

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

**ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600**

UMI[®]

NOTE TO USERS

This reproduction is the best copy available.

UMI

**THIS AIN'T NO TWO-ROOM SCHOOLHOUSE:
EXAMINING A NOVA SCOTIA VILLAGE THROUGH THE DESIGN OF A
COMMUNITY SCHOOL**

by
Monique D. MacEwan

**Submitted in partial fulfillment of the requirements
for the degree of Master of Architecture (First Professional)**

at
**Dalhousie University
Halifax, Nova Scotia**

April 2003

© Copyright by Monique D. MacEwan, 2003



**National Library
of Canada**

**Acquisitions and
Bibliographic Services**

**385 Wellington Street
Ottawa ON K1A 0N4
Canada**

**Bibliothèque nationale
du Canada**

**Acquisitions et
services bibliographiques**

**385, rue Wellington
Ottawa ON K1A 0N4
Canada**

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-77512-7

Canada

Dedication

to my Mother, my first friend and eternal role model

to my Nieces and Nephew, the future custodians of our unique and beautiful little Village

to my Truest-and-Dearest, whose unfaltering support and encouragement is always remembered and forever appreciated

Contents

Abstract	vi
Acknowledgements	vii
Introduction	1
Impetus- A School In Need; A School Is Needed	3
Thesis Question	8
Regionalism: Studying <i>Place</i> In Architecture	9
Defining by Example: Thoughtful Architecture	11
Seabird Island School	
Agassiz, British Columbia	11
Strawberry Vale Elementary School	
Victoria, British Columbia	12
Agora, University of Northern British Columbia	
Prince George, British Columbia	13
The Atlantic Center For The Arts	
New Smyrna Beach, Florida	14
Site	15
The Village: Edging the Sea and the Trees	15
Life as a Village	17
Shoreham Township (1764)	18
The Village of Chester (1864)	20
The Village of Chester (1964)	22
The Village of Chester (2003)	24
Topography of the Village	28
The Site: At The Crossroads	30
As-Built: Analyzing The Existing	31
The Existing: Analysis	35
The Village as Placemaking Tool	44
The Village as a Study Tool	46
Location 1 - The Crossroads	47
Location 2 - The Recreation Park	51
Location 3 - The Parade Square	57
Location 4 - Tavern Corner	61
Design Strategy	66
The School	66
Shared	66
The Community	66
Programming the New Building	67
Composition of the New School	71
Design Conclusions	73
References	74
Books and Articles	74
Buildings and Projects	76

Abstract

This thesis focuses on the role architecture plays in defining and facilitating the use of public institutions. Specifically, this issue is addressed through the investigation of the Community School as an iconic representation of its host community, one of contextual uniqueness.

The relationship between community and school is often deeply rooted in societal and cultural values, characterized by geographic and social definitions of - and distinctions between - *place*. This amalgamation between *community* and *school* is examined at the scale of the rural Maritime village, a scale of intimate familiarity.

Through an analysis of site, cultural history and the built environment it is possible to create an architecture that responds to our understanding of - and desire for - meaningful gathering, learning, social exchange and active participation.

The site for this investigation is the seaside village of Chester, in Mahone Bay, on Nova Scotia's South Shore, in Canada. This thesis investigates the geographic and social development of the area, analyses the site's existing school (c.1963) and tenders a design exploration for a contextually appropriate new Community Middle School.

Acknowledgements

Many thanks to J. Grant Wanzel for your insightful observations, instructive criticism, thought-provoking discussions, wisdom, guidance and endless pep-talks during these past eleven terms.

Thank you to Steve Mannell for your clarity of insight, unbiased observation, and ceaseless interest in a place I had only begun to know. Your guidance and instruction has enabled a multi-faceted understanding of the place I call Home.

For your friendship, spirit and support, both in the studio and out, thank you to Jennet Bowdridge, Cory Dobbin, and Tina Smith.

For your daily crits, infectious work ethic, and unending humour, a special thank you to my desk-mate and friend, Paul Wu.

Introduction

The social and cultural heart of many coastal Nova Scotia villages revolves around the local public schools, as this is traditionally the place of far more than merely formal scholastic education. Historically, this is a location for community politics, church meetings, social gatherings and neighbourly festivals.

The school, through its architecture and activities, can be viewed as a micro-community in and of itself, scaling and translating the programmatic elements, hierarchical structure, organization and composition comprising the larger community to the relative scales of the classroom, the grade level, the classmate-classmate relationship, and the student-teacher partnership.

This thesis examines this issue through a design exploration of a Community Middle School for the seaside village of Chester, nestled at the head of Mahone Bay, on Nova Scotia's South Shore. The site is that of the original Chester Municipal Junior/Senior High School, located at a topographic gateway to the village, overlooking the Atlantic Ocean while edging the forest to the north. This thesis assumes the replacement of the existing 1963 structure. This structure, though built to serve as a junior/senior high school, currently functions as the Chester Area Middle

School, having adopted this title in 1994 with the building of a new municipal high school on a site located 10 km from the village.

Paramount to this study is the formal expansion of the program of the standard rural Nova Scotia school design to include and give precedence to contemporary social and recreational activities, activities so often omitted from the generalized modern programming of schools. This is not a critique specific to 1960's school design, but rather a point of departure and reference from which to begin this architectural analysis and design exploration.

This thesis examines and inventories the local history, culture, site and existing built forms and then explores an architectural response that is specific to the local understanding of *place*.

Impetus - A School In Need; A School Is Needed

In Nova Scotia, as in rural geographies worldwide, the relationships between communities and their local schools is as unique and dynamic as the place itself. The spirit of the community is often felt most deeply within, and displayed most visibly on, the walls of the public community school. Traditional use of the local school extends far beyond that of formal education; it often is the veritable *community centre*.

Unfortunately, these historic communities are witnessing the displacement of much of their population from rural areas to larger regional centres in recent decades. This population shift, combined with the continuing degradation of operating budgets and declining government interest in the role of the public school, traditionally continues to threaten the existence of healthy communities. This has affected the elemental requirements and distribution factors of the architecture of public institutions, not only in Nova Scotia, but across Canada. Concentrated populations are demanding more and larger facilities in densely populated centres, while rural, less densely populated communities are subjected to the closing and combining of schools - often between communities located many kilometres apart - due to low enrolment. This

trend has facilitated both the physical and social collapse of these invaluable *community houses*, with compounding negative effects resonating throughout the communities' social and economic infrastructure of these communities.

In the village of Chester, a small seaside community on Nova Scotia's South Shore, the resultant cultural shift in the community during recent years is due to the combination of two primary factors. The consistent population growth of the Municipality of The District of Chester, in conjunction with the strategy introduced by the Nova Scotia Board of Education to relocate the new municipal high school to a remote site, profoundly altering the established relationship between the public and school communities.

Following the construction of Chester Municipal High School in 1963 - the municipality's first school to separate the junior/senior high school students from the primary school students - the growth of the year-round village and municipal resident population quickly outpaced the functioning capacity of the school.

After numerous years of waiting for the overpopulation to be relieved from the Chester Municipal High School, Forest Heights Community School was completed in 1994. Built on a rural site northwest of both nearby Chester Basin (a satellite community west of the village of Chester) and Highway 103, the building was

designed to accommodate the entirety of the district's Grade 10-12 student population. In relieving the immediate population burden on the existing junior/senior high school, the physical location of the school created alternate problems.

The Nova Scotia Board of Education's intention was to both reduce the land purchase price and geographically centralize the new high school within the municipal boundaries, however the choice to site the new high school on a remote property has necessitated the bus and auto transportation of all students, staff and public users of the school. Those Chester high students who previously walked to the village school now require bus transportation, along with everyone else. This high school siting strategy has created a difficult, if not debilitating, relationship between the school and its users that would not exist using a site nearer Chester.

During the eight years since the construction of Forest Heights Community School, the administration and support system of the remnant middle school has deteriorated, as much of the South Shore Regional School Board's financial and administrative obligations have been shifted to the running of the new municipal high school.

The previous incarnation of the Chester Area Middle School, as the Chester Municipal (junior/senior) High School, had already seen its physical and financial resources stretched beyond

reasonable standards. The introduction of a second school did reduce the immediate usage requirements on the building. However, many of its most valuable assets (teachers, administrators and extracurricular activities) were moved to the new high school.

During the years when the village school was filled far beyond capacity, its degraded physical condition appeared to be relatively less critical than the overcrowding. Exemplifying the building's age and *sick* status was a period during the early 1980's when it was closed for a number of weeks while asbestos was removed from the ceilings of the gymnasium wing.

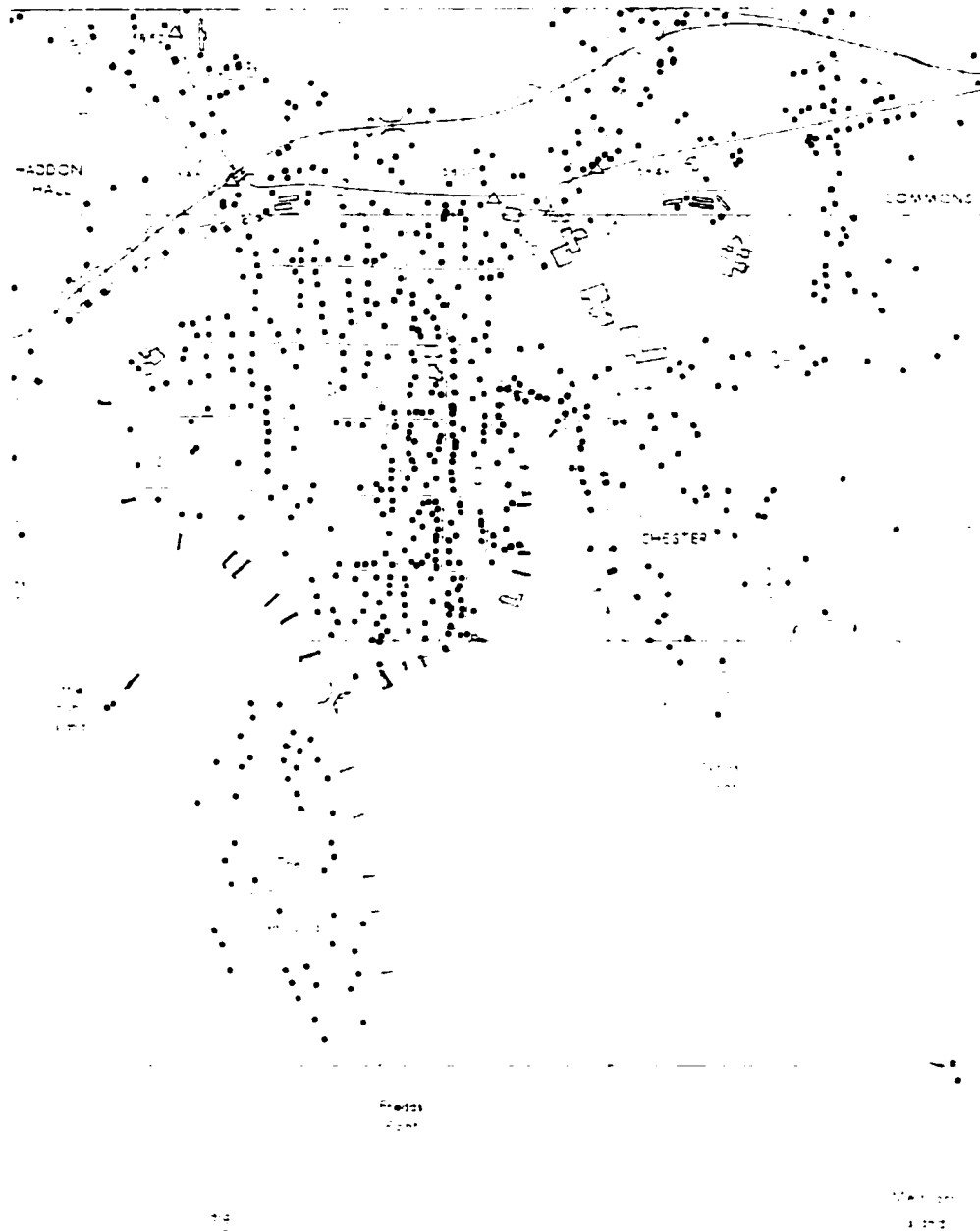
The departure of key teachers, mentors, resource workers, and community activities, combined with the unhealthy and depreciated physical state of the school, has resulted in a downgraded physical and social status of the school within the village community. Having been assigned a position on the provincial Board of Education's School Replacement List for more than a decade, the Chester Area Middle School was recently removed from that list, being cited as a safe and functioning public institution. This decision has been made in spite of the fact that no significant repairs or upgrades have been made to the building.

It is at this critical point that the desire to reinstate the icon of the Community School as a *community centre* is born.

Thesis Question

Understanding *place* as an essential foundation of design, how can the architecture of a place for public learning respond to, and facilitate, a desire for meaningful gathering, learning, exchange and community participation?

Regionalism: Studying *Place* in Architecture



Map of Chester and area
from Nova Scotia
Department of Housing and
Municipal Affairs Land
Information Services,
map 10 44 5000 64 200,
(2001).

Geography, history and contemporary culture are all used to define regions worldwide. It is how we come to know *of* or *about* a place. It is the unique character of a society or location that aids the memory in distinguishing between the *there* and *them* and the *here* and *we*.

Distinctions are naturally made to separate and give autonomy to all communities, whether continental, national, or local. This contemporary expanse of individuality affords an opportunity to explore the correlation between regional culture and architecture.

The following four examples of architecture embody the regional characteristics of site and material sought for this thesis project through their conscientious study of site, material and tectonics. These precedents have been studied as successful responses to the distinct character and ambiance of their site and their aesthetics of cultural expressionism.

All four examples are educational institutions, three of which are located on the west coast of Canada, where the natural beauty and rugged nature of the land is pervasive and expansive. Culturally diverse, the clients and user groups of these buildings necessitated a deep understanding of their ancestral history and current customs and aspirations.

The fourth architectural precedent, located on the Atlantic coast of Florida, is an example of far more than site specificity. Its formal and material arrangements display a thoughtful awareness of its uses and ambitions as a catalyst for its artistic client community.

Defining by Example: Thoughtful Architecture

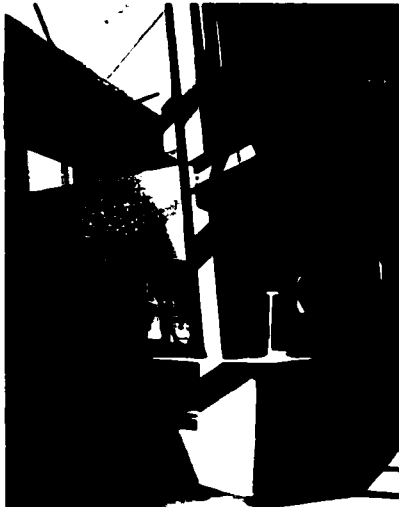
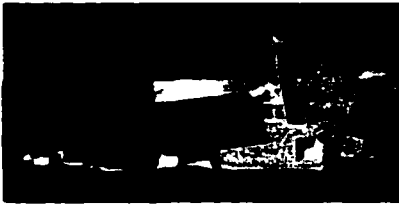
**Seabird Island School
Agassiz, British Columbia
Patkau Architects
1988**



All images from
Brian Carter, ed.,
*Patkau Architects:
Selected Projects,
1983-1993* (1994).

The driving force behind this unpretentious yet elegant design is the belief held by the Seabird Island Band "that the first purpose of their educational program is to promote and enhance the culture, language and way of life of the Salish people of the Pacific Northwest" (Carter, 59). Designed to strengthen and further define the community's public square, the school's placement, orientation, and formal order equally reflect the desire to relate to the surrounding natural environment. The spirit of the mountains beyond, the nearby lake and the abundance of animals so respected by the community can all be perceived in the design of the building.

**Strawberry Vale Elementary School
Victoria, British Columbia
Patkau Architects
1996**



**All photos by
James Dow from
Christopher Macdonald,
"Eloquent Resistance,"
Canadian Architect, Vol.
42, No.5 (May 1997).**

A distinct regard for the topography and constrained layout of this site is evident in the organization and orientation of this building. While "the central common area serves as an explicit focus organizing the program and site" (Macdonald, 20), the meandering circulation spine follows the natural contours of the site, connecting the pods of park-facing classrooms with the library, gym and public areas on the north side of the plan. Here, programme and site culminate in what Christopher Macdonald refers to as both "a remarkable sense of social potency" and "the ability to sustain a fluid overlay of spatial structures in such confined dimensions with such intensity" (ibid.).

**Agora, University of Northern British Columbia
 Prince George, British Columbia
 Hotson Bakker Architects
 with Stuart C. Ross Architect
 and Cornerstone Architects
 1994**



**Top photo by Rob
 Melnychuk and bottom
 photo by Bob Clarke
 from Bronwyn Ledger,
 "Agora of the North,"
Canadian Architect, Vol.
 42, No. 5 (May 1997).**

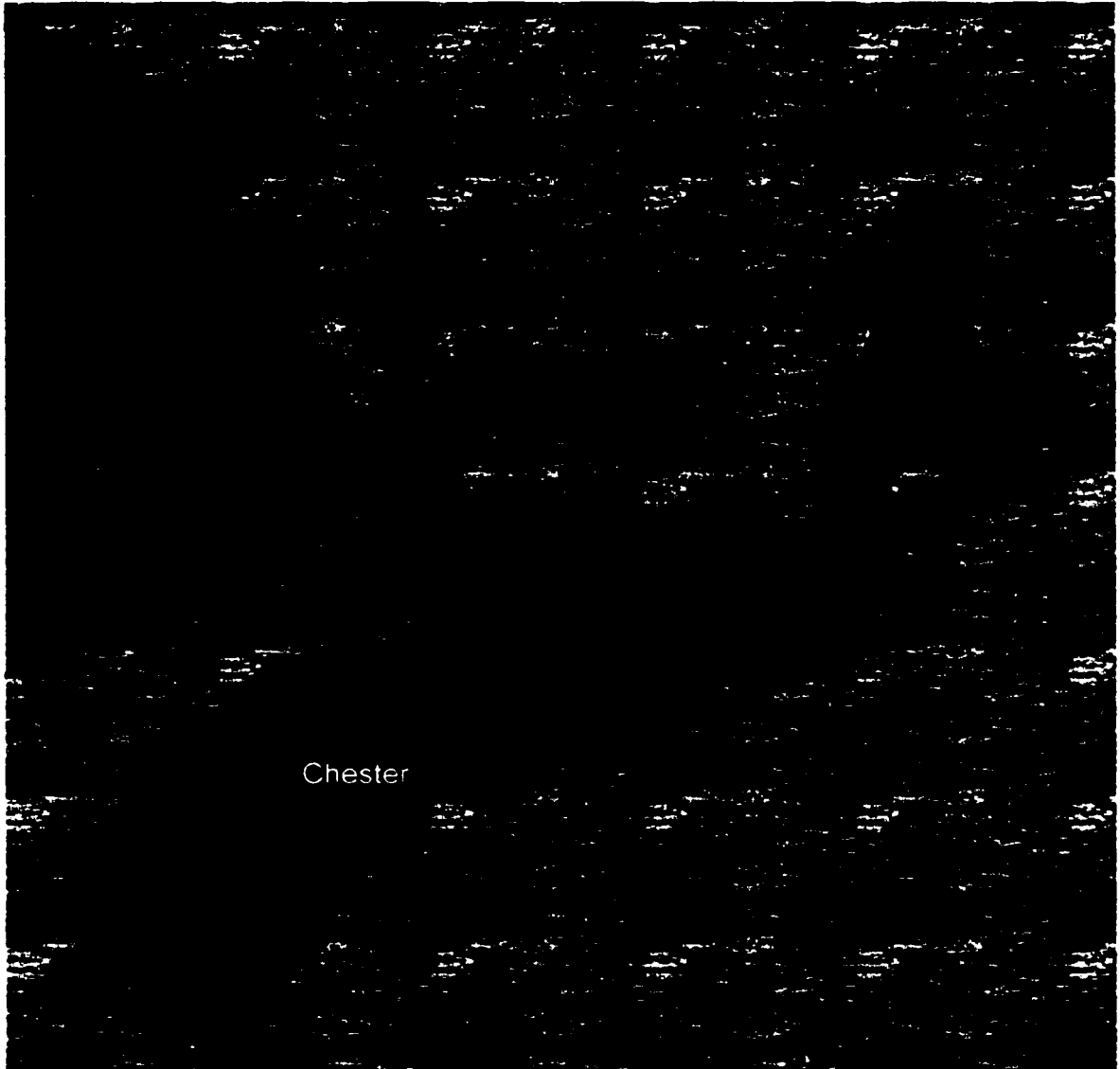
Functionally conceived as simply an interior circulation route to connect a series of buildings on this new northern British Columbia university campus, The Agora unquestionably surpasses its precursors of the 1960's both programmatically and aesthetically. The designers of this *corridor* conceived the "Agora student centre to be both a social incubator and the physical glue that holds the new campus together" (Ledger, 24). Providing dual academic and social services to the campus population, the architecture responds to the rugged exterior environment by providing a sun-lit, active collage of spaces, both intimate and spacious.



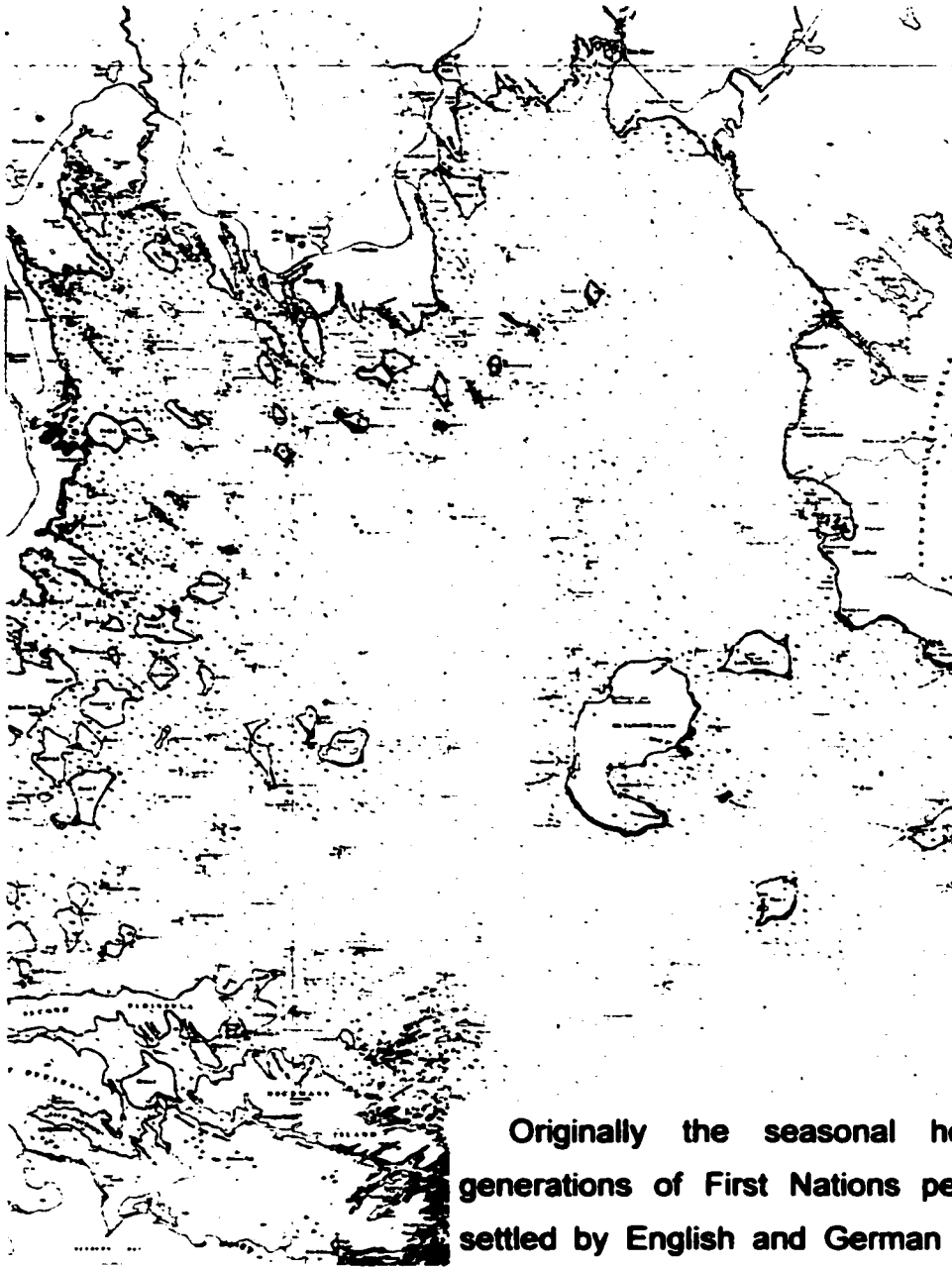
Images from Karen Stein, "Project Diary: The story of two thirtysomething architects and their ideal commission, the Atlantic Center For The Arts, in an unlikely setting, the Florida 'jungle'," *Architectural Record*, Vol. 185, No. 6 (June 1997).

**The Atlantic Center For The Arts
New Smyrna Beach, Florida
Thompson + Rose Architects
1997**

This project epitomizes contextual regard for both site and programme. Expanding an existing centre to include new artist-in-residence studios and a library, the scheme preserves "the site's low scale, jungle-like thicket of palmetto shrubs and twisted scrub-oak by proposing individual pavilions for each creative discipline" (Stein, 100). Connected on the rugged 67-acre parcel of land by a series of raised wooden boardwalks and deeply-overhanging trellises, the individual buildings become emblematic of the disciplines contained within. Splayed walls, wood louvers, overhanging rooflines and subtle nuances of design are employed to characterize the activity taking place within each pavilion.

Site**The Village: Edging the Sea and the Trees**

The site is positioned at a unique vantage point overlooking the waters of Mahone Bay, on Nova Scotia's South Shore. Having a direct view south and east, looking out over many of the 365 islands that dot the bay, the village was established on a peninsular drumlin of land sheltered by nearby islands and protective arms of land.



Map (#4381) of Mahone Bay from Canadian Hydrographic Service (1996).

Originally the seasonal home of many generations of First Nations people, and later settled by English and German immigrants, the village was officially settled in 1759 by a group of settlers arriving from New England. Shoreham, as it was originally known, was a grant of some 100,000 acres on and around the existing village, reaching far into the heavily wooded lands from the sea. The grid of streets mapped upon the drumlin hill in 1759 remains today, unchanged.

Life as a Village

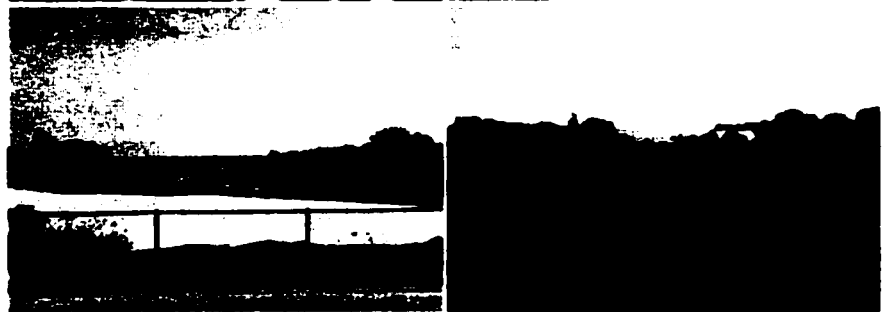
The front harbour



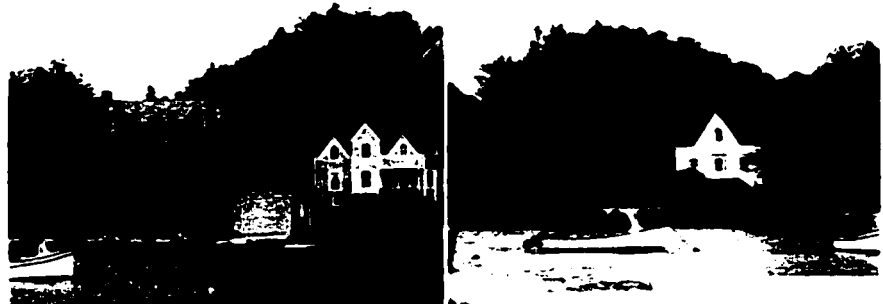
**Views to
the existing school**



**Views from
the existing school**



**Front harbour
boats and homes**



**View to
Nauss Point and
Meisner's Island**

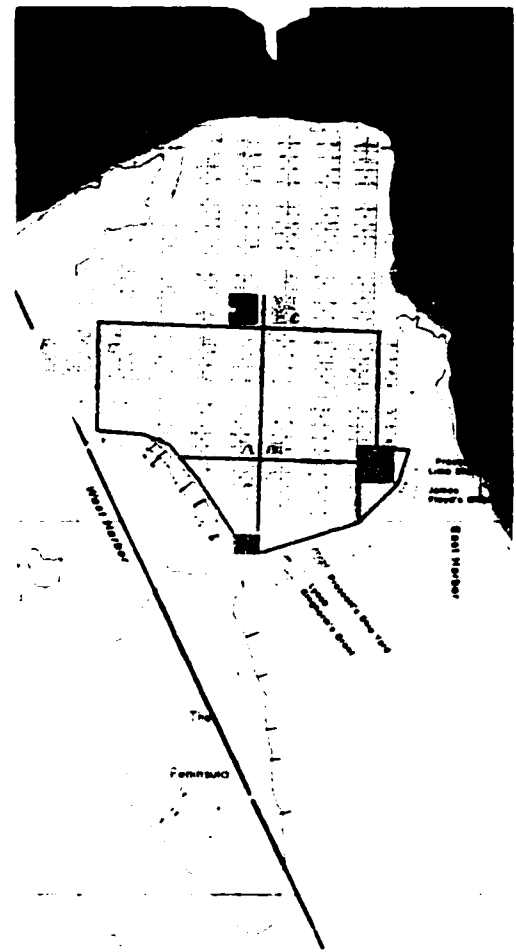
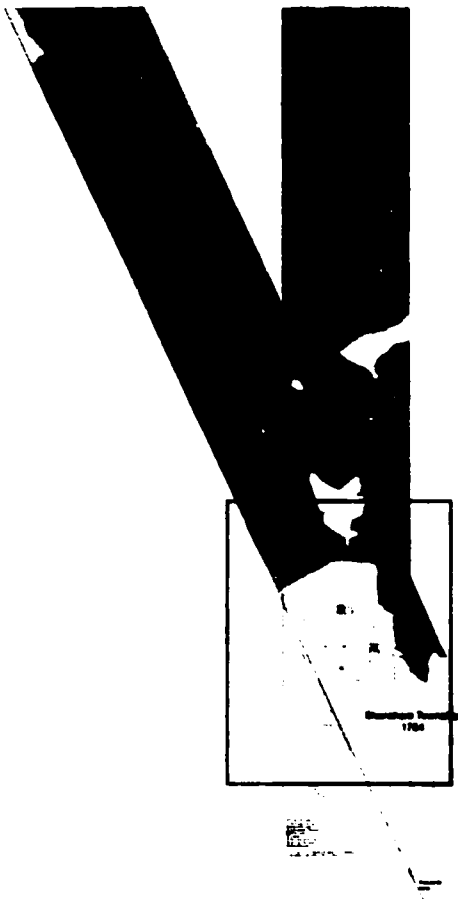


**Shoreham Township
(1764)**

The x-shaped map on the following page depicts Chester and its surrounding land and water areas, c. 1764. An inset of the original village street grid is shown to its right, highlighting in various colours the village's original public buildings.

This x-shaped map is the first of four created to study the physical morphology of the village and its relationship to the surrounding woodlands and seascape. The series of maps illustrates the village geography at incremental periods of 1764, 1864, 1964 and 2003.

The original form of the village, as a simple grid of seven east-west streets intersecting eight north-south streets, laid over an elongated drumlin of land, is clearly visible in both images.



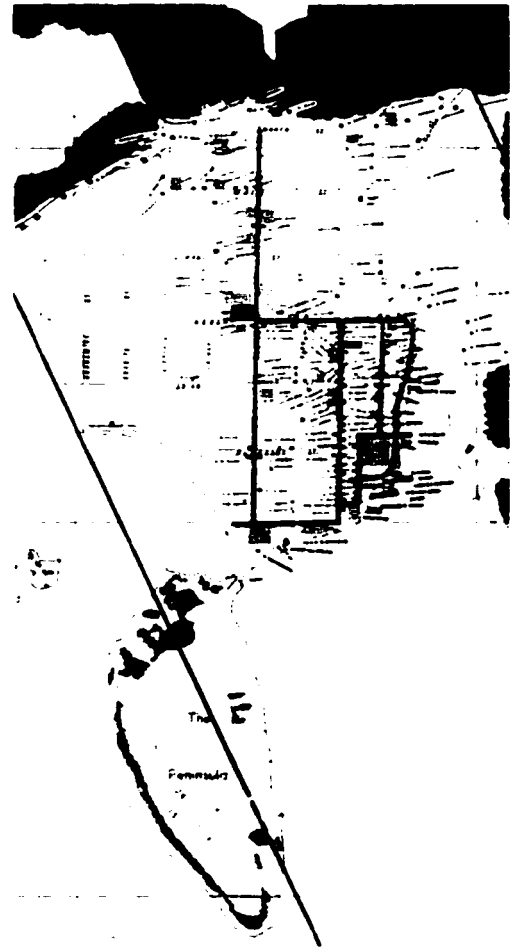
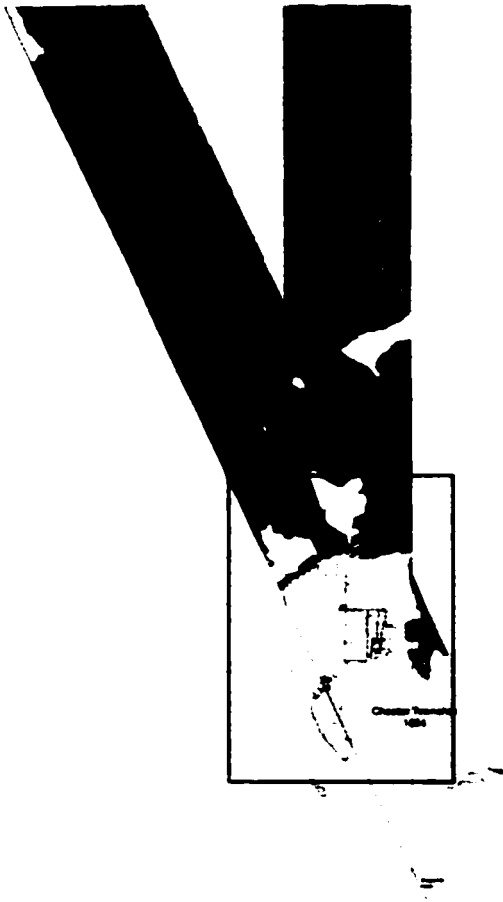
Inset above showing village street grid laid by Captain John Prescott in 1764, and important community buildings. Certain streets highlighted to show connection between public buildings and elements. Image at left showing relationship between the village, bay, islands and forest.

Image created using maps 1044500064200, 1044550064200, 1044450064200, 1044450064100, and 1044400064100 from the Nova Scotia Department of Housing and Municipal Affairs Land Information Services.

The Village of Chester (1864)

The x-shaped map on the following page depicts Chester and its surrounding land and water areas, c. 1864. An inset of the village, recording its growth beyond the original street system, is shown to its right, highlighting in various colours the public buildings of the village at that time. The most commercially active streets of the time are highlighted in dark brown, signifying the development of a "downtown core" within the rigid structure of the street grid.

The original form of the village, as a simple grid of seven east-west streets intersecting eight north-south streets, has expanded to encompass homesteads on surrounding treed lands and cleared fields, as well as waterfront warehouses, commercial buildings and homes. These additions to the village construct are formally more passive and unstructured, following the topography of the land and the function of each building.



Inset above showing village street grid, important community buildings, and commercial traffic paths. Note the expansion of the village into surrounding land. Image at left showing relationship between the village, bay, islands and the dense forest leading to the town of Windsor to the north.

Image created using maps 1044500064200, 1044550064200, 1044450064200, 1044450064100, and 1044400064100 from the Nova Scotia Department of Housing and Municipal Affairs Land Information Services.



The Village of Chester (1964)

The x-shaped map on the following page depicts Chester and its surrounding land and water areas, c. 1964. An inset of the village, recording its growth beyond the original street system through the Victorian era and into the twentieth century, is shown to its right, highlighting in various colours the public buildings of the village at that time. The most commercially active streets of the 1960's are highlighted, signifying the intensification of the "downtown core" near the front harbour.

The organisational form of the original village street grid remains unchanged, though expansion into the surrounding area is clearly visible. Industrial, commercial, and residential buildings are being erected in and around the intensified village core.



Inset above showing village street grid, important community buildings, and commercial traffic paths. Note the expansion of the village into surrounding land. Image at left showing the intensifying relationship between the village, Mahone Bay, islands, the newly-built Highway 103, and forest

Image created using maps 1044500064200, 1044550064200, 1044450064200, 1044450064100, 1044400064100 and aerial photos from the Nova Scotia Department of Housing and Municipal Affairs Land Information Services.



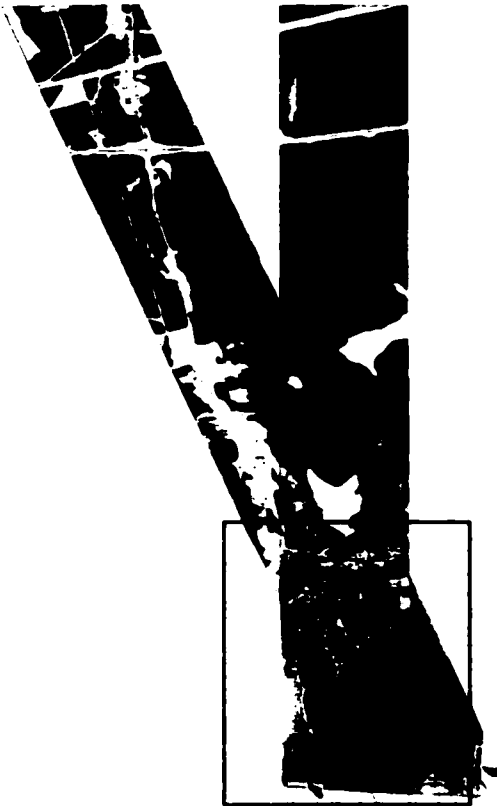
Map



The Village of Chester (2003)

The x-shaped map on the following page depicts the current geography of Chester and its surrounding land and water areas. An inset of the village, recording its development and growth from the original site laid by Captain Prescott into the modern multi-faceted village it has become, is shown to its right. Highlighting of public and commercially important buildings are denoted by shaded blocks. The busiest automotive streets of the village are highlighted, reiterating the intensity of the “downtown core” near the front harbour.

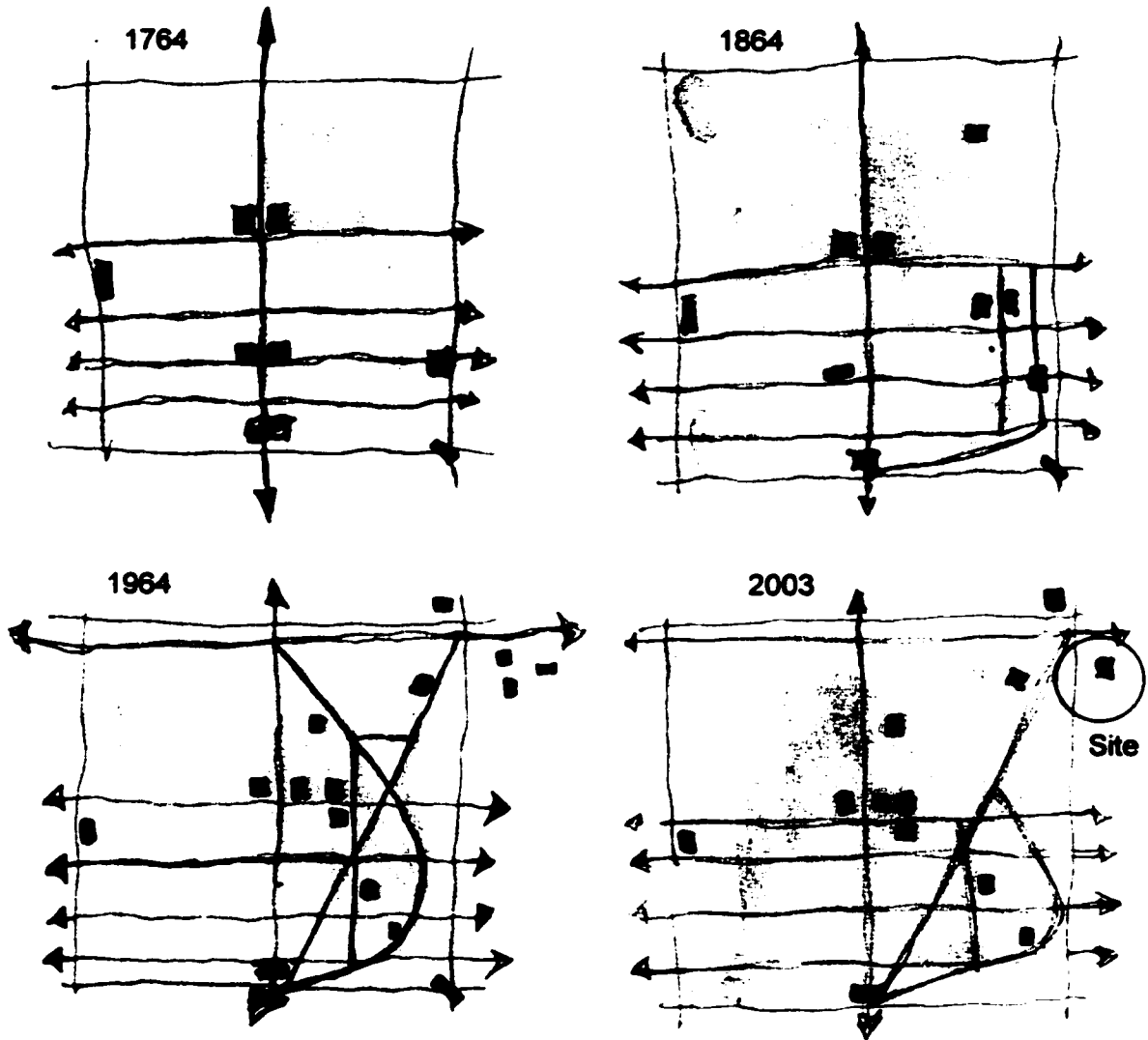
An intensity of modern building and re-building is clearly depicted in the density of the original street blocks, as well as the newly-expanded suburban areas to the east, north and west of the village peninsula.



Inset above showing village street grid, current expansion of the built community, public and commercial buildings, and major traffic corridors. Note the expansion of the village into surrounding land. Image at left depicts the relationship between the village, Mahone Bay, islands, highways, and woodlands to the north.

Image created using maps 1044500064200, 1044550064200, 1044450064200, 1044450064100, 1044400064100 and aerial photos from the Nova Scotia Department of Housing and Municipal Affairs Land Information Services.



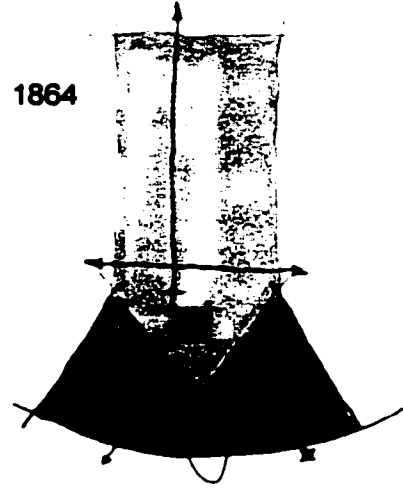


Village Development

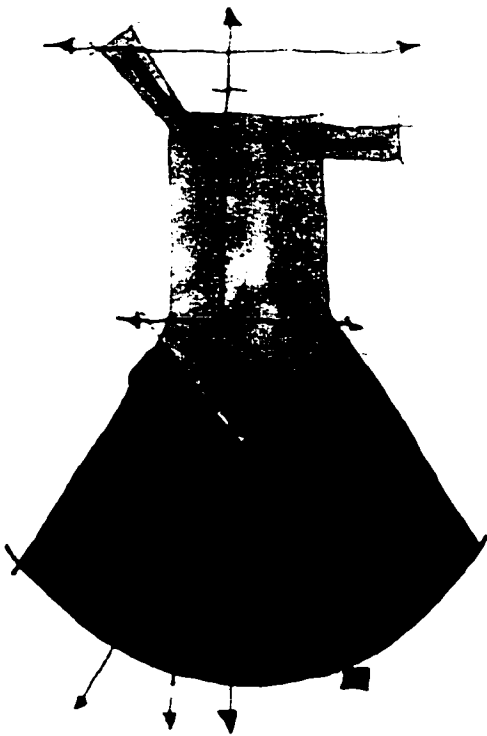
1764



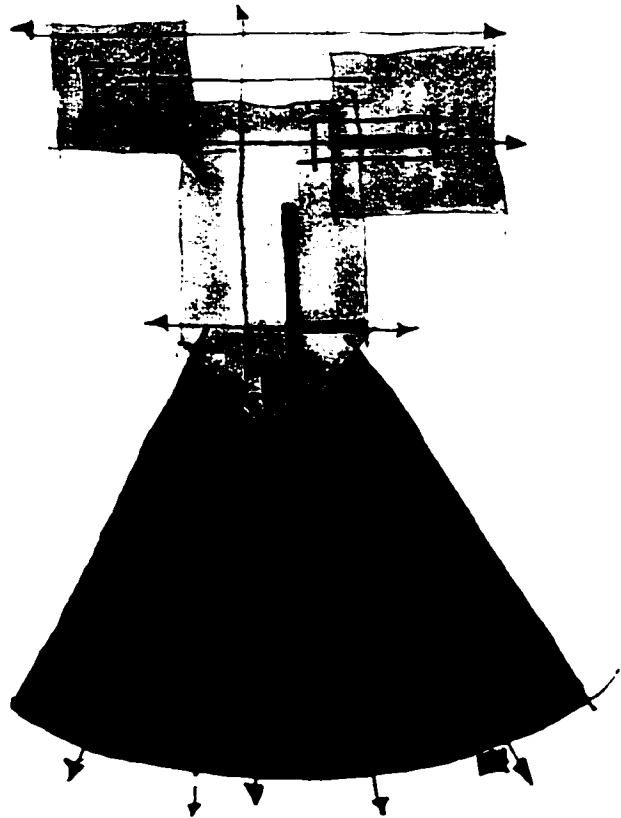
1864



1964

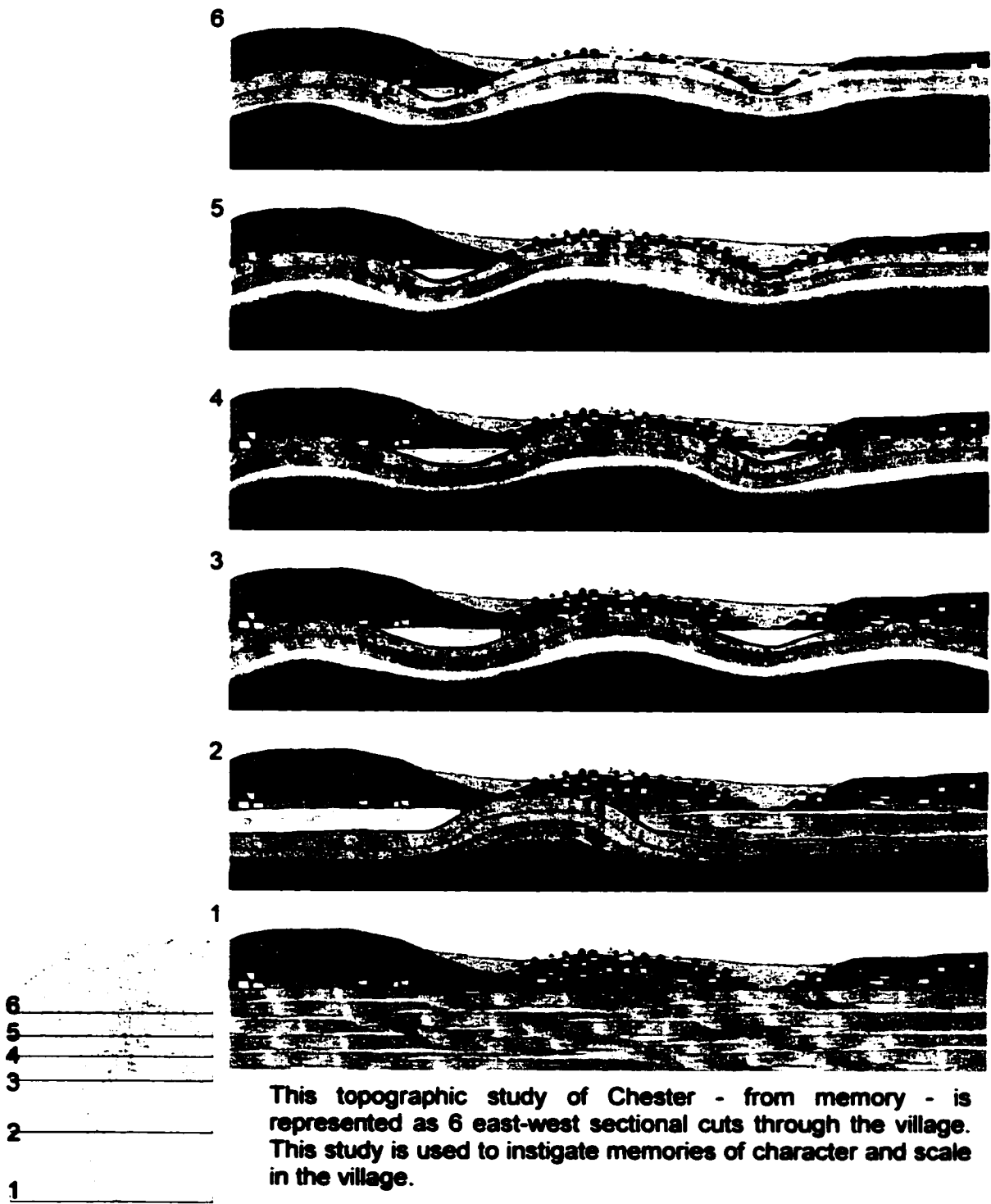


2003



Municipal Development

Topography of the Village



This topographic study of Chester - from memory - is represented as 6 east-west sectional cuts through the village. This study is used to instigate memories of character and scale in the village.



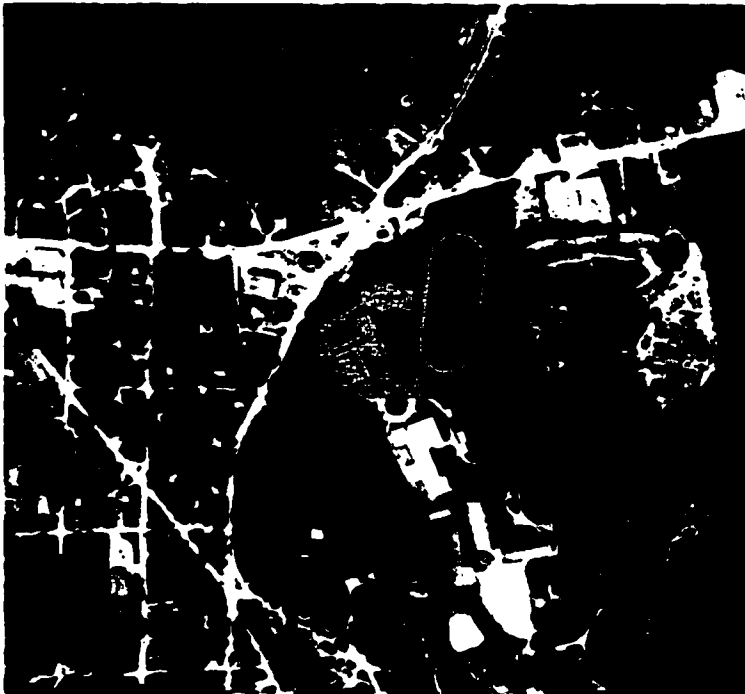
Village, c. 1900

view of village from peninsula c. 1900



Images courtesy of R. A. MacIsaac, Novalight Studio, Chester, Nova Scotia (2003).

The Site: At the Crossroads



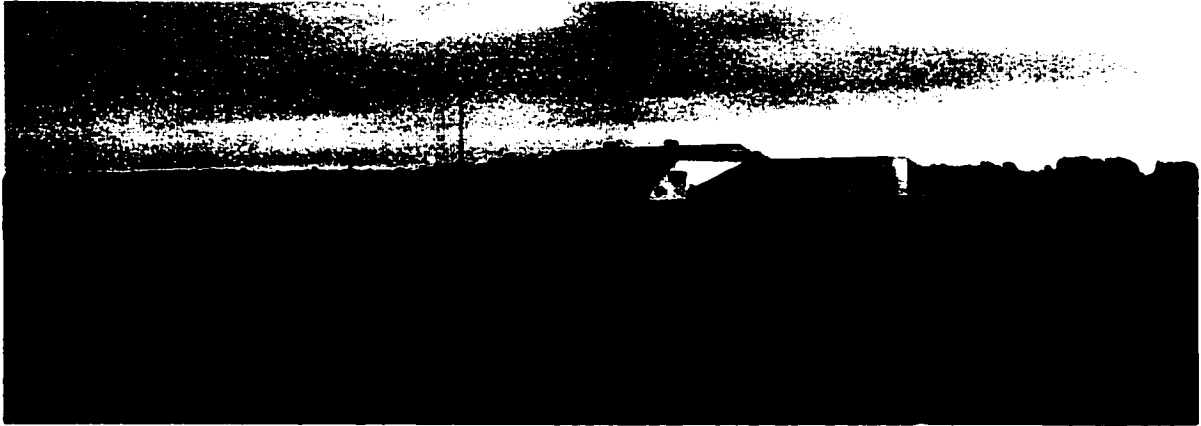
**Aerial photograph, from
Nova Scotia Department
of Housing and Municipal
Affairs Land Information
Services.**

The site of the existing Chester Area Middle School is the location of this thesis investigation.

Situated at the northeast corner of the village, the site abuts a crossroads that separated the early village from the common pasture lands to

the north. Its location at this junction between Commons Road, Main Street, Duke Street and #3 Road, the east *entrance* to the Village, instils a presence as *threshold* or *gate-keeper* not experienced at any other land-based approach. Constructed as the Chester Municipal (junior/senior) High School in 1963, the essentially unchanged building is the specific subject of analysis and critique.

Identifying and understanding its position within the village context is necessary in order to discover the iconic potential of the site. Referencing and translating the organization, distribution, and character of the village, a new site-specific and contextually-defined design strategy for a Community Middle School will be introduced to the site.

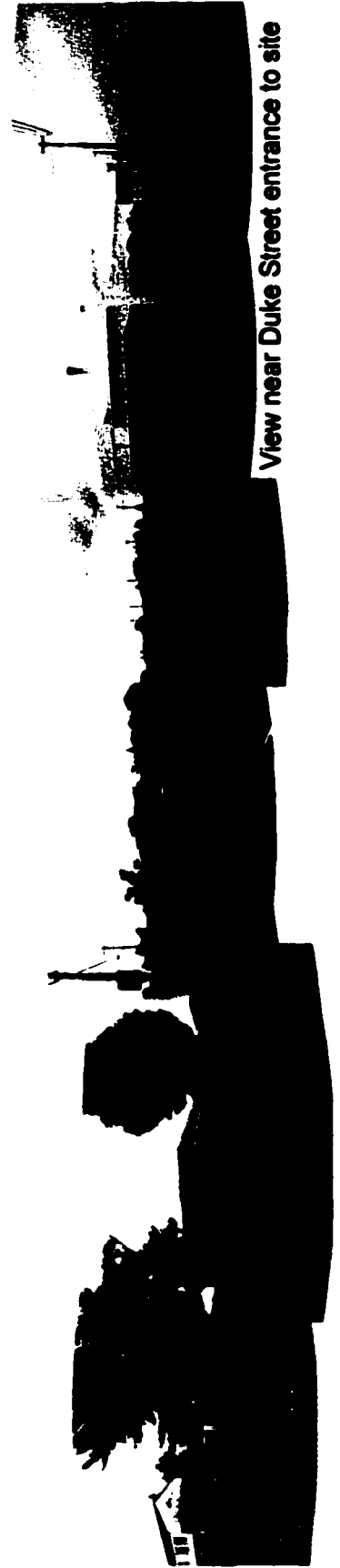
As-Built: Analyzing the Existing

Neighbouring elementary school to the south, Chester District School

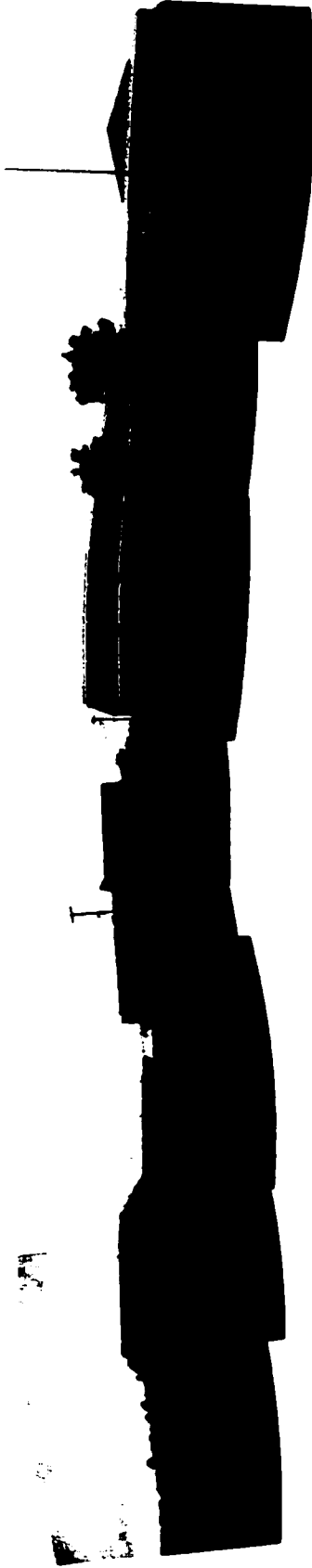
The existing structure on the site, the 1963 school, can be viewed as symbolic of the 1960's trend in school design. Along with its administrative and accessory spaces, the school's 32 classrooms are tightly aligned in a non-hierarchical cellular fashion along a main corridor axis and its two perpendicular wings.



View of Duke Street



View near Duke Street entrance to site



Existing Chester Area Middle School



Existing bus-loading area/Gymnasium



View to front harbour



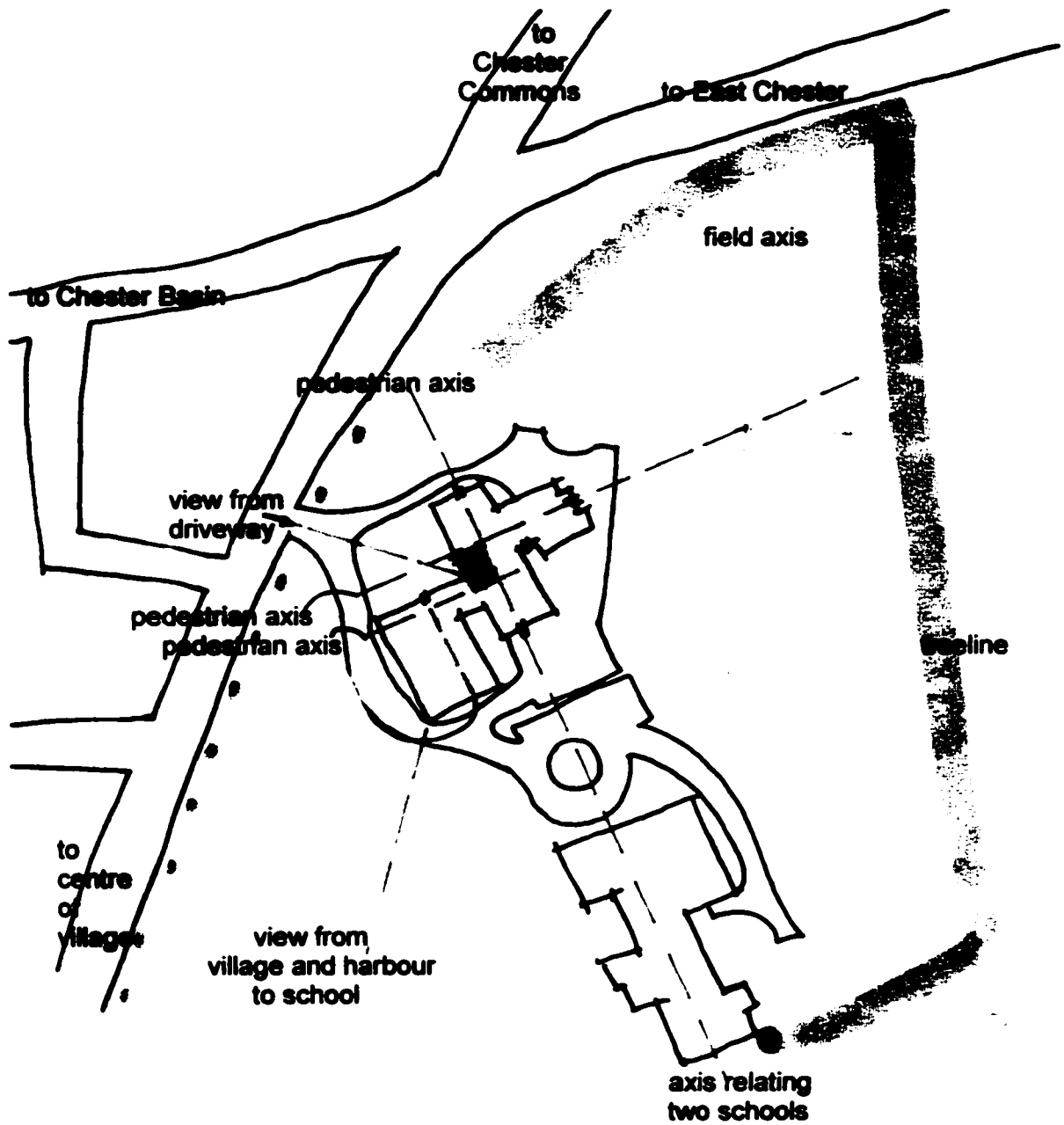
View from existing parking lot to sports field (east) and elementary school (south)

The Existing: Analysis

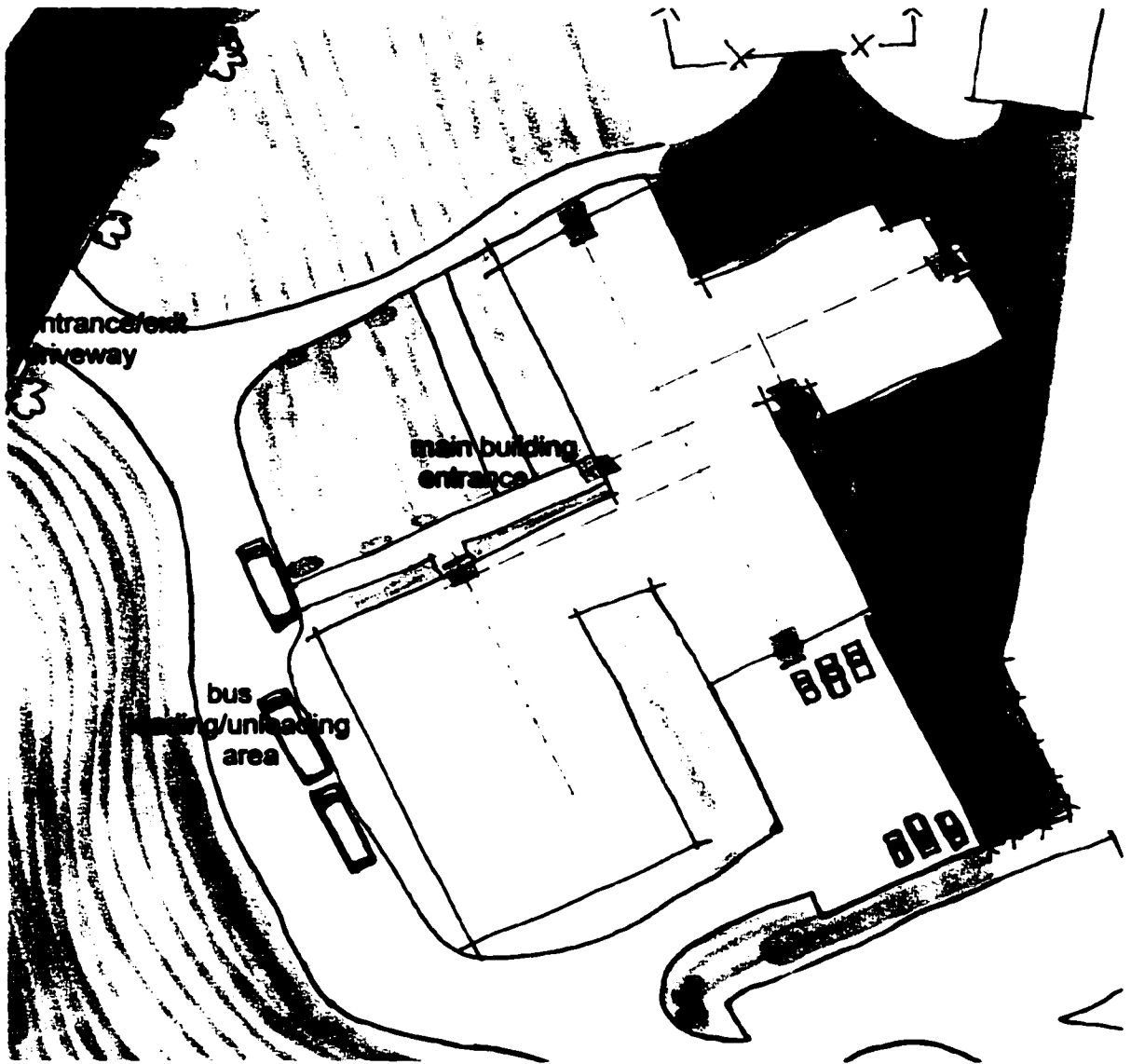
This rigidly allocated assemblage of spaces can be assessed by two categorizations of architectural critiques.

Firstly, it is necessary to note that the design is the product of a particular age of institutional architecture. A general stiffness of organization and undifferentiated architectural treatment of programme leads to a general banality typical of this period in modern Canadian institutional architecture. This characteristic commands a critique of the general architecture character of the building rather than a critique of the specific and contextual.

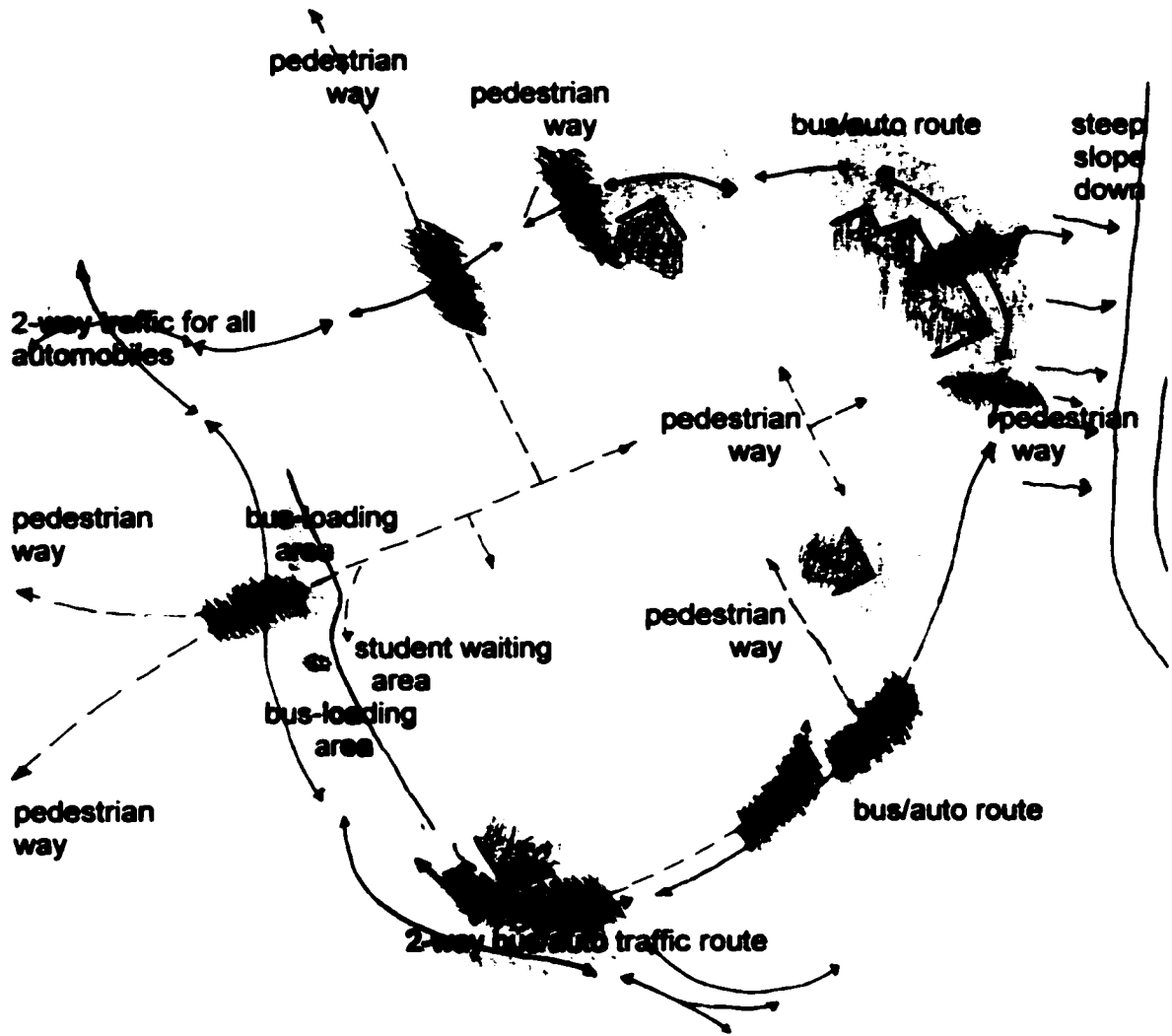
The orientation and presentation of the building on the site are the subjects of the specific design flaws. The relationship imposed by the building's placement on both its neighbouring buildings and users is one of negative and introverted character.



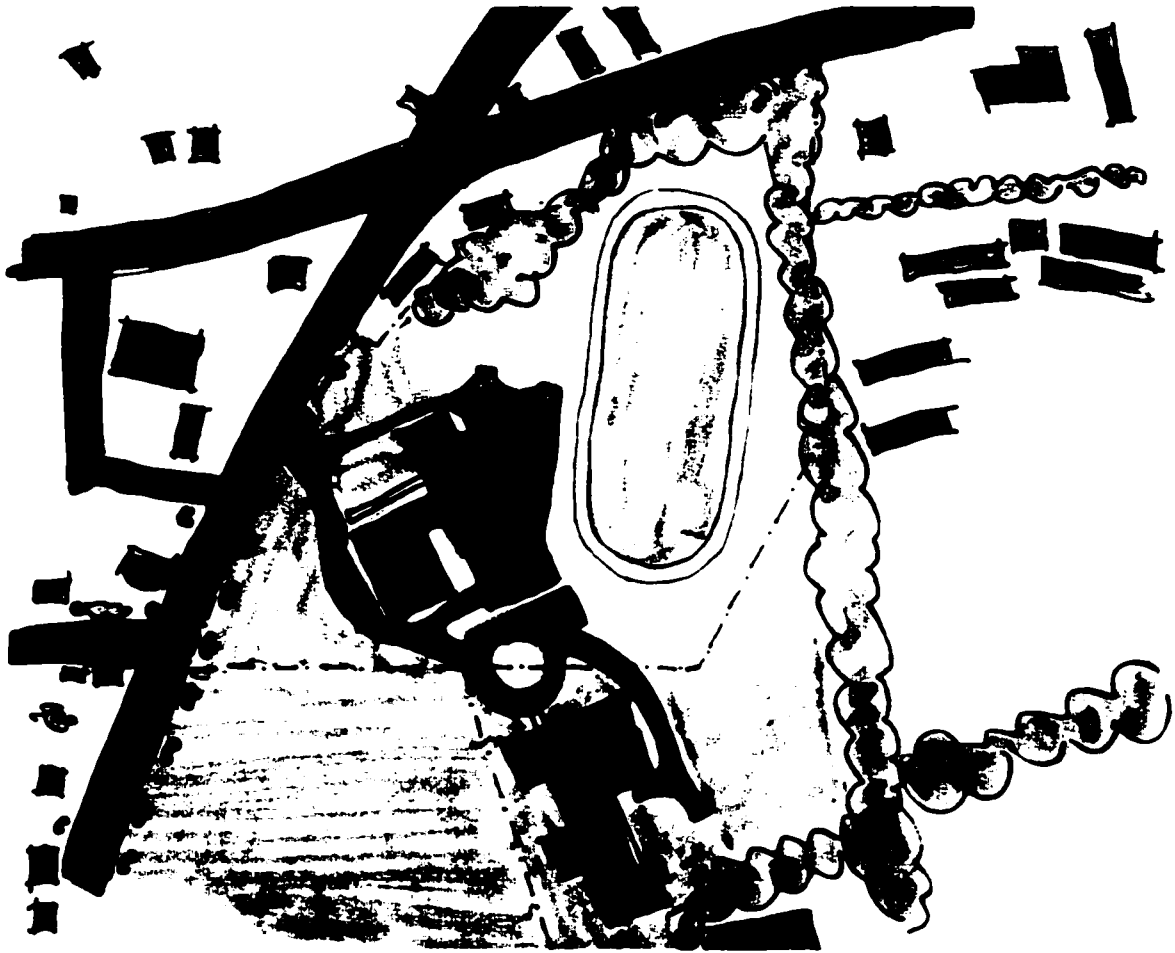
Existing axes between elementary and middle schools and to views of ocean, street, and sports field



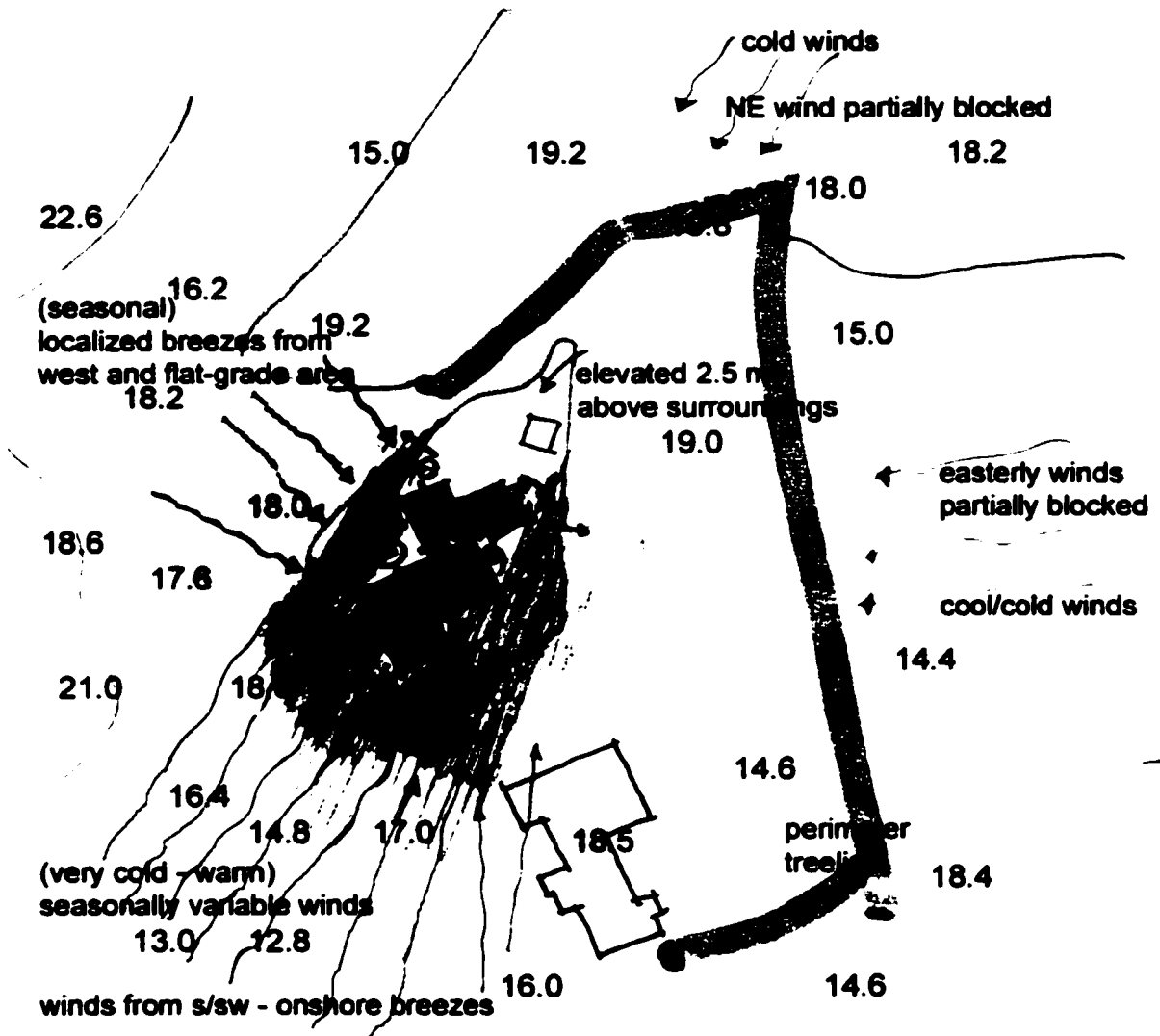
Existing circulation, exits, bus-loading, and vehicle parking areas



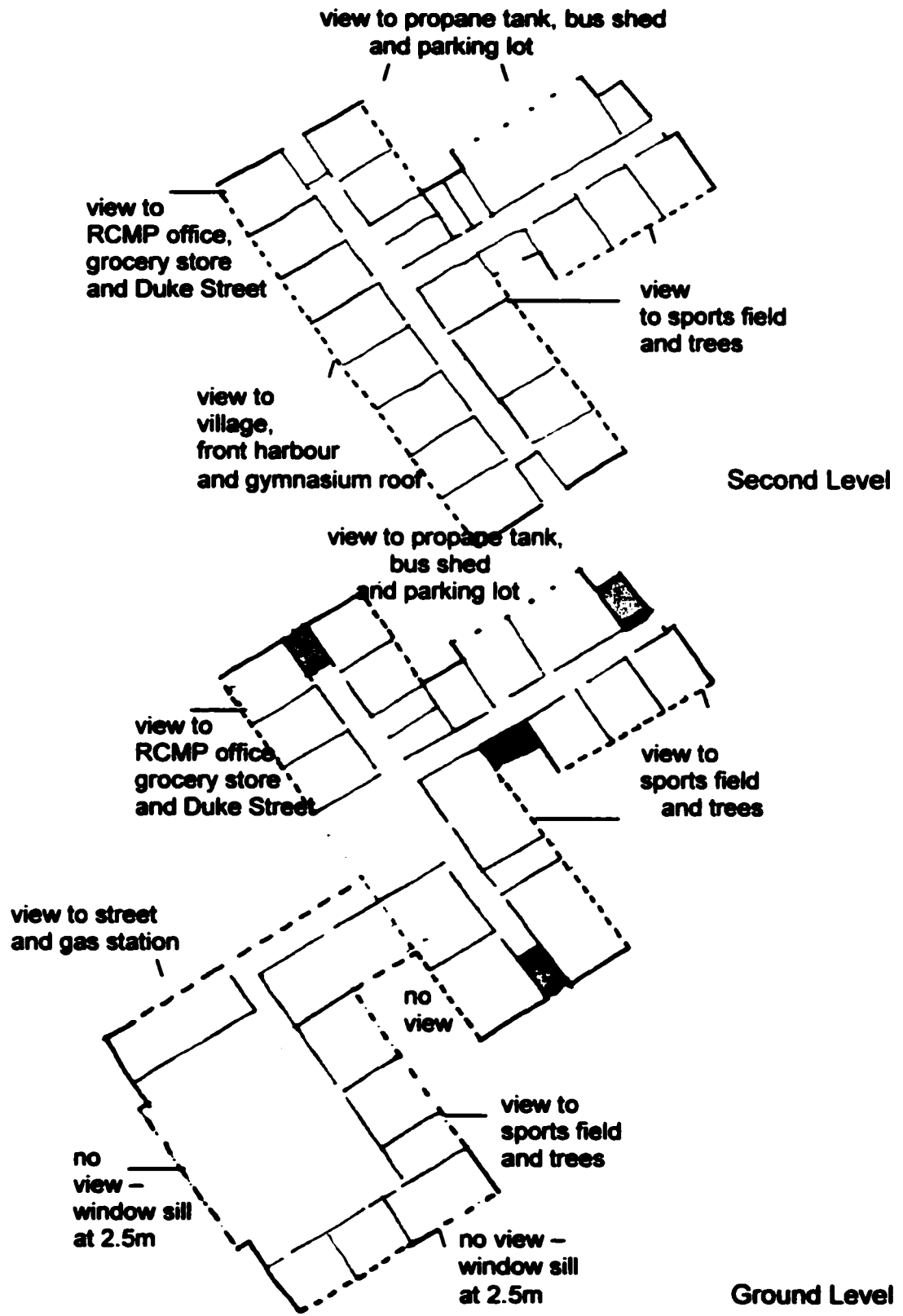
Existing traffic paths - bus/pedestrian/auto



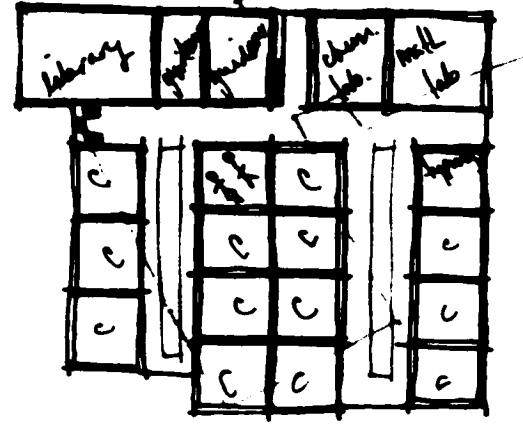
Existing site plan showing surrounding buildings and vegetation



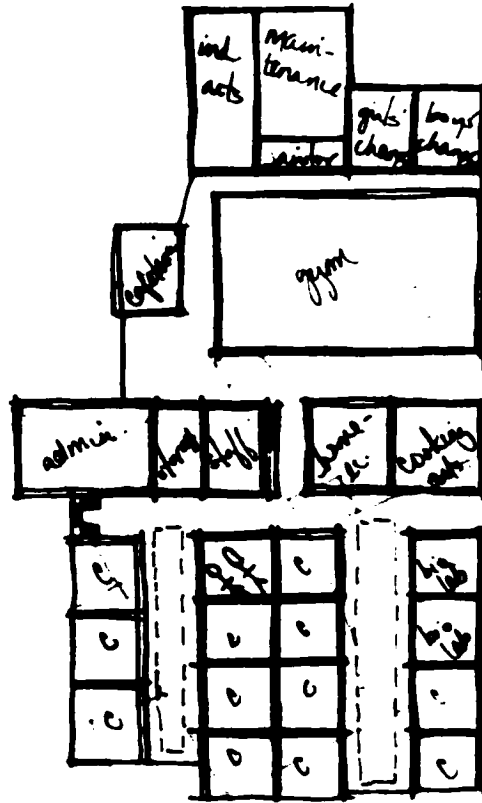
Site - existing topographic/wind/precipitation conditions



Existing view planes

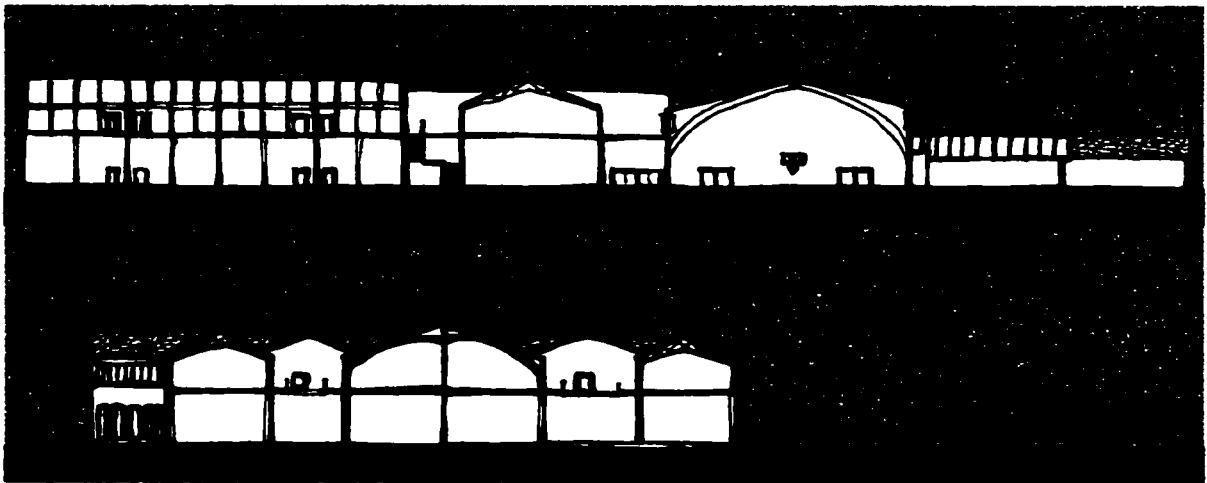


Second Level

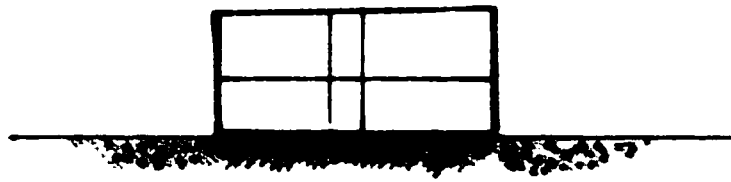


Ground Level

Existing school – programmatic elements (32 classrooms/learning spaces) reformed



Existing school – sectional option of reformed elements



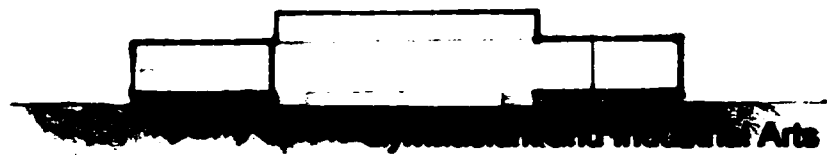
Library wing



Main classroom axis



Biology lab and corridor



Existing school - sectional cuts through existing elements

The Village as Placemaking Tool



Aerial photograph, from Nova Scotia Department of Housing and Municipal Affairs Land Information Services, 2001. The dashed line indicates the area shown on the following page.

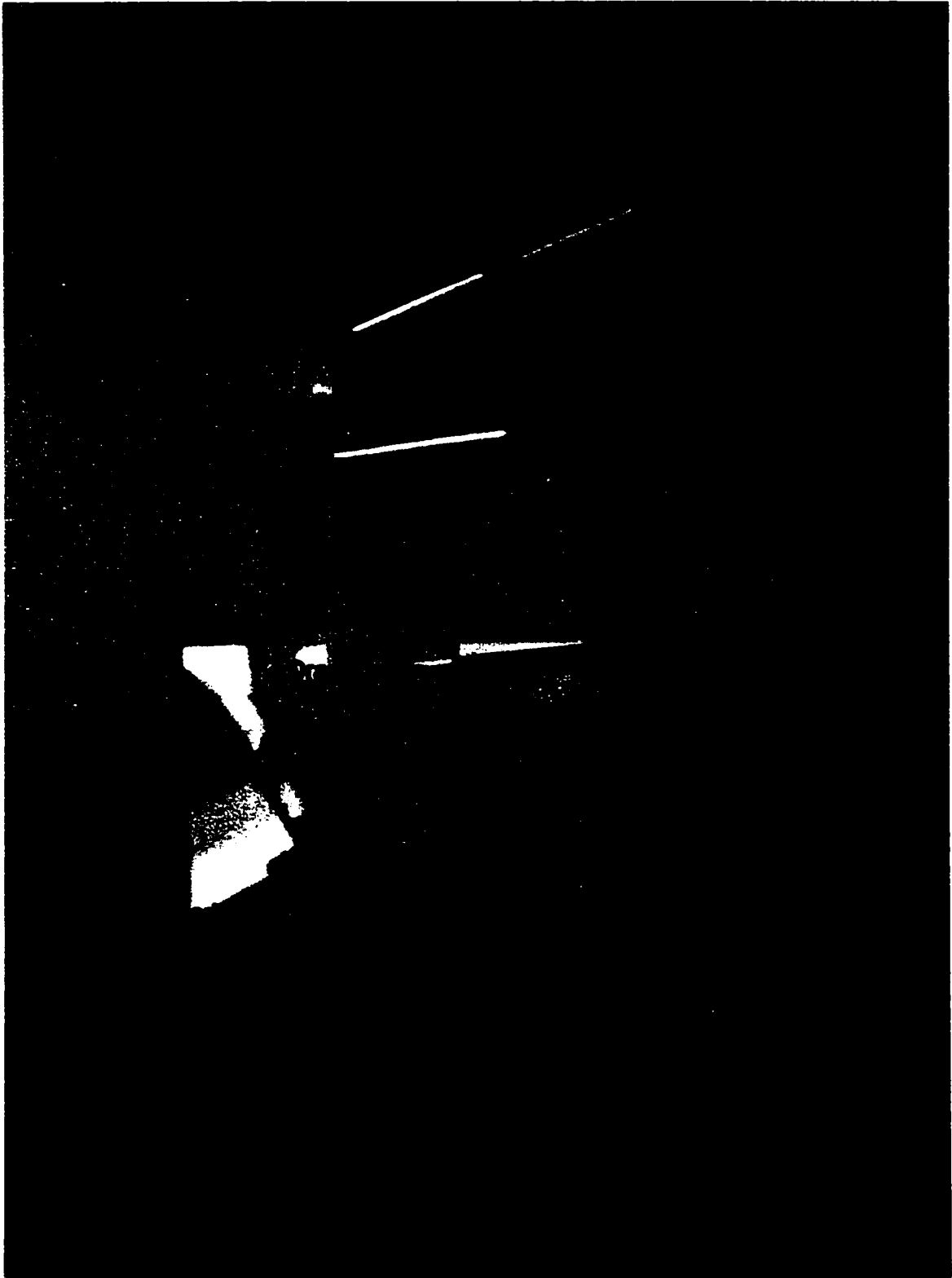
The functions of gathering, circulation, enclosure and exchange are studies using translated conditions existing in the village. The circulation path of vehicles and pedestrians (red) is examined for its translation to the streets and paths of the school. Hard edges, buildings and fences are seen as walls and enclosures of the school. Soft edges created by vegetation are equally informative as soft edges within the building and landscaping of the site. Spots for gathering and social exchange (striped hatch and ovals) become the nooks within the school for leisure and conversation.



Examining the character, organization, and cohesion of the village, these studies inform the formal village and programmatic organization of the school.

Aerial photograph, from Nova Scotia Department of Housing and Municipal Affairs Land Information Services, 2001.

The Village as a Study Tool

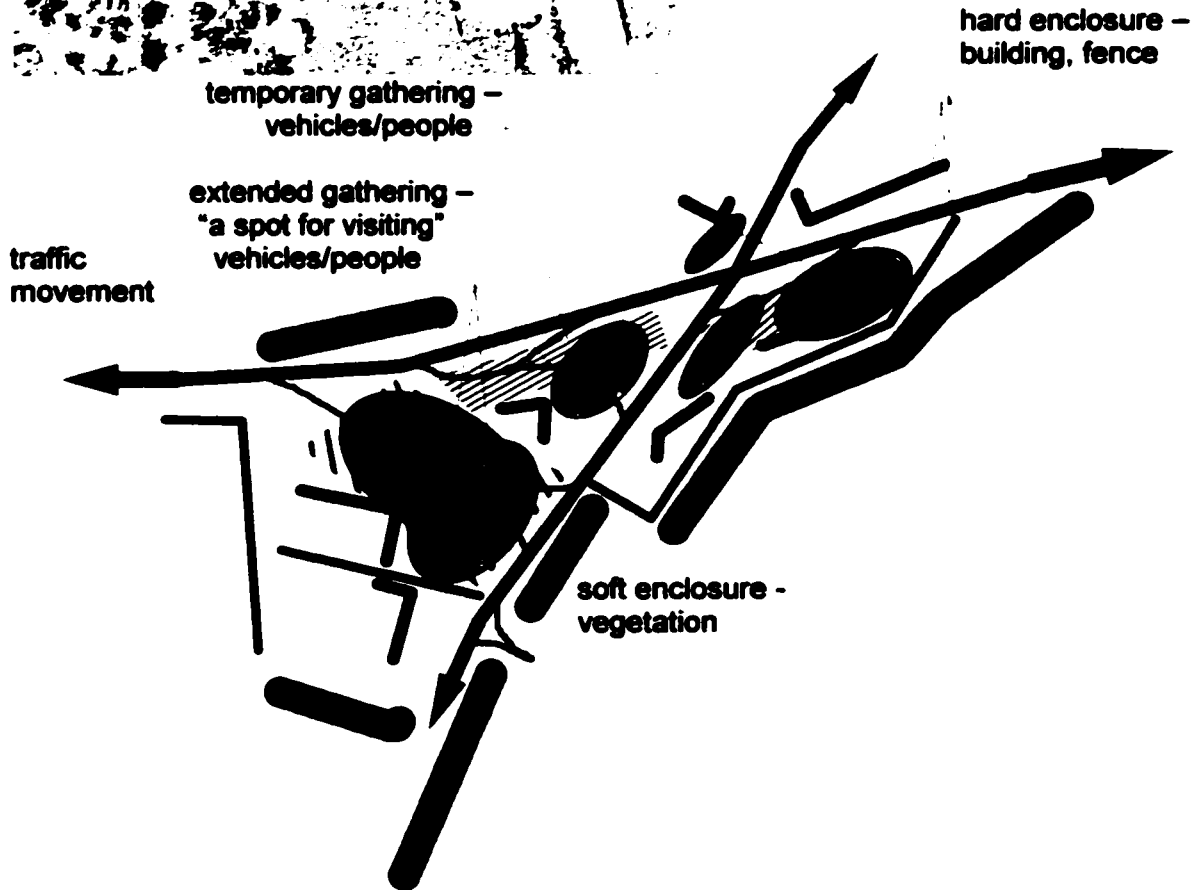


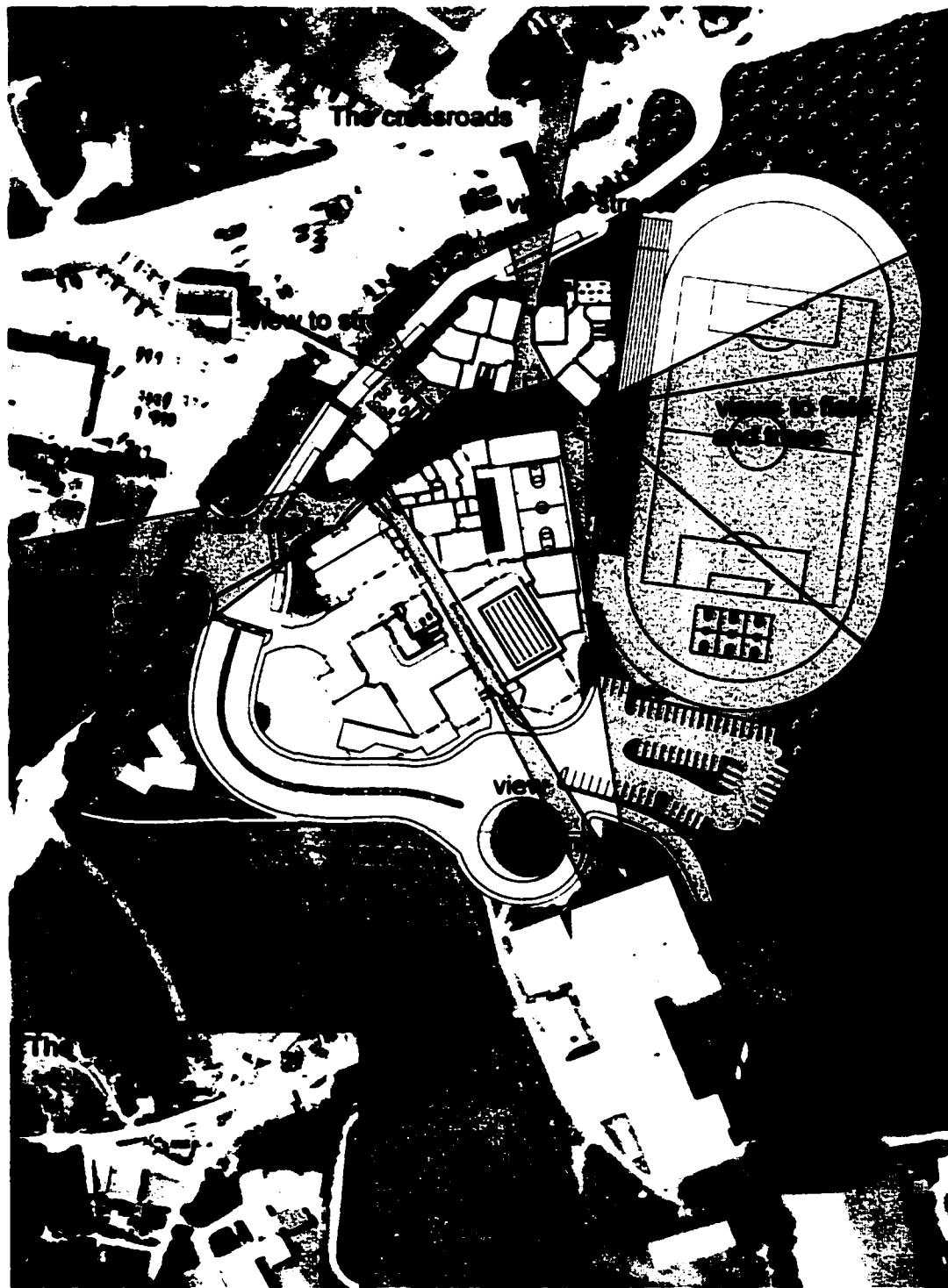
Sketch study model of the new school with the atrium at the top right, with study truss system in place

Location 1 - The Crossroads



One of the most significant circulation areas of the Chester area is found at the northeast entrance to the village, where Highway 3, a component of the highway system encircling the province, intersects two significant village streets. Lying east-west at the north edge of the original village grid, Highway 3 separates The Commons Road and Duke Street. The Commons Road leads to a sub-urban residential area of the village, and is so named for its former existence as a common grazing area for village farm animals. Duke Street runs from this intersection south through the commercial district of the east village, to Water Lane, edging the front harbour.

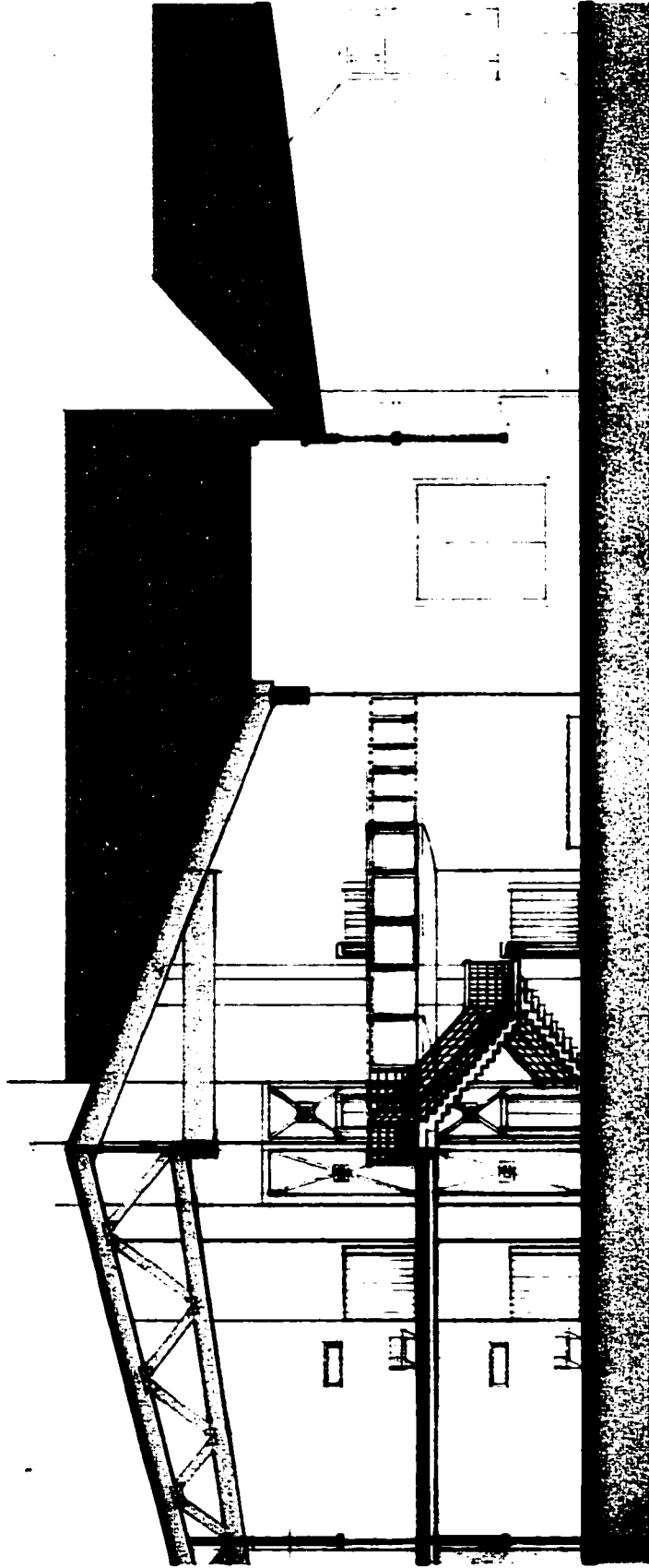




Ground floor plan of the new community middle school, highlighting the atrium of the school as the crossroads of the building and site. Multiple openings and views to the surrounding spaces, buildings and vegetation show the atrium to be a central organizational element within the building.

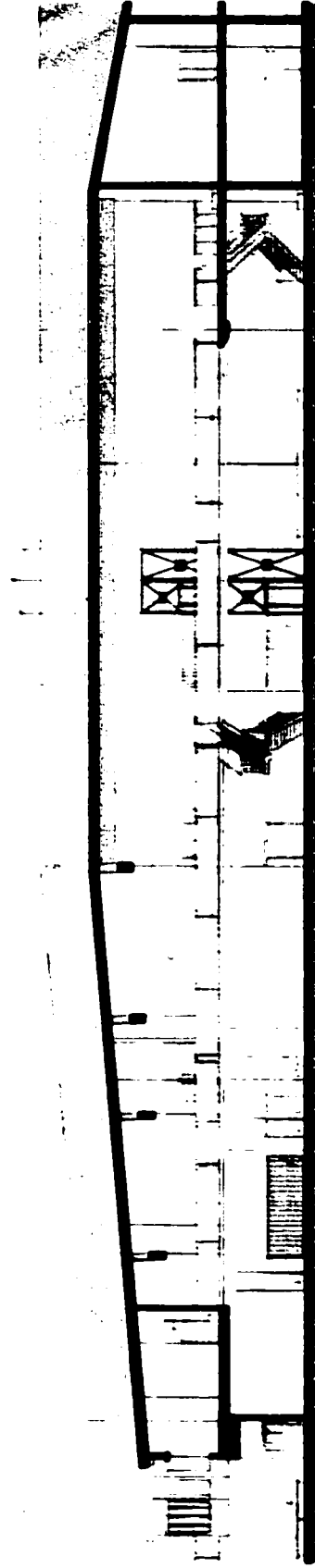
Inset photograph shows the associated village study location.

Aerial photograph, from Nova Scotia Department of Housing and Municipal Affairs Land Information Services, 2001.



Atrium of Chester and Area Community Middle School

Transverse (north-south) sectional cut through the community school atrium, showing mezzanine level balcony with staircase and elevator and connecting elements between levels. Shown to the left of the image, classroom clusters on both levels are nestled between the mass of the building to the south and the vegetation-lined private lane to the north. Locker groups are coloured in various bright tones to denote the specific classroom cluster to which they belong. The local tradition of large-scale wood framing is introduced in the form of variable-form trusses, spanning the width of the atrium. Shown to the right of the image, the gymnasium and black box stage area anchor the threshold between the atrium and the outdoor sports field to the east.



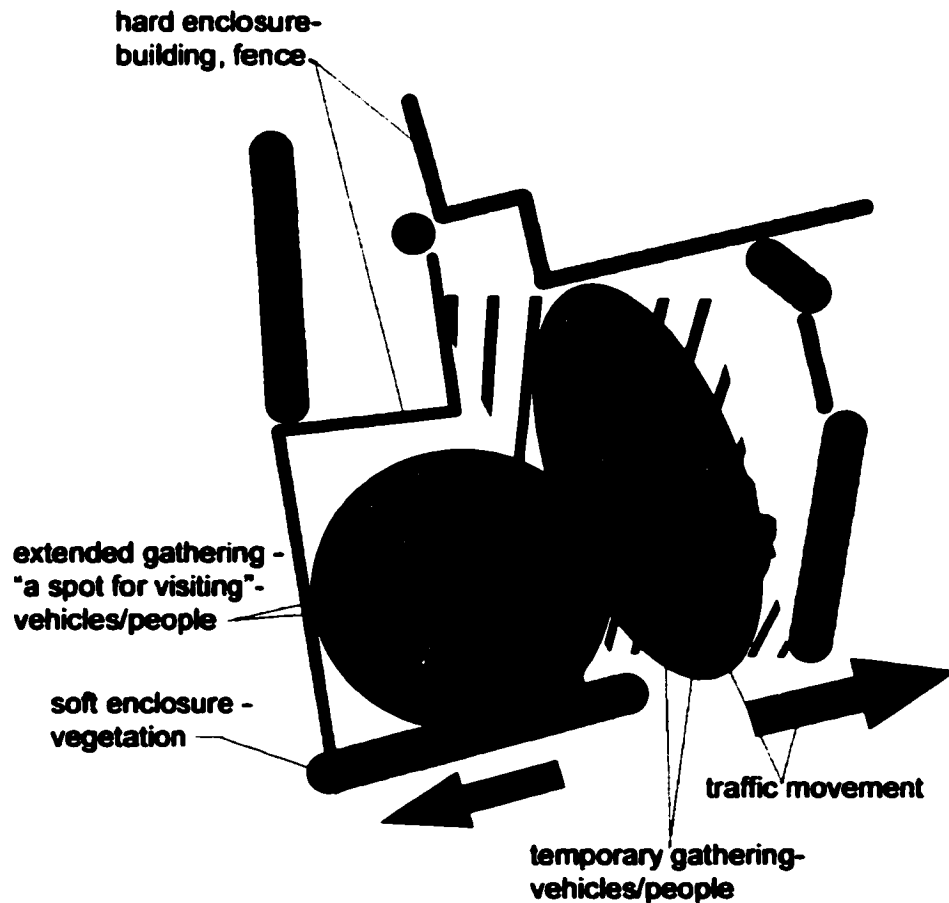
Atrium of Chester and Area Community Middle School

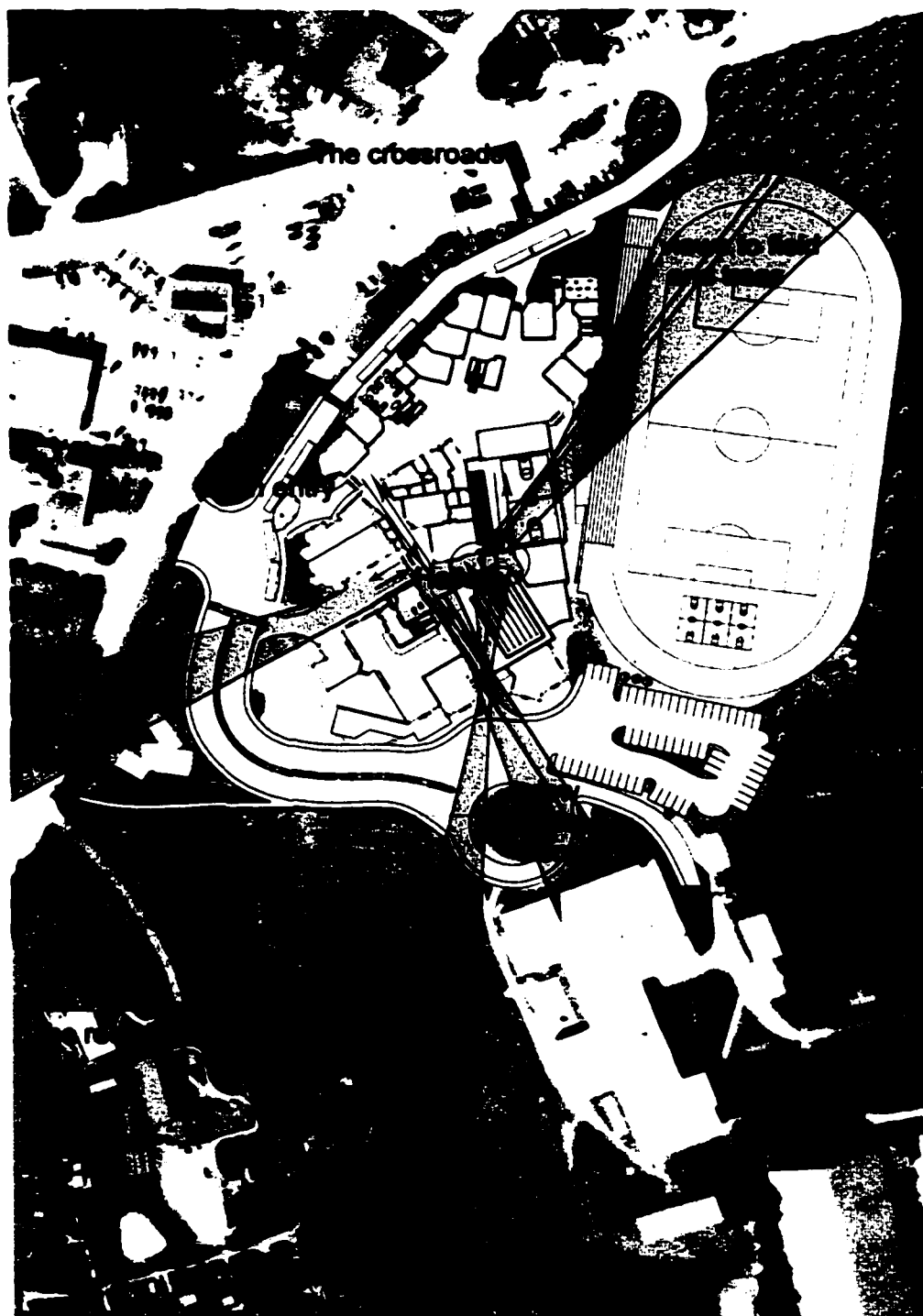
Longitudinal (east-west) sectional cut through the atrium, depicting the two levels of classroom clusters at the north end of the community school. The expansive mezzanine, containing two main staircase elements and a central elevator, spans the length of the east-west axis and visually connects the two levels of the building. Shown to the left of the image, the location and orientation of the staff room on the second level affords unimpeded passive supervision over activities both inside and out.

Location 2 - The Recreation Park

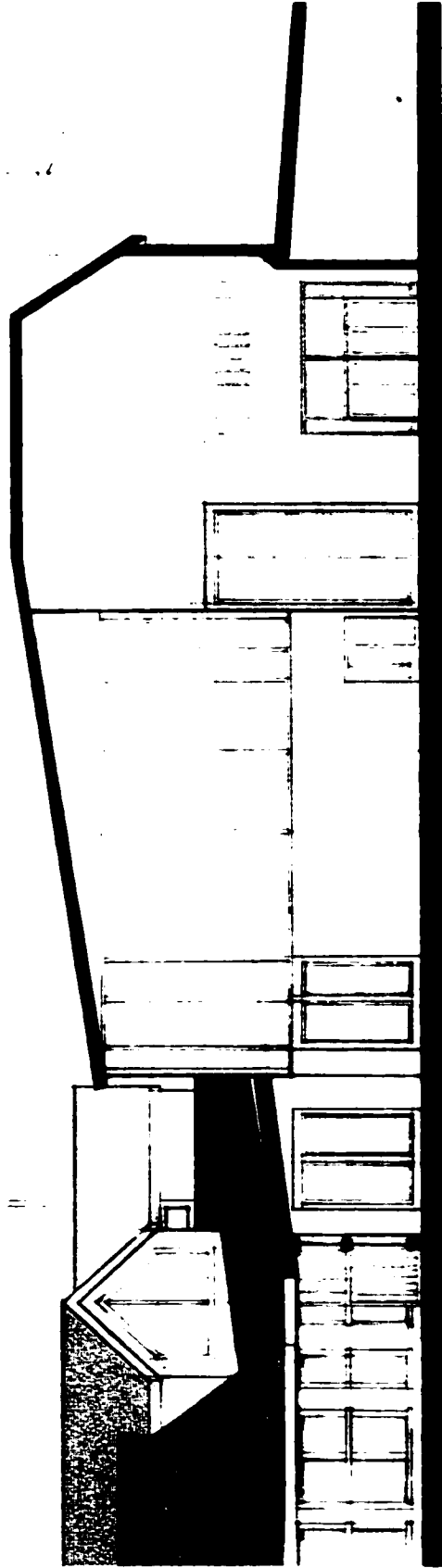


The village recreation park, commonly referred to as "the rink", is of great importance to the sporting and community-focused population within the municipality. Housing the sole local skating and curling arenas, baseball field, tennis courts, and social club meeting rooms, this property is a location of year-round activity. The diversity of activities taking place on this site brings a large contingent of the community together on a regular basis. Social interaction, though often taking place for mere moments while families or individuals are coming to – or leaving – the site, is viewed as an important factor in the assemblage of the community.



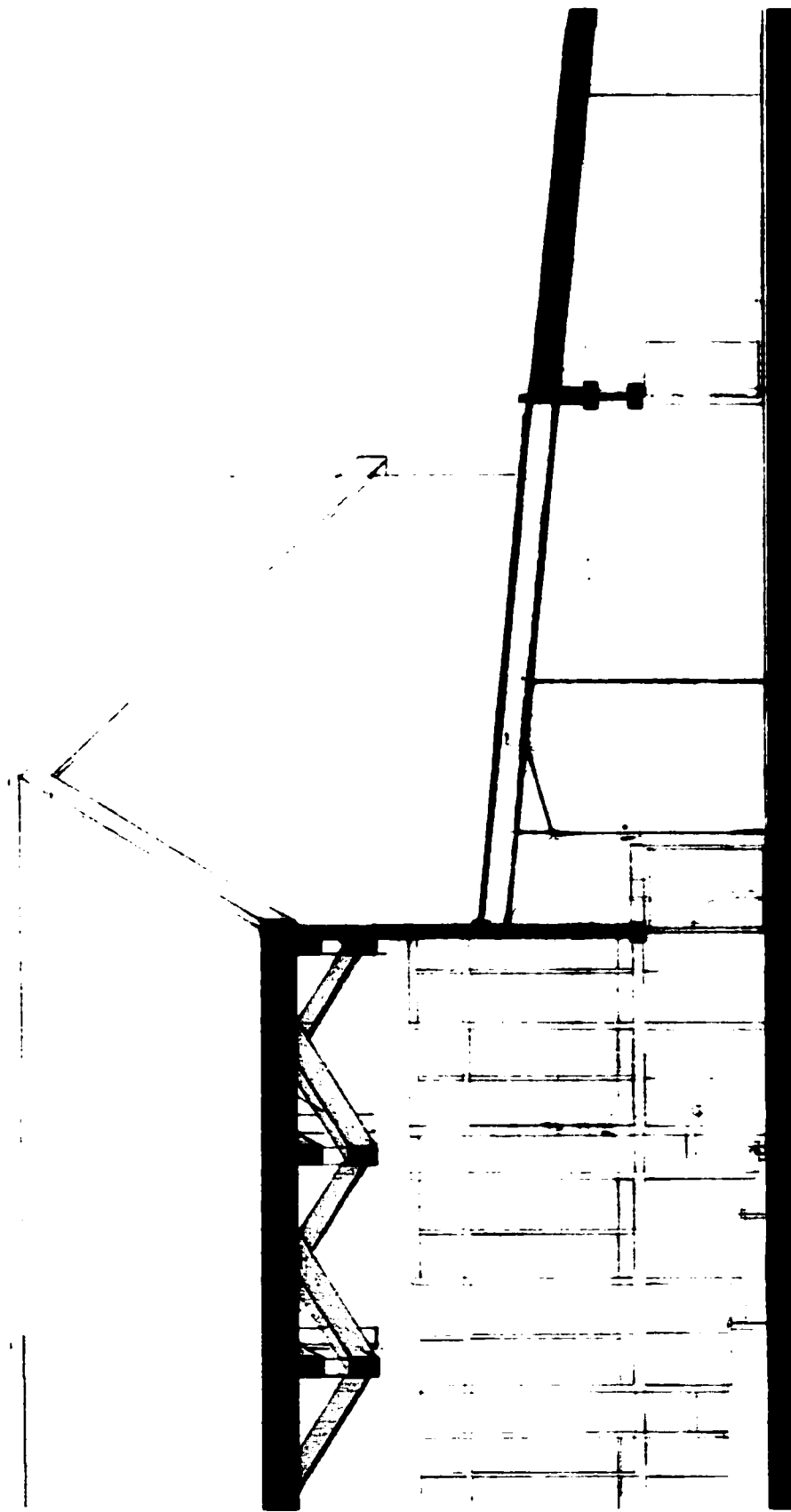


Ground floor plan of the new community middle school, highlighting the gymnasium wing hallway of the building as a critical point of activity and transition within the building and site. Views, both overt and subtle, to surrounding spaces within the building, as well as to the exterior site landscape and neighbouring properties, reinforce the hallway as an important element of connection, transport, and communication within the site's functions. Inset photograph shows the associated village study location. Aerial photograph, from Nova Scotia Department of Housing and Municipal Affairs Land Information Services, 2001.



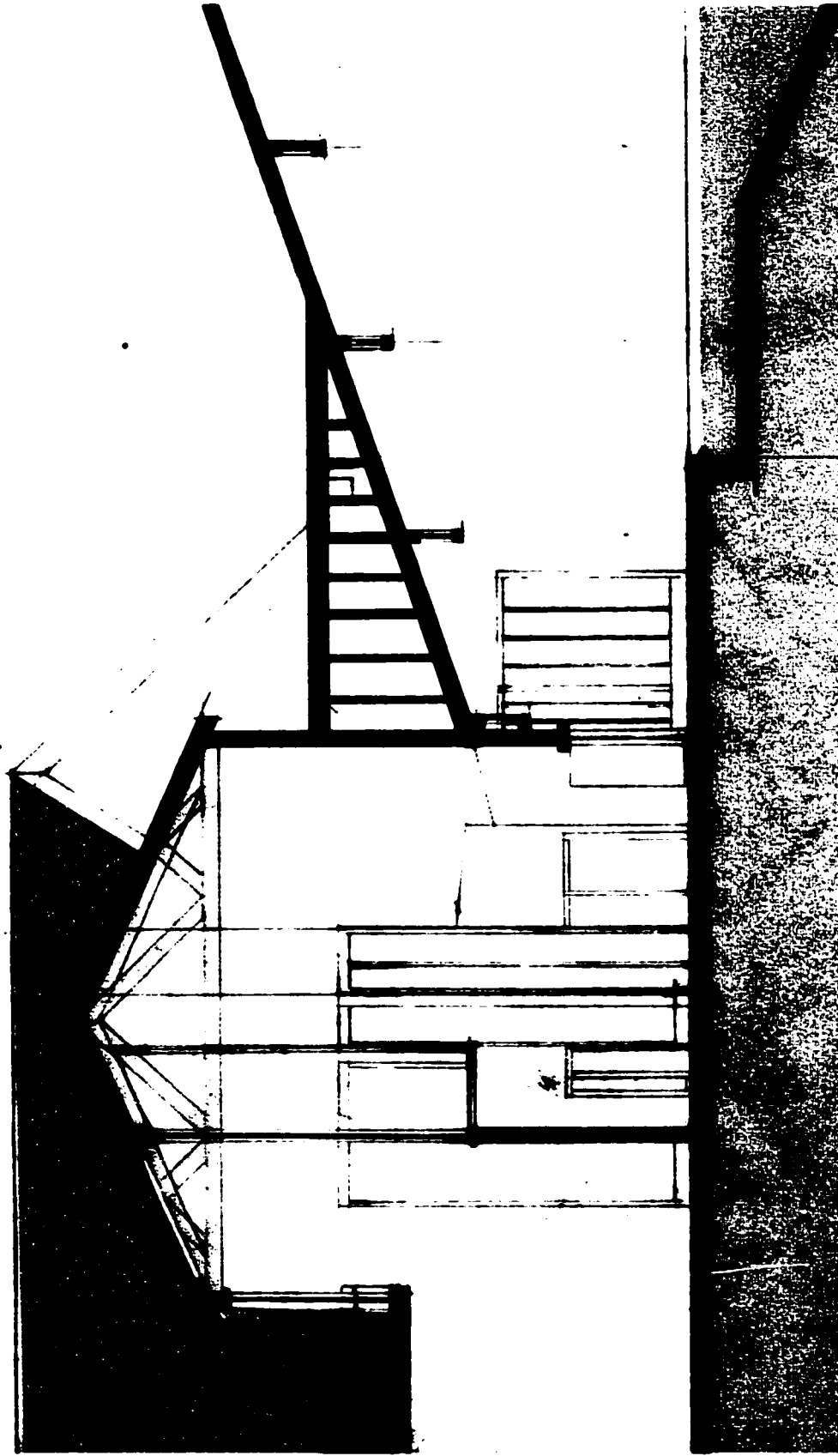
Gymnasium Wing Hallway of Chester and Area Community Middle School

Transverse (north-south) sectional cut through the hallway, showing the large expanse of window openings above the music room entrance wall, placed to capture the north light
To the left of the image is an entrance courtyard depicting a partial facade of the community library behind. The triple-height space at the right of the image is the community entrance foyer to the gymnasium. To the far right is the single-story entrance canopy to the female locker rooms.



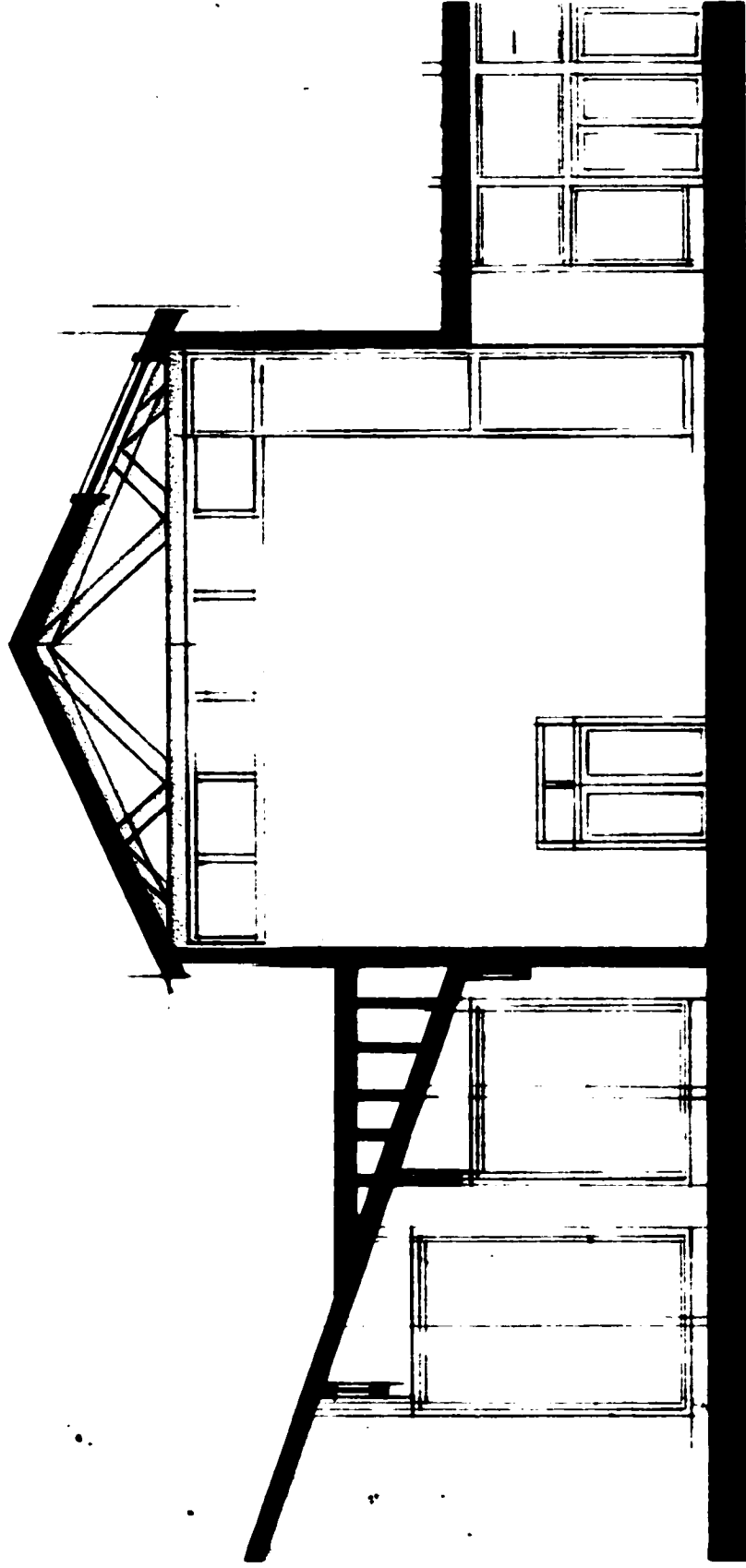
Gymnasium Wing Hallway of Chester and Area Community Middle School

Transverse (north-south) sectional cut through the hallway, showing the gymnasium at the far end of the building, the sloped roofline of the locker room entrance foyer and the facade of the gymnasium



Gymnasium Wing Hallway of Chester and Area Community Middle School

Transverse (north-south) sectional cut through the hallway, showing the gymnasium to the far left end of the building, the sloping roofline of the community pool, the shallow end of the pool element, and the truss system of the hallway roof



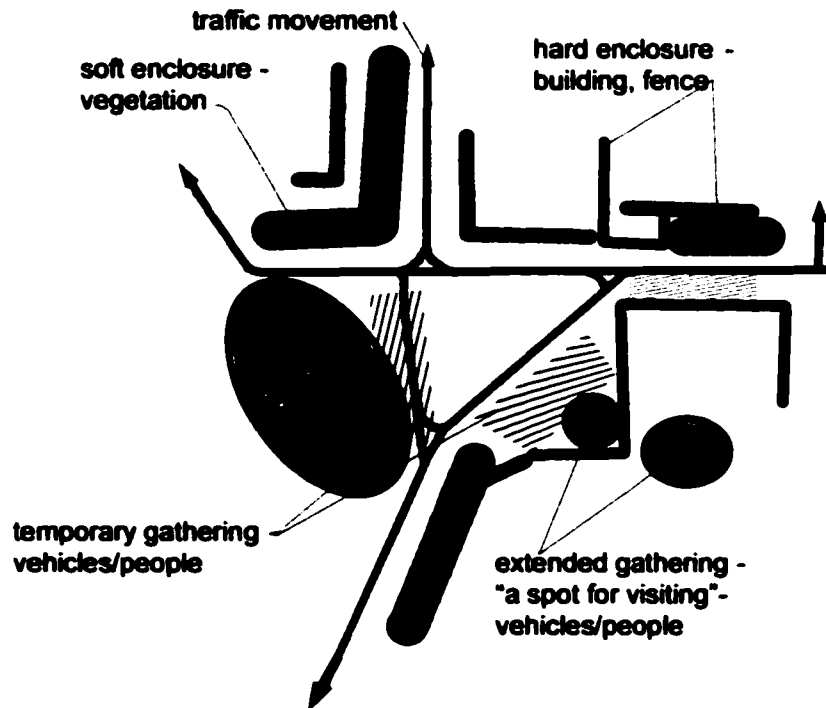
Gymnasium Wing Hallway of Chester and Area Community Middle School

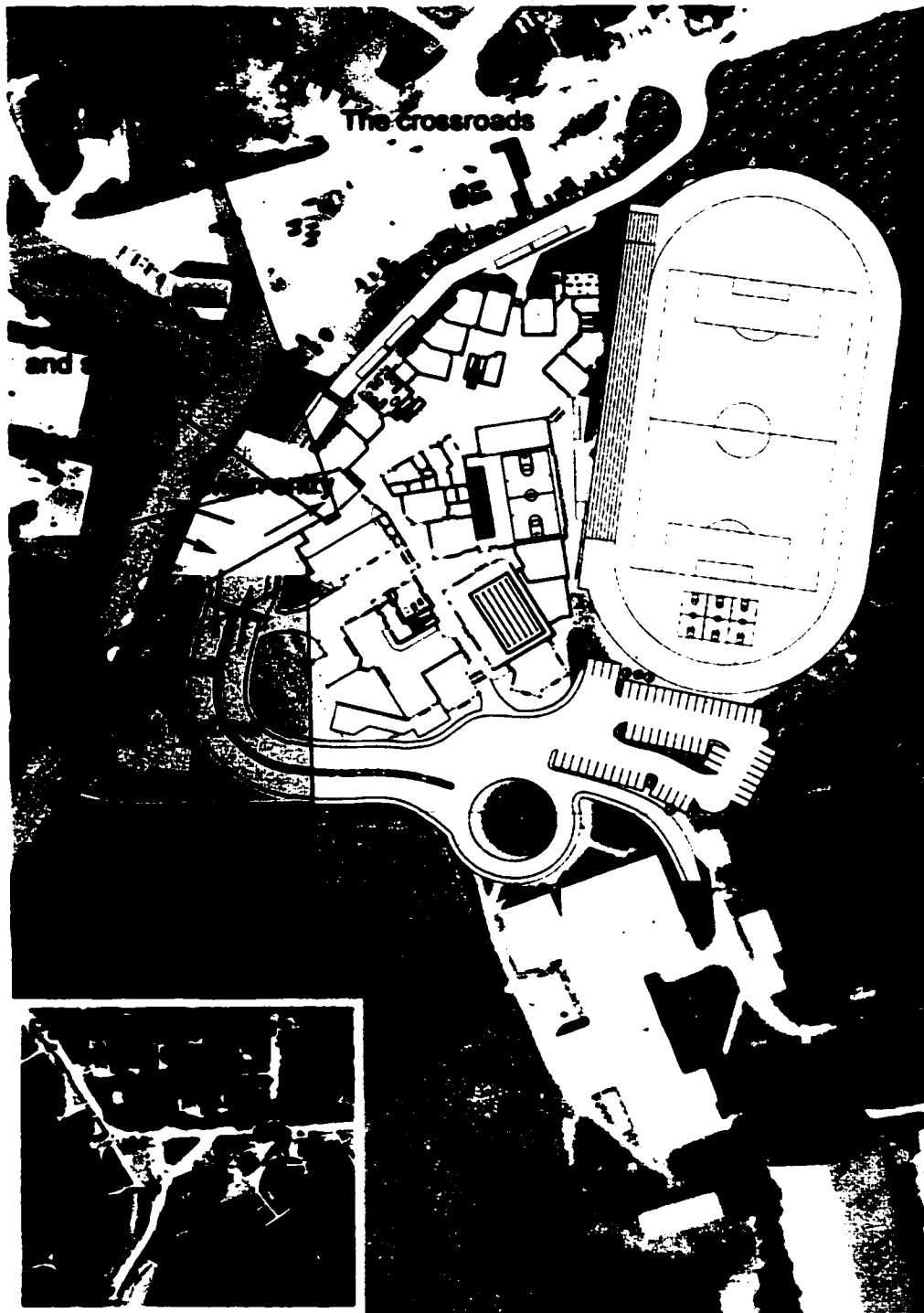
Transverse (north-south) sectional cut through the hallway, depicting the west wall of the hallway at the centre of the image, exit doors to the library courtyard to the right of the image, and viewing windows to/from the pool area near the building's "community entrance"

Location 3 – The Parade Square



The parade square is both the beginning and the end of the village. Its unimpeded views to the front and back harbours, the islands of the open bay, and the Atlantic beyond, have made it a location of entrance, departure, gathering and exchange for centuries. It is a geographic reference point for all who live in and visit the village, as it can easily be accessed from any location in the village or directly from the sea.

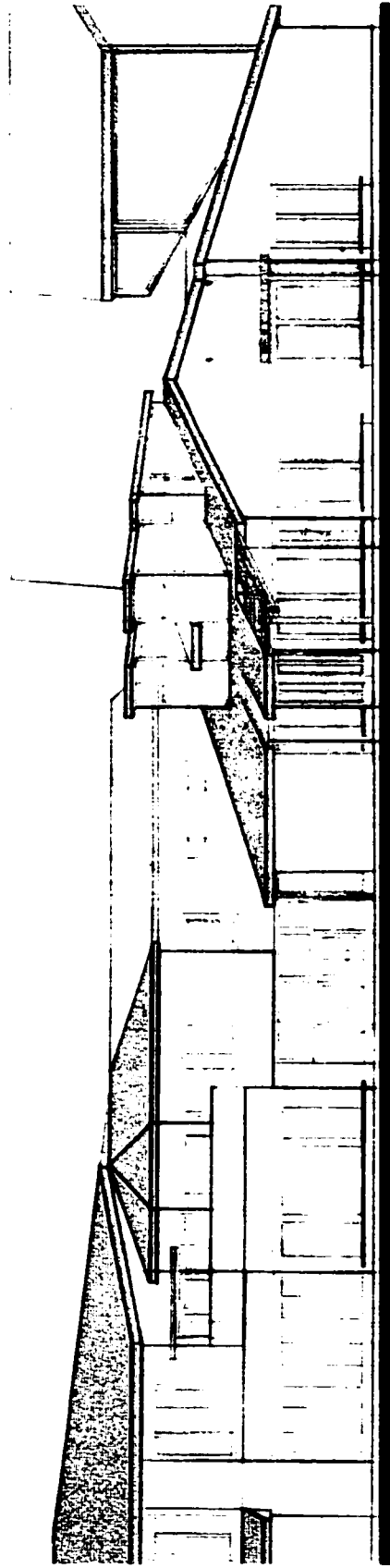




Ground floor plan of the new community middle school, highlighting the main entrance as the threshold to the building and site. Panoramic views extend to surrounding buildings, properties and the land - and seascape. The main entrance is oriented to oversee and welcome all who visit the site, acting as an enveloping and receptive "doorstep".

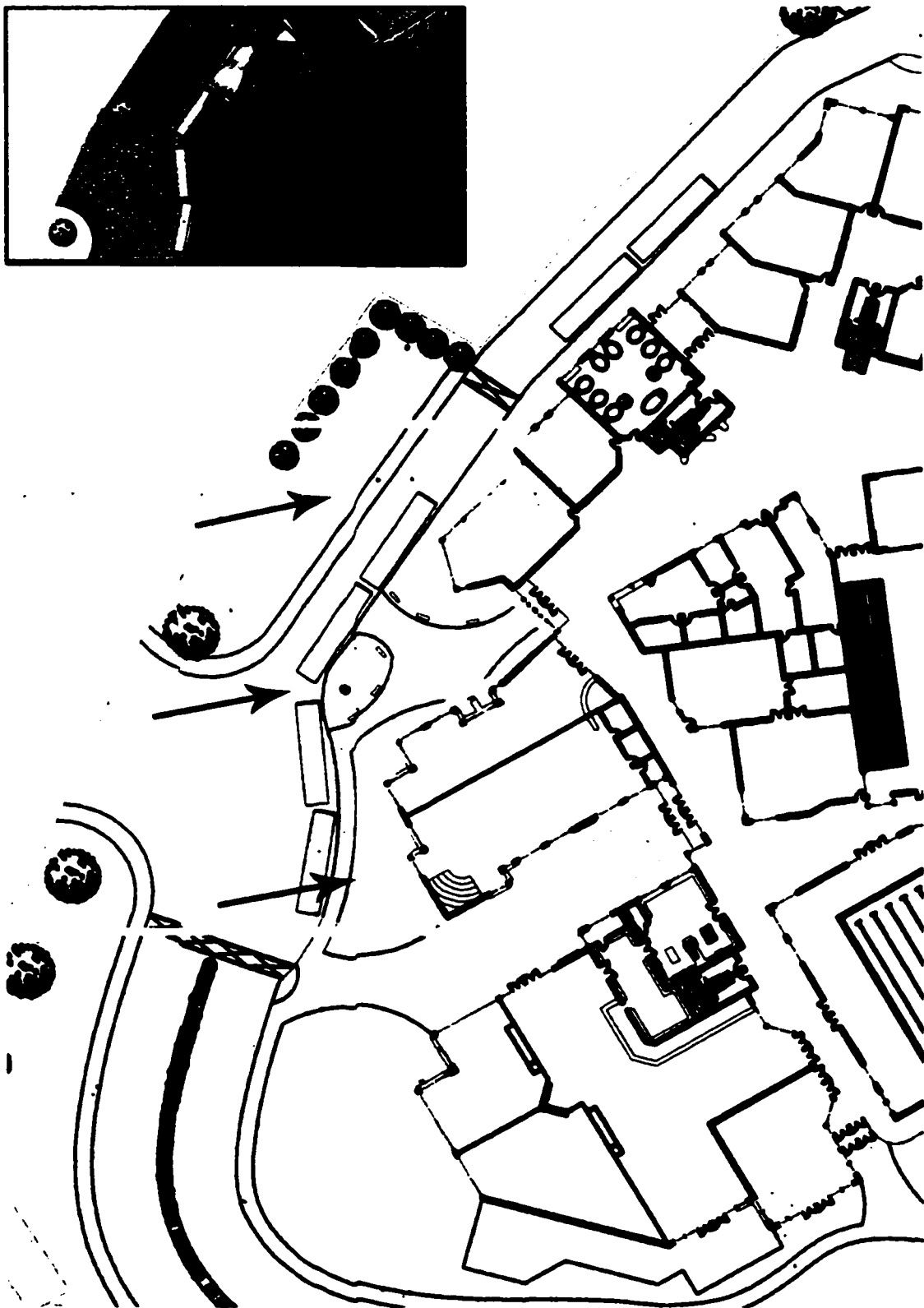
Inset photograph shows the associated village study location.

Aerial photograph, from Nova Scotia Department of Housing and Municipal Affairs Land Information Services, 2001.



Main Entry to Chester and Area Community Middle School

Exterior elevation drawing of school entry/bus-drop, showing the multiplicity of roof planes and facades, comforting colour scheme and assortment of window arrangements connecting indoors with the landscape

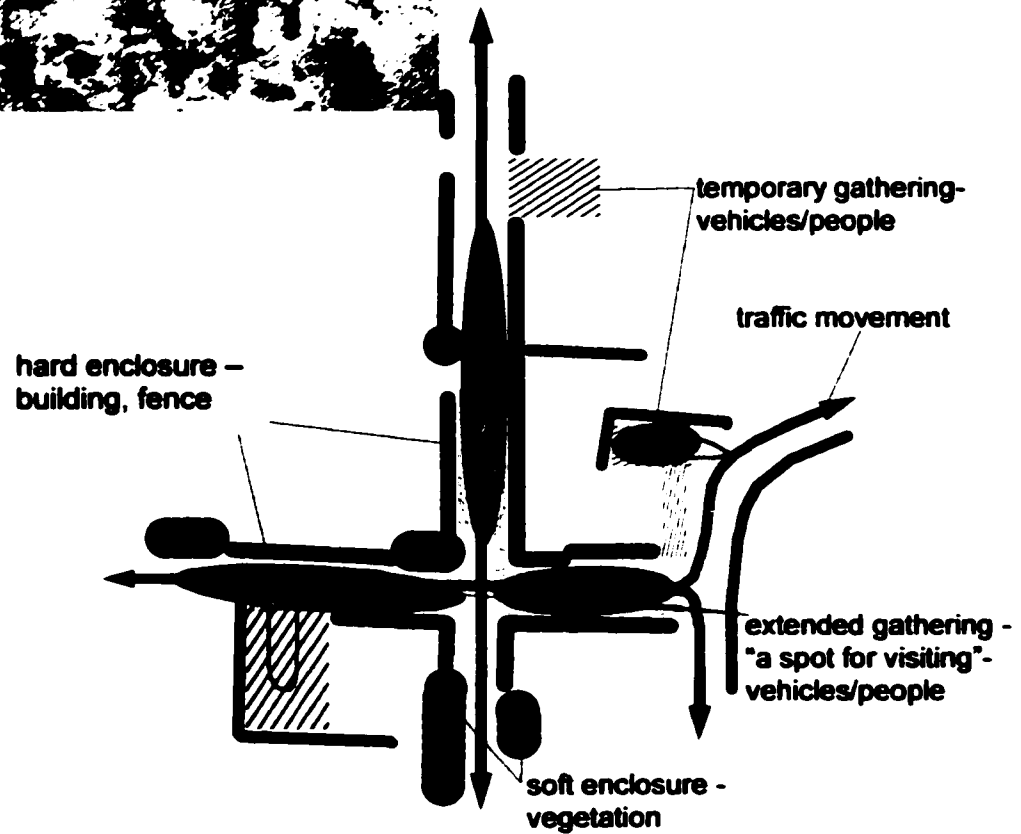


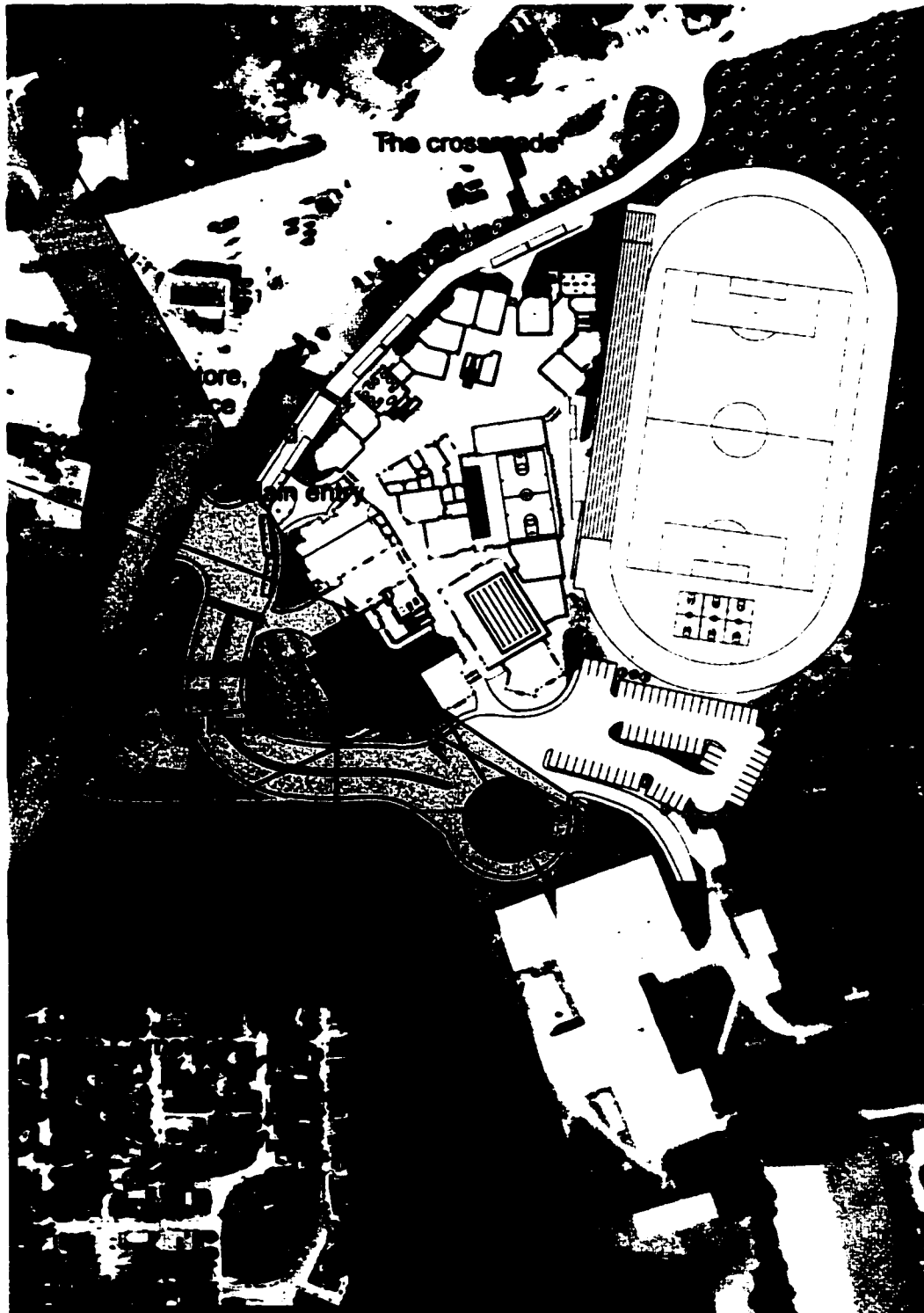
**Partial ground floor plan of the new community middle school, highlighting the elevation portion illustrated on the previous page - arrows denote viewing direction
Inset image features the associated portion of roof plan**

Location 4 – Tavern Corner

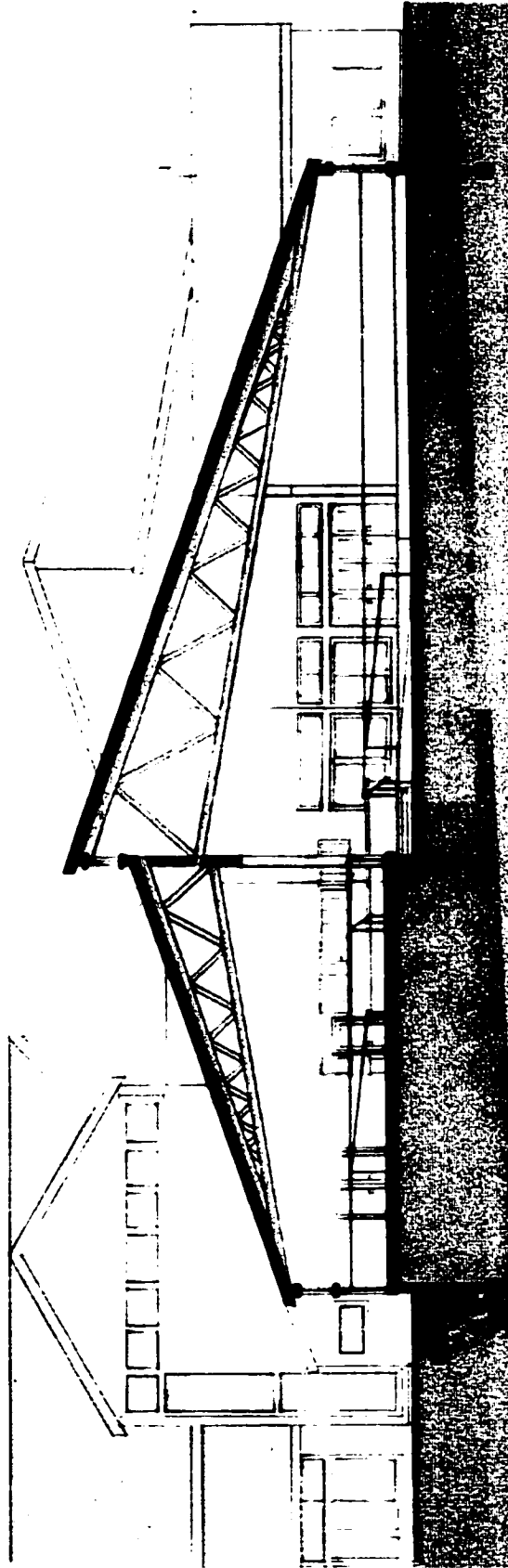


The corner of Queen and Pleasant Streets is unarguably the most animated and lively in the village. It is home to the oldest tavern in North America, the only local bank, several art and craft galleries, local businesses and many private residences. It is here that young and old gather together to pass on the most recent social news and information of the community. Some sit on the sidewalk benches for hours, chatting about nothing more than fog patterns and the price of bread. Others stop only briefly, as a momentary connection with their friends to say hello. It is the "kitchen" of the village.



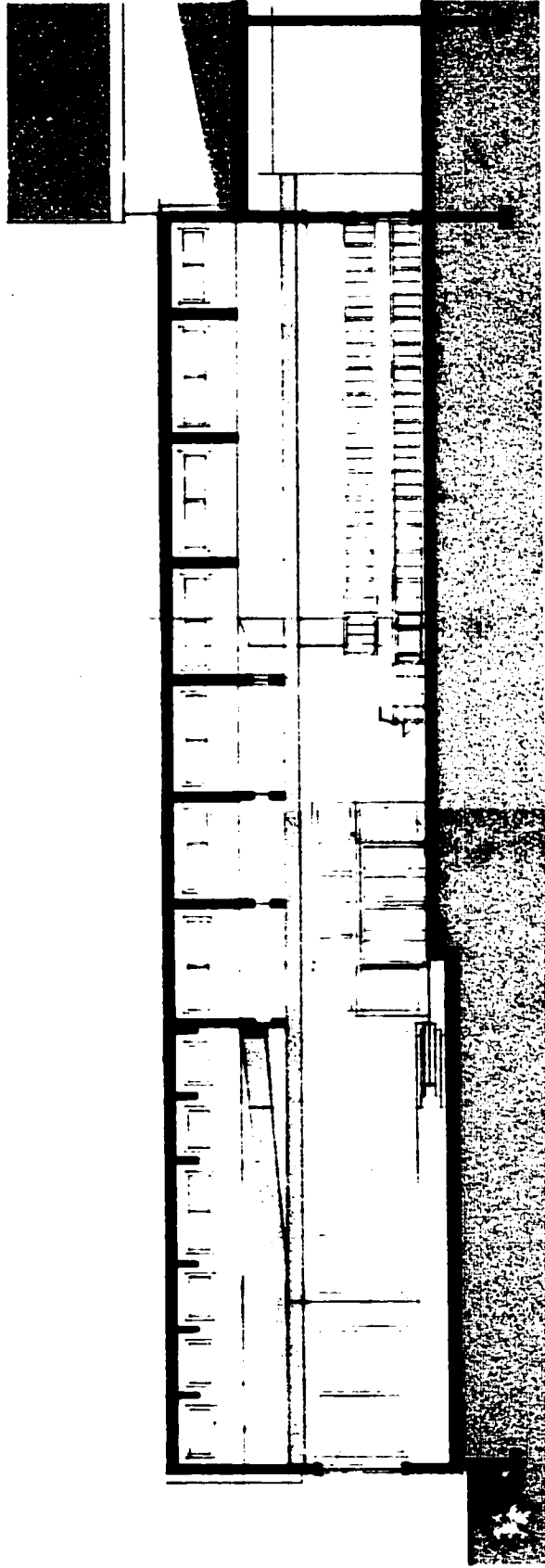


Ground floor plan of the new community middle school, highlighting the cafeteria as the 'kitchen' of the school and site. Its openness to the site and surrounding landscape allows unimpeded viewing interaction to the east village and nearby properties. Inset photograph shows the associated village study location. Aerial photograph, from Nova Scotia Department of Housing and Municipal Affairs Land Information Services, 2001.



Cafeteria of Chester and Area Community Middle School

North-south section through the cafeteria showing the divergent roof planes and terraced eating levels and accessibility ramps. Shown beyond the cafeteria is the gymnasium wing hallway to the near left, the gymnasium to the rear left, community meeting room to the immediate right and pool in the right distance.



Cafeteria of Chester and Area Community Middle School

East-west section through the cafeteria showing the north-facing clerestory windows, terraced eating levels and accessibility ramps. To the right is the community-entrance hallway, leading to the atrium, classroom clusters, library and main administration area.

The Village

Site
 Pathway
 'On-the-Go'
 'Visiting'
 Front Porch

Commercial / Business
 Fire / Medical / Dental / RCMP
 Park / Green Space
 Club / Organization
 Cemetery / Religious Grounds
 Municipal Building
 Institutional Building / School
 Industrial Building / Shipwright

Shaded blocks indicate the locations employed as study tools on the previous pages.

Parade Square translates to Main Entry/Bus Drop

Tavern Corner translates to Cafeteria

The Recreation Park translates to Gymnasium wing hallway

The Crossroads translates to the Atrium

Aerial photograph, from Nova Scotia Department of Housing and Municipal Affairs Land Information Services, 2001.



Four areas of the village are used as study tools for the design of the community school. Each area informs a specific programmatic element of the school.

Design Strategy

The School

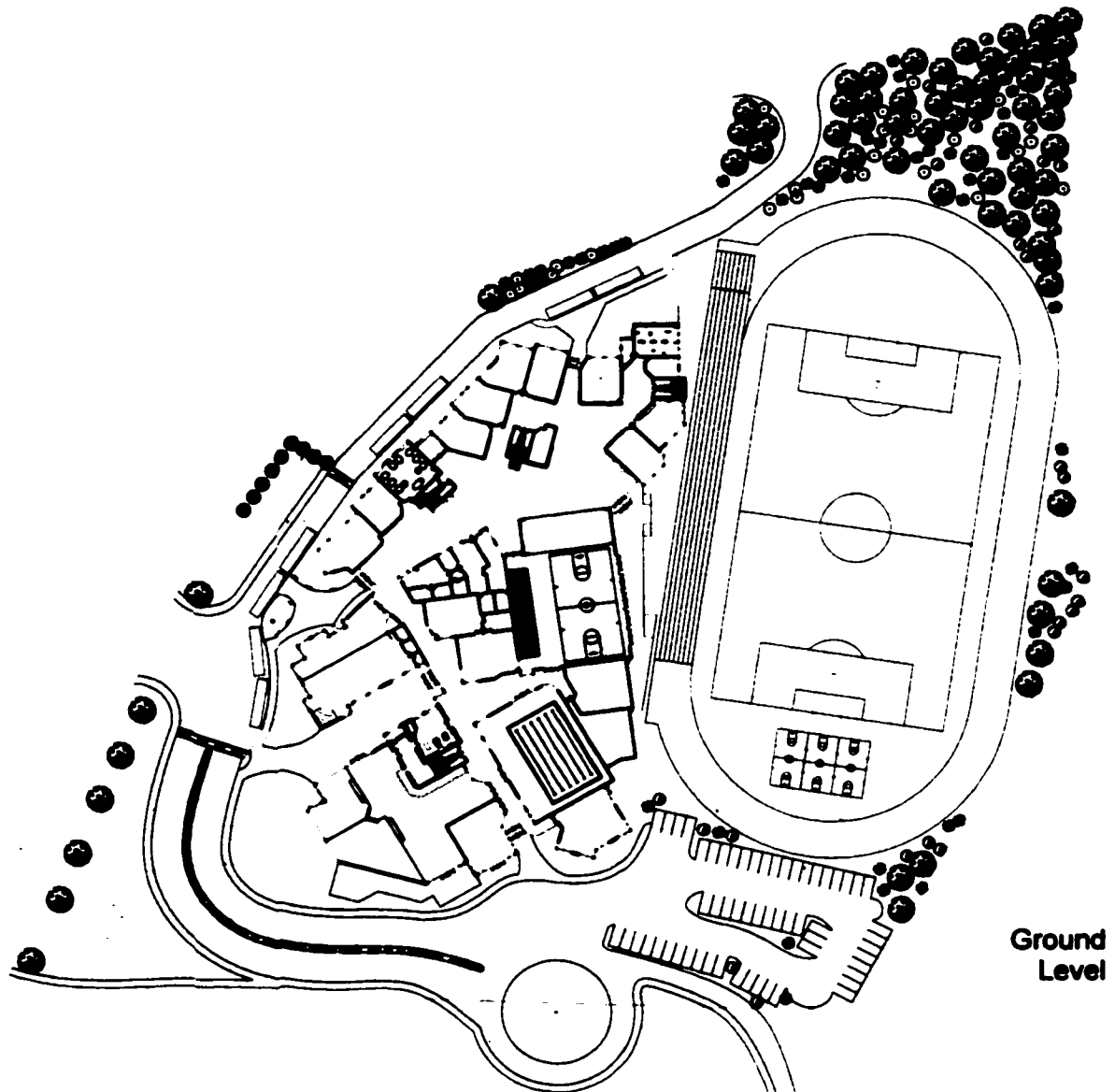
School reception/administration
 Principal's office
 Vice-Principal's office
 Conference room
 Photocopy room
 Audio/visual storage room
 Teaching materials storage room
 Staff room w/ teacher preparation room
 Guidance office & student services
 Reading recovery room
 Classrooms x16 flexible
 Chemistry laboratory w/ preparation area
 Biology laboratory w/ preparation area
 Mathematics laboratory

Shared

Information technology laboratory
 library
 Cafeteria w/ kitchen facilities
 Outdoor eating terrace
 Parking/accessible parking
 Outdoor classrooms x2
 Community health/teen health info. room
 Mechanical room
 Arts & crafts studio
 Drama studio
 Black-box stage
 Music room
 Industrial arts workshop w/ storage room
 Family studies (home economics) laboratory
 Gymnasium w/ office
 Public pool
 Male change/shower room
 Female change/shower room
 Outdoor basketball court – 6 hoops
 Sports field/soccer field/running track
 Landscaped outdoor recreation area

The Community

Daycare/after-school care facility
 Community meeting room

Programming the New Building

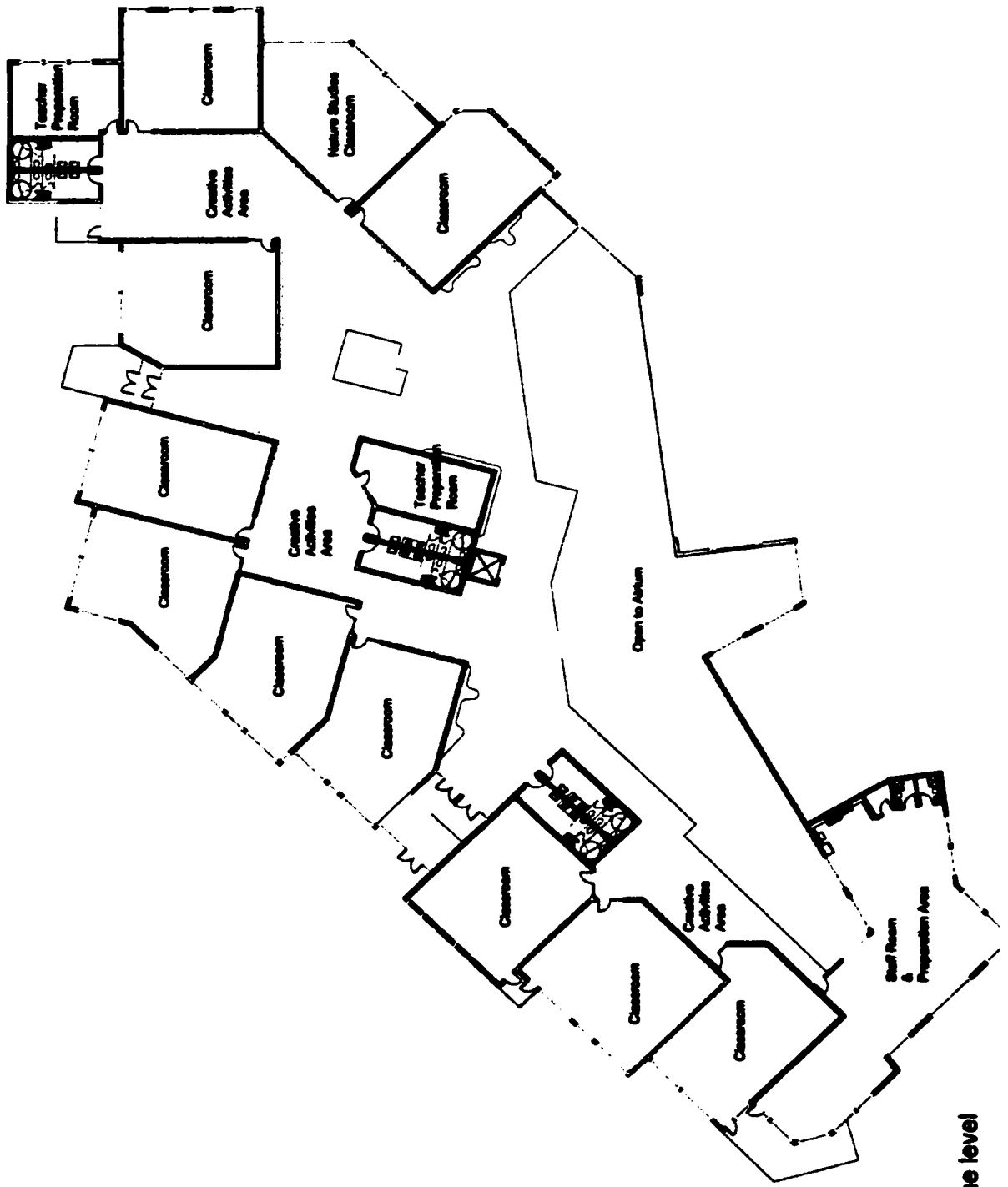
**Site plan showing
ground floor of new
school design**

The new community school is a composition of elements both specialized and general, following the built tradition of the assembled and evolutionary village. There are traditional school integral elements – classrooms, library, gymnasium, a principal's office – as well as integrated programmatic elements not traditionally

constructed within this environment. These community-focused elements - public pool, gymnasium, library, community cafeteria, daycare facilities, continuing education classrooms - have been assembled together with traditional facilities as a new community school environment.

The ground level of the building is comprised of a scholastic wing and community wing composed around a two-story communal atrium. Three clusters of classrooms, each with a creative learning area, teachers' preparation room, locker clusters, and washroom facilities, occupy the north portion of the building mass. To the south of the atrium is the body of the community school, where the administrative offices are located, along with the gymnasium, pool, library, performing arts classrooms, cafeteria and daycare facilities. These community-focused areas face the adjacent elementary school as well as the front harbour and the east side of the village.

The second level contains three additional clusters of classrooms, similar to those on the ground level, as well as a staff room that overlooks both the interior atrium and the main entrance on the exterior. The mezzanine balcony and staircases connecting the two levels are the binding elements of the atrium.

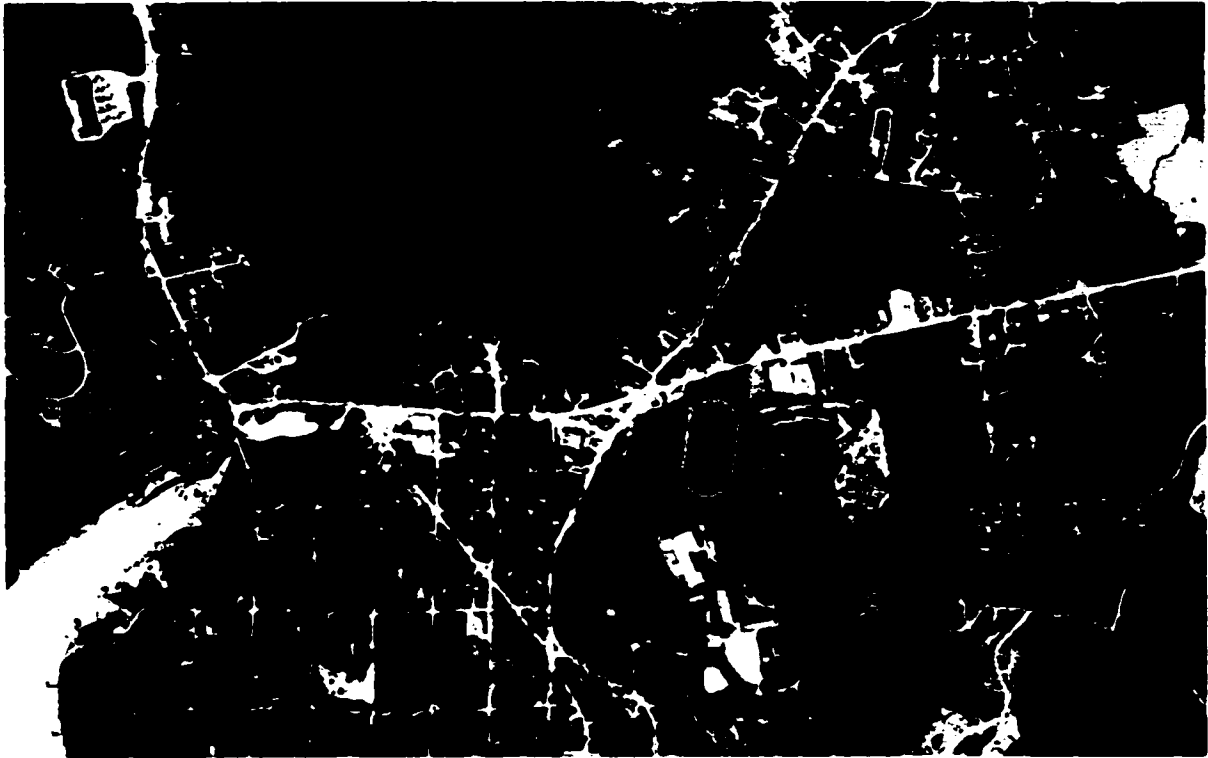


Mezzanine level



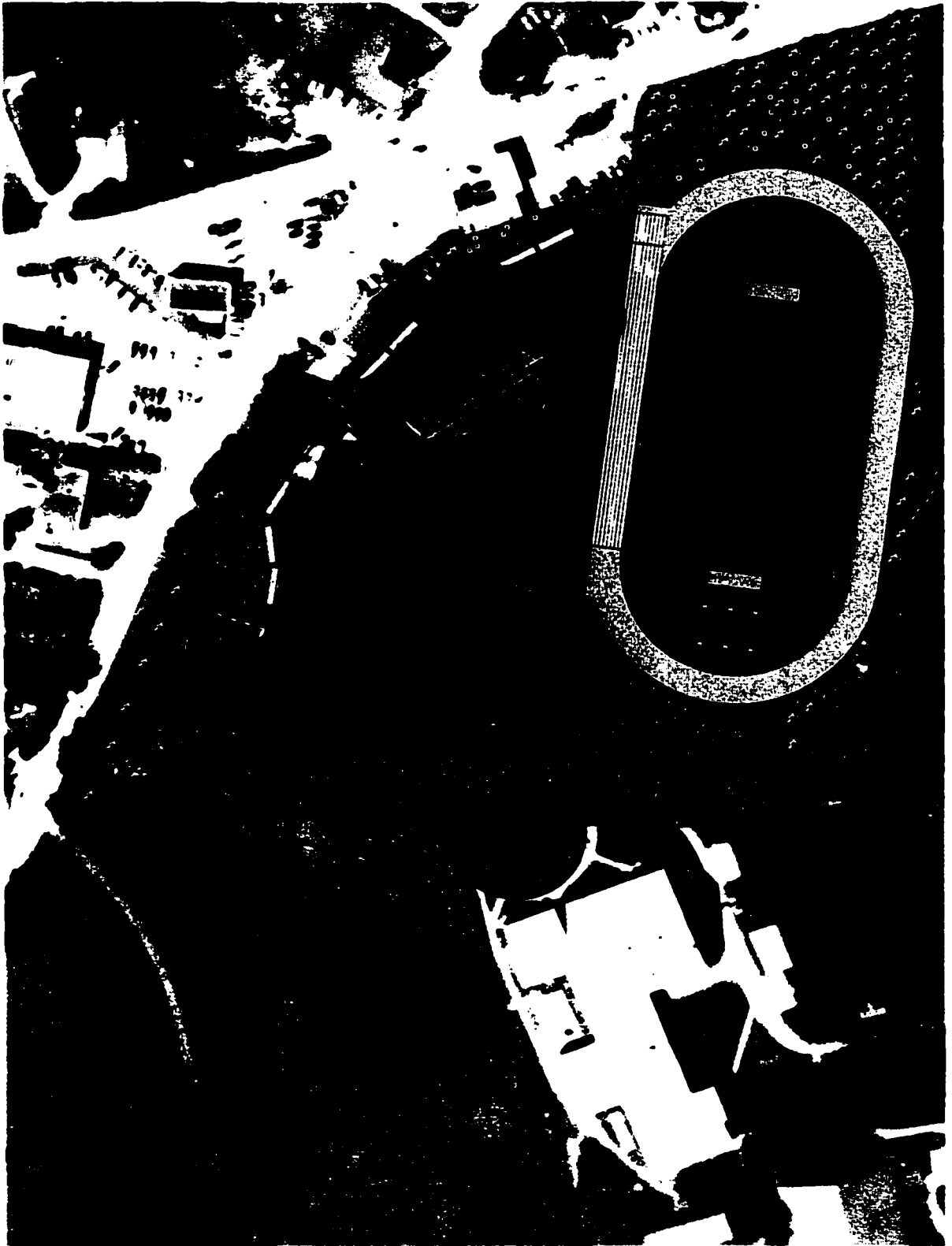
Village plan showing new school at top right

Composition of the New School



**Village plan showing
new school at southeast
corner of Highway #3,
Duke Street, and North
Street**

The physical composition of the new school is intended to invoke an ambiance of communal gathering, social exchange, life-long learning, and shared experience. The aspiration is to create an environment that invites wonder, inquisitiveness, and interest, while fostering self-confidence and pride in the self and the community. The meandering planes and volumes allow for a freedom of exploration and activity not easily achieved in rigidly-formed environments. The placement and orientation of the structure on the site allows maximum viewing to and from the community school by its neighbouring buildings and properties, yet does not impose itself on the geography of the site or within the village context.



Site plan showing new school in relation to neighbouring elementary school to the south, Duke Street entrance driveway to the west, and the 'Crossroads' junction to the north.

Design Conclusions

In designing a new community middle school for the village of Chester, it is necessary to understand the role of *place* in the traditions, cultural specificities, and aspirations of the local population.

The material traditions, established social values, and pedagogy of community learning must be considered in creating an environment of education and exchange. A venue to nurture and promote the desire to become involved can be achieved through the employment of contextually appropriate practices of construction, material tectonics and design theories.

References

Books and Articles

Agrest, Diana I. "On the Notion of Place." In *Architecture From Without*, 7-28. Cambridge, Massachusetts: The MIT Press, 1991.

van Bergeijk, Herman, and Deborah Hauptmann. *Notations of Herman Hertzberger*. Rotterdam: NAI Publishers, 1998.

Branch, Mark Alden. "Tomorrow's Schoolhouse: Making the Pieces Fit." *Progressive Architecture*, (June 1994): 77-83.

Brief History of Chester Founded 1759 (Web site). 2003 (last cited March 4, 2003). Available from <http://www.chesterbound.com/history.htm>.

CAMS: Chester Area Middle School (Web site). 2003 (last cited March 4, 2003). Available from <http://ednet.ns.ca/educ/schoolpages/cams>.

Carter, Brian, ed. *Patkau Architects: Selected Projects, 1983-1993*. Halifax: Tuns Press, 1994.

Caudill, William W. *Toward Better School Design*. New York: F.W. Dodge Corporation, 1954.

David, Thomas G., and Benjamin D. Wright, eds. *Learning Environments*. Chicago: The University of Chicago Press, 1975.

DesignShare: The International Forum for Innovative Schools (Web site). 2003 (last cited March 4, 2003). Available from <http://www.designshare.com>.

Educational Facilities Laboratories. Community/School: Sharing the Space and the Action. New York: EFL, 1973.

Fitch, Catherine, David Hyslop, James R. MacFarlane, and Tanya Rafuse. *Chester: A Pictorial History of a Nova Scotia Village*. Chester, N.S.: Christopher Ondaatje, 1983.

Ledger, Bronwen. "Agora of the North." *Canadian Architect*, Vol. 42, No. 5 (May 1997): 24-7.

Macdonald, Christopher. "Eloquent Resistance." *Canadian Architect*, Vol. 42, No. 5 (May 1997): 16-23.

McMahon, Catherine. "Another Brick in the Wall? Pursuing an Alternative Educational Environment for Halifax." Master of Architecture (First Professional) thesis, Dalhousie University, Halifax, 2002.

Morisseau, James J. *Design & Planning: The New Schools*. New York: Van Nostrand Reinhold Company, 1972.

Norberg-Schulz, Christian. *Architecture: Meaning and Place*. New York: Electa/Rizzoli, 1988.

Pocius, Gerald L. *A Place To Belong*. Athens, GA: The University of Georgia Press, 1991.

Province of Nova Scotia Department of Transportation and Public Works. *DTPW Document DC350, Design Requirements Manual*. Halifax, 2001.

School Design & Planning Laboratory (Web site). 2003 (last cited March 4, 2003). Available from <http://www.coe.uga.edu.sdpl/sdpl/html>.

Stein, Karen. "Project Diary: The story of two thirty-something architects and their ideal commission, the Atlantic Center For The Arts, in an unlikely setting, the Florida 'jungle'." *Architectural Record*, Vol. 185, No. 6 (June 1997): 98-111.

Ternoway, Heather. "Chester: Planning and Settlement History of a Nova Scotian Village." Master of Urban and Rural Planning research paper, Dalhousie University, Halifax, 2002.

Weber, Adele. "Native Intelligence." Canadian Architect, Vol. 45, No. 2 (February 2000): 22-5.

Buildings and Projects

Acton Johnson Ostry. Chief Matthews School, Massett, British Columbia, Canada (1995).

Acton Johnson Ostry. Sk'aadgaa Naay School, Skidegate, British Columbia, Canada (1999).

BCWH, Inc. Maggie L. Walker Governor's School, Richmond, Virginia, U.S.A. (2001).

Drummey Rosane Anderson, Inc. Lt. Eleazer Davis Elementary School, Bedford, Massachusetts, U.S.A. (1999).

Group2 Architecture. St. Francis of Assisi Middle School, Red Deer, Alberta, Canada (2003).

Hertzberger, Herman. Montessori Schule Apollolaan/Willemspark Schule Apollolaan, Amsterdam, the Netherlands (1980-83).

Hotson Bakker Architects with Stuart C. Ross Architect, and Cornerstone Architects. Agora Building, University of Northern British Columbia, Prince George, British Columbia, Canada (1994).

Patkau Architects. Seabird Island School, Agassiz, British Columbia, Canada (1988).

Patkau Architects. Strawberry Vale School, Victoria, British Columbia, Canada (1996).

**Peter Cardew Architects. Stone Band School,
Stone Band Indian Reserve No.1, Stone,
British Columbia, Canada (1994).**

**Thompson and Rose Architects. Leeper Studio
Complex, Atlantic Center for the Arts, New
Smyrna Beach, Florida, U.S.A. (1997).**

**Wise Miller Architects. Horizon Middle School,
Ferndale, Washington, U.S.A. (2001).**