

OLD HOMESTEAD SITE CIRCULATION STUDY

SUSSEX COUNTY, NEW JERSEY

HMR ARCHITECTS

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Study: Sussex County Old Homestead Site Circulation

Site Plan Design Improvements

Introduction

The Old Homestead Site on County Route 655 in Newton, Sussex County, has developed over many years to include the Main County Library, the County Nursing Facility, and the Old Homestead itself. A County vehicle storage and repair facility is also on-site, along with several smaller storage and accessory structures. Over time, site circulation and pavement configurations have been changed and expanded in response to a variety of concerns. Today, the resulting site configuration is disorienting to visitors with redundant drives, unclear one-way directions, and generally confusing way-finding.

This report has been prepared for the County of Sussex by HMR Architects with 50 States Engineering to review the existing conditions, identify areas of concern, and make recommendations for an overall plan to improve the site's vehicular and pedestrian circulation, while enhancing its ample visual appeal.

Existing Conditions

Site Circulation – General

- Vehicular ingress to the site from Route 655 is compromised by a series of three parallel paved drives.
- Nursing Facility is hidden behind Old Homestead, making way-finding difficult for the first-time visitor.
- Vehicular Circulation is limited by narrow bridges in two locations.
- Pedestrian circulation routes are unclear, inadequately marked and, in some cases, non-existent.
- Employees utilize "short cuts" which encourage potentially dangerous speeding behind buildings.
- Tractor-trailer trucks make deliveries to the rear of the Nursing facility, and must be able to negotiate narrow access routes.
- Impervious coverage of site is near maximum and should not be expanded.

Library

- Main public entrance is through an architecturally undistinguished side entrance, indicated only by a glass air-lock vestibule.
- Entry area does not define a clear public unloading area, and is devoid of landscaping or other amenities.
- Vehicular and pedestrian circulation is not separated entire area is paved.
- Parking behind Library is inefficiently configured, with single-loaded vehicular aisles.
- Service drive entrance to east of Library encourages vehicular "short cut" to Old Homestead and Nursing facility.
- Pedestrian route to Nursing Facility is not identified.

Nursing Facility

- Access is limited by 2 narrow bridges, which must accommodate tractor-trailer deliveries.
- Way-finding from Route 655 entrance drive is unclear.
- Visitor parking is not clearly separated from employee parking.
- Area at building entry is a large paved non-directional area. Short-term parking, long-term parking and drop-off areas are not clearly designated.
- Pedestrian circulation crosses large paved area and is not identified or separated from vehicular traffic.
- An addition to the front of the building is anticipated, potentially affecting public drop-off at front entrance.



Old Homestead

- Central building of entire site, with notable historic character.
- Entry drive currently centers on primary front façade.
- Building currently has limited use, although expanded use and occupancy is anticipated in the future.
- Building has separate loading dock at east end of building, and must accommodate tractor-trailer traffic and turning at dock area.
- Current driveway behind building (north side) has "back entrance" feeling not in character with visitor entrance to Nursing Facility.
- County is currently up-grading drive behind Old Homestead to provide improved pedestrian circulation.
- Pedestrian entrance to Old Homestead is at rear (north) of building, near Nursing Facility. This location adds pressure to parking capacities in this area.
- As the Old Homestead Building is developed, other building entrances may become active, requiring adjacent parking.

Recommendations

General

The goal of the proposed recommendations is to enhance vehicular way-finding and circulation within the site, while accommodating service circulation and maximizing appreciation of the natural beauty of the site. Accordingly, the two proposed options in this report include the recommendations discussed below. Recommendations specific to each scheme follow this section.

- Entry Boulevard: A proposed new boulevard-style entry drive from Route 655 provides a clear, single point of entry for all vehicles and serves all buildings. Additional way-finding takes place after entering the site. The boulevard is in the location of the existing main entrance, and is centered on the Old Homestead itself, the namesake of the site and architecturally most significant structure, even though it does not generate the bulk of traffic. Existing redundant entrances from Route 655 should be eliminated, although an emergency vehicle entrance should be retained at the east end of the site.
- <u>Library Entrance</u>: A new circular drive pattern is proposed in front of the West Entrance of the library. This drive provides double-loaded parking near the library entrance, and also provides convenient right-side curb drop-off/pickup for vans or buses. Exterior design proposals for rehabilitation of the Library Building have identified enhancement of this entrance as a significant design component of proposed Library Renovations. A redesigned West Entrance will be clearly visible from the new site entry location on Route 655, and will provide a clear way-finding signal for library visitors. The existing service entrance drive at the eastern edge of the site should be closed to normal vehicular traffic, and reserved for emergency vehicle access only. This will eliminate the existing "short cut" route
- <u>Library Parking:</u> In addition to redesigned parking at the west entrance of the library, parking behind the library should be reconfigured. Provision of double-loaded aisles to replace existing single-loaded aisles greatly increases the efficiency of this parking area, increasing capacity from 87 existing spaces to a 130 proposed spaces, while reducing the amount of pavement.
- <u>Nursing Facility Access:</u> At the end of the new entry boulevard, and directly in front of the Old Homestead, the boulevard will end in either a T or a circle intersection. Signage at this intersection will direct visitors to the Nursing Facility, which is not visible from the drive. Signage will also identify directions for all other destinations within the site.

- <u>Driveway behind Old Homestead:</u> The existing narrow, steep drive behind the Old Homestead is not conducive for entry circulation to the Nursing facility, a function which it now serves. Entry circulation to the Nursing home should pass to the west (left) of the Old Homestead, avoiding the drive behind the Old Homestead. Use of this drive should be limited to employee and use and, possibly, as the exit route from the Nursing Facility.
- Nursing Facility Main Entrance: This entrance should provide convenient short-term parking, as well as convenient pickup and drop-off, for cars, vans or buses. A proposed building expansion at the front of the building limits specific site recommendations at this time until those plans are developed. However, the area of paving should be reduced, and parking and drop-off areas should be redesigned. Recommendations for redesign at this area include accommodation of tractor-trailer access to the rear of the Nursing Facility.
- Overflow Parking: The Nursing Facility occasionally hosts events that draw a
 significant number of visitors. An overflow parking area for 28 vehicles is
 indicated to the southwest of the Nursing Facility, near the barn/service
 complex. Pedestrian access to the Nursing Home from this location
 necessitates crossing an open grate bridge. However, since a change to oneway traffic is proposed, a sheet surface treatment can be considered for the
 west edge of the bridge deck.
- <u>Pedestrian Access:</u> A network of pedestrian access routes is proposed throughout the entire site. In particular, a pedestrian connection between the Nursing Facility and the Library will replace a route which currently crosses several drives and parking areas. The proposals indicate crossings at safe, marked intersections, avoiding main traffic routes as much as possible.

Scheme A

Proposed Scheme "A" addresses all of the general items noted above, with the following specific features:

• <u>Nursing Facility Access:</u> From a T intersection at the end of the Entry Boulevard, a one-way system of vehicular drives passes to the west (left) of the Old Homestead Building to the Nursing Facility Entrance. Both narrow bridges are proposed as one-way, eliminating the potentially dangerous existing two-way condition. A revised Entry area in front of the Nursing facility will provide improved orientation in this area. The proposed vehicular exit is via the drive at the rear of the Old Homestead, which is also modified to permit only one-way traffic.

<u>Library Entrance</u>: A "short-cut" entrance is indicated from the Entry Boulevard to the base of the Library Entry area. This provides a more direct access to the Library without "driving past" the visible building entrance. The "short-cut" is far enough away from Route 655 to allow for slowing and turning without upsetting following vehicles. Also, the "short-cut" is one-way, for entrance only, and all vehicular exit from the library would be via the main transverse drive near the Old Homestead.

Scheme B

Proposed Scheme "B" also addresses general items noted above, with the following difference from Scheme "A:

• <u>Nursing Facility Access:</u> A Vehicular Circle intersection at the end of the Entry Boulevard would direct traffic to the Nursing Facility entrance via a new onway drive between the Old Homestead and the existing pumphouse. A second circle in front of the Nursing facility would redirect vehicles to the building entrance, visitor or employee parking, service drop-off, or the exit. Existing bridges would be re-utilized as part of a one-way exit route, returning to the entry circle. Employees could exit behind the Old Homestead from designated parking in that area.

Summary

The attached drawings illustrate the recommendations proposed herein, allowing comparison with the existing condition, which is also illustrated.

In each case, it is notable that significant improvements to vehicular and pedestrian circulation can be realized through relatively minor changes in existing pavement configuration, accompanied by directional and signage changes. These changes can provide vastly improved site circulation and orientation, as well as safer conditions at Route 655, and increased total parking capacity, all without increasing the impervious coverage area of the site.

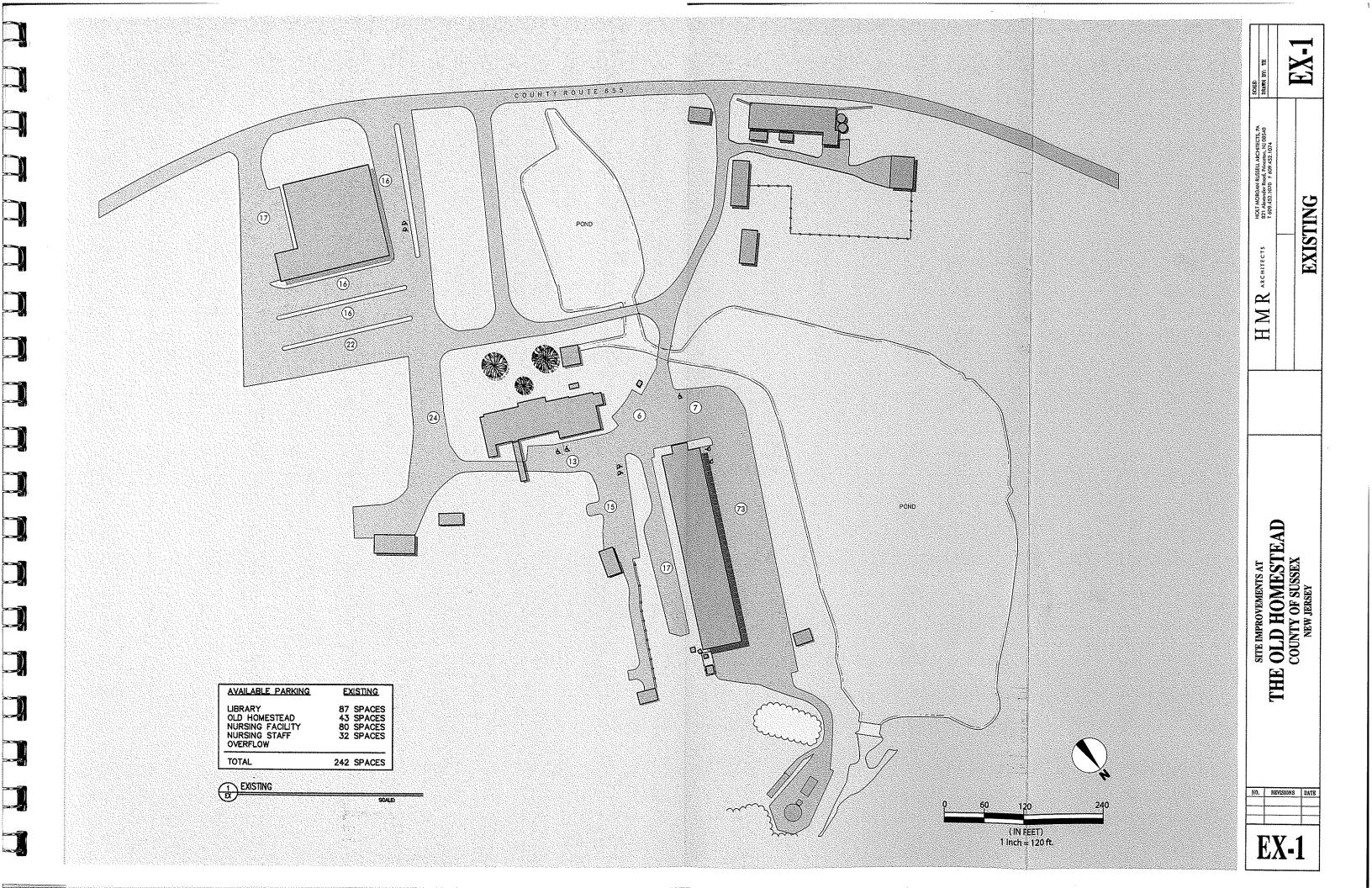
Note that the work proposed in this report is limited in scope, and focuses on vehicular and pedestrian site circulation. Other site plan issues such as landscaping, water management or site maintenance are not specifically addressed, and may warrant further development.

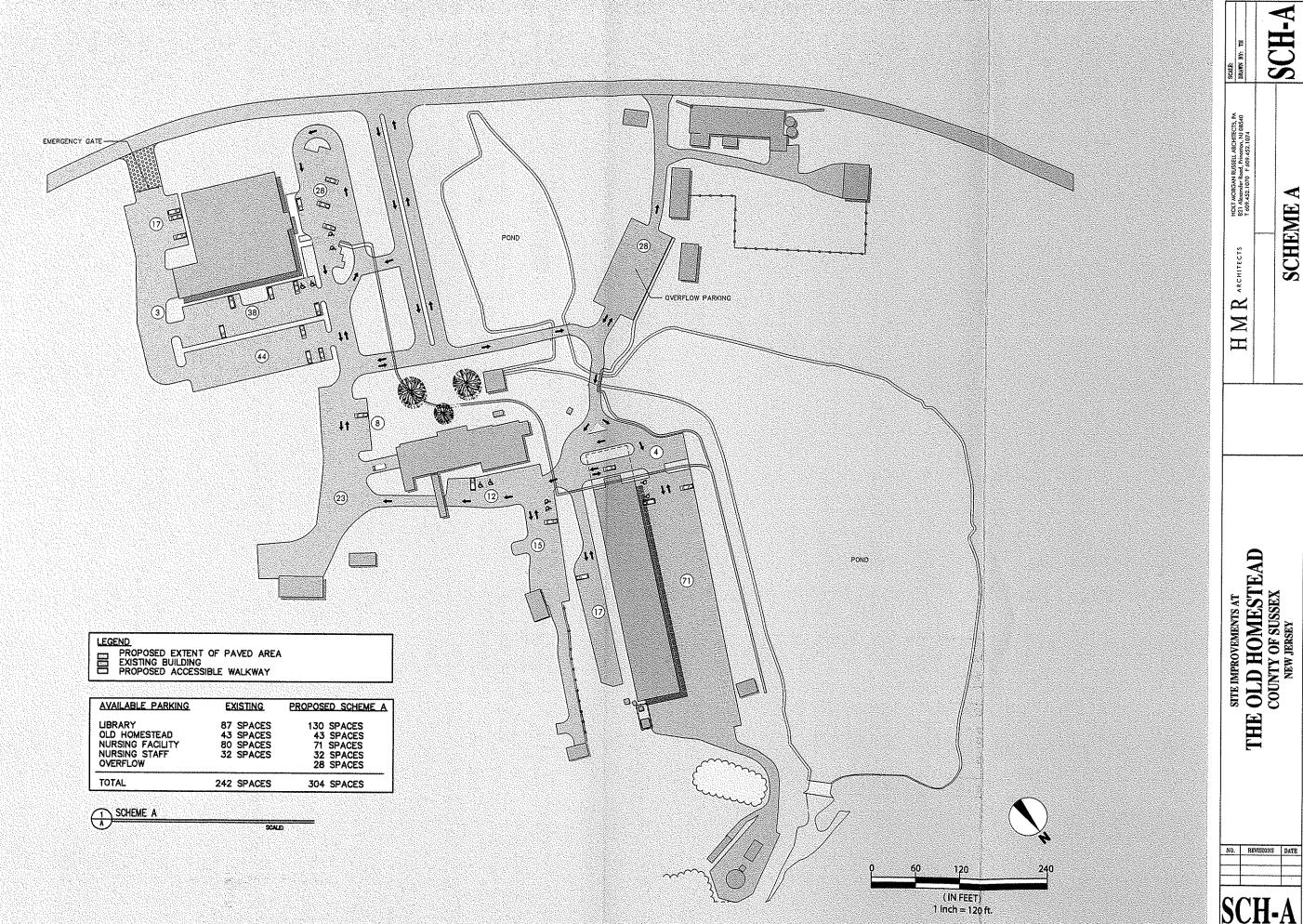
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Tabulations

DΛ	DKI	NG	CD/	MES

PARKING SPACES		described to the second se	w
	Existing	Scheme A	Scheme B
Library	87	130	130
Old Homestead	43	43	46
Nursing Facility	80	71	78
Nursing Staff	32	32	32
Overflow	0		28
TOTAL:	242	304	314
IMPERVIOUS COVERAG	E		
	Existing	Scheme A	Scheme B
Area of Impervious Coverage in Sq. Ft.	191,441 sf	187,666 sf	191,106 sf





SCHEME

