Alternative)

This alternative would use the Kelderhouse farm located on the east side of Port Oneida Road just north of M-22 for the visitor contact station (Figure 2-8). This farmstead consists of a home and four outbuildings: chicken coop, two sheds, and a privy. Consistent with the other action alternatives, the visitor contact station site would include parking for 10 to 20 cars, restrooms, an outside gathering place for small groups, and a picnic area. The visitor contact station would be located in the house and would include internal and external interpretive graphics, a staff desk, and storage. Informational and orientation materials would also be provided. Restrooms would likely be located in one of the outbuildings. Figure 2-9 illustrates one concept for the visitor contact station at this farm.

Landscape work at the visitor contact station site includes the restoration of orchards, ornamental shrub plantings, sugar maple rows, and windbreaks. Other work includes restoration or reconstruction of fences, and the restoration of paths, drives and concrete sidewalks.

In this alternative, staff housing would be located at the Carsten Burfiend farmstead. There are two homes located at the farmstead, one near the access drive and one located just to the south of the garage (Figure 2-3). Housing would be provided in one of the two homes, but more likely in the home to the south to provide more privacy for the residents. This house is 2,700 square feet with five bedrooms and one bathroom. It would be adapted to serve as housing for park staff.

Figure 2-9: Kelderhouse Visitor Contact Station Concept



As with the other action alternatives, circulation within Port Oneida would be enhanced by providing additional parking, roadside pull-offs, and an improved trail system. New parking (6 to 8 cars) would be provided in the vicinity of the Eckhert and Ole Olsen farms on Basch Road and at Carsten Burfiend farm on Port Oneida Road (Figure 2-8).

The Kelderhouse house would be stabilized, as part of the site's rehabilitation for its intended new use. One of the two houses at the Carsten Burfiend farmstead, which would be used as housing in this alternative, would be stabilized as part of its rehabilitation for its intended new use.

Additional structures within Port Oneida would receive treatments of stabilization or higher treatments as part of this alternative. The selection of structures for stabilization would be made at the discretion of the Sleeping Bear Dunes staff.

2.3 MITIGATION MEASURES

The action alternatives would predominantly result in beneficial effects. In areas where there is potential for adverse effects, the following mitigation measures are proposed.

- In areas of new mowing or grading, monitoring would occur for invasive vegetation or exotic species.
- In areas of new grading, restore adjacent areas with appropriate species.
- If during construction previously unknown archeological resources are discovered, all work in the immediate vicinity of the discovery would be halted until the resources could be identified and documented and an appropriate mitigation strategy developed, if necessary, in consultation with SHPO. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 would be followed. All human remains, funerary objects, sacred objects, or objects of cultural patrimony would be left in situ until the culturally affiliated tribe(s) was consulted and an appropriate mitigation or recovery strategy developed.

2.4 ALTERNATIVES CONSIDERED AND DISMISSED

An analysis of all design options led to the dismissal of several alternatives. These alternatives included components that failed to meet the project objectives or actions that generated unacceptable levels of resource impacts. The nature of the dismissed alternatives and the rationale for their rejection follows.

There are 14 farms, four barns, and one school within Port Oneida that are owned by NPS. In order for one of these sites to qualify for use as a visitor contact station, it needs to have more than one structure on the site, and to be used for staff housing, it needs to have a residence; otherwise, the site would be technically or economically infeasible.

Based on this, the school and four barn sites were eliminated for consideration as a visitor contact station or as staff housing.

The remaining farms were carried forward for further evaluation. Partner occupied sites were considered for visitor contact stations, but were not considered for staff housing. It was agreed that the visitor contact station should be located near the core of Port Oneida in order to meet the project objectives. Furthermore, if a site was considered as having potential as an interpretive program site, it was eliminated as a housing site because this would conflict with the potential use. In order for a site to be carried forward for staff housing, it needed to meet a minimum size; otherwise, it would not be technically or economically feasible. These criteria, along with a field reconnaissance and coordination with park employees, allowed for the elimination of additional farms from further consideration.

Thoreson farm: This farm is currently being used as a partner site and thus was eliminated as an alternative for staff housing. It is located too far from the core of Port Oneida (M-22 and Port Oneida Road) and was also eliminated as an alternative for a visitor contact station.

Weaver farm: This farm is in poor condition and would not be suitable for rehabilitation as a visitor contact station site or housing. The poor condition of the farm makes it technically and economically infeasible for restoration at this time.

Schmidt farm: This farm is too remote for a visitor contact station and the residence is too small for staff housing.

Ole Olsen farm: This farm is too remote for a visitor contact station and the residence is too small for staff housing.

Martin Basch farm: This farm is too remote for a visitor contact station. In addition, this farm is within proposed wilderness and could not currently be used for housing, or for a visitor contact station, because of the impacts to the wilderness values of naturalness and solitude.

Eckhert farm: This farm is located too far from the core of Port Oneida to be considered for a visitor contact station. It presents an excellent opportunity for an interpretive program site and, consequently, was dismissed as a potential housing site.

Werner farm: This farm was dismissed as a visitor contact station due to its distance from the core of Port Oneida and safety issues with ingress and egress from the site onto M-22. The residence is too small for staff housing, and the farm presents an excellent opportunity for an interpretive program site; consequently, this alternative was dismissed as a housing site.

Peter Burfiend farm: This farm is located too far from the core of Port Oneida to be used for a visitor contact station.

Goffar farm: This farm is located too far from the core of Port Oneida to be used for a visitor contact station.

Lawr farm: This farm was dismissed as a visitor contact station because of its location too far from the core of Port Oneida. Ideally, visitors to Port Oneida coming from the visitors center in Empire should encounter the visitor contact station near M-22 and Port Oneida Road. The Lawr farm would not be encountered until after they have passed through the core of Port Oneida. This is not an ideal location for capturing visitors entering Port Oneida. Lawr farm, which was previously used a partner site, is better suited as a partner site or interpretive program site and was not considered for staff housing.

The Peter Burfiend and Goffar farms, however, have a residence of an appropriate size that would make them suitable for staff housing; therefore, these farms were carried forward as staff housing alternatives.

Charles Olsen and Kelderhouse are being evaluated as a visitor contact station. The Kelderhouse farm is more suitable for an interpretive program site, and therefore is eliminated as a housing site. The Charles Olsen farm is currently being used as a partner site and therefore is eliminated as a housing site. The Dechow farmstead, is currently being used for housing and is considered as the No Action Alternative for housing.

2.5 ENVIRONMENTALLY PREFERRED ALTERNATIVE

As stated in Section 2.7D of Director's Order 12 and Handbook (NPS, 2001), the environmentally preferred alternative is the alternative that would promote the national environmental policy expressed in the National Environmental Policy Act.

Section 101(b) of the National Environmental Policy Act identifies six criteria to help determine the environmentally preferred alternative. The act directs that federal plans should:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Generally this means the alternative that causes the least damage to the biological and physical environment. It also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources (CEQ, 1981).

Continuing the current conditions under Alternative 1, the No Action Alternative, the NPS would fail to preserve several historic resources. Structure and landscape stabilization would only minimally occur as needed. Historic structures in Port Oneida would continue to be at risk from deterioration due to lack of maintenance and stabilization. The cultural landscapes would also be at risk from invasive species and vegetation encroachment.

Alternative 2, Carsten Burfiend farm, would provide a visitor contact station at the Carsten Burfiend farm with housing at the Peter Burfiend farm. Alternative 2 would require a higher level of operations and maintenance than the other alternatives because of the security requirements from the combination of a visitor contact station and beach access at the same site.

Alternative 3, Charles Olsen farm, would provide a visitor contact station at the Charles Olsen farm and housing at the Goffar farm. This alternative would place the visitor contact station at a farm where the house has already been rehabilitated for a partner site. Placing a 10- to 20-space car parking lot at a highly visible location along M-22 would be a minor adverse visual quality impact to Port Oneida.

Alternative 4, Dechow farm, would provide a visitor contact station at the Dechow farm and housing at the Peter Burfiend farm. The residence at the Dechow farmstead is currently being used for housing and has already undergone rehabilitation for these purposes. Placing a 10- to 20-space car parking lot at a highly visible location along M-22 would be a minor adverse visual quality impact to Port Oneida.

Alternative 5, Kelderhouse farm, fully addresses the six criteria and meets the park's objectives to stabilize historic structures and cultural landscapes, enhance visitor access to interpretive and recreational opportunities, and be consistent with current park planning documents. This alternative would provide a visitor contact station at the Kelderhouse farm and housing at the Carsten Burfiend farm. This alternative would rehabilitate structures at two of the predominant farms in Port Oneida.

Alternatives 2, 3, 4, and 5 would all provide for a new visitor contact station, new employee housing, improved circulation, rehabilitation of historic structures, and the stabilization of cultural landscapes. However, Alternative 5 would result in beneficial effects as a result of rehabilitating structures at two predominant farms. Overall, Alternative 5 provides the highest level of enhancement of cultural resources with the least damage to resources in Port Oneida and is the environmentally preferred alternative.

2.6 COMPARISON OF ALTERNATIVES

Table 2-2 compares each project alternative and provides a summary of the potential effects by impact topic.

Table 2-2: Comparison of Impacts to the Alternatives

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	No Action	Carsten Burfiend	Charles Olsen	Dechow	Kelderhouse
Ecological Resources	The continued spread of invasive species combined with the impact on wildlife habitat would result in localized long-term minor adverse impacts.	The limited displacement of old field wildlife species and the potential for introduction of invasive species along mowed trails would result in long-term minor adverse impacts.	The potential for introduction of invasive species along mowed trails would result in long-term minor adverse impacts.	The potential for introduction of invasive species along mowed trails would result in long-term minor adverse impacts.	The potential for introduction of invasive species along mowed trails would result in long-term minor adverse impacts.
Cultural Resources: Landscapes	This alternative would result in long-term minor adverse impacts.	This alternative would result in long-term negligible adverse impacts.	This alternative would result in long-term minor adverse impacts.	This alternative would result in long-term minor adverse impacts.	This alternative would result in long-term negligible adverse impacts.
Cultural Resources: Structures	The continuation of minimal stabilization of structures would result in a long-term moderate adverse impact.	The stabilization of structures would result in a long-term moderate beneficial effect.	The stabilization of structures would result in long-term moderate beneficial effects.	The stabilization of structures would result in long-term moderate beneficial effects.	The stabilization of structures would result in long-term moderate beneficial effects.
Visitor Use and Experience	The continued lack of visitor facilities would result in long-term minor adverse impacts.	An enhanced visitor experience would result in long-term moderate beneficial effects.	An enhanced visitor experience would result in long-term moderate beneficial effects.	An enhanced visitor experience would result in long-term moderate beneficial effects.	An enhanced visitor experience would result in long-term moderate beneficial effects.
Park Facilities and Operation	The No Action Alternative would result in long-term minor adverse effects.	An increase in required operation and maintenance would result in long-term minor to moderate adverse effects.	An increase in required operation and maintenance would result in a long-term minor adverse effect.	An increase in required operation and maintenance would result in a long-term minor to moderate adverse effect.	An increase in required operation and maintenance would result in a long-term minor adverse effect.

Table 2-3 compares and contrasts whether each alternative accomplishes the purpose or fulfills the need identified in the purpose and need section.

Table 2-3: Project Objectives by Alternative

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	No Action	Carsten Burfiend	Charles Olsen	Dechow	Kelderhouse
Stabilize and rehabilitate historic structures and cultural landscapes.	Historic structures in Port Oneida would continue to be at risk from deterioration, lack of maintenance and stabilization.	Alternative 2 would fully address this issue.	Alternative 3 would fully address this issue.	Alternative 4 would fully address this issue.	Alternative 5, the Preferred Alternative, would fully address this issue.
Provide a visitor contact station, recreational opportunities, and improved circulation.	Continuing the current management would not address this issue.	Alternative 2 would fully address this issue.	Alternative 3 would fully address this issue.	Alternative 4 would fully address this issue.	Alternative 5, the Preferred Alternative, would fully address this issue.
Provide employee housing within Port Oneida.	Employee housing would remain at the Dechow farm, which would address this issue.	This issue would be addressed by providing employee housing at the Peter Burfiend farm.	This issue would be addressed by providing employee housing at the Goffar farm.	This issue would be addressed by providing employee housing at the Peter Burfiend farm.	This issue would be addressed by providing employee housing at the Carsten Burfiend farm.

3.0 SITE HISTORY SUMMARY

Port Oneida was a small, closely-knit farming community that was founded in the early 1860s primarily by immigrants from Germany (Hanover) and Prussia. Initially, it was a logging community, with small farms cultivated by homesteaders. Agricultural production in the area from the earliest years focused on a variety of grain crops that were used to support small herds of livestock, usually dairy cattle. Potatoes, corn, fruit trees and garden vegetables were cultivated for use by the families. This trend continued into the 20th century. Following the demise of logging, residents turned to farming as the primary source of income. Throughout its history, some residents of Port Oneida fished to feed their families and supplement their incomes.

The period of significance for the Port Oneida Rural Historic District ranges from 1870 to 1945. This period spans the approximate date from which agricultural features associated with the first generation European-American settlers existed to the approximate point at which the farming economy had begun to decline and the agricultural technology peaked. The following sections provide a historic context for the major periods of development in Port Oneida: pre-settlement, early settlement, logging, agriculture, and Sleeping Bear Dunes National Lakeshore.

3.1. PRE-SETTLEMENT

Human occupancy of the Leelanau Peninsula began at approximately 9000 B.C., the time of the glaciers' last retreat. While little data exists about prehistoric or early historic activity in the Port Oneida area, it is generally thought that both aboriginal people and later European-American settlers initially were attracted to the region by abundant natural resources, such as its fisheries and forests. European occupancy on the mainland was preceded by occupancy on North and South Manitou Islands, primarily because of steamship traffic through the Manitou Straits. Later, because of the longer growing season provided by the lake effect, the shoreline portion of the peninsula was the site of early agricultural development.

3.2. EARLY SETTLEMENT (1852-1862)

Significant impacts on the Port Oneida landscape occurred with the arrival of European-American settlers in the mid-19th century. Port Oneida's first European residents arrived in 1852, after Michigan's inland was opened to settlement. The earliest residents, Carsten and Elizabeth Burfiend, purchased 275 acres on the west side of the peninsula near Pyramid Point. Carsten worked as a fisherman and ferried early settlers between the mainland and North and South Manitou Islands, while Mrs. Burfiend cared for their growing family. They were joined by other migrants from Hanover, including Frederick and Margaret Werner in 1855, and Frederick and Fredericka Dechow in 1857. By 1860, the population of what would soon become known as Port Oneida had grown to 87 people, many from Germany (Hanover) and Prussia.

Between 1860 and 1865, at least 15 land claims were entered - 12 under the Preemption Act of 1841 and four under the Homestead Act of 1862. Parcels claimed under the Preemption Act ranged from six to 160 acres, and those under the Homestead Act from 20 to 120 acres. As part of the improvements required by the Preemption and Homestead Acts, farmers cleared land, constructed dwellings and developed farmsteads.

3.3. LOGGING (1862–1890)

The arrival of Thomas Kelderhouse in 1861 signified a turning point in Port Oneida's growth as a community. Kelderhouse, originally of Albany, New York, was responsible for much of the settlement's initial economic development related to logging. In 1861, he struck a deal with Carsten Burfiend: he would build a dock if Burfiend would provide the land for a port, which comprised 177 acres of shoreline property. By 1862, the dock was built and Kelderhouse had moved to a settlement near the dock that was given the name Port Oneida. The community was named for the SS Oneida, one of the first steamships to stop at the dock.

With completion of the dock, the mainland's extensive forest could be harvested and sold. Kelderhouse continued his land acquisition and built a sawmill to process the harvested trees into cordwood for sale to the passing ships. Over the next 25 to 30 years Port Oneida grew to include a blacksmith shop, a boarding hotel, a general store/post office, two barns and the Kelderhouse residence. Most of these structures were owned by the Kelderhouse family, as was approximately half the land in this shoreline area, which has generally become known as Pyramid Point.

3.4. AGRICULTURE (1890-1970)

Logging provided a relatively-short lived economic foundation for the community, but the affects of resource extraction altered the immediate landscape for generations. By the 1890s, the Pyramid Point area had been almost completely deforested and most Great Lakes steamships were now coal burning rather than wood burning. As a result, the community's economic base disappeared. Soon the community took advantage of the logging legacy – the cleared land allowed the second generation of settlers to expand their agricultural operations. By the turn of the century, most Port Oneida individuals and families were purchasing land outright and supporting themselves through subsistence farming.

By 1908, the dock and all the buildings at the original Port Oneida town site were abandoned with the exception of the Kelderhouse residence. The social center then shifted approximately three-quarters of a mile inland to the intersection of Port Oneida Road and M-22, the current site of the Port Oneida schoolhouse and the Port Oneida cemetery. By 1952, nearly all built features related to the logging era had disappeared.

From the turn of the century until 1945, Port Oneida existed as a subsistence level farming community dedicated to raising dairy cattle and cultivating a variety of grain crops. From the end of WWII until 1970, farming constituted a secondary form of income

for most of the community's residents. Non-farming jobs were the primary means of support, and agricultural activities occurred seasonally, after working hours or on weekends. A small number of residents left the area entirely and others leased their land to neighbors who were still farming. The number of farms was reduced with a simultaneous increase in the acreage of successful farms. From the 1950s to 1970, several families sold to land speculators and then left the area; others remained in Port Oneida, but found year-round employment in nearby towns or cities. Some residents returned on a seasonal basis, using their farms as vacation homes.

3.5. SLEEPING BEAR DUNES NATIONAL LAKESHORE (1970-PRESENT)

In 1970, Sleeping Bear Dunes National Lakeshore was designated by Congress, and all of Port Oneida was included within its boundaries. The 1979 *General Management Plan* recognized that portions of Port Oneida were likely to remain in private ownership. Since that time, however, some of the private landowners have chosen to sell their property to the NPS. Currently there are 14 farms and 4 barns under federal ownership.

The Port Oneida Rural Historic District was added to the National Register of Historic Places in 1997.

4.0 SUMMARY OF CULTURAL LANDSCAPE CHARACTERISTICS AND FEATURES

4.1. LANDSCAPE SIGNIFICANCE

Port Oneida is a rural historic district, listed on the National Register of Historic Places that began as a small port community on the shore of Lake Michigan and later evolved into a subsistence level agricultural community. Its period of significance is from 1870 to 1945, representing the approximate date from which agricultural features associated with the first generation settlers are extant to the approximate point at which the farming economy began to decline after the peak of agricultural productivity in Port Oneida.

Port Oneida is significant for its agricultural and built landscape that reflects the general settlement patterns of its Northern European immigrants. The significance of Port Oneida lies in its ability to convey the land use patterns that resulted from the farming activities and cordwood operations of these settlers. Most notable is Port Oneida's characteristic pattern of wooded ridges contrasted by its low, open agricultural fields that are dotted with the small building clusters of its individual farmsteads. Even though the fields in Port Oneida are no longer cultivated or grazed as they were historically, they continue to reflect their historic use. The overall lack of modern intrusions in the building clusters adds to the historic character of Port Oneida.

The NPS manages more than 90 structures within the 14 farms, 4 barns, and one school owned by the NPS in the Port Oneida Rural Historic District. These structures convey the architectural styles of the area's early German and Prussian immigrants and reflect the array of activities that were commonplace in the community. The farm buildings are simple, but skillfully crafted, reflective of a collective cultural heritage in their similar architectural styles, construction methods, and decorative elements, such as spirit symbols. The practice of arranging structures to form a courtyard or farm yard is evident in the building clusters at many farmsteads.

4.2. LANDSCAPE CHARACTERISTICS

Landscape characteristics are those tangible and intangible attributes of the Port Oneida Rural Historic District and its individual farms that collectively define the historic character of Port Oneida. The analysis of these characteristics provides an understanding of the features and qualities that should be preserved or enhanced to protect the historic landscape. The analysis for Port Oneida focuses on seven landscape characteristics that include setting; land use; spatial organization and topography; circulation; buildings, structures, and small-scale features; vegetation; and views. *Farming at the Water's Edge* (McEnaney, et. al., 1995) provides a basis for this analysis.

Setting

The development of Port Oneida was directly associated with the physical qualities of its natural systems and features. Lake Michigan and the glacial landscape of moraines, bluffs and bays largely influenced its agricultural development. Hilltops were utilized for

orchards. The forested hillsides were utilized for cordwood logging and woodlots to provide a fuel source and building materials. The broad, low-lying former glacial meltwater channel in the center of Port Oneida and level areas near the shoreline were transformed into fields and pastures for crop production and grazing. The adjacency to Lake Michigan provided a significant climatic influence. The lake effect retained heat in the summer, providing a warmer climate that extended into the fall, delaying the first frost and allowing farmers to grow apples and other fruits for a few weeks past those of farmers located further inland. The European settlers relied heavily on the lake for both fishing and transportation, as had the earlier Native tribes.

Land Use

Land use practices have determined the patterns of development and landscape at Port Oneida. Settlement of the area was imprinted on the land primarily through logging and agricultural practices. The early logging cleared the area of first growth forests and opened up many fields for agriculture. Through much of the period of significance, the predominant land use in the Port Oneida area was agriculture. The land was cleared and used for the cultivation of grain crops and pastures. Following the period of significance, the reforestation that occurred is still evident in the second growth forests, and the planted conifer windbreaks and pine plantations found throughout Port Oneida. The general pattern of development has produced a series of farms and open fields linked by roads, which responds to the local topography and the shoreline of Lake Michigan. The historic character of the farms and their extant features reflect the agricultural character of Port Oneida's past. Buildings, fence lines, plantings and open fields are all evidence of agricultural land use at Port Oneida. While the use of the land changed, Port Oneida retains much of the shape and form of the land use practices that were present during the period of significance.

Today, land use has transitioned from active farming activities to the recreational and educational activities of Sleeping Bear Dunes National Lakeshore. Port Oneida also includes private youth camps and a few scattered private residences.

Spatial Organization and Topography

Port Oneida's spatial character is primarily defined by topography and vegetation, which is influenced by the imposing presence of Lake Michigan. The relationship between Port Oneida and Lake Michigan has remained largely unchanged throughout Port Oneida's history of settlement. The broad open spaces that define the central and southern portion of Port Oneida are framed by the forested moraines that rise up and surround these low-lying and gently sloping parcels of agricultural fields and pastures. Farms punctuate the broad open landscape with building clusters, conifer windbreaks (non-historic), fences, orchards and rows of sugar maple trees. The moraines that surround Port Oneida provide a physical and visual divide between Port Oneida and the modern development that is occurring in its neighboring communities.

Circulation

Port Oneida's circulation system of one and two-lane roads that connected the farmsteads and linked Port Oneida to surrounding communities has only been minimally altered

since the period of significance. The overall pattern and alignment of the roads remains much as it did in the mid-1920s, with the exception of incremental road widening and the realignment of M-22 between the Charles Olsen and Dechow farms, and around the North Unity schoolhouse site (NPS, 2004a). Traces of earlier roads, including 1800s logging roads and the original alignment of Port Oneida Road, along the western shoreline, are visible in a few locations.

Port Oneida's road system is significant in that it contrasts with the traditional Midwestern pattern of laying out roads along section lines to maximize agricultural use. This traditional pattern, however, does occur at Lawr farm, and where M-22 intersects with Port Oneida Road. The other roads primarily follow the natural topography and features, including M-22 that follows a broad glacial meltwater channel, Port Oneida Road that parallels the Lake Michigan shoreline, and secondary roads that follow the ridgelines in the forested moraines.

The character of the roads ranges from the open, broad curving alignment of M-22 that is paved with asphalt and carries higher speeds and volumes, to the narrow sand and gravel surfaced roads through second growth forests that follow curving ridgelines and steep slopes.

Buildings, Structures, and Small-Scale Features

Port Oneida is distinguished by its well-preserved community of farms and historic structures. The buildings are primarily associated with individual farmsteads and are generally arranged in a characteristic pattern (described as the building cluster) that forms an interior courtyard or farm yard. The houses, barns and outbuildings are skillfully crafted and reflect the heritage of the early settlers. They provide a visual reference in the broad open landscape and are recognizable as a cohesive grouping of farms with similar architectural styles.

In addition to the farmsteads, other structures contribute to the significance and integrity of Port Oneida including the Port Oneida schoolhouse, North Unity schoolhouse, several barns, and remnants of the Port Oneida dock.

Small-scale features are found on all of the farmsteads in Port Oneida and include fences, gates, cisterns, and other farm landscape features that contribute to the character of Port Oneida.

Vegetation

The agricultural fields and the forested moraines remain the dominant vegetative communities in Port Oneida, providing a characteristic spatial pattern of forests and open fields that contributes to Port Oneida as a cultural landscape. The fields are no longer cultivated or grazed, but are managed by the NPS to reduce encroachments. A variety of other intentional plantings also highlight the past agricultural use in Port Oneida. These include functional plantings, such as remnant orchards, sugar maple rows, pine plantations, and conifer windbreaks. Ornamental plantings occur within many of the

farmstead building clusters and are generally shrubs, such as lilacs and spiraeas that were planted to improve the aesthetics of the farm.

The open fields, now covered predominantly with smooth brome grass include land that was formerly cultivated for grain crops, including oats, rye and wheat, and for potatoes sold as a cash crop. Other fields were used as pastures for grazing cattle and sheep. Remnant orchards exist at many of the farms in Port Oneida. The original orchards were small, usually consisting of approximately 20 apple or cherry trees, and were primarily grown to provide food for the farm family, with an occasional limited surplus. This contrasted with the larger commercial enterprises that became established elsewhere in Leelanau County. Sugar maple trees were both functional and aesthetic. They were tapped by farmers for maple syrup production, and rows of sugar maple trees lined the roads, providing a distinct unifying character. The sugar maple trees remain as prominent landscape features.

Conifer windbreaks, usually spruce and pine, were planted in the 1950s, after the period of significance. The windbreaks helped to reduce soil erosion and conserve soil resources. In addition, pine plantations were planted by farmers, in select locations of Port Oneida, to reforest the landscape and prevent soil erosion caused by strong winds (McEnaney, *et. al.*, 1995).

Farmers also planted small groves of black locust trees (*Robinia pseudoacacia*), which are still evident in several locations in Port Oneida. These trees were planted for wood for fence posts or wagon tongues. The black locust trees have become invasive and are encroaching into the adjacent hardwood forest and open fields.

Views

Views and vistas to building clusters, between farms, and to Lake Michigan have changed only slightly since the period of significance. Today, there are few modern intrusions that detract from this historic scene. Changes are generally due to continued growth in the forested moraines and encroachment of woody vegetation into the open fields and pastures. The visual relationship between Lake Michigan and Port Oneida has changed slightly due to the growth of the hardwood forest and expansion of the conifer windbreaks.

4.3. ANALYSIS OF CONTRIBUTING FEATURES AND INTEGRITY

This section describes the contributing features of each farm and provides an overall assessment of the historic integrity for the four farms that are considered eligible sites for a visitor contact station (Carsten Burfiend, Charles Olsen, Dechow, and Kelderhouse). Section 2.0 provides a discussion on the alternatives and the selection process.

Historic integrity can be described as the ability of a landscape to convey the spatial organization, physical components, and historic associations that it attained during its period of significance (NPS,1989). This analysis focuses on six aspects of historic integrity including location, setting, materials, workmanship, feeling and association. The

aspect of design was not considered due to the vernacular character of the farms. Definitions of the aspects of historic integrity are shown in Table 4-1. Three primary reference documents have been used for this analysis: *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques* (NPS, 1998a); National Register Bulletin 30, *Guidelines for Evaluating and Documenting Rural Historic Landscapes* (NPS, 1989); and Director’s Order 28, *Cultural Resource Management* (NPS, 1998b). Table 4-2 provides an analysis of integrity for each of the landscapes assessed. The overall integrity of each historic landscape has been identified as high, medium or low.

Table 4-1: Aspects of Historic Integrity

Location – The place where the cultural landscape was constructed or the landscape where the historic event occurred
Setting – The physical environment of the cultural landscape
Materials – The physical elements that were combined or deposited during the particular period(s) of time and in a particular pattern or configuration to form the cultural landscape
Workmanship – The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory
Feeling – A cultural landscape’s expression of the aesthetic or historic sense of a particular period of time
Association – The direct link between the important historic event or person and a cultural landscape

Table 4-2: Analysis of Integrity

	Level of Integrity	Location	Setting	Materials	Workmanship	Feeling	Association
Burfiend	High	H	H	M	H	H	M
Olsen	Medium	H	M	M	H	M	M
Dechow	High	H	H	H	H	H	M
Kelderhouse	Medium	H	M	M	M	M	H

4.3.1. District Overview

Port Oneida is significant for its association with Northern European immigrant settlement patterns and the subsequent evolution of the area as a rural, subsistence level agricultural landscape. Port Oneida has a high degree of historic integrity. Today, Port Oneida and the cultural landscape characteristics that shaped its landscape during the period of significance are present in much the same way as they were historically. This is reflected in the extant farmsteads and building clusters, spatial patterns of fields and pastures, tree rows, vegetation, and circulation patterns that continue to convey the historic scene. A distinct cohesive grouping of farmstead buildings exists with similar architectural styles and symbols that reflect the cultural heritage of early settlers. Port Oneida has had few modern alterations, and the moraines that surround the open fields and farms continue to provide a physical and visual divide that buffers the modern development occurring in the neighboring communities.

The majority of the buildings, structures and small-scale features remain much as they did during the period of significance due to the modest lifestyle of the farmers who did not have the means to substantially modify their homes. The roads remain in their historic alignments, although some have been realigned for safety and in response to farm

improvements. Port Oneida Road was moved during the period of significance in 1923 to its current alignment. Originally located on the bluff in front of the Burfiend house, the road was moved in response to complaints from residents about beach visitors picnicking in their yard, (McEnaney, *et. al.*, 1995). Traces of the original road are visible on the west side of the Carsten Burfiend farm.

Changes to the vegetation have occurred at most of the farms and is related to: (1) natural succession of the forest areas; (2) encroachment of trees into open fields; (3) loss and deterioration of orchards, sugar maple rows and other ornamental plantings due to aging, disease and natural decay; and, (4) widespread planting of pine plantations and conifer windbreaks.

Port Oneida's integrity has been slightly impacted by the loss of original features including fences, a number of buildings and structures, and the encroachment of woody vegetation into historic fields and pastures. However, Port Oneida has retained a strong historic scene and a "sense of place" due to the existence of these landscape characteristics and the relationship of the cultural landscape to the natural systems and features of the area (McEnaney, *et. al.*, 1995).

4.3.2. Carsten Burfiend Farm

The Carsten Burfiend farm is unique among the farms managed by the NPS in the Port Oneida Rural Historic District due to its adjacency to Lake Michigan and the organization of the farmstead into two building clusters (east and west) that are bisected by Port Oneida Road. The farm has a high degree of integrity due to the extent of original structures, fields, small-scale features, circulation patterns, and relationships that remain from its period of significance.

The farmstead's characteristic white, clapboard buildings in the west building cluster - the original 1893 farm house and 1890s garage, and 1926 second house and privy - are prominent visual elements that contribute to the farm and to the broader significance of Port Oneida. The farmstead's primary original buildings are extant as are many of the original outbuildings including the foundation of the original barn in the east building cluster. The loss of this large barn, which was prominently located along Port Oneida Road and would have been a significant visual feature somewhat lessens the presence of the farm along the road.

The Carsten Burfiend farm is the only farm of the four farms under consideration for a visitor contact station in Port Oneida that has a direct physical and visual connection to Lake Michigan. The relationship between the farm and Lake Michigan has changed slightly since the period of significance, primarily due to the continued growth in the conifer and hardwood forest along the bluff. The increased density of vegetation along the shoreline bluff is beginning to obscure the visual connection. A minor intrusion into the historic scene is the modernization of a private home to the north of the farm.

Non-contributing features are minor elements and include steps down to the shore of Lake Michigan and a small grass parking lot located adjacent to the west side of Port Oneida Road. These non-contributing features do not impact the integrity of the farm.

4.3.3. Charles Olsen Farm

The Charles Olsen farm is distinguished by its characteristic buildings and vegetation, most notably its large red dairy barn, Queen Anne style bungalow, and sugar maple tree rows. While its major structures, vegetation, fields, circulation patterns and relationships remain from its period of significance, the integrity of the farm has been impacted by the loss of a number of structures and the incremental widening and repaving of M-22. The structures lost include the grandmother's house, a chicken coop and several outbuildings. The farm has a medium degree of integrity.

The building cluster retains its historic character. Surrounded by open fields and set against a forested backdrop, the house and barn, their proximity to M-22 and the sugar maple tree rows combine to provide a focal point for Port Oneida. The view of the farmhouse and barn, particularly from the south along M-22, contributes to the significance of the entire District. This distinct view also contributes to the high degree of integrity that is exhibited by the overall District.

The relationship of the Charles Olsen farm to Port Oneida and to nearby farms remains as it was during the period of significance. Views between the Charles Olsen farm and the Dechow farm provide a strong visual connection that is a contributing characteristic of Port Oneida.

4.3.4. Dechow Farm

The Dechow farm and building cluster, with its surrounding agricultural fields and a forested hillside as a backdrop, provides an important characteristic image of Port Oneida that is visually prominent along M-22 and from other areas within Port Oneida.

The Dechow farm remains much as it was during the period of significance. Its distinct and prominent setting and the extent of its extant features provides a high degree of integrity for the farm. The views towards the building cluster and pasture barn with a backdrop of open fields and forested hillsides makes the Dechow farm highly significant to the Port Oneida Rural Historic District and provides a focal point for Port Oneida. This distinct view also contributes to the high degree of integrity that is exhibited by the overall District.

The farmstead is characterized by its buildings and structures that are arranged to form a building cluster or farm yard and by its agricultural fields that include a series of prominent terraced fields. The rows and groups of sugar maple trees provide a distinct character. Other important landscape features include open fields surrounding the building complex, a remnant orchard, and a small sugar shack.

The relationship of the Dechow farm to Port Oneida and to nearby farms remains as it was during the period of significance. Views between the Dechow farm and the Charles Olsen and Kelderhouse farms provide strong visual connections. Its prominent setting in the center of Port Oneida also allows for important views from the Port Oneida cemetery, Port Oneida Road, and the Port Oneida schoolhouse.

A few recent features have been added to the building complex. The garage was added late in the period of significance, in the 1940s, but is still a contributing and compatible feature. The mown trails and parking areas are non-contributing but compatible features.

4.3.5. Kelderhouse Farm

The Kelderhouse farm is located just north of the intersection of Port Oneida Road and M-22. The Kelderhouse farm is significant for its association with Thomas Kelderhouse, who is credited with the early development of the Port Oneida community, and for its role as the center of the community. The farm is also significant for its central location and proximity to the Port Oneida schoolhouse and Port Oneida cemetery. The farm has a medium degree of integrity due to the loss of its prominent barn and several outbuildings.

The Kelderhouse farmstead retains its original feeling and is characterized by a compact building cluster that is immediately adjacent to Port Oneida Road and surrounded by open agricultural fields on two sides and a remnant orchard to the south. The house is the most prominent of the structures. One of its most characteristic features is the row of mature sugar maple trees that borders Port Oneida Road and extends for the entire length of the building cluster. The spatial organization of the farm remains much as it was during the period of significance; however, several buildings no longer exist, including the Kelderhouse barn that once anchored the northern edge of the building cluster.

The remnant orchard is one of the most intact and prominently located in Port Oneida; however, the orchard has been reduced to a few trees in a faded row pattern.

The views to and from the Kelderhouse farm have changed relatively little since the period of significance. Views to the Port Oneida schoolhouse, Port Oneida cemetery and Dechow farm are intact and important to the farm. Views into the building cluster from Port Oneida Road are framed by mature sugar maples and appear much as they would have during the period of significance.