

**Urban Industrial Dereliction: A Strategy of Engagement**

**By**

**Emeka Joseph Nnadi**

**A Thesis  
Submitted to the Faculty of Graduate Studies  
In Partial Fulfillment of the Requirements  
For the Degree of**

**Master of Landscape Architecture**

**Department of Landscape Architecture  
University of Manitoba  
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**Urban Industrial Dereliction: A Strategy of Engagement**

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**Emeka Joseph Nnadi**

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University**

**of Manitoba in partial fulfillment of the requirements of the degree**

**of**

**Master of Landscape Architecture**

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# URBAN INDUSTRIAL DERELICTION:

A Strategy of Engagement.

This Practicum is submitted to the Faculty of Graduate Studies, The University of Manitoba, in partial fulfillment of the requirements for the degree of:

MASTER OF LANDSCAPE ARCHITECTURE.

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Emeka Nnadi, 2000.

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# SECTION ONE



## THE PRELIMINARY STUDY

# 1 Preamble:

This study focuses on ‘Perception,’ – human and cultural perception - as the medium through which humanity understands, experiences, and interacts with the physical world. An exploration of perceptions surrounding the urban postindustrial landscape is carried out, and a philosophy which suggests that designing for the human perceptual experience should preclude functional or aesthetic design, is put forward. This philosophy will develop into a *strategy of engagement*, engaging perceptions of dereliction which many urban postindustrial landscapes harbor. The ultimate intent becomes to utilize this strategy in the transformation of perceptions from those of dereliction to perceptions that celebrate the intrinsic and poetic sense of place, which every landscape possesses.

A three-segment discourse discusses this idea further:

The first segment begins with a discourse on *cities and industries*, exploring the evolving relationship that has existed between them over a brief historical and cultural span. The ‘remnant fabric’ of this evolving relationship – **the postindustrial landscape** – is identified as a canvas on which the culture and mythology of modern society has been etched. This part of the preamble explores the view that as the fabric of postindustrial landscapes steadily spreads, it is important that it should be seen not as derelict, but as possessing extensive potential for adaptive re-growth and continued cultural engagement.

The second segment discusses collective and personal ‘*Perception*’ as the source of all cultural reality. Thus the cultural and mythological engagement that postindustrial landscapes have the ability to foster can only occur through the influence of the perceptual tools of sight and sound, touch and taste. This part of the preamble calls for the development of an appropriate strategy that will allow for the possibility of just such perceptual explorations.

The third segment of the preamble is a brief, critical commentary on prevalent procedure for urban postindustrial remediation. *The stand*

taken is one that sees the cultural and intrinsic value of these sites explored and amplified, and not (as is widely the case) something to be scraped away like so much rubble, in the wake of new development.

## 1.1 On Cities and ‘Industries’...

Cities are the engines of commerce and culture - places of the greatest energy, excitement and creative exchange. They serve as the physical expressions of humanity’s most far reaching dreams; the storage vaults of our collective accomplishments; and the springboard from which we embark on our future aspirations.

Human ‘Industry’ is something that historically has had an intimate and deeply relevant role in the development of cities. To a large extent, the industrial revolution heralded both the dawn of heavy industry, and simultaneously the formation (physical and philosophical) of the ‘City’, as it has evolved to exist today.

Today, the word ‘Industry’ is defined as 1. Diligence; 2. A department or branch of a craft, art business, or manufacture; *ESP*: one that employs a large personnel and capital; 3. A distinct group of productive enterprises; 4. Manufacturing activity as a whole<sup>1</sup>.

‘Industry’ is also a *cultural* word. It is a word that defines within itself all of humanity’s endeavors in relation to the cosmos around us, and therefore possesses a cultural significance that is impossible to ignore.

With the discovery of the usefulness of stone and wooden objects for self-defense and hunting, human ‘industry’ had begun. The Stone Age in time gave way to the metal age(s), and with this came the first of countless shifts in human ‘technology’. Today, as we near the end of this millennium, we are faced with an occurrence that is not in itself unique: another imminent shift in the technology base of first world nations. What *is* however unique, is the fact that in the last century, an unprecedented toll has been taken on (urban) landscapes in the support of technologies and industries that are now starting to become obsolete. Typified in first world nations, economies are shifting from a heavy industrial, to a service and information technology base; increasingly

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<sup>1</sup>The New Merriam - Webster Dictionary, 1995

moving heavier industries to less costly third world nations. With the technological shift now heralding the emergence of service and information based 'new age' industries, the physical demands on urban land are significantly reduced, and many of our industrial landscapes are being perceived as obsolete.

And thus, the first clue to what lies at the heart of this study:

*As the technological shift becomes more apparent in the early years of the next century, more and more heavy industrial sites will cease to function as dynamic parts of an organic city. The Cities that they nursed into existence and growth are now in the early stages of an industrial weaning process. Typically between ten and twenty percent of present day north American cities are zoned as heavy industrial land, (M1-3), and in the foreseeable future a significant quantity of this land will become perceptually derelict, or at best, incipient.*

## 1.2 On Perceptions

The exploration in this project involves sensory and cultural perceptions. The emergent 'new millennium' postindustrial landscape provides a unique, relevant and diverse palette of opportunities for the exploration of 'landscape' as perception.

*The idea here is that the term 'Landscape' defines not the scene, but the relationship between the participant and the scene.*

The hypothesis becomes therefore that the relationship between humankind and the land is both nonlinear and symbiotic. In other words, in as much as a 'landscape' appears to be derelict, it may in fact only be derelict because we perceive it so. If an altered view, a frozen moment in time, or the juxtaposition of unrelated cultural elements allows us to perceive the land differently, would it remain derelict? Or are there potent and intrinsic qualities inherent in every Landscape? Is there a magical poetry that addresses more honestly the true meaning of place?

The French Landscape Architect, writer, and philosopher Bernard Lassus, in his book 'The Landscape Approach', explores in great depth landscapes as perception, and his writings and hypotheses play an extensive role in the development of this study's philosophical position.

Peter Jacobs, writing about Lassus's philosophy, states: 'Lassus believes that landscape is by its very nature cultural: "a construction of spirit born of the senses."' He suggests that the scope of landscape is more non-visual than visual, a play of hidden and seen, directly perceived, remembered, and imagined. He asks, "Is not the landscape that fragile moment where the visual, auditory, olfactive fragments are linked to my feelings at an instant in time to form a view?", and regrets that in fracturing the landscape into its component parts we destroy it. Lassus reminds us that it is not always necessary to modify an existing landscape... 'to plant trees, modify the topography, enlarge or change the course of a riverbed to affect landscape change. It is more than sufficient to offer other ways of seeing, reading, or hearing an existing one...'

There can be no doubt about the cultural legacy of the industrial landscape. As discussed earlier, there is a strong relationship between the emergence of the 'city', culture, and Industry. As long as a site was perceived to be associated with some form of 'industry', the cultural relationship between the site and its participants remained positive. Over time, and with continued use, such a site would increasingly acquire layers of intrinsic cultural characteristics that would establish it as a unique and magical place within the collective mind.

Especially evident in North American cities<sup>2</sup> (where much of the technological shift is currently occurring), the inevitable demise of the industry would lead to the site being labeled 'derelict', and a program for its complete overhaul and 'reintegration' would quickly commence. This usually occurs without any perception of the site's cultural value, and results in a collective loss for society. And herein lies the philosophical mandate:

*To search for a strategy that will promote the exploration of landscapes as cultural memoirs and mythical 'mindscapes' - a strategy that will provide, prior to functional re-use, the opportunity for new ways of seeing, interacting with, and ultimately perceiving of the postindustrial landscape.*

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<sup>2</sup> This distinction is made because in many European cities there is a policy of 'marginal cultural intervention', which protects culturally significant urban fabric from indiscriminate redevelopment.

## 1.3 The 'Stand':

Traditional methods in urban development have created myriad landscapes, even though landscape<sup>3</sup> creation is never the initial or central theme. As such, a clear understanding of the perceptual power and potency that these landscapes possess is impossible (before one can explore the intricate and wondrously poetic landscape that has formed over time, the scene is scraped clean and a 'new' stage is constructed).

Urban municipalities and policy makers continue to view incipient urban open space - spaces that do not directly yield economic dividend - as voids in desperate need of filling, or as sites suffering a 'condition', and in need of a cure. At best, such places are seen as functional and economic opportunities simply waiting to be exploited.

But there is a different reality. As discussed above, such scenes are usually the products of intense and vigorous human activity over several years, and are therefore deeply, intrinsically rich in cultural heritage. The post-industrial fabric is particularly given to such poetry:

*The loud yelling of the working crew, over the sounds, sights and smells of heavy industry; the lives of the laborers, so deeply connected to the life of the factory; a city's civic pride in the accomplishments of her industries; the intoxication of the experience of forging sustenance out of raw earth; the intense amounts of life-energy expended at these places - all of this, occurring in different ways at different sites, leaves behind something intangible, yet ever so real, about every one of such places.*

- Author.

Walking through the site of the former Canada Packers meat processing plant, I am struck by a feeling, akin to nostalgia, for a place to which I've never before been. On my very first visit, it feels like I remember. ... Something whistling in the wind; the fascinating, fractured texture of the cracked, endless concrete pavement (something that could never really be 'designed'); dilapidated yet *beautiful* artifacts and architecture strewn across the site; the ominous silence, charged with the sounds of

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<sup>3</sup> 'Landscapes' as the intimate perceptual *relationship* between participant and scene.

past endeavor; the proud, resilient naturalized grasses, tossed by wind. And in the background, enormous prairie skies. It is not a 'real' memory, but a fabrication, a manufactured memory that connects me with this land – creating for me a landscape that is full of dreams, myth and energy; a powerful, culturally significant landscape. I had experienced a perceptual transformation.

*Bernard Lassus suggests in his work that we cannot create such landscapes, but must in every case wait for the hindsight that inevitably brings with it 20:20 vision. In other words it is in looking back at scenes detached through disuse (or misuse), that we, in an instant, are struck with the true depth of their inherent cultural meaning.*

This implies that there is a cultural value extant in our abandoned, disused or misused industrial landscapes that only really comes to light in the wake of a post-decay visitation. The participant in the scene is exposed to more than just a cumulative visual history of the site: there is a perceived interpretation that becomes a personal journey through the mythology of the site. The viewer is, in the abandoned silence of the place, faced with the same overwhelming (yet largely reconstructed) nostalgia that one experiences when visiting an historical ruin or excavated city site.

*In contrast to traditional urban redevelopment process, this study intends to explore avenues for capturing - and amplifying - this elusive mythology. Prior to any kind of functional re-integration, the practicum intends to develop and demonstrate a strategy; setting in place a framework for seeing new and relevant layers of meaning in what appears to be a 'derelict' landscape.*

# 2 Introduction:

General objectives, specific goals, and the method for the practicum are discussed in this chapter.

## 2.1 Goals and Objectives:

The major goal of this practicum is to explore issues surrounding industrially derelict sites within an urban environment. In contrast to traditional urban redevelopment process, this study intends to explore avenues for capturing cultural meaning within the postindustrial fabric, prior to any kind of functional re-integration. Specific objectives are as follows:

1. To develop a 'strategy of engagement' that can be applied to industrially derelict urban sites, providing the opportunity for individual and collective shifts in perception; and amplifying the 'cultural mythology' inherent in every industrial landscape.
2. To respond to an invitation for redevelopment proposals made by the city of Winnipeg regarding a derelict site within the St. Boniface industrial park district - applying the above research, strategy and philosophy to the evolution of a physical design proposal - a framework upon which programmatic development is made possible.

## 2.2 Method:

The method is divided into four parts:

1. The challenge, as described in the City of Winnipeg tender document<sup>†</sup>, is examined and debriefed. Issues, opportunities and constraints are established and synthesized into a definitive Challenge Statement.
2. A literature review of five related design precedents is then undertaken. These precedents have been compiled for their conceptual relevance, and identify a typology of sites and design responses. The exploration of these examples (in part and in whole) will present a series of conceptual positions.
3. Thirdly, a parallel discourse is embarked upon; exploring the philosophy of renowned French Landscape Architect Bernard Lassus. The speculative roots of Lassus's work and writings become intimately relevant to our exploration of urban

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<sup>†</sup> PD98-148

postindustrial landscapes. An extraction of relevant themes in his work, combined with the conceptual propositions discussed above, will yield a concrete Strategy of Engagement.

4. Finally a Synthesis occurs. Responding to the challenge statement, the strategy is employed. It finds philosophical justification in the views of Lassus, and evolves into a design solution that provides a sensitive framework for future development.

In contrast, appendix 1 contains excerpts from a strategy and concept development document produced in 1996 by the Environmental engineering firm of DS Lea for the site. Comparatively, the former approach is land-*USE* oriented, while this study intends to explore the landscape *relationship*.

# 3 The Challenge:

In September of 1998, the City of Winnipeg released a call for proposals for redevelopment of the “Public Markets” sites in the St. Boniface industrial park district. Excerpts from this call are quoted and scrutinized in this chapter, with an aim at percolating a clear understanding of the challenges and opportunities for Landscape Architecture and urban reintegration. A synthesis of these implications and opportunities is given in the *Challenge Statement*, at the conclusion of the chapter.

### 3.1 Process:

The City of Winnipeg, in the call for proposals, specifically opened the site up for private sector proponents. The site is a 170 acre (69 ha) site within the St. Boniface industrial park district which is presently extremely derelict, and is currently owned by the City. The City of Winnipeg has modified their policy of selling land through a tender process due to the uniqueness of the circumstances surrounding this site. The number of variables affecting the site and the possible range of options with respect to redevelopment has led to this call for proposals.

### 3.2 The Site:

The Public Markets Limited was the name of the company that owned and operated Winnipeg's former stockyards. For the purposes of the call for proposals, the term 'Public Markets Site' is used to refer to the area bordered by the CPR Emerson line on the west, Marion Street to the north, the CNR Sprague line on the east and the CP / CN transfer track and the Paddington Yard on the south. (Figure 3.2)

The total area of City owned land is 170.7 acres east of the CPR Emerson line and an additional 1.81 acres west of the rail line, fronting on rue Archibald. In addition, there are .8 acres of inactive rail property belonging to CP rail within the site area, which should be considered available for development, subject to negotiating an agreement with CP. There are also several parcels of privately owned land along Marion street frontage and a site adjacent to the southeast corner, which is jointly owned by CP Rail and CN Rail. This area is leased to an auto transport company that unloads new vehicles from CP and CN, and stores and distributes them from the site by truck.

The original Public Markets Limited land was purchased by the City of Winnipeg in 1991. In addition, the City acquired the former Swifts Canada site in 1988, and the Canada Packers site in 1997.

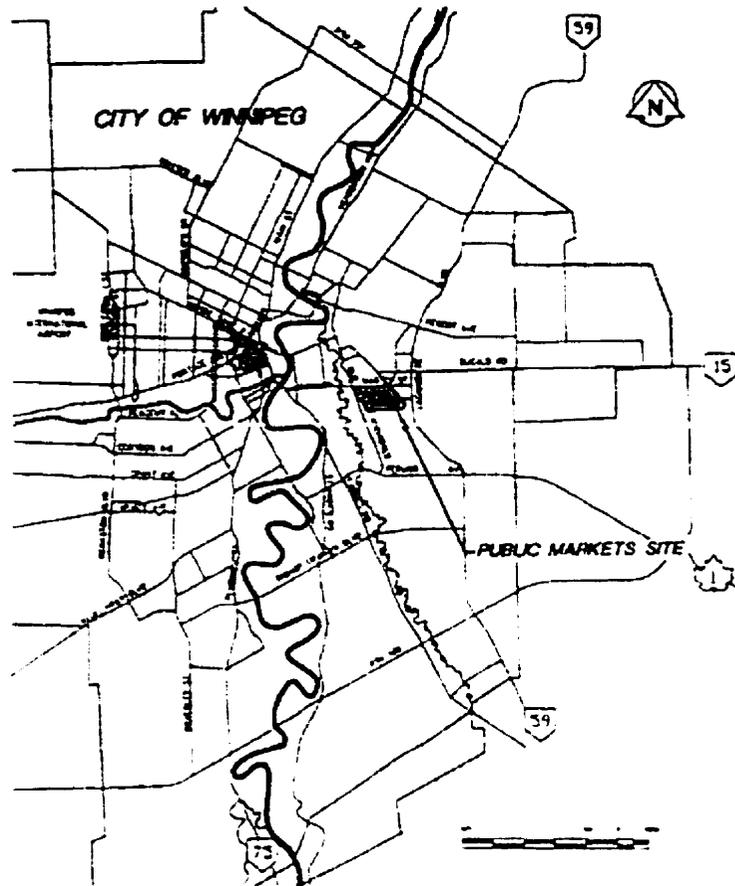


Figure 3.1 Site Location Map

### 3.3 Background:

For eighty years prior to the late 1980's, much of the Public Markets site was used for livestock related activities including holding, selling, transferring, slaughtering and packing. The primary operations were the Public Markets Limited stockyards, which occupied most of the land away from the Marion Street frontage. The Canada packers and Swift plants located near the Marion and Archibald intersection, and a hide processing plant. A number of rail yards and sidings also existed on the property at one time.

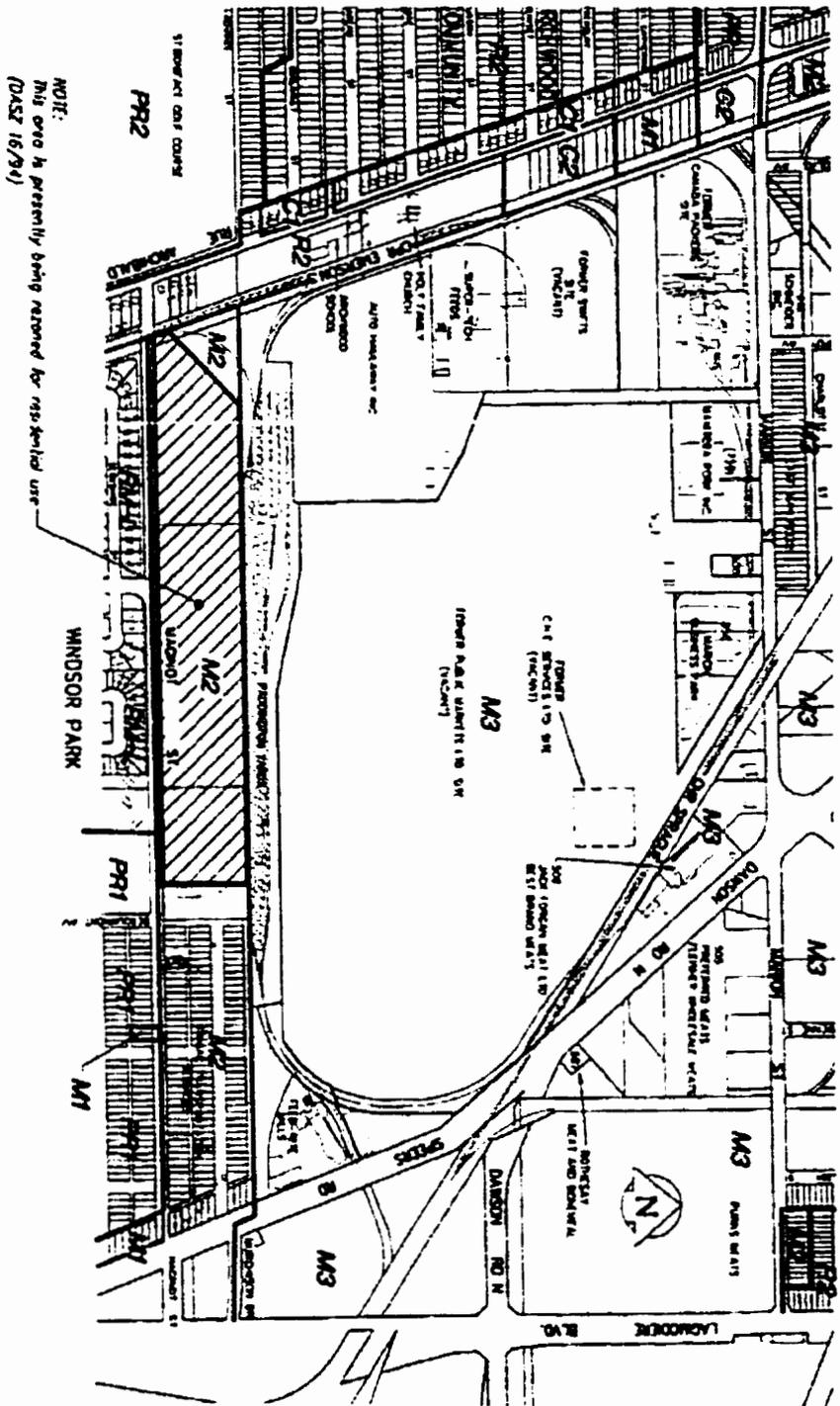


Figure 3.2 Site Environment

The stock holding pens, barns, and most of the associated buildings were removed between 1983 and 1988. Structures remaining on the site include the administration building powerhouse and water tower. The former Swifts Plant was demolished in 1993 and the former hide processing plant in 1995. The Canada Packers building has been partially demolished but principally still stands.

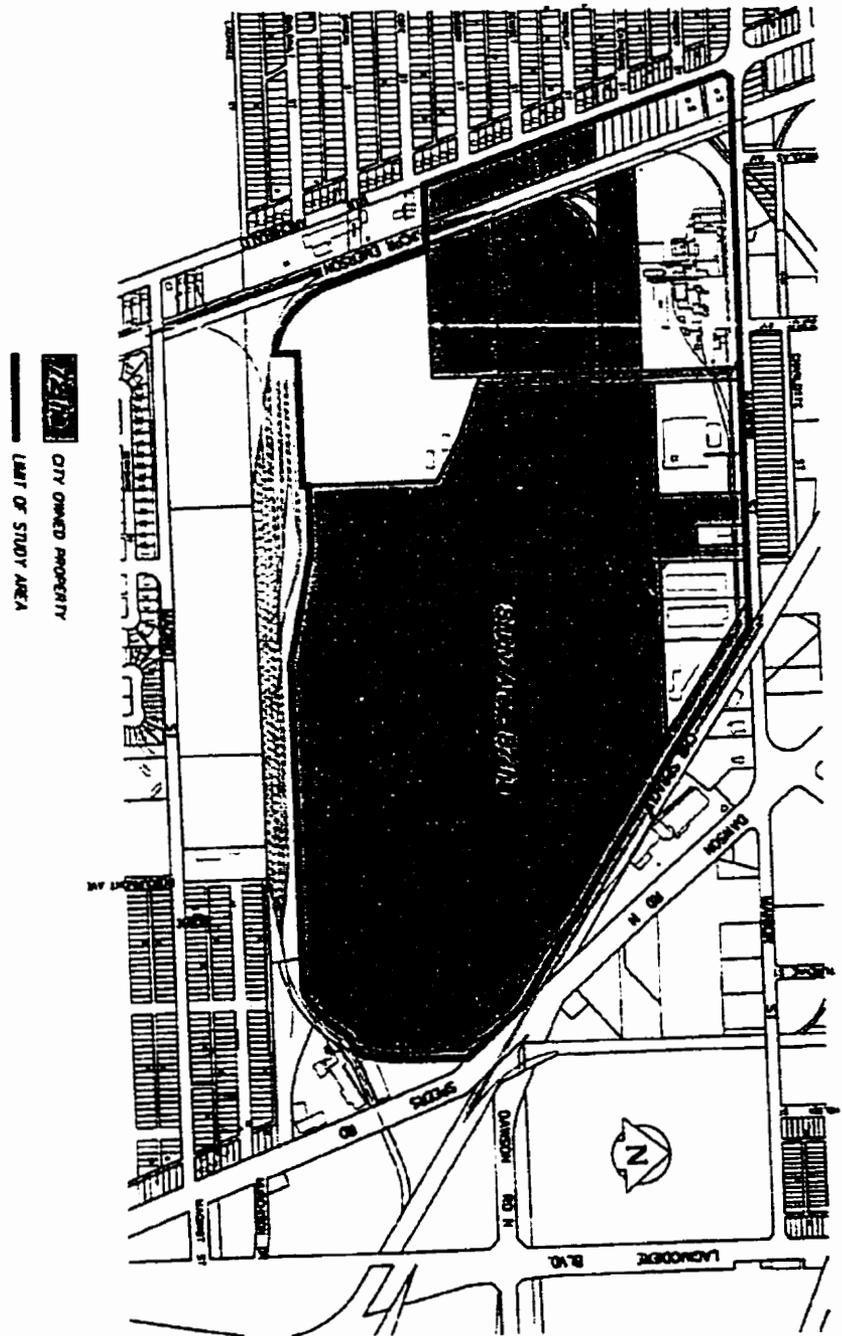


Figure 3.3 Site Boundaries

The site is generally characterized by large tracts of vacant land and three abandoned structures - a four story administration building, the former Canada Packers meat packaging plant including associated structure, and a water tower.

In its present state, the site does not compliment the community from either a visual or economic perspective. The Chamber de Commerce Francophone de Saint-Boniface and Winnipeg 2000 have both expressed concerns that the appearance of the area detracts from St. Boniface and Winnipeg, and they would like to see some physical changes or redevelopment which would improve its character. They point out that the site represents a poor image to visitors who approach Winnipeg from the southeast, particularly along PTH 59 from the United States.

In addition, residents from the adjacent communities of Windsor Park and Archwood have expressed concern about the appearance of the site and the potential risks associated with derelict buildings because of their attractiveness to children. They are also concerned about the future use of the site.

### 3.4 Previous Studies

Previous environmental studies were carried out for the Public Markets and the former C.H.E. Services site. The investigation for these sites concluded that those portions of the site that were tested were assessed to be relatively clean. There are some surface manure piles and a deep manure pit in one location, as well as some soil contamination associated with a former service station.

The planning and engineering firm of Tetris Inc. carried out the complete environmental study and report for DS-Lea Consultants.

### 3.5 The Public Markets Task Force

Winnipeg City Council has established a Task force to assist in developing recommendations with respect to the future re-use of the site. The Task Force is comprised of the counselor for the area; a counselor for an adjacent area; representatives of the Reil Residents' Advisory group; Norwood Grove Business Improvement Zone; Chambre de commerce francophone de Saint-Boniface, Conseil de development economiques des municipalites bilingue; Winnipeg 2000; Manitoba Department of industry Trade and Commerce; DS-Lea Consultants Ltd., and the City's Property and Development Services Department.



across the northeast part of the site. The Task Force considers commercial uses to be appropriate for the Marion Street frontage.

### 3.6 Development Plan

The City's official development plan<sup>5</sup>, designates this area as an *industrial policy area*. Industrial uses, limited commercial uses and recreational uses are all permitted within this policy area. The introduction of residential uses would likely require a Plan Winnipeg amendment prior to a re-zoning application. There is flexibility in this regard, depending on the timing and the nature of the proposals received by the City. The site could be re-designated as part of the review process.

### 3.7 Zoning and Land Use

The site is currently zoned "M3" Industrial District. The M3 zoning allows for heavy industrial development of a potentially noxious nature.

A portion of the site currently is leased to a private feed mill company, identified on fig. 3.2 as Super-Tech Feeds. There is presently litigation between the city and this leasehold party, therefore the status of this property is undefined.

Although the site is zoned for heavy industrial development, the Task Force would like to explore options for the redevelopment of the Public Markets site with uses that provide a transition between the heavy industrial uses to the north and east and the residential uses to the south and west. Such uses could include light industry, commercial, recreational or institutional use.

### 3.8 Remaining Structures

The bulk of the former Canada Packers building and associated structures and a three story former administrative building and water tower all remain from the former stockyards operation. The stockyard pens and sheds have been removed, but the concrete floors remain.

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<sup>5</sup> *Plan Winnipeg...Towards 2010*

### 3.9 The Rail Lines and Yard

The site is bounded on three sides by rail lines and yards. The CPR Emerson line is an active component of the CP Rail system link with the USA, handling eight to ten trains daily. The CN Sprague line is a local inter-connecting line and is less active, with four to five trains per day.

The Paddington yard, along the south boundary of the site, is a major interconnection point between the two railways. Rolling stock is transferred between the two rail systems in these yards. In addition, it is the common connection point for both rail companies' car and light truck transportation services. Auto Haulaway Inc., which is a private operation on land leased from CN and CP, unloads new vehicles from rail cars at the west end of the yard, and stores and distributes them from this location.

### 3.10 Conclusions - Challenge Statement

Opportunities and challenges that have been extracted from the Call for Proposals document are identified below:

1. The site's borders - created by the two rail lines, the rail yard, and Marion Street, create hard edges that will require creative and innovative treatment to facilitate strong physical connectivity with its surroundings. The inactive CP Rail yard (0.8 acres) may represent some **potential for connections** in this regard.
2. In addition to the defunct CP Rail yard, other structures remaining on the site include the administration building, powerhouse, water tower, and the Canada Packers building. While presently seen as eyesores that are potentially hazardous, these may possess **opportunities for functional and cultural activity**, amalgamating the various surrounding activities, within the site.
3. The reference made to the visual and environmental apathy that the site is currently experiencing also serves to identify untapped visual and physical potential. A large portion of this

visual potential revolves around creating new ways of seeing, rather than new things to see. In terms of environmental apathy, this mostly occurs towards the southeast area of the site. Manure pits, gravel piles and other potentially toxic elements betray the site's noxious past. But here again, untapped potential for the reformation of the site in ways that utilize its cultural memoirs, becomes the paradigmatic intent. As such we can identify this **untapped visual and environmental potential**.

4. The site's future is also stated as an area of concern. This notion of future reality extends beyond the site and embraces the very fabric of our technological and cultural realities. What this concern identifies is the need to develop a framework that operates outside of the typically temporal development models that are currently in fashion. This way, consecutive periods may develop around and within this framework, continuously harnessing a **cultural metaphor that, once established, can only grow in meaning and depth**.
5. The wide range of land use zones within close proximity offer the opportunity for mixed and dynamic use of space. Activities usually restricted to particular zoning schemes can be layered over one another, or juxtaposed against one another, in such a way as to foster a greater sense of unity within the wider site vicinity. Thus the site possesses the **potential to serve as a social condenser**.

In contrast with what this study intends to achieve, the Public Markets Development Concept Study report document offers what can at best be described as a pragmatic approach to the study site's issues. What becomes obvious is that in approaching the site from a purely utilitarian point of view, the design team<sup>6</sup> makes no reference to the site's intrinsic value, implying instead that there is none: 'The site is generally characterised by limited remaining industrial and commercial

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<sup>6</sup> DS-Lea Consultants Ltd.

uses, derelict buildings and vast tracts of vacant land. In its present state, it does not compliment the community from either a visual or economic perspective. There...are concerns that the appearance of the area detracts from Saint Boniface...<sup>7</sup>,

The policy applied in the DS-Lea report is specifically one of land use: 'the second phase of the report considers future land use scenarios including industrial, residential and recreational options. The purpose of generating the land use scenarios is to provide the Land and Development Services Department with a framework which can be used to assist in responding to issues and developing on-going policies for the Public Markets and adjacent lands.'

The intent of this study is to provide a framework that is contextual and in harmony with the site's intrinsic value, offering *that* as the basis for further development. In its closing statement, the invitation for proposals document recognises that the Public Markets site presents 'some real challenges'. The document concludes: "*We are confident that just such a challenge will attract proponents who have the vision and ability to see beyond the present status of the site... to bring about a transformation of the area*". The study conceives that the real challenge is to **extract from within the site interdependent and contextual cues that will foster a new perceptual vision, and bring about a transformation that remains in harmony with the site's cultural identity.**

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<sup>7</sup> DS-Lea Consultants Ltd. Report 4517/101

# SECTION TWO



## STRATEGIC DEVELOPMENT

# 4 Case Studies:

A review of precedents that demonstrate how sites that have undergone disuse and dereliction have been reintegrated into the urban fabric is the first step in this practicum. Five precedents have been identified, and the idea is to review and analyze these precedents in order to extract clues from each of them that will then stimulate the formulation of a strategy.

## 4.1 Overview:

By the 19<sup>th</sup> century, urban industrial wastelands were being redeveloped in some manner. Even before a broad awareness of environmental and ecological issues occurred, they were seen as economic saboteurs that lowered adjacent property values. The intent when redeveloping these lands would have been to facilitate the increased value of the land itself, and as an offshoot, the value of its surroundings.

An early introduction to remediation attempts for industrial wastelands is Birkenhead Park in England. Constructed in 1843, it is considered to be the first park built and owned by the public specifically to ameliorate its own industrial conditions. Birkenhead Park was intended as an amenity to counteract the social impact of the industrial revolution. Redevelopment succeeded in increasing the social value of the land.

Parc des Buttes-Chaumont (1863) in France is another example of the emergence of wasteland remediation. This park, originally a limestone quarry that later became a garbage dump, is considered “the most dramatic early example of the art of landscape recreating shape and form from apparent waste” (Jellicoe, 1987). The original “scene was so violent that it excluded the urban environment and absorbed a railway that pierces it.” The remediation was seen as so successful that the value of adjacent properties more than quadrupled, and there was an enormous influx of social activity.

Another historic example of successful industrial-dereliction remediation is Frederick Law Olmsted’s Central Park in New York City (1857). Central Park’s site was so abused that it was originally labeled unsuitable for either building development or agricultural use. As such it was designated as a public open space. With the provision of a successful public amenity, the property value of surrounding lands has increased so much that the tax revenue generated has paid for the park’s site and redevelopment several times over.

These historic examples demonstrate that there is a strong precedent for the successful redevelopment of urban industrial wastelands into socially and economically viable public spaces. As earlier stated, the fact that the economic and industrial bases of many first world countries are in a state of rapid change indicates that there will be a

flux of industrial wastelands generated in the near future, that can then benefit from such a wealth of precedents.

## 4.2 IBA Emscher Park



Figure 4.2.1 Emscher Park

In May 1988 the Government of North Rhine Westphalia resolved to stage the Emscher Park International Building Exhibition (IBA) in 1999. This latest German IBA was seen to be preparing for the challenge, which, sooner or later, faces all highly developed industrial societies, namely, *the repair of environmental damage caused by industrialization*. The intention of the IBA was to bring together international experience and organize a lasting and practical exchange of ideas. The sub-title of the IBA became the "workshop on the future of old industrial areas." The ambitious vision of the IBA involves creating new high quality urban areas and regenerating a natural landscape along the River Emscher between Duisburg and Dortmund.

The area of the IBA is 800 sq. km and comprises 80 individual projects set in 17 cities with a combined population of two million inhabitants.

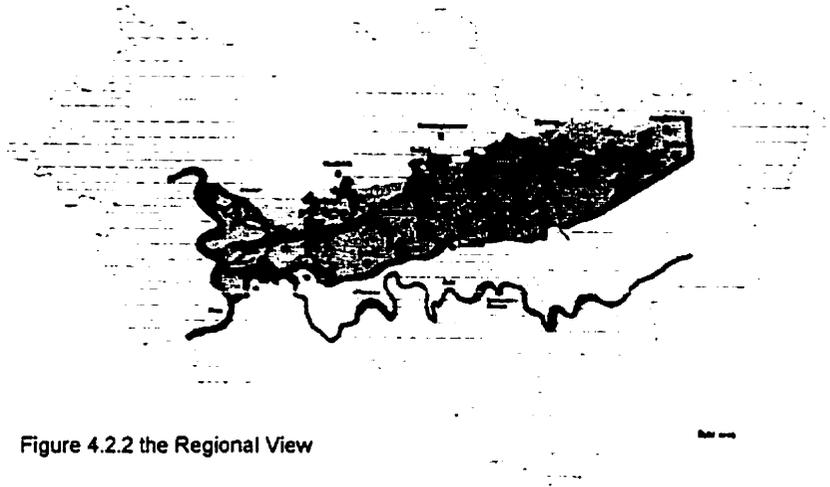


Figure 4.2.2 the Regional View

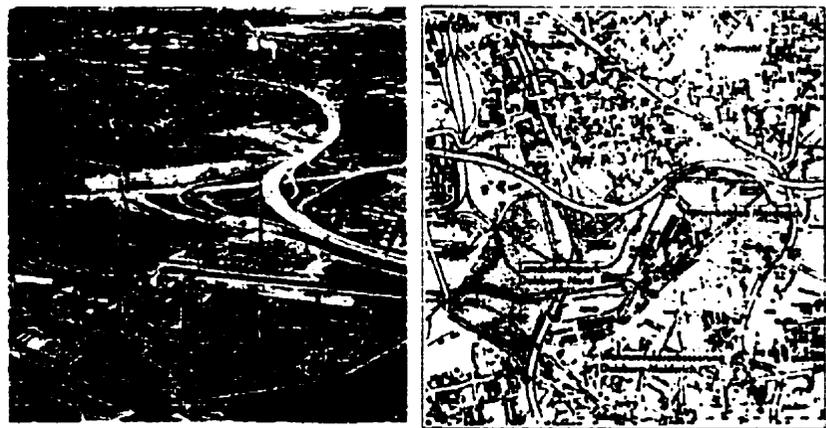
### **The Industrial landscape of the Ruhr:**

The mandate for the Emscher Park focuses on the broader issues of urban planning, architecture and urban regeneration. In selecting the Emscher area between Duisburg and Dortmund (a corridor forty kilometers long and several kilometers wide) the question of urban ecology as a fundamental requirement for new working, living and cultural patterns is forwarded. Historically, the Emscher area of the Ruhr was developed in the 19th century by manufacturing plant and transportation systems for coal, steel, chemicals and energy generation. This process of rampant industrialization turned the area into the most densely overworked industrial landscape in central Europe, with exceptionally high levels of environmental pollution and intensively carved up open spaces. The issue of soil is also central to the late 20th century post-industrial region of the Ruhr. The growing predominance of derelict land and underdeveloped urban sites are the signs of rapid and major structural, cultural and industrial change, and is the major issue facing urban designers and architects in the Ruhr.

During the 1970s there was growing concern in the Ruhr about worsening economic conditions and the deteriorating quality of the environment. Coal mine closures, rationalization of the steel industry and movement of manufacturing industry has changed the economic landscape. These post-industrial cities and regions now comprise

spatial voids, as 'dereliction' has changed the physical form of the urban areas, creating new types of urban landscapes. These changed scenes call for new attitudes towards urban design, architecture and urban regeneration and new thinking and attitudes towards a restored predominance of nature are developing out of the urban decline. In these situations urban regeneration projects no longer exist within the metropolitan framework of urban design, but rather they are to be discovered in new ecological systems where the landscape and the park are appropriate metaphors for a new greening of the city.

Figure 4.2.3 Duisburg Nord – photo and proposed plan



Plan and view of former Industrial site at Duisburg North being converted into a new type of park

#### **The Park's Features:**

The Emscher IBA proposal includes sewage conversion into sensitive systems; recreational renewal of green landscapes, creation of high quality industrial parks, finding new uses for old industrial monuments and construction and conversion of new and existing urban housing and garden city settlements.

The completed IBA Emscher Park projects comprise a number of distinctive themes: The Emscher Landscape Park includes major new 'green paths', a state garden exhibition in 1996 and regional 'green corridors'. The ecological restructuring of the Emscher river system includes a new sewage treatment farm at Bottrop and Deininghauser Brook renovation. The theme of working in the park is well represented by new Science Centers, Business Parks, and Future Technology Centers for Environmental Protection. New forms of

living and housing have been developed with new residential projects; conversions of existing settlements and renovation of coal mine garden cities. The re-integration of the urban areas is being brought about by many public transportation projects including new stations, bridges and urban public spaces.

Figure 4.2.4 Old buildings and Competition entry



Zollverein colliery Pithead buildings



Bergkamen Housing Project competition design

The scheme to create a landscape park provides the main unifying theme of the Emscher IBA. This is intended to provide the central core of the new infrastructure for the whole region. By connecting isolated open spaces, restoring the landscape, and upgrading the ecological and aesthetic quality of the desolated landscape, the idea is to achieve a lasting improvement of the living and working environment. The ambitious proposal is the further development of a plan to create seven regional green corridors. This idea was first conceived of in the 1920s but was never properly realized. Taking up this earlier idea, the individual corridors are being expanded and linked to new corridors to form a complete park system of European significance. Duisburg North (a 200hectare former industrial site), with a redundant steel works at its heart, is being converted into a new type of park. The planned green path from Oberhausen to Duisburg creates new links between cities using the routes of former industrial roads and railway lines. The transformation of Mechtenberg Hill, lying on the boundary of the cities of Essen and Gelsenkirchen, draws together the ideas of artists, landscape architects and the local community in forming new ways of utilizing a natural landmark of the Emscher region.

### **Industrial Monuments:**

It is particularly important for the new identity of the Emscher region that existing industrial plant, collieries, foundries, spoil heaps, transportation lines, and warehouses should be preserved as the only physical witnesses to the history of the former industrial landscape. Perhaps the most outstanding industrial monuments in the Ruhr are the pithead buildings of the former Zollverein colliery. The industrial plant has been called a 'Cathedral of Labour' of the 'Cologne Cathedral of the Ruhr.' In its new role, the emphasis is on using the colliery site for art and culture. Restoration of the old buildings is being carried out in conjunction with a job creation scheme for the long term unemployed. Many new uses have been developed for existing industrial buildings and perhaps the most impressive is the conversion of the massive Oberhausen gasometer into a contemporary theatre. A new glass lift, inserted into the structure, takes visitors on the roof where panoramic views of the changing Ruhr landscape are revealed.



Figure 4.2.5 the many Views of Emscher

**Review:**

Important themes to be extracted from this case study are as follows: The primary mandate is *the repair of environmental damage caused by industrialization*. As stated earlier, it is the author's contention that in the wake of changes to the industrial base of all first world nations, such damage and dereliction will become more evident in the future. Note that the IBA coined this project's subtitle as the "workshop on the future of old industrial areas".

It is particularly important to understand the project's approach to cultural (site) artifacts. A clear indication of this approach is how the project views the region's new identity as emerging intrinsically from the old. "It is important for the new identity of the Emscher region that existing industrial plant, collieries, foundries, spoil heaps, transportation lines and warehouses should be preserved, as the only physical witness to the history of the former industrial landscape."

The idea of 'regional connections' is also paramount to this work. By connecting isolated open spaces, the old rail and industrial road system, which were the region's lifelines, continue to flourish as a network of current and relevant 'green' corridors.

## 4.3 Duisburg Nord Park, Emscher

The most spectacular of the IBA Park projects in Germany, the Duisburg-Nord Park (designed by Peter Latz) was once an iron and steel plant in Duisburg – Meiderich.

In 1899, August Thyssen planned an extension of its metallurgical plants to the coalfields north of Duisburg. The first furnace of the "Hüttenbetrieb Meiderich AG" was ignited in 1903. All five furnaces were complete in 1908. The foundry (which is still in operation today) was added in 1910. In the years between 1900 and 1985, 37 million tonnes of pig iron were produced here, and until its shutdown in 1985, the plant produced several kinds of special pig iron and was regarded as the "pharmacy of the Ruhr District." The fallow industrial land is a new kind of park, one of many developed since 1989 as part of the "IBA Emscher Park." This project, more than many others in the past, has brought to bear the crucial question of whether the remains of a large scale industrial mass production plant could really serve as the basis for a park. Peter Latz and his design team, along with his wife Anneliese Latz, began working on this project in 1990.

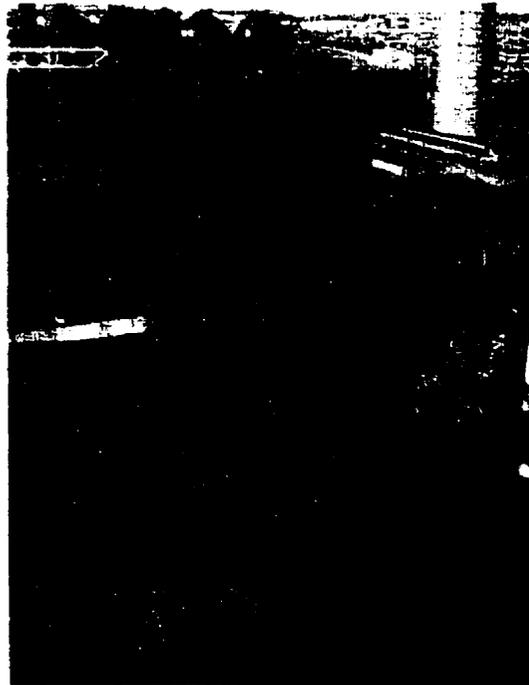


Figure 4.3.1 Duisburg Aerial view

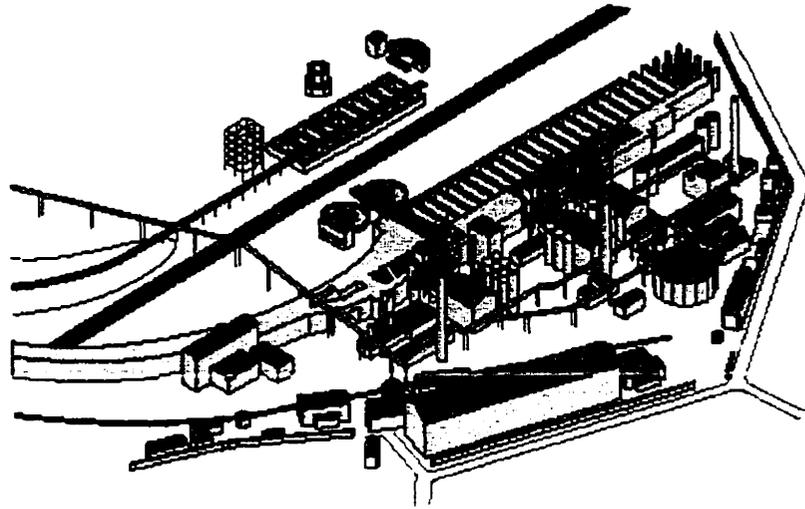


Figure 4.3.2 Schematic view

### Site Details

The principal industrial region in the Federal Republic of Germany is the Ruhr District, home to 5 million people. The Emscher region within the Ruhr area comprises 17 cities, a total land area of 802sq.km, and a population of 2 million. The region stretches along the River Emscher from its confluence with the Rhein at Duisburg, eighty kilometers eastwards to Bergkamen. The area once boomed with its coal, steel and other related industries, which have been in great decline in recent years, leaving a damaged and dirty environment, a dwindling economy, and the out-migration of many thousands of people. The River Emscher itself has gained notoriety as the Ruhr's open sewer; in the years ahead it is hoped that it will become a symbol of the ecological renewal of an industrial area.

A large-scale redevelopment program has been introduced in the Emscher region to clean up the contaminated land and watercourses, to re-introduce green areas into the agglomeration, and to boost economic production. A part of this redevelopment is the **Duisburg Nord Landscape Park**. Situated between the urban districts Hamborn and Meiderich, the site covers 200 hectares, and the completed park will serve 100,000 people living north of Duisburg. A former industrial site, the area is dominated by the disused Thyssen steelworks, covering 20 hectares.

### **Aims of the project**

The design brief stated that the development must be ecologically sensitive, innovative, reasonably priced, provide for a wide range of users, and be completed rapidly. Those responsible for the landscape design also introduced the aim of integrating the industrial heritage of the site with the existing pattern of open spaces to create a park with strong links with its past.

### **The strategy**

The aims have been achieved through the following main strategies:

- The preservation of existing vegetation and industrial buildings including huge blast furnaces
- The provision of a variety of leisure activities, play facilities, and areas for cultural events
- The creation of seven 'development areas' within the site
- An 'industrial history trail' and 'project trail' have been created as a means of exploring and understanding the site
- The renovation of some existing buildings for use in employment projects
- As part of the whole Emscher Park regeneration program, the reconstruction and cleaning of the River Emscher where it passes through the park.

### **Results**

The Duisburg Nord Landscape Park creates the first 'green stepping stone' in the Emscher region redevelopment area, lying by the confluence of the Emscher and Ruhr rivers. The juxtaposition of intensely designed areas with spaces or buildings left largely unaltered has made the park a major attraction from the outset. The construction work was completed in 1999; parts of the park were officially opened in June 1994. The park appears to be succeeding in providing historic and cultural interest as well as recreational facilities.

The park has been developed largely to encourage economic growth in the surrounding region, and may not achieve a particularly high level of sustainability, but the master plan has been carefully considered and designed with the implications for the future in mind. The much larger project to clean and 'green' the River Emscher, of which this park

forms a part, is founded on highly sustainable methods. The river's misuse and subsequent toxicity, now being reversed, have shown how nature's principles are most effective at maintaining the purity of ecological resources such as water. New technologies can use these principles to help return the Emscher to its original unpolluted state, and maintain it as such into the future.



Figure 4.3.3 Images of the Light Show

A visit to the Duisburg Nord Landscape Park is very captivating. The visitor can climb up to the topmost platform of a furnace or take part in guided tours about industrial history. International cultural events take place inside the halls. The park includes several treasures of nature, among which are gardens and sections of fallow land which nature has re-conquered. Especially at night, when the old metallurgical plant is lit by a fascinating light show designed by the British artist Jonathan Park, the park is a fascinating spectacle, creating a link between the industrial heritage, ecology, relaxation, and culture which is the aim of the Landscape Park.

## 4.4 Gas Works Park, Seattle - USA

The third precedent to be examined is the Gas Works Park, Seattle, Washington. In 1970, Richard Haag was commissioned to develop a master plan for this park, three years prior to the actual acquisition of the land by the City of Seattle. The site was originally a separation plant that extracted gas from coal – later being converted to process crude oil.

It operated successfully from around 1906 to 1952, when the process was rendered obsolete by the introduction of high-pressure gas pipe lines into the city. Though the site was originally designated to be developed in the manner of most 'traditional' parks, - with groves of trees and large open areas of lawn - severe contamination and massive infrastructural remnants made such a solution less that attractive. Also, Seattle possessed a significant number of traditional parks at the time. As a result, even though the location of this park was extremely unique (it was to be the only public open space along the shore of the Lake Union at the time), there wasn't a strong political or civic push for another such park (Campbell, 1973).

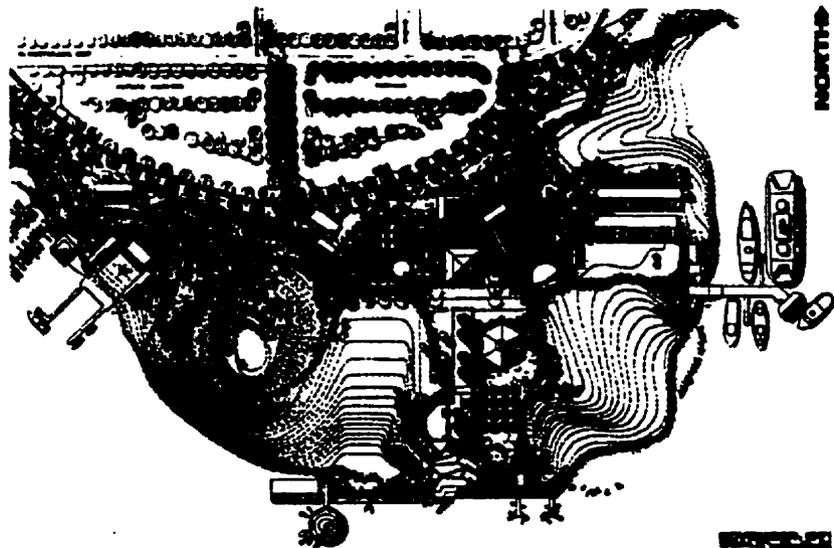


Figure 4.4.1 Gas Works Park master plan.

BY 1971, Haag had proposed a master plan (figure 4.4.1) proposing that portions of the original infrastructure on the site be retained for their sculptural qualities and for their potential as landmarks, physical delineators of space within the park, and temporal delineators serving

as historical bench marks. It took over a year for Haag's proposal to gain acceptance, including 16 public and private presentations to gain support for preserving the unique industrial structures and to recycle the site into an urban, intensely used pleasure ground. At the time the popular belief was that the park as Haag had designed it would be nothing more than an eyesore on the city's waterfront.

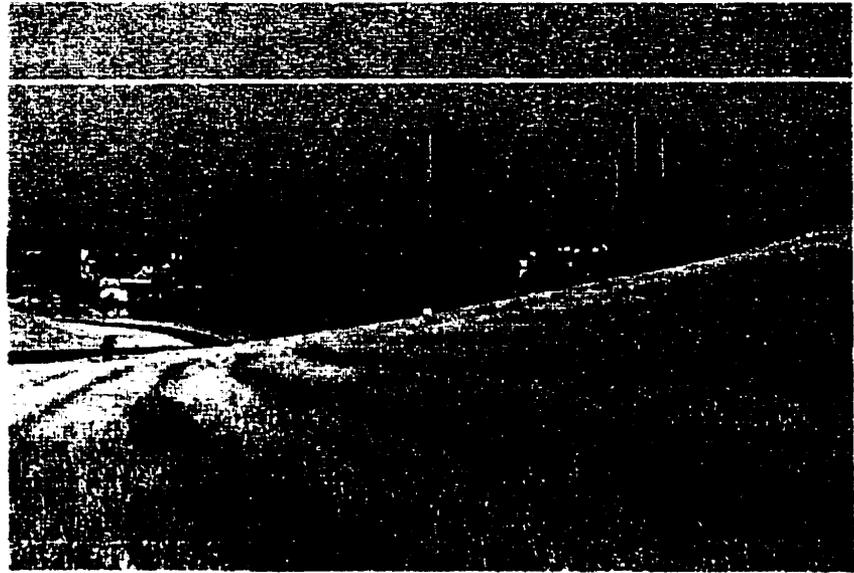


Figure 4.4.2 Gas Works Park.

The infrastructural elements retained on the site - including the gas generator towers - have been described as "sacred" to the site for historic, aesthetic, symbolic and utilitarian purposes. In 1972, the Seattle City Council unanimously approved the master plan, and by the year 1975 the park was officially opened. Construction was completed in 1978.

The initial phase of development included the boiler house being converted into a Picnic Shelter with tables, cooking grills, and open floors for dancing and impromptu games. Also included was a mezzanine stage for musical events. The former exhauster/compressor building, converted into the children's play-barn, includes a maze of machines, brightly painted. An outdoor play area adjoins the south side of the play-barn.

Soil contamination was initially addressed using experiments in bio remediation, but some areas were so toxic that the contaminants were capped under thick layers of fill material, or were trucked off the site. As a result of the capping process, large elementary earth forms

emerged, and these forms eventually helped to define the park's program.

The space layout is flexible enough that a range of activities, from informal games to temporary events like plays, rallies and concerts can be supported. The remnant industrial infrastructure was dealt with interestingly: rather than turning it all into some kind of 'museum', a principle of 'adaptive reuse' was employed. Specific issues that are uncovered include the 'spots' of intensified soil pollution, and the large industrial building remains. Earth mounds were used for 'capping' polluted soil spots - the mounds doubling as strong functional and design elements as well.



Figure 4.4.3 Gas Works Park – Children's Play Barn.

The landscape infrastructure was redesigned and manipulated specifically to provide the observer with the opportunity to see things differently - the beautifully undulating hills (the result of soil pollution remediation), and the well manicured grounds immediately suggest that what 'appears' to be derelict simply cannot, in reality, be so. This paradigm shift goes further to explore not only present perceptions, but also the most potent perceptual realities - that of memory. Thus the brightly painted industrial infrastructure plays with one's recollections, and creates a 'false' nostalgia that becomes a profound and personal experience.

The relationship between what is molded (the land) and what is retained (the industrial infrastructure) is manipulated so that it is no longer clear which is 'real', and which is 'dreamt.'

## 4.5 The Steel Cloud, Los Angeles

The Steel Cloud, while not dealing directly with the physicalities of an industrially derelict site, represents a response to industrial *change* and the socio-technical evolution of culture. In other words, there is the notion that former perceptions regarding the relationship between how we work and how we live (industry and culture), are becoming obsolete in the wake of currently evolving industrial and cultural models.

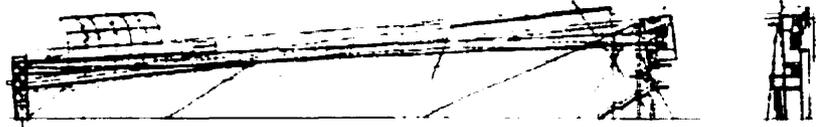


Figure 4.5.1 Sketch of the Steel Cloud

This sense of change or *flux* is what Lise-Anne Couture and Hari Rashid (Asymptote Architecture) attempt to crystallize into architectural form. Asymptote projects attempt to 'free us to confront modes of *perception* that have been modified by technology... the environment, behavior, functionality and even perfection (are all) faced with the influence of new technologies.'<sup>8</sup>

The Steel Cloud is a design proposal for the Los Angeles and Hollywood freeway. It represents an entrance portal that denies aesthetic (and therefore perceptual) precedent. At the same time remains well rooted within the socio-cultural realities of the Los Angeles area. The design typifies 'the grand fictions and utopian fantasies of' the city itself,' and is inspired by optical machinery, flight simulation, and the technologies of surveillance. The architecture - described as 'episodic' - seeks to reconfigure information, speed, and the instantaneous into a new city-space. It reveals - in an anticipatory moment - an invisible site, directly above the Hollywood freeway, where "the super-rapid position of rest<sup>8</sup>" of a closing millennium can be felt.

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<sup>8</sup> Architecture for the Future, Terrail. Pg. 171



Figure 4.5.2 Model of the Steel Cloud

This architecture is made up of oscillating fields and plains, devoid of perspective or depth. The ambiguous and anonymous quality of the architecture is intentional. It calls to mind the superficial and ambiguous quality of (Los Angeles) sub-culture.

This work is strikingly conceptual in its premise, and represents a potent exercise in perceptual paradigm shifting. The proposal is for a monstrous steel, plastic, screen and glass construction over a stretch of Los Angeles freeway. Functionally, '...it is a device to be filled and conquered by the human spirit, a living monument, accommodating *galleries, libraries, theaters, cinemas, parks and plazas*, each intersected by the fluid and Transient City.'<sup>9</sup>

The intersections occur at various levels and the fluid and transient city is represented by the freeway and its incessant traffic. Altered perceptions occur both from within and from outside the Steel Cloud.

Firstly, we think of the earth as stable, the 'terra firma' on which we create our enduring lives. As one drives through the Monolith, one sees in the precarious nature of its construction the true quality of all of our human constructs, both physical and cultural: '...here aquariums and suspended *landscapes* oscillate to the arcane rhythms of the freeway. The Cloud itself, held together by cables, steel girders, harnesses and weights, counters the precarious shifting plates beneath it. This strange and disparate architecture is constantly being unfinished and re-situated.'<sup>9</sup> This metaphor makes suitable commentary on both the cultural fluidity, as well as the geo-tectonic reality of the Los Angeles area.

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<sup>9</sup> Architecture for the Future, Terrail. Pg. 171

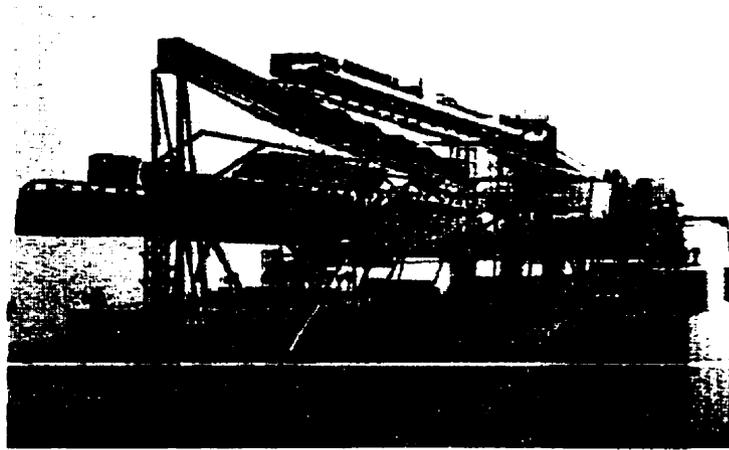


Figure 4.5.3 Model of the Steel Cloud

Secondly, within the Cloud we realize, in an instant, that a theater, a park, a gallery, need not *appear to be* one. In fact, how do we know *what* one of these looks like if not for preconceived notions that have no real basis for being? This redefining of form is analogous as well to cultural redefinitions of societal structure, and the questions of *why* society need to be structured quite the way it is – questions for which answers are being sought and explored.

What is very interesting in this case study is how very relevant to the greater Los Angeles theme this work is. The Steel Cloud could certainly not have been designed this way for any other location on earth, and its radical propositions are matched only by its utter appropriateness to the area.

The relevance of this precedent to our study lies in the unique manner with which it engages perception. This conceptual design, more than all the others, demonstrates what can occur when we realize that a theater, a park, a gallery, need not *look* like one. This mundane idea opens up a world of opportunity, and the tools with which to generate perceptual alterations. In this case study, the forms created relate much more deeply to the metaphorical (and mythological) realities of *place*, than to any notions of form as a product of function.

And the depth of cultural and mythological relevance the Steel Cloud achieves is nothing short of astounding. From the accurate depiction of the *transience* of Los Angeles life, to the geological accuracy of the

shifting and non-tethered model, this work remains true to the myth – enabling it to transcend functionalism to reside firmly within the world of culture and perception.

## 4.6 Crystal Monolith, Japan

The Crystal Monolith is striking in both its conceptual premise and in its design expression. The proposal is a design for a futuristic amusement park to be located on an abandoned crude oil tank yard.

Again, notions of industrial obsolescence and obscurity are immediately apparent in this work. The architect, Shin Takamatsu, is attempting through this piece to create and sustain a landscape which reinforces the *collective memory*. The premise is that in an era of accelerated movement, energy and transience, the human psyche is eroding its own memories. Takamatsu believes that the essence of identity is embodied in history, specifically in the collective memory; and sees the rapid acceleration towards the post-information age as potentially perilous if no attempt is made to retain human identity through these collective memoirs.



Figure 4.6.1 Model of the Crystal Monolith

Takamatsu's architectural style is unique. Initially inspired by the heavy, massive and impressive machinery created by 19<sup>th</sup> century engineering, as well as medieval armor, his architectural roots demonstrate a familiarity with the forms indicative of industrial dereliction.

More recently, influenced by 'the volatile character and consequent transformation of architecture,'<sup>10</sup> his work has been redirected towards

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<sup>10</sup> Architecture for the Future, Terrail. Pg. 199

the search for a 'space of marginal activity,' that is, a space that might escape from the strict confines of the program. In attempting to do this, Takamatsu is initiating a search for paradigm shift, or perceptual transformation. In his case, this transformation is found in reiterating the reality of the collective memory. In this process, his work has grown lighter in material and form, acquiring a new, almost ethereal geometric simplicity.

In the spirit of this new-age ethereality, the Crystal Monolith is a conceptual 'sea', created in a 450 x 450 meter glass box which floats 33 meters above the ground - complete with an 'island' and 'beaches.' The artificial sea is intended to recall a past when seas were unpolluted: it is impossible to escape the conceptual juxtaposition of this idealized seascape with its foundation: the abandoned and polluted crude oil tank yard. The potency of this work is expressed in its ability to stimulate an idealized memory that becomes reality in the collective human mind.

"A few decades from now, there may no longer be any unpolluted seas, and people may not ever remember that there once were unpolluted seas."<sup>11</sup> If such a time ever comes to pass, the Crystal Monolith is what will be recalled instead...

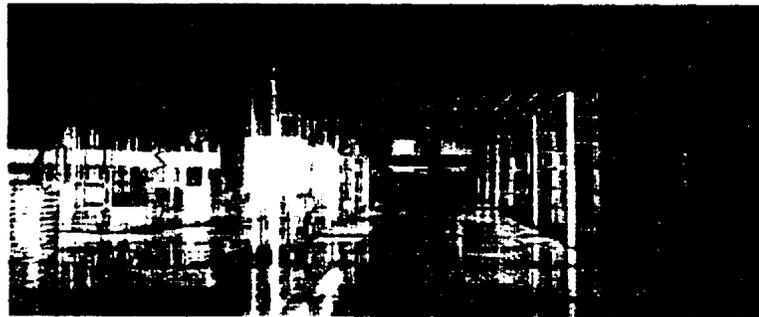


Figure 4.6.2 Model of the Crystal Monolith

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<sup>11</sup> Architecture for the Future, Terrail. Pg. 199

# 5 Philosophy and Strategy:

## 5.1 'The Landscape Approach'

The Philosophy of Bernard Lassus.

### Introduction:

"In his writings, which are poetic and persuasive, Lassus often reminds us that landscape is 'a cultural reading . . . a construction of the mind.' . . . Physical qualities may be more or less fixed but not their meaning, from which Lassus makes an important inference: 'To suggest a landscape, it is not therefore always necessary . . . to plant a number of trees or to widen a river.' . . .

Lassus seeks something other than the bland schemes we hurry through and pass--a more replete landscape, in which our senses, intellect, and imagination are all brought into play."

-Andrew Mead, *The Architect's Journal*

Perhaps best known for the speculative base that sustains his work and thought, Lassus is an artist whose philosophical concerns precede and determine his design work. For him, attention to the interactive nature of the landscape underlies all projects. He approaches each site in pursuit of the particular opportunities and challenges it presents and is ever mindful of the way in which observers will experience the space. He does not allow experience to be relegated to by-product of design. Instead, as one of his close collaborators explained, for Lassus "form is not primary, it is induced from the articulation of intention."

The central idea behind his work and philosophy is that by definition, a Landscape refers to the Relationship between participant and scene.

The essays in Lassus's book "The Landscape Approach" afford readers a look into some of Lassus' most important projects, and furnish provocative insight into Lassus' unique bonding of theory and practice. A few of these essays are explored in this chapter.

Bernard Lassus is currently head of postgraduate research in "Gardens, Landscapes, Territories" at both the Paris-La Villette School of Architecture and Ecole des Hautes Etudes en Sciences Sociales.

In this segment a review of Lassus's writings is undertaken, and is intended to lend a richness of philosophy to the study. The speculative roots of his work and writings become intimately relevant to our exploration of urban postindustrial landscapes. An extraction of relevant themes in his work, combined with the conceptual propositions extracted from the case studies, will yield a concrete Strategy of Engagement.

Inventive Analysis / 1989.

*The place under study is often a surface area that is being pushed to the limits of its luck, since it carries, at the moment when its free development is envisaged and especially if it is a "favored spot," the dreams and needs of the neighbors and the population, as their representatives consider it anyway. Without ado, we establish that numerous images haunt both the sites to be developed and the person of whom everything is asked at the same time: what to do, how to do it, and quite often, how to place too much together in that location. Inventive analysis consists in going beyond first ignorance, with its feeling of absence or of disorganized accumulations, in order to approach the site in its singularity. This is done, first, by 'floating attention,' to become impregnated with the site and its surroundings, in the course of long visits at different hours and in different weathers, to soak it up from the ground to the sky until boredom sets in, or almost. To visit that place frequently does not mean to be eager to capture it, but to live a few moments by and with it in its shade, and lights, to read and chat there. Then, to look for the preferential points of view, to discover the micro-landscapes and the perspectives that bind them, to identify and test the visual and tactile scales... all the while consulting its memories, localities, tales and local legends, stories and history.*

*Inventive analysis... is by repeated trial and error, since particular cases are concerned here, that we have to initiate other approaches, or to conduct them according to the circumstances, therefore researches and studies for new hypotheses. Those hypotheses, selected, specified, and tested, become orientations which, strengthened by studies that anticipate the lived experiences of the realization, in particular its*

*conduct, can lead without discontinuity to the organization and its forms (the project), which will enter dynamically into the chosen processes. The invented analysis is the rough plan. Pierre Donadieu, in his presentation of our studies in 1985, said, "the form does not come first, it is induced by the articulation of intentions."*

Bernard Lassus – The Landscape approach, pg. 57

This essay gives us the mental imagery with which to embark on the preliminary assessment of our study site. As is the case in his description, our site too has been pushed to 'the limits of its luck', and its 'free development' has become a widespread cry, indeed reflecting the dreams and needs of the neighbors and the Winnipeg population. As Lassus suggests, we are quick to conjure images of what needs to be done, how to do it, and even who should do it. But in this essay the mandate is to step away from what Lassus calls 'first ignorance,' and rather to become 'impregnated with the site and its surroundings.'

The product of this preliminary investigation is to forge within us an 'inventive analysis' of our site. In exploring the site perceptually, Lassus suggests that we will discover 'the micro-landscapes and the perspectives that bind them', and through consultation with its 'memories, localities, tales and local legends, stories and history', will unveil a deeper, more intrinsic sense of place. This sense of place is what should direct our response to the site, above and beyond any 'abstracted' externalities.

Tactile Scale – Visual Scale / 1961

*For the pedestrian, the basement, window, and front door, located at eye level, are part of his immediate scene, and are only partly associated with the façade.*

*The tactile scale is the one in which we move, in which it is required to acknowledge ourselves with precision: to park our car, locate the stairs, and open the door. The scale is not restricted to ourselves, but*

*also includes the dimensions of our instruments' activities (buses, cranes, marker lights for planes, harbor movements along the quay...). The tactile scale is the zone within which the confrontation of imprecise in information, transmitted by the eye, must correspond to images registered in our memory to allow us to move easily. The space may not be faked, but at least it may be animated, with the proviso that what is there remains subject to everyday requirements of judgement on distances.*

*Beyond the tactile scale is the visual scale, one in which phenomena, even if they provide us with various sensations, are only visual. In that scale, we do not, as a rule, have utilitarian reasons to encumber ourselves with considerations in regard to the volumes that exist.*

Bernard Lassus – The Landscape approach, pg. 43

In this essay, Lassus calls to mind the notion that there are at least two separate (yet connected) levels of perceptual exploration. These two – the Tactile and the Visual – establish a very large proportion of our perceived world. As Lassus discusses, the two levels operate with subtle differences, and these interactive differences provide the opportunity for different design responses. With tactile perceptions, the proportions (or even just the illusion of proportions) and distances that allow for comfortable movement and interaction must be maintained; while for purely visual perception, the nature of space and volumes takes on a less utilitarian, and more fantastic scale.

There is also the realization that one can explore 'bridging' the two. Like a 'runway to heaven,' we can visualize a landscape that, with one homogenous entity, provides us with a tactile experience of sorts – while at the same time offering that which we can connect with only as far as we can see.

The challenge of tactile, visual, and combined perceptions becomes an important mandate in Lassus's writings, and one which, in our exploration of the Canada Packers site, should be advanced in the search for the 'landscape' experience.

*Beneath the sun in June 1969, traveling along a quay in Stockholm, I was suddenly pulled up short. Emerging from the vegetable mass of building sections I thought I saw in the distance, on the port's horizon, there materialized before me the shape of a long and powerful warship. It had remained hidden thanks to its camouflage. Until then I had thought that camouflage was reserved for the land army. But here the pattern of a paratroopers battle dress, mainly green but also strewn with maroon and streaked with some black, represented a design that had grown the envelop the whole of the boat.*

*Then I experienced what a landscape is: the sudden grasp of all those sections of various colors – houses, factories, or trees – in an assemblage, making possible the insertion of new objects all the time without the assemblage itself being modified, and without the objects being able to be recognized. In one single move, not held up by the scientific identification of any particular object, a reading of the vast horizon, in its total sweep, had been made possible by the gathering of multiple, dissociated and momentary sections, of objects which from another view were integrated parts. Is not this “the landscape?” in that specific case, the one of camouflage in the dominant vegetation of the Swedish marine front, the horizon of the port of Stockholm. The displacement of that battle dress from the paratrooper to the warship is explained through the structure of the fjords along the Swedish coast. At anchor, the warships must be more ground than sea. But if, in this northern country, land can be identified as summer vegetation, is not winter a vast whiteness? In Alaska, the dominant vegetation of armored vehicles is augmented with stains of snow whatever the season. Further to the south, the play of desert ochers excludes all others. But, along with the blue gray of the ocean, all that only constitutes a limited number of landscapes: the sea, sky, vegetation, desert, snow.*

*One to two millimeters of paint subdivide the warship into complete multiple surfaces without discontinuity involving other sections, trees, or constructions, and with it constituted the horizon of the port and outlined the limit where ground meets sky. What a contrast between that minutely thin skin, which visually effaces the boat by enlarging it horizontally “in the landscape,” and the thickness of the plate of the*

*hull, the turrets, and their guns, radar, machines – a few millimeters opposed to two or three tens of thousands of tonnes.*

Bernard Lassus – The Landscape approach, pg. 24

In this essay Lassus gives a striking example of what perceptual illusions are. In particular, the very nature of a landscape is redefined to include one's perceptions and the magic of time. Here disassociated elements come together – including a large battleship – to create a landscape which is not only *more than*, but also *independent of*, the sum of its parts. Thus for our study, this essay has a particular relevance: once the site has been inventively analyzed, an attempt to respond to the analysis, and to express, articulate and even amplify the mystique of the place may even include some technique of illusion. This applies because in Lassus's philosophy, Landscape is not the sum of its parts – it is always more. There is always something poignant - yet unseen - about the relationship between viewer and scene (landscapes).

## 5.2 A Strategy of Engagement

The study of precedents and the infusion of the philosophical thought of Bernard Lassus, leads into this section. With a technical understanding of the study site, a series of relevant case studies, and the philosophical discourse of Lassus, the intent now must be to evolve a strategy of engagement. This strategy must pervade technical or pragmatic boundaries, and must facilitate the confrontation of notions of dereliction, in the wake of a philosophy that reawakens in the participant, a reality of the myth and culture extant in the study site.

A summary of the conceptual themes and ideas gathered from the case studies is fused with the philosophy of Bernard Lassus, (as experienced through his essays). These ideas directly inform the development of this strategy. The Strategy will, while responding to the study site's challenge statement, also connect the participant (individually and collectively) with the site's sense of place.

1. From the Emscher regional park model, we are exposed to the possibilities for the creation of viable and extremely relevant (cultural) environments out of industrial wastelands. Specific to the Emscher model, the idea of an interconnected *network* of post-industrial park environments transcends the city, largely due to the extensive densities of industrial fabric extant in the region. This notion of *networking* however, represents an idea that should also be explored at the city level. As discussed earlier in this discourse, most North American cities are comprised of between 10 and 20 percent industrial fabric, and over the next few decades, significant portions of this fabric will fall into disuse.

As such, the initial strategic implication to be put forward is that remediation attempts regarding urban industrial wastelands should be carried out within an *urban context*. Opportunities for networking should be explored and harnessed.

## THE URBAN CONTEXT

The study will begin with an examination of the evolution of the industrial sector in Winnipeg. A brief analysis of patterns of dereliction at the city scale is intended to establish urban context, and suggest guidelines for connectivity and redevelopment at the urban scale. The potential for network connections within the urban fabric of the City of Winnipeg will be explored, and this phase will conclude with an urban scale plan for addressing industries as they decay – proposing avenues for physical connections that will create an interwoven fabric of ‘post-industrial parks’ for the city. An essential element in the formulation of these connections remains the rail corridors and industrial roads.

2. Gas Works Park, The Steel Cloud, and the Crystal Monolith demonstrate through elements of *connective tissue* strategies for creating physical environments that promote the occurrence of perceptual engagement between viewer and postindustrial scene. In the Gas Works Park, the molded and manicured landscape environment both allows for easy and pleasant access to the industrial infrastructure, and more importantly helps to create an environment within which it would be nearly impossible to *perceive* the infrastructure as *derelict*. The landscape in the park explores both tactile as well as visual *connectivity* – the one leading to the other in such a manner as to create, in addition to methods of engaging postindustrial reality, positive feelings of anticipation and delight.

In the Steel Cloud, this relationship between the visual and the tactile environments, and the elements of connectivity that lead us from one to the other, take advantage of the opportunities provided by the highway. The ‘episodic’ architecture it describes uses the momentary experience of the motorist to create and sustain images that are fused into one’s memory, and create and sustain a perceptual, or *dreamed*, connection. This dreamed or visual connection with place offers the promise of something more: the motorist needs to return, to explore a tactile experience of that which the individual already, perceptually *remembers*.

It therefore becomes apparent that the creation of *connections*, real and dreamed, (or *tactile* and *visual*) should be the initial step at the site

level, for creating an interactive experience of the fullness of meaning within a landscape.

### CONNECTIONS – REAL AND DREAMT

The site will then be studied, and critical paths identified to delineate connections –visual, and tactile, and both. This is done on the premise that there can be no shift in perception if one is not able to see the site; not only seeing it, but also seeing it in different ways, or from different viewpoints. An intimate, tactile relationship must also be allowed to occur, and as such avenues for physical connectivity must also be proposed.

3. Thirdly, In order for any industrial wasteland to successfully utilize the opportunities of visual and tactile connections (among other ends), the physical and environmental issues (that come about as a result of the site's historic use) must be investigated as an integral part of the re-development. This idea was demonstrated in the Gas Works Park, where the earth mounds, which served as caps for toxic soil piles, were also *simultaneously* designed as functional features within the park. Just as was the case here we have, as another strategic implication (one that must work in tandem with any and all the other factors) the need for a *comprehensive environmental evaluation* that seeks out at the same time to identify and harness *creative opportunity*.

### ENVIRONMENTAL ISSUES AND SITE ANALYSIS

Issues of toxicity and safety, ecological integrity as well as human and wildlife comfort will be looked at in such a way as to identify constraints and opportunities that may direct design development and landscape creation.

4. The potential for any sort of designed landscape environment cannot be fully materialized without an in-depth and perceptual exploration of its 'poetics of place,' or unique set of circumstances that define the site. There exists, in general terms, '...a limited number of landscapes: sea, sky, vegetation, snow'. Looking at our case studies,

we go a little further: with the Crystal monolith, we have an abandoned oil tanker port; in the Steel Cloud, a Los Angeles freeway; Gas Works Park was a derelict and densely packed industrial site. Duisburg Nord represents a part of one of the world's largest postindustrial regions, with powerful sociopolitical implications. The magic that is created in each of these sites could not have occurred anywhere else in the world. There is an element of uniqueness that is amplified into a place-specific poetry. On the study site, we have a landscape that is prairie. Not only is it prairie, but it is industrially scarred and dormant prairie fabric. An abandoned abattoir, it does not possess quite the same frantic energy of a Los Angeles freeway. The industrial infrastructure isn't as elaborate or extensive as that of either Duisburg Nord or of Gas Works Parks, nor does the site possess quite the somber atmosphere of an abandoned oil tanker graveyard. The opportunity exists here to create, through illusion and depth perception and metaphor, a more intimate and intrinsic experience of what is a unique set of circumstances for the place.

#### THE POETICS OF PLACE

Here we shall explore the perceptual essence of the study site. Its particular landscape, the feel, sight, and sounds of the site – those physicalities which the connective elements are intended to make us aware of – will be explored with an intent to amplify their realities in our minds, through illusion, contradiction and metaphor. This is intended to create in the observer's mind a relationship akin to memory, albeit a *recreated* memory, part dream and part real.

5. An examination of the social dynamics of a site's surroundings should lead to an understanding of a site's functional creative potential. This is demonstrated very clearly in both the Gas Works Park and the Duisburg-Nord models. The multitude of functions and activities point to an exploration and subsequent manifestation of the socio-cultural dynamic surrounding the site. On every industrial wasteland, this *strategic implication* should evolve into a clear statement about the site's *functional potential*.

## **CULTURAL IDENTITY**

The site will be evaluated for its functional relationship with its surroundings. The site's wider environment will be studied, and functional patterns (industry, education, commerce, residence, entertainment, employment, open space, nightlife, etc.) will be extrapolated into the site. This will allow for an integration that remains true to the cultural identity of the area, while at the same time permitting the future evolution of the site to occur in tandem with its surroundings.

# SECTION THREE



## STRATEGIC RESPONSE

# 6 The Strategy...

## And the Site

This chapter begins to apply the philosophies and ideas compounded in the strategy of Engagement. The Urban Context, Connections, Environmental Issues, Place Poetics and Cultural Identity are all expressed as phases in an evolving design expression.

## 6.1 The Urban Context:

Inspired particularly by the regional studies in the Ruhr and Emscher Park areas in Germany, the notion of linking together a string of similar scenes to create a network of parks is the first idea to find physical expression in this study.

It makes sense to identify and connect a network of parks – the scenes possess very integrated characteristics; they are made from the same heavy industrial fabric. It would be less than appropriate to fragment the *postindustrial* ‘landscape’, when the parent industrial landscape was an integrated entity. Just as the original industries were clustered together and serviced by common arteries (roads and rail), any attempt at renewal (perceptual and otherwise) should begin at the urban scale. This is intended to ensure continuity and harmony in the evolution, as these sites transform from industrial to postindustrial environments.

The understanding that we cannot capture the magical essence of a postindustrial landscape until it actually becomes ‘postindustrial’ – until the site in some way becomes incipient, leads us to an examination of evolving land use patterns at the city scale. An exploration of chronological stages in the metamorphosis of an Urban Postindustrial Network Park, becomes the first step.

Figure 6.1 demonstrates this thinking. Map number 1 is an image of Winnipeg City as one entity, with all of the levels of activity that make up the ‘organics’ of a city. Map 2 isolates in blue the areas that are currently designated as industrial land, according to municipal zoning codes. In map 3, the railway network is superimposed (in red) over this fabric, clearly demonstrating the intimate relationship between the development of industry and the railway. In image 4, four major incipient sites within the industrial fabric are identified in orange. Map 5 goes further to suggest, in three shades of orange, a temporal evolution of incipient areas. Image 6 extrapolates these incipient landscapes, along with the railway network. Over time, it is suggested that relevant railway routes will, (continuing in their role as arteries) connect these incipient landscapes, creating the Urban Postindustrial Network Park discussed above (map seven). This ‘network’ park is extrapolated in map 8, and reinserted into the context of Winnipeg in map 9.

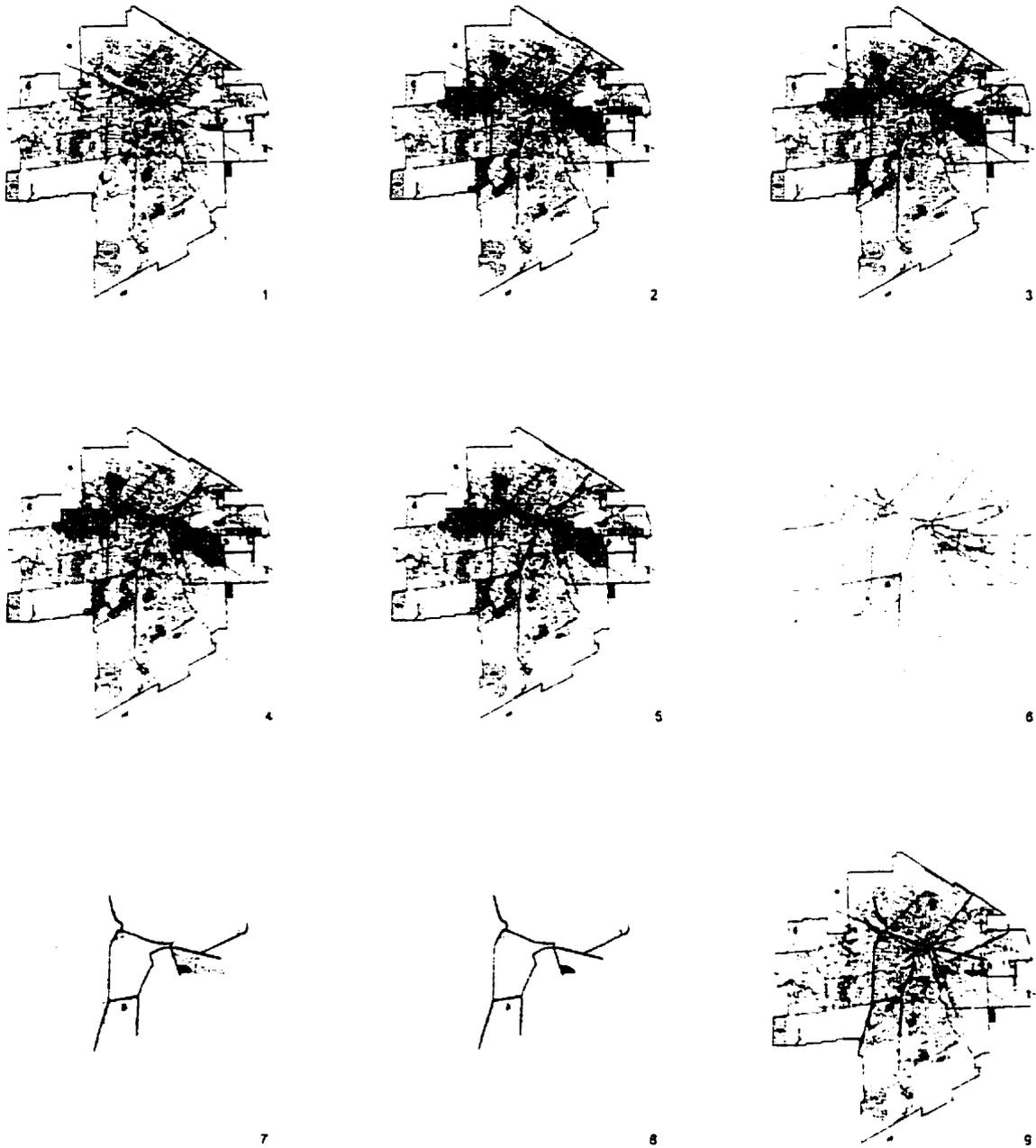


Fig. 6.1.1 the Urban Context: network postindustrial park development model.

With the idea of connecting these urban 'incipient' landscapes together into a network of postindustrial parks planted firmly in mind, an investigation of the other elements in the strategy is carried out at the site scale.

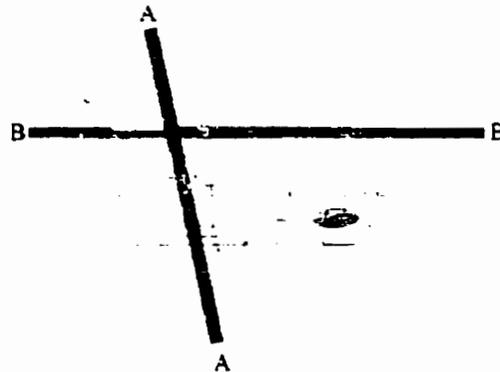


Fig. 8.1.2 the Study Site as part of the network...

The railway system has historically been associated with the urban industrial fabric. It is the intent of this proposal to retain this relationship as industrial sites become postindustrial, and even as rail lines become decommissioned. This transformation is intended to occur through a process of adaptive reuse, utilizing relevant (active and inactive) railways as 'trail' ways for civic activities such as pedestrian / ski and cycle trails.

As a method for exploring the site-specific elements of the strategy, a system of layers is employed. The individual elements of the strategy lend themselves to such stratification, and the different layers are introduced in detail next.

The first item on the strategy of engagement is 'connections – real and dreamt.' This idea translates into the initial layer of perceptual intervention on the site. The idea here is to create avenues for exploring the site, and allowing the participant the opportunity to experience the reality of the site, in visual, tactile, and combined ways. The premise here is that no perceptual awakening can occur if one cannot see the site. More than just seeing, this layer (or phase) is concerned with permitting various new and unique ways of seeing, or reading the site.



The second strategic mandate is to undertake an environmental assessment, primarily for the purposes of establishing satisfactory levels of toxicity and ecological integrity. This phase is also concerned with seeking out environmental concerns that possess a cultural aspect, which becomes part of the identity of the site, such as the earth mounds in the Gas Works Park. These mounds were integrated into the park's design in such a way as to provide contextual continuity.



The third layer of the strategy discusses the site's poetic core. The essence of this core is what must be grasped during an 'inventive' analysis, and in this phase of the strategy, the site's poetic mystique must be amplified until a perceptual transformation is achievable (by either the individual or the collective).



The fourth element in the strategy is the infusion of cultural identity to the site. This is carried out in a sensitive and responsive manner, responding to site determinants such as the area's wide range activities for function, as well as the site's own physical and cultural influences for form.



These layers suggest more than just transparent graphic overlays; they also suggest a technique for implementation of the strategy.

The image bellow represents the four 'layers' superimposed on the site, and gives some indication of the level of dynamism and energy that the execution of the strategy may evoke. Interestingly, (as Lassus has reminded us) this dynamism is not so much the result of the injection of new things to see, but rather the manipulation of what exists, so that we are faced with *new ways of seeing*...



## 6.2 Connections – Real and Dreamt

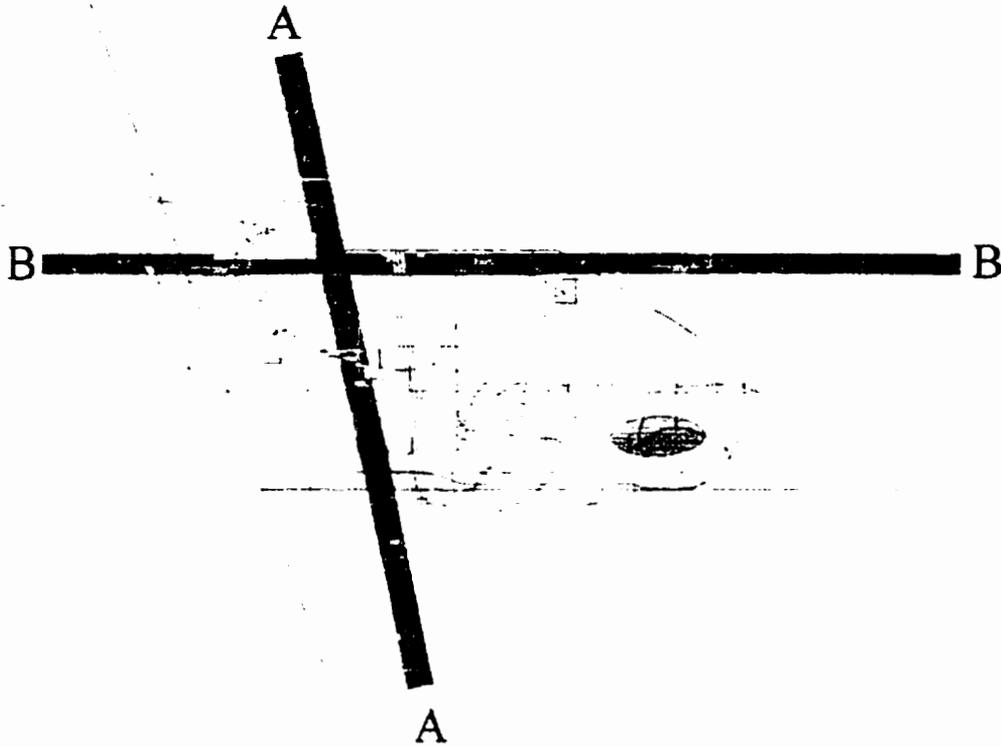


Figure 6.2.1 Connections – the concept

Connections - This conceptual element involves establishing a means of getting to the site, seeing, experiencing, and 'reading', of enabling an individual to become a participant. Generally, the factors preventing such connections from occurring here are the two rail lines on the east and west sides of the site, the rail yard to the south, and the industrial buildings on Marrion Street.

The four sides to the site possess very different characteristics, and as such, innovative techniques must be employed to establish connections. The creation of connections occurs in two parts.

The first part, represented conceptually in the above image, suggests major vehicular routing as the first step towards exposing this site to 'participants'. These two axes are intended to provide the both real and dreamed connections. The 'real' connections occur by offering the residents of Windsor Park an alternative route to the downtown areas

with the east-west axis (B-B). Rue Archibald is renowned for its rush-hour congestion, and bringing commuters from Lagimodiere Boulevard through the site, via Dawson Road, is an intriguing idea. This would, among other things, alleviate the current burden on Marrion Street, as well as suggest a more sensitive route for connecting to the city's proposed Grant Avenue extension project (see appendix 1).

The axes are also intended to foster 'dreamed' connections – by being positioned so that they suggest minimal intrusion, these axes offer stimulating views of the site, while preserving its integrity and wholeness. They create the ideal visual environment for a perceptual reinterpretation of the site. The idea that the north-south road (A-A) connecting the residential area to Marrion St. can be ramped at both ends, and raised to a height that would allow a different viewing of the site to occur for most of its length, possesses strong perceptual implications. This striking feature makes the road more than just a means to an end. This road becomes a destination in itself, as it offers in the brief period one is on it, panoramic views and the opportunity to capture the entire scene as one fleeting, episodic landscape.

The second part involves physical connections into the site. This is achieved through a series of pedestrian bridges that unobtrusively permit the participant to access the site over the east-west vehicular axis to the north, or over the rail yard to the south. Spaced 90 meters apart, these four steel and wood structures are intended to achieve more than just bringing the participant to the site – they also allow the viewer access to elevated pedestrian views of the site – thereby providing again the opportunity for perceptual reinterpretation. The materials employed in their construction would be in harmony with the industrial character of the site, thus engaging the participant further into the magic of the site. With these bridges, the opportunity exists to stop awhile, to ponder at any point along the bridge, the magic of the site. This phase is graphically represented in figure 6.2.2.

Figure 6.2.2 also shows the development of pedestrian pathways and trails within the southern portion of the site. This is the most tactile experience in the developing connections, with the meandering nature of these paths reflecting both the topographical characteristics of the

**CONNECTIONS - REAL AND DREAMED**      **PHASE 1**

**COMBINED PHASES**

Physical connections are superimposed on the site as the primordial expression. The north-south axis is proposed as a superimposed road, one that does not engage the site physically, but rather stimulates visual, (or dreamed) connections. Due to the size of the site, what is 'seen' resides somewhere between vision, and illusion, and creates in the mind of the passing motorist a sense of (pseudo) identity, or constructed yet nostalgic memory.

The west-east axis is at grade level, but does not actually intersect the site. Thus the most potent impact generated by this axis is also visual; hinted at, suggested, but never in itself fully professed. At the same time, this axis becomes a major thoroughfare connecting the highway system (Logansdale) to Archbold via a much more poetic and interchangeable route. The study site is no longer 'hidden'; the black hole in our collective memory has been exposed for present day 'reading'.

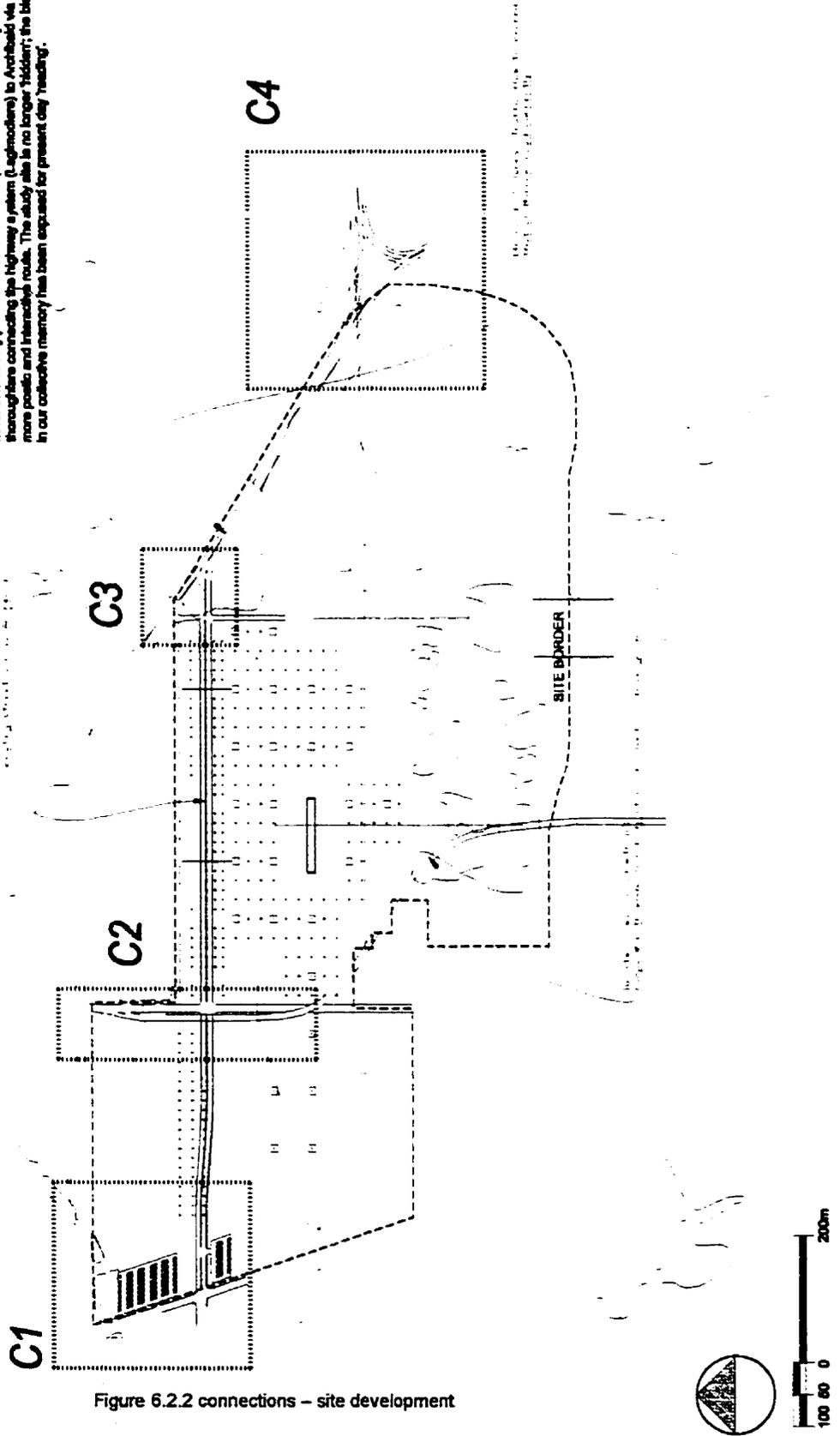


Figure 6.2.2 connections – site development

site, as well as the meandering, explorative and contemplative nature of human experience with the land.

## 6.3 Environmental Issues

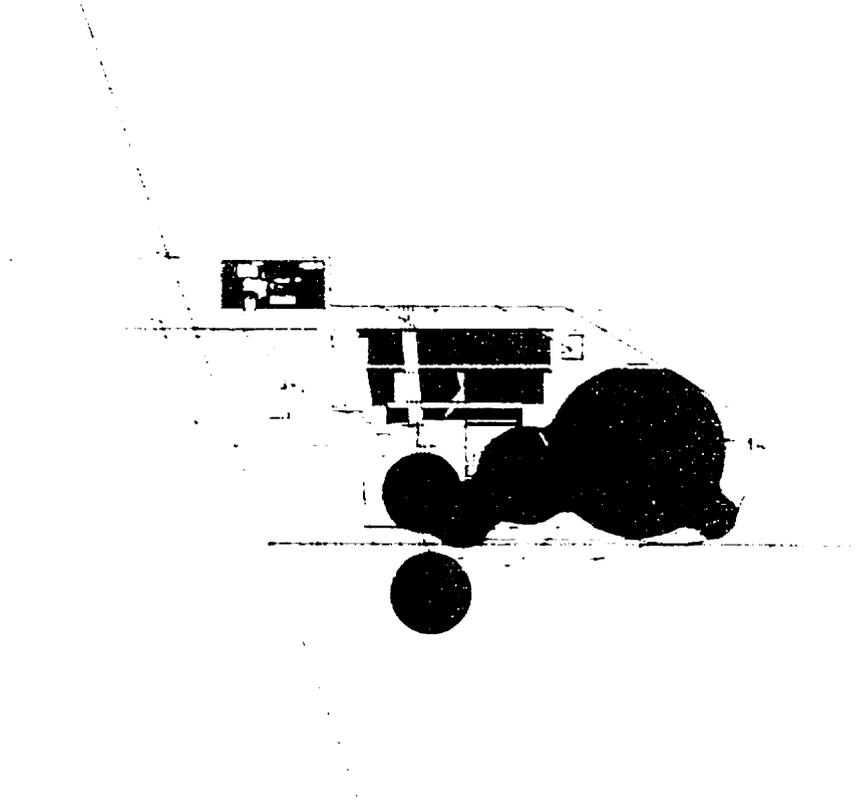


Figure 6.3.1 the Environment - Concept

For the most part the site is free from contaminants and environmentally hazardous material. However, in the southeastern portion of the site, the opportunity exists to turn existing manure pits and potential methane pollutants into landscape infrastructure.

In figure 6.3.2, the proposal for this section of the strategy is expressed. The site's natural topography lends itself to the location of a retention pond as indicated in the plan. The three dominant gravel and manure heaps are to be capped with a minimum of five feet of clay, with a layer of topsoil and turf overtop that. These rolling hills will serve as part of the landscape construct, and the paths that have been discussed as meandering through this area of the site will weave around these hills.

# ENVIRONMENTAL ISSUES

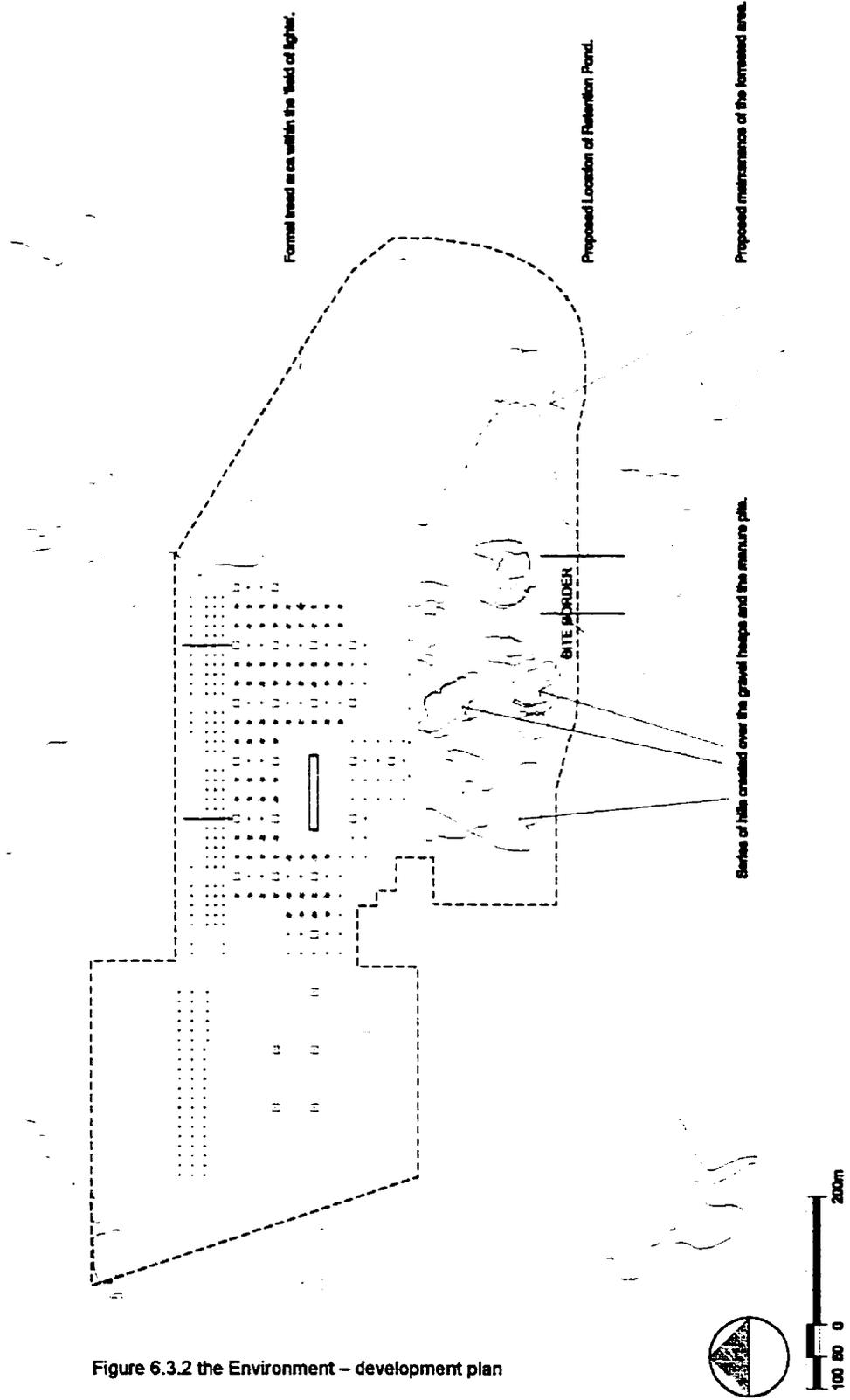


Figure 6.3.2 the Environment – development plan

## 6.4 The Poetics of place

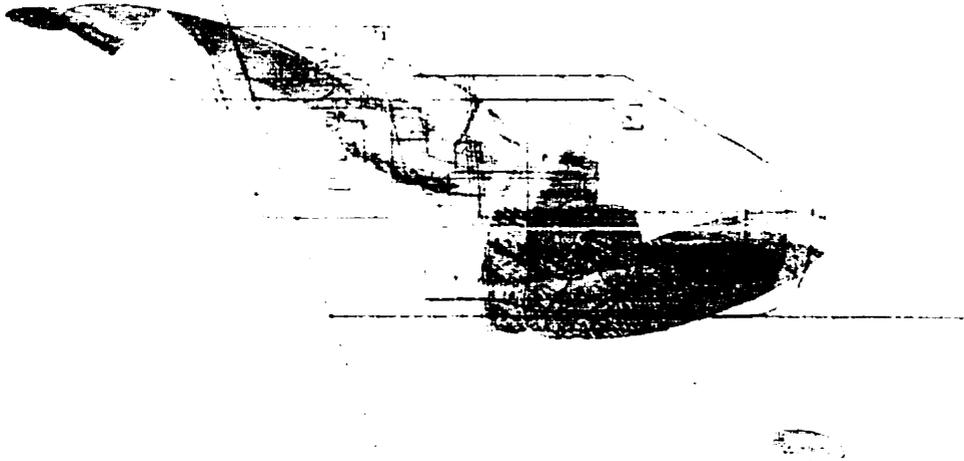


Figure 6.4.1 Poetics – the concept

In this phase of the strategy, the physical characteristics of the site are explored, an intimate relationship between participant and scene is gained, and subtle techniques for amplifying the poetic qualities of the site are applied. This is the phase within which an ‘inventive analysis’ takes place.

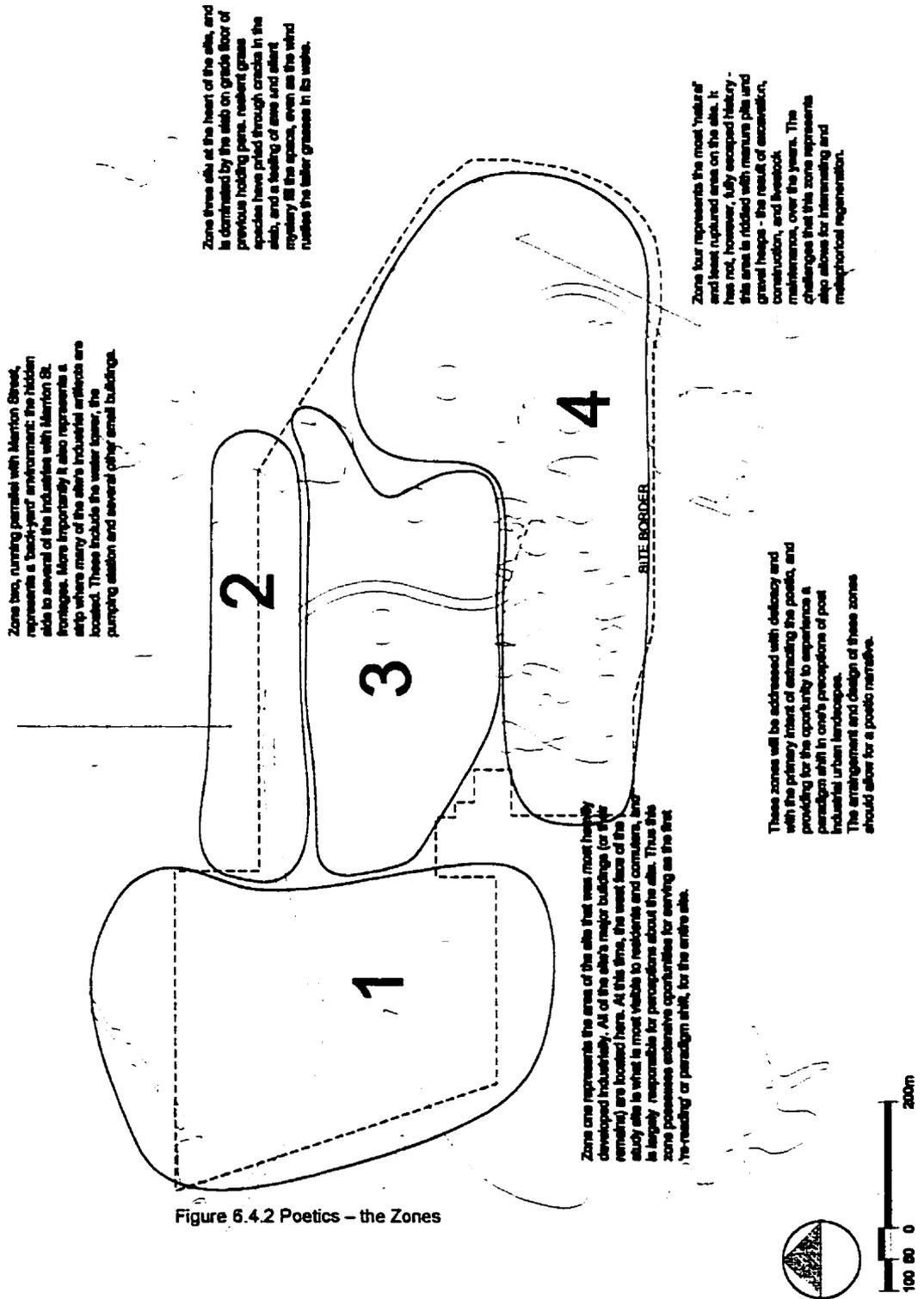
After dozens of visits to the place, a certain level of intimacy unveiled ‘worlds within worlds’, or distinctly different areas within the site. In figure 6.4.2, the site is separated into four loose ‘zones’ that exhibit differing characteristics.

Zone one, situated along Rue Archibald, represents the area of the site that was most heavily developed industrially. Most of the site’s major buildings (or their remains) are located here. Currently, this (the west) side of the site is what is most visible to residents and commuters travelling along Archibald; and the view is largely responsible for the present derelict perceptions of the site. The looming ominous shape of the gutted and partially demolished Canada Packers building dominates this zone. Shattered windows and extensive graffiti are clear markers of dereliction, and this is all that one initially sees.

Zone two, running parallel with Marrion Street, represents a 'back-yard' environment: the hidden side to several industries with Marrion St. frontages. More importantly, it also represents a strip where many of the site's industrial artifacts are located. These include the water tower, the pumping station, and several other small buildings. The character that they possess is lost to the public particularly due to their hidden locations.

Zone three sits at the heart of the site, and is dominated by the slab on grade floor of holding pens long gone. Resilient grasses have grown through cracks in the slab in many places, creating a wondrous fractured pattern of concrete, stone, and plant material. This is a place where one could lose track of time very easily, just sitting on a rock, listening to the wind rustle in the grass.

Zone four represents the most 'natural' and least ruptured area on the site. This is not to say that this area has escaped the effects of history – the area is riddled with manure pits and gravel heaps – the results of excavation, construction, and livestock rearing, over the years. The environmental issues inherent in this zone offer the opportunity for the most unprecedented earthwork and physical remodeling, while remaining culturally sensitive to the site's poetry.



In response to the above zones and their opportunities, the strategy proposes several subtle interventions that will amplify the poetic qualities of each of these zones. Figure 6.4.3 shows the plan, while graphic depictions accompany the discussion below.

### **Zone One: The Industrial Museum.**

In zone one the primary goal is to show off the naturalized vegetation for what it is. The big blue stem grass may be cut, and low maintenance site care would bring about an invigorating facelift, without embarking on enormous and potentially character-removing 'landscaping' efforts. The predominant building, the Canada Packers building, is covered in graffiti. Looking beyond this initial display is difficult, but an inspection of the masonry, the craftsmanship displayed in the initial construction of the building shows a piece of architecture that is worthy of some kind of adaptive reuse. A juxtaposition of the historic building techniques so expressive of its prairie past, into our present and future psyche would be appropriate. This study proposes that this significant building be readapted into an industrial museum (uniting its future with its past), and that as much as possible, elements from its historic past be retained during renovation.



Figure 6.4.3 Poetics – the building

### **Zone Two: The Linear Park.**

In zone two, a linear park is proposed to stimulate activity along the northern edge of the site, running parallel to the proposed east-west vehicular route. The strip-park will unite the site's smaller artifacts in

one integrated atmosphere, providing an area for people to stop and enjoy the scenery (or walk, jog, roller blade or bike) in comfort. This area will house the most intensively developed recreational space on the site, allowing for concession stands, community events and other activities to take place along the northern edge of the site.

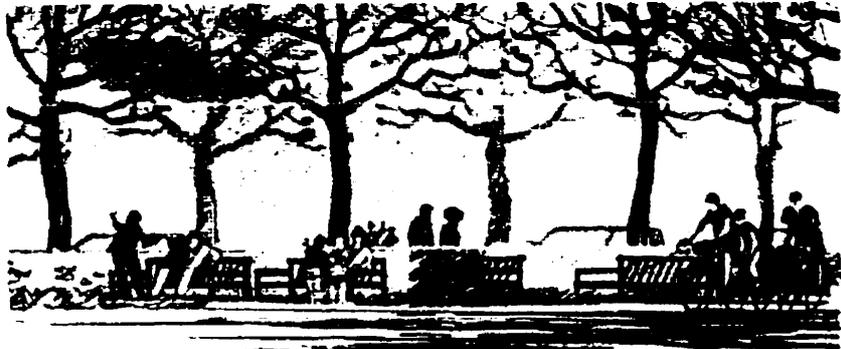


Figure 6.4.4 Poetics – sketch of the Linear Park

### **Zone Three: Field of Lights.**

This zone is accessed via the pedestrian bridges, or off of the east-west roadway proposed under 'connections, real and dreamt.' Arranged in a staggered grid over the expanse of cracked, intriguing concrete slab, 27 high powered spot lights are positioned in the ground, and pointed upwards into the sky. They create a nighttime field of lights, at once celebrating human endeavor, and announcing the perceptual reawakening that will occur here. The opportunity also exists here to incorporate a program of festive light shows during cultural celebrations. This is another way in which the industrial heritage of the site would be incorporated into the cultural future of the community.

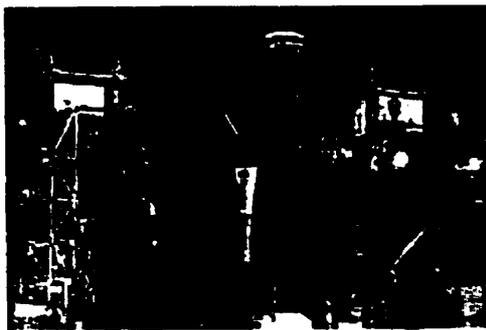


Figure 6.4.5 Poetics – Emscher light show

#### **Zone Four: the Discovery Zone.**

As mentioned earlier, zone four – the farthest corner of the site, and the area buried deepest in the shroud of myth and uncertainty - will also allow for the most unprecedented reawakening. The pathways become roads to personal discovery, and the environmental issues that are dealt with in this area supply us with the relevant landscape forms. Within this area, the burms and hills formed as a result of the capping of industrial waste will help to create undulating 'mazes'. The footpaths developed as the final aspect of the search for connections will work in tandem with the mazes, and will permit the participant to wander through the scene, experiencing a 'landscape' that possesses the potential for endless discovery and interpretation. This area will also be made available for the exhibition of works of land-art by local and foreign artists, and in this way shall demonstrate a deeper and more dynamic commentary of collective experience, dreams, and memory.



Figure 6.4.6 Poetics – Image of discovery zone

# THE POETICS OF PLACE...

## GARDENS

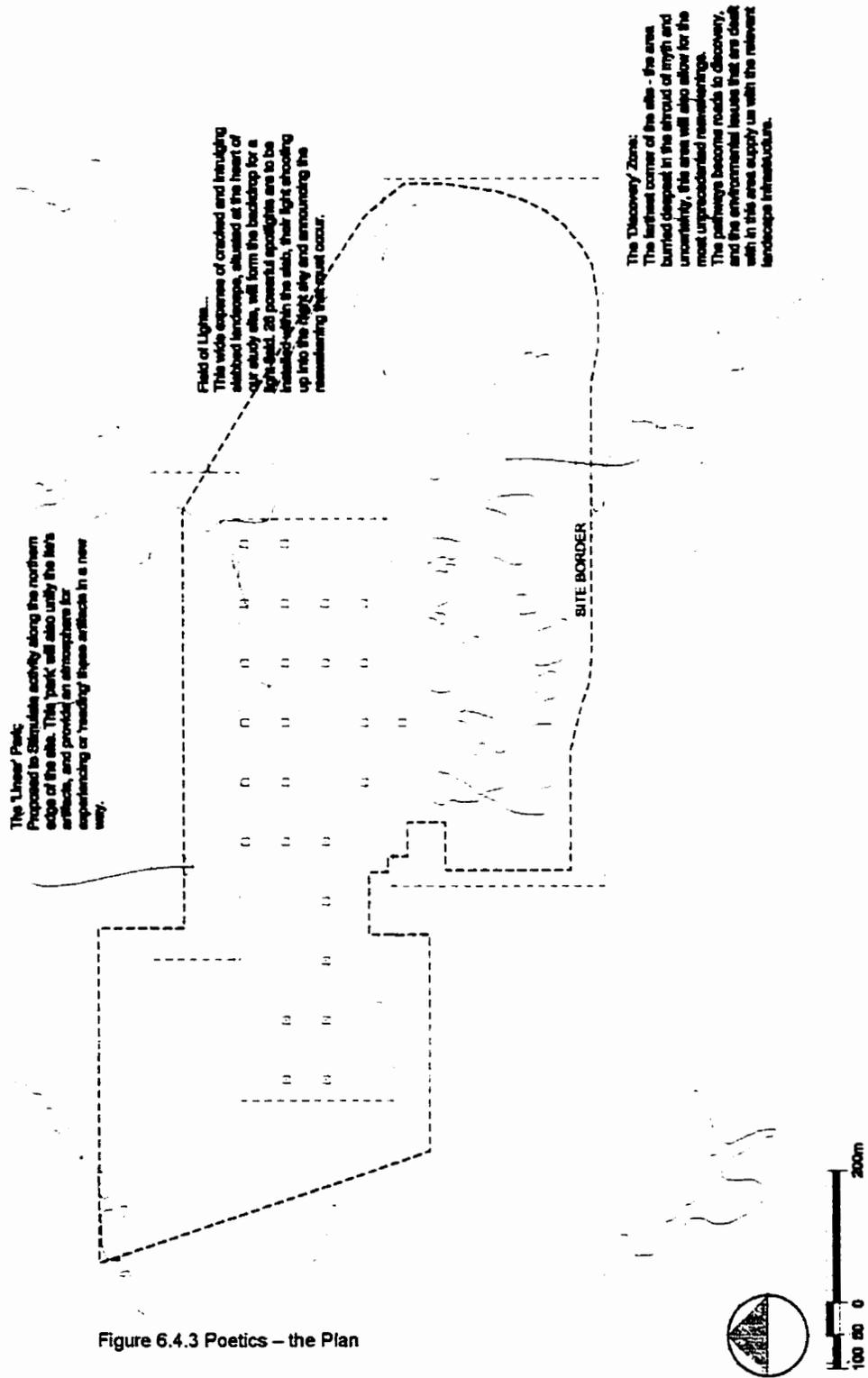


Figure 6.4.3 Poetics – the Plan

## 6.5 Cultural Identity

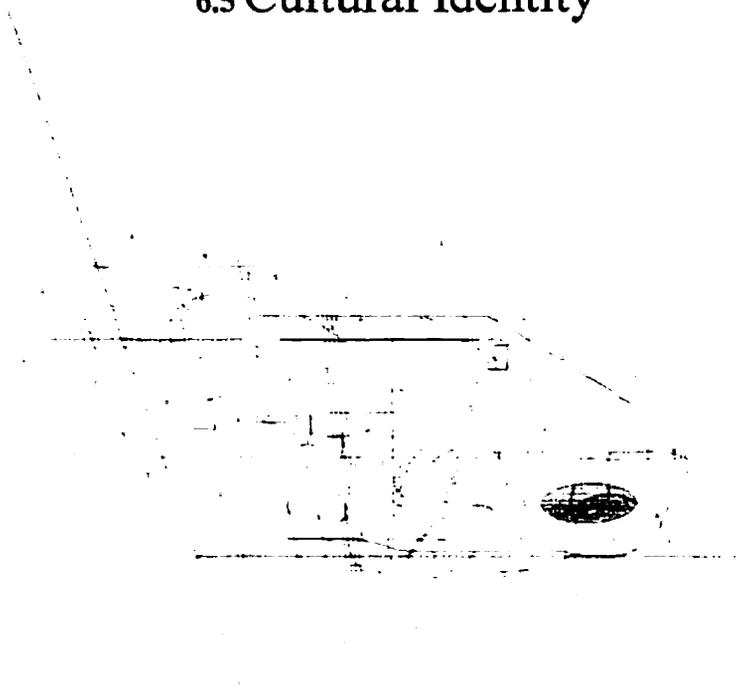


Figure 6.5.1 Identity – the Concept

This phase deals with ideas about structuring human activity back into the site for commercial, educational, or recreational purposes. The intent is to establish the opportunity for social interaction at a scale that is sensitive to the identity of the area's inhabitants. The wide expanse of land available for this interaction will not be 'zoned' or organized on the basis of arbitrary geometry or an externally applied ordering system, but should grow and evolve from the hand of the site's participants, or users.

Within the heart of the expansive field of concrete, an even rectangular opening measuring 380 meters long and 40 meters wide provides the opportunity to infuse the beginnings of human activity. The metaphorical position that forms the basis for the location of human activity here lies in the fact that historically, this open space identified the area of livestock exchange, transfer (drop off and pick up). This thin strip will form the basis for initial open-air theaters, plazas, kiosks, follies, or other such structures as driven by the community.

CULTURAL IDENTITY

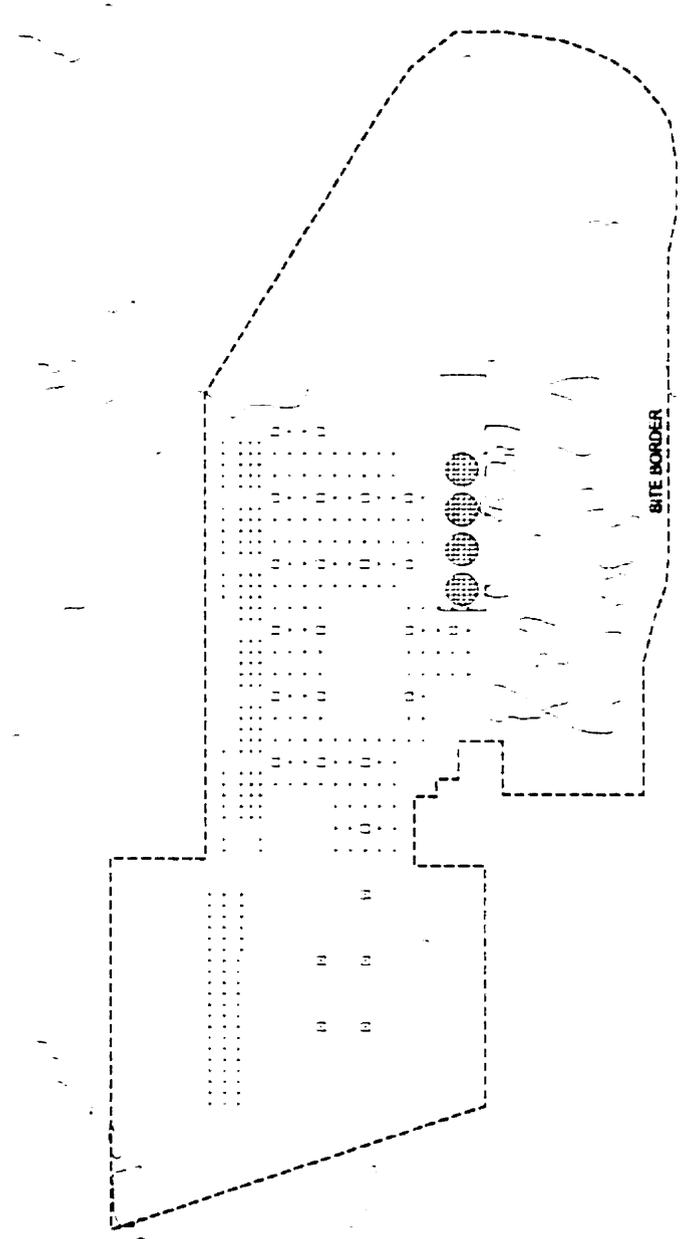
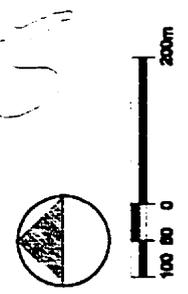
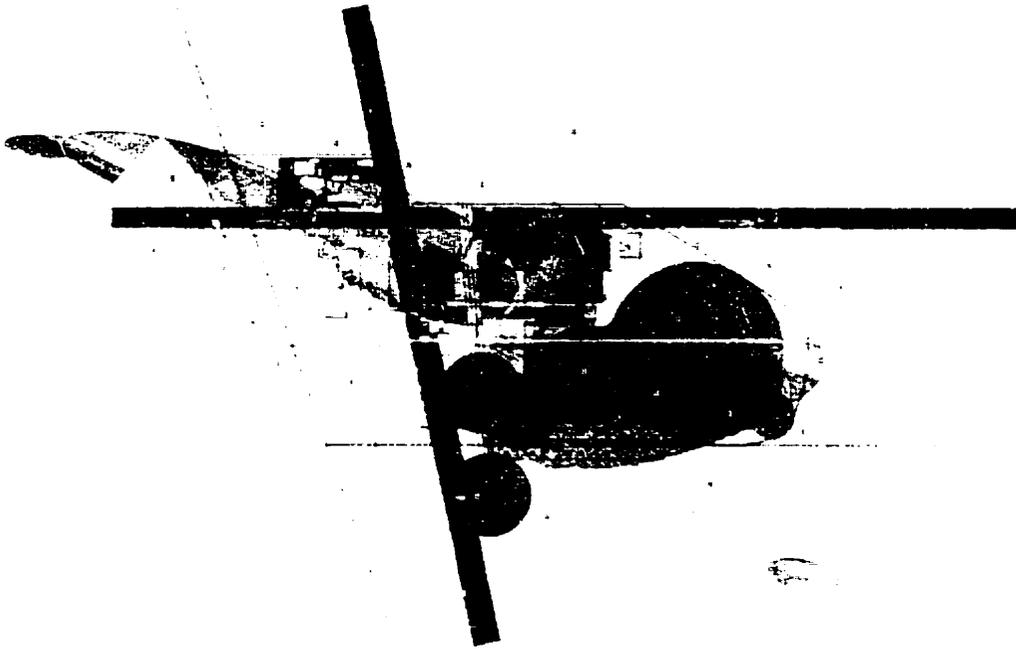


Figure 6.5.1



## 6.6 Conclusion



The above graphic demonstrates the conceptual overlay of all the phases of the strategy over the site. The idea that a 'landscape' is actually the relationship that exists between a mind (individual or collective) and the physical scene is the true source of the ideology that has been explored in this study.

In closing, two things remain clear. The first is that the fabric of urban postindustrial landscapes is spreading. Consequently, it is becoming more imperative that strategies for engagement with this phenomenon are devised. The second thing is that landscapes are in fact the product of human perceptions, myth, and dreams – at least to the same degree that they are the products of physical matter.

These two facts confirm that engagement strategies for this emergent fabric require, to a large degree, the exploration of perceptual themes such that these sites will be perceived for what they truly are: more than the sum of their physical parts.

With the study site, this strategy of engagement has been developed utilizing a layered, or phased approach, and the combination of these layers fosters the exploration of the site's interdependent, contextual and perceptual themes.

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# 7 Supporting Information

**Appendix 1:  
A Comparatively Non-Perceptive Response  
Strategy:**

Excerpts from the city of Winnipeg / DSLea Report.

## 9.0 SUMMARY OF OUTSTANDING ISSUES AND RECOMMENDED ACTION

There are a number of issues raised in this report and specific recommendations put forward. To begin to address them, the following actions are suggested:

1. The report and recommendations should be forwarded to the appropriate standing committees of council for their review and comments.

It is anticipated that the Committee on Planning and Community Services may refer the report to the recently constituted Task Force on the Public Markets which may, in turn, recommend or initiate a public consultation program to inform the adjacent communities of the study and its recommendations and seek their input.

2. A decision should be made as to the compatibility of the two current uses (Super-tech and Auto Haulway) in the southwestern part of the site from the perspective of the recommended land use concept and possible zoning changes (assuming a more restrictive zoning than the present "M3").

Council should also review standards for appropriate separation distances between heavy industrial areas ("M3" districts) and residential districts. This review would apply to all heavy industrial districts within the city for the possible adoption of a city-wide policy.

3. Assuming that a general consensus can be reached on an acceptable land use concept, Council should consider the initiation of an application to amend the zoning by-law to redesignate the lands from an "M3" category to an appropriate mix of lighter industrial uses, as recommended in this report, or other uses which may be recommended by the Task Force.
4. Concurrent with the aforementioned recommended actions, it is suggested that:
  - a) The Streets and Transportation Department should confirm the recommended widening of the Marion Street right-of-way (along the south side) and the alignments for the two proposed collector streets to serve the Public Markets site and take steps to protect or acquire these lands.

- b) The Water and Waste Department should initiate a study to determine the feasibility of utilizing the existing combined sewer in Dawson Road to accept storm water during "dry flow" conditions from a retention pond to be located in the Public Markets and/or of constructing a surface drain from the proposed retention pond to connect to the Dugald Drain somewhere in the vicinity of the Marion/Archibald intersection and to accordingly formulate its recommendations.

These studies can be initiated immediately because they do not depend on the final mix of land uses proposed for the site and should not prejudice the work of the Task Force.

Once these steps have been initiated or completed, the City will be in a position to make further recommendations or decisions with respect to:

- the construction of the storm water retention pond;
- the development of a regional public works yard; and
- the sale of surplus frontage properties along rue Archibald and Marion Street and the former Swifts site.

Although further investment in the development of the balance of the Public Markets site is not recommended at this time, by addressing these issues and adopting an overall development concept plan for the site, the City will be in a much better position to respond in a timely manner to any future opportunities which may arise.

**Appendix 2:  
Excerpts from the environmental study undertaken  
by Tetris, Inc.**

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## 1.0 SUMMARY

TetrES Consultants Inc. was retained by DS-Lea Consultants to provide an assessment of environmental conditions at the Public Markets site. This Environmental Assessment was part of the investigation into the suitability of this site for the relocation of the City of Winnipeg's Ross Avenue Public Works Yard.

In the course of the Environmental Assessment, 28 boreholes were drilled, six monitoring wells were installed, and 54 soil samples and six ground water samples were analyzed for chemical parameters. The locations from which the soils and ground water were sampled were selected to detect possible contamination resulting from past on- and off-site uses as well as to test representative background conditions from large open areas at the site.

The work completed to assess environmental conditions at the Public Markets indicates that the site should be suitable for the relocation of the City of Winnipeg's public works facilities. Only soil samples from three boreholes drilled in the northwestern corner of the property contained detectable contamination. Two of these were drilled at the location of the former Public Markets garage and fuelling station and soils from the boreholes contained gasoline hydrocarbons (BTEX) and oil and grease at levels below Manitoba limits for industrial sites. A third borehole which was drilled adjacent to an abandoned Canada Packers abattoir and food processing facility contained soil with oil and grease, Freon and lead at levels below Manitoba limits for industrial sites. Manitoba Environment has been notified of the evidence of contamination found in these three boreholes and has determined that further delineation or remediation at the site was not required.

Ground water samples obtained from two monitoring wells in the shallow till aquifer beneath the site contained levels of lead in excess of Canadian Drinking Water Quality Guidelines. Ground water sampled from a third monitoring well contained sulphate concentrations in excess of Canadian Drinking Water Quality Guidelines. These ground water conditions may be naturally occurring.

Manure and straw were found in uncertain quantities in clay fill material to a depth of nine metres in one location at the southwest portion of the site. There is a potential that methane produced from the decomposition of this material could be of significance when locating structures in this area.

## **2.0 INTRODUCTION**

The property presently occupied by the City of Winnipeg's Ross Avenue Works Yard has been proposed for the location of a Federal Government Laboratory Centre for Disease Control. The Public Markets site in St. Boniface is being considered for the relocation of the City of Winnipeg's Central Public Works Yard. Prior to purchasing this property, the City of Winnipeg conducted a site investigation to determine the suitability of this property for the relocation of the Works Yard. Part of this investigation was an environmental assessment of the site.

The environmental assessment of the Public Market Site was performed to determine if any hazardous materials are present at the site in amounts that may impact the development of the property. The assessment of the site consisted primarily of soil and ground water sampling and chemical analysis. Additional information to aid in assessing environmental conditions at the site was acquired through a review of the history of the site and surrounding properties performed by DS-Lea Consultants Ltd., current and historic photographs of the site, site inspections and results of a concurrent geotechnical study of the site performed by Dyregrov Consultants.

## **3.0 BACKGROUND INFORMATION**

### **3.1 SURFICIAL GEOLOGY**

The geological setting of the former Public Markets site in Winnipeg consists of up to 21 metres of silt, clay and till overlying carbonate bedrock. These strata are generally classified into three units; the Complex zone, the Glaciolacustrine Clay and the Tills.

The Complex zone is the surficial unit and is about 3 metres thick. This unit is composed mainly of stratified silty clay and silt, with varying amounts of organic soils, alluvial clays and sands and anthropogenic fill.

The Glaciolacustrine Clays below the Complex zone are 12-15 metres thick in this area. The upper 4 metres are usually a weathered brown or mottled grey-brown clay, while the clay below is grey with occasional rock fragments near its base.

The Tills in the area are approximately 3 metres thick and are composed largely of silt, sand, and gravel. The upper part of the Till unit is soft, loose, and water-bearing, while the lower part is much denser.

The underlying bedrock is composed largely of dolomitic limestone. As a result of preglacial weathering, the bedrock surface is highly fractured, disturbed, and intermixed with sand and gravel. The bedrock surface is highly irregular and contains numerous local highs.

### 3.2 HYDROGEOLOGY

Ground water beneath the Public Markets site can be found in three separate strata, as follows:

- Within the Complex zone, perched aquifers are found in the silt. This ground water generally occurs in isolated pools, therefore, quantities are limited and flow is minimal.
- Sand and gravel lenses within the Till form an aquifer with moderate to high transmissivities (i.e., ability of the formation to transmit water). Flow within the aquifer is generally governed by gradient.
- The carbonate bedrock constitutes the major aquifer beneath the City of Winnipeg, with a high but variable fracture permeability. The aquifer transmissivity beneath the

site is approximately 620 m<sup>2</sup> per day. Historical industrial use of the aquifer in the St. Boniface area has produced a cone of depression in the water table in the vicinity of the Public Markets site and industrial properties adjacent to the west of the site.

### **3.3 SITE SETTING**

The Public Market Site was used from early this century until 1988 as a livestock holding, selling and transfer facility. Stock barns and pens occupied much of the Northern half of the site. Manure from barns and holding pens was removed and stored to the south of the pens where it was sold as fertilizer. A garage and fuelling station as well as hay barns were located at the east of the property between the presently-abandoned Canada Packers and Swift plants. The Public Markets powerhouse and office building are located at the north of the property. Numerous railroad tracks serviced the Public Markets, and at the height of activity in the early 1970s up to 25,000 railcars were unloaded at the site each year.

All stock holding pens, auction buildings, the garage and fuelling station and barns were removed in the years from 1983 to 1988. The only remaining structures consist of the administration building, powerhouse and water tower. A tunnel connecting the administration building and the powerhouse still contains asbestos-covered pipes.

The northern portion of the site that previously contained the stock holding pens remains largely covered with concrete. This area was serviced with sewer lines and some of the manholes were partially filled with debris when the livestock operations were discontinued, while others have been left uncovered. An additional uncovered manhole has been identified to the south east of the concrete-surfaced area. No complete inventory of uncovered manholes has been conducted at the site.

Railroad lines surrounding the Public Market site remain in use. Additional lines that had been used to bring livestock into the yard have been removed, only the gravel beds remain.

Underground storage tanks at the fuelling station were removed in 1987. These tanks were installed in 1985 and had replaced older tanks at the same location.

Throughout the past several decades, many truck-loads of fill material from construction projects throughout the City of Winnipeg were unloaded in previously marshy south-central and south-western portions of the property. Debris from the removal of Public Markets structures, mainly concrete fragments, timber and railroad ties is located primarily in piles in the south central portion of the property (Figure 1). Large piles containing significant amounts of straw and manure in addition to concrete fragments and soil are located in the south-central portion of the property (Figure 1).

The Public Market site is adjacent to industries that include: hide treatment, abattoir, meat processing, feed lots and vehicle repair, maintenance and transfer facilities. The adjacent businesses with the greatest potential for having influenced environmental quality at the Public Markets include a hide treatment facility, currently the St. Boniface Hyde and Wool Company Ltd., and two abandoned abattoir and food processing plants, formerly in operation as the Swifts and Canada Packers Plants (Figure 1). The hide treatment facility has apparently only been used to salt hides which have then been sold to tanning firms. The former Swifts and Canada Packers plants contained large and diverse operations which included slaughtering, rendering, margarine production and hydrogen production. These two plants maintained their own sewage treatment facilities, water wells, boilers, above and below-ground fuel storage tanks and vehicle maintenance facilities.

#### **4.0 SOIL SAMPLING AND MONITORING WELL INSTALLATION**

A total of 28 boreholes were drilled at the Public Markets site as part of the environmental assessment, as shown on Figure 1. Drilling was performed by Maple Leaf Enterprises Ltd., of Winnipeg, on two separate occasions; September 11 to 13, and October 19, 1990. Three soil samples were collected from each borehole at depths of 0.5, 1.5 and 3 metres for laboratory analysis. General hydrocarbon vapour readings were taken from air at the top of

boreholes during drilling with a portable photo-ionization detector. Drill logs for these boreholes are presented in Appendix B. Soil sample collection methodologies are described in Appendix A and sample descriptions are presented in Appendix D.

In September, four boreholes (MW1, MW2, MW3 and MW4), were drilled into till, with depths ranging from 14.4 to 18.9 metres below grade. These boreholes were then completed as monitoring wells to allow for sampling of the ground water within the till aquifer. Three of the monitoring wells were located around the perimeter of the site to aid in determining ground water flow direction beneath the site and possible contaminant migration from off-site industry. MW4 was located in the centre of the site to enable sampling that would show effects of Public Market livestock handling activities and manure storage on ground water quality.

Sixteen additional boreholes were drilled throughout the site in locations chosen to detect the environmental impact of historic uses of the Public Markets and adjacent properties. BH1 and BH2 were located adjacent to the Public Markets powerhouse. BH3, BH6, BH16 were located adjacent to the abandoned Canada Packers plant. BH4 and BH5 were drilled at the location of the former Public Markets garage and fuelling station. BH6, BH16, BH7, BH8 and BH9 were located adjacent to an abandoned Swift's food-processing plant.

Following a review of the chemical analysis and drill logs from the first round of chemical and geotechnical exploration borehole drilling, additional chemical exploration drilling and soil and ground water testing was performed to gain a better understanding of conditions of the centre of the site.

In October, a fifth monitoring well (MW5) was installed, along with nine additional chemical exploration boreholes (BH17 to BH23, MW2A and MW3A). The drill logs from these boreholes are presented in Appendix B.

Five boreholes (BH18, BH20 to BH23), were drilled to a depth of 3 metres in the southern half of the site. Borehole BH17 was drilled to a depth of 3.5 metres in the vicinity of existing

boreholes BH4 and BH5 which were known to contain hydrocarbon contamination. This borehole was then equipped with a 50 mm diameter PVC casing and screen for the monitoring of the perched ground water table for hydrocarbons.

Borehole BH19 was drilled to a depth of 9 metres into an area which appeared to have been previously excavated and backfilled. Clay fill in this area contained manure and straw fragments.

Boreholes MW2A and MW3A were drilled to a depth of 3 metres next to existing monitoring wells MW2 and MW3, for re-sampling of soil at these locations.

#### 4.1 FIELD OBSERVATIONS

During the drilling of all chemical exploration boreholes and geotechnical testholes TH25 to TH35, all unusual soil characteristics were noted and air from the tops of boreholes was tested for the presence of combustible gas. During site visits potential on- and off-site hazards were noted and a map was prepared showing surface features of the site (Figure 1).

Petroleum smell was evident on samples from BH4, BH5 and BH17. High combustible vapour readings were recorded from BH3.

Uncertain amounts of straw and manure in clay fill material were encountered at depths between 3 m and 9 m in BH19, TH13, TH25, TH27, TH28 and TH29 that were drilled close together in the southwest corner of the site (Figure 1). This fill material apparently extends for 90 m from north to south and is up to 40 m wide in a east to west direction, though it is less than 40 m wide along some of its north-south extent. A brief description of the stratigraphy encountered in the Test Holes is given in Appendix C, the log for BH19 appears in Appendix B.

## **5.0 ANALYSIS OF LABORATORY RESULTS**

In total, 90 soil samples were collected from the Public Markets site. Descriptions of the samples are provided in Appendix D. Selection of the samples to be analyzed was based on the historical review, observations made while drilling, and the combustible gas concentrations recorded in boreholes. Soil samples were analyzed for chemical parameters listed on Table 1. A list of the 54 soil samples analyzed is given in Table 2. The samples not submitted for laboratory analysis are being stored in a frozen state to preserve them, should future chemical analyses be required.

Ground water samples collected from each of the six monitoring wells installed at the Public Market Site were analyzed for the chemical parameters listed on Table 3.

Soil and ground water samples were analyzed by Enviroclean Laboratory Services in London, Ontario.

Soil chemistry was compared to the Manitoba Environment Guidelines for acceptable concentrations of various chemical parameters on industrial property. Where no Manitoba Guidelines were evident, Manitoba Environment advised that using the Quebec or British Columbia Guidelines was acceptable. In some instances, a comparison to the Ontario Guidelines for decommissioning industrial sites was made.

Ground water chemistry was compared to the Canadian Water Quality Guidelines for Drinking Water, as well as to Manitoba Guidelines (adapted from Quebec or British Columbia), for decommissioning industrial sites.

Several of the above guidelines apply to the decommissioning of industrial sites. In some instances, higher concentrations of some contaminants may be acceptable to Manitoba Environment if the site continues to be used for industrial purposes. In these instances, remediation levels are normally site specific and are set by Manitoba Environment. In these cases, migration of on-site contamination off property to adjacent lands is the primary

concern. Further, it is recognized that some elements and compounds that appear in the above guidelines may naturally occur in the soil and water at concentrations in excess of the stipulated maximum acceptable concentrations. In these circumstances, remediation is not required, however, the occupants of the property or consumers of the water are advised of the potential risks.

## **5.1 SOIL LABORATORY ANALYSIS**

Only soil samples from three of the 27 boreholes from which soil samples were analyzed contained detectable concentrations of contamination. None of the contamination encountered exceeded Manitoba Environment Guidelines. A copy of the laboratory report is contained in Appendix E.

Soil samples from boreholes BH4 and BH5 which were drilled at the former location of the Public Markets garage and fuelling station contained small amounts of the volatile organic compounds benzene, ethylbenzene and xylene as well as oil and grease. Although none of the concentrations of these substances were in excess of the Manitoba Environment Guidelines, it is possible that hydrocarbon contamination could be present at higher concentrations elsewhere in this area.

Borehole BH3 located on an access road adjacent to the eastern boundary of the abandoned Canada Packers Plant contained elevated levels of oil and grease, copper and lead. In addition, trace quantities of Trichlorofluoromethane (a Freon) were found in soil from BH3. Trichlorofluoromethane is extremely volatile and of low toxicity and is used as a refrigerant or a solvent. Possible explanations for its presence are the loss of refrigerant or its use as a solvent. The highly volatile nature of Trichlorofluoromethane might have produced the high vapour concentration measurements observed in BH3 during drilling. (Refer to Appendix B.)

## **5.2 GROUND WATER LABORATORY ANALYSIS**

Canadian Water Quality Guidelines for drinking water were exceeded in ground water samples from three of the six monitoring wells installed at the site. A copy of the laboratory analysis of ground water samples from the site is contained in Appendix F. Ground water from MW4 contained 130 ppb lead and MW2 contained 20 ppb lead, which exceeded the Canadian Drinking Water Guideline limit of 10 ppb. A sulphate level of 930 ppm in the ground water from MW3 exceed the Canadian Drinking Water Guideline limit of 500 ppm. The presence of lead in the water is most likely attributable to natural causes, such as the composition of the till surrounding the monitoring well. The high sulphate concentration is also likely naturally occurring and is found in similar concentrations throughout the City.

Water from the perched water table from BH17 was tested for fuel oil in water by the W.M. Ward Technical Services Laboratory. Fuel oil was not detected at a minimum detection limit of 0.7 ppm.

These results indicate that according to the Canadian Water Quality Guidelines for Drinking Water, the ground water in portions of the till aquifer is not fit for human consumption; however, the ground water could be suitable for industrial uses.

## **5.3 GROUND WATER MONITORING**

In order to determine the direction and gradient of the ground water flow within the confined till aquifer, four monitoring wells were placed roughly in the four corners of the site. Another well was located near the centre of the site. Ground water elevation data was also obtained from the Province of Manitoba Water Resources Branch for three bedrock aquifer monitoring wells found at the abandoned Swift's and Canada Packers sites. Provincial monitoring wells located close to the east of the Public Market Site were also utilized. This data is summarized

in Table 4. Figure 2 shows monitoring well locations and the potentiometric surface beneath the site as defined on November 7, 1990.

Ground water elevations in monitoring well MW3 did not correspond with elevations obtained from the other monitoring wells. The ground water level in MW3 is over two metres higher than the other monitoring wells. The cause of this difference may be that MW3 does not extend into the till aquifer. Drilling of MW3 was completed immediately below the clay without penetrating a measurable thickness of glacial till. Refusal of the drill rig may have been caused by a boulder or a local bedrock high. The ground water found in this well most likely originates from silt and gravel lenses encountered near the bottom of the borehole. Because of this, the water level in MW3 was not incorporated in the potentiometric surface map on Figure 2.

Ground water flow direction in the till aquifer appears to be northerly and the gradient to be very shallow (1:2600). Long-term ground water elevation data collected over the past 20 months reveal a seasonal rise and fall of almost 4 metres. Ground water elevations in the bedrock aquifer and till aquifer indicate that the two are hydraulically linked.

## 6.0 CONCLUSIONS

The Public Market site appears largely uncontaminated and developable.

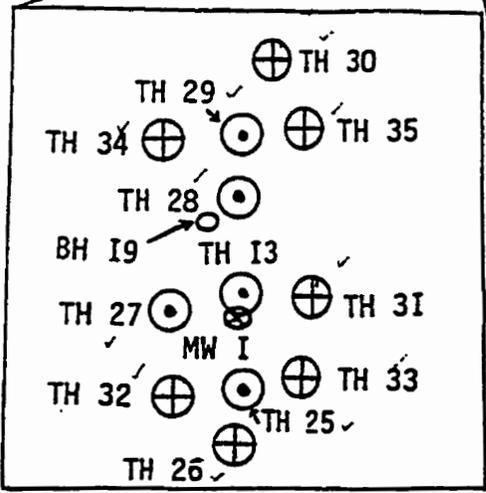
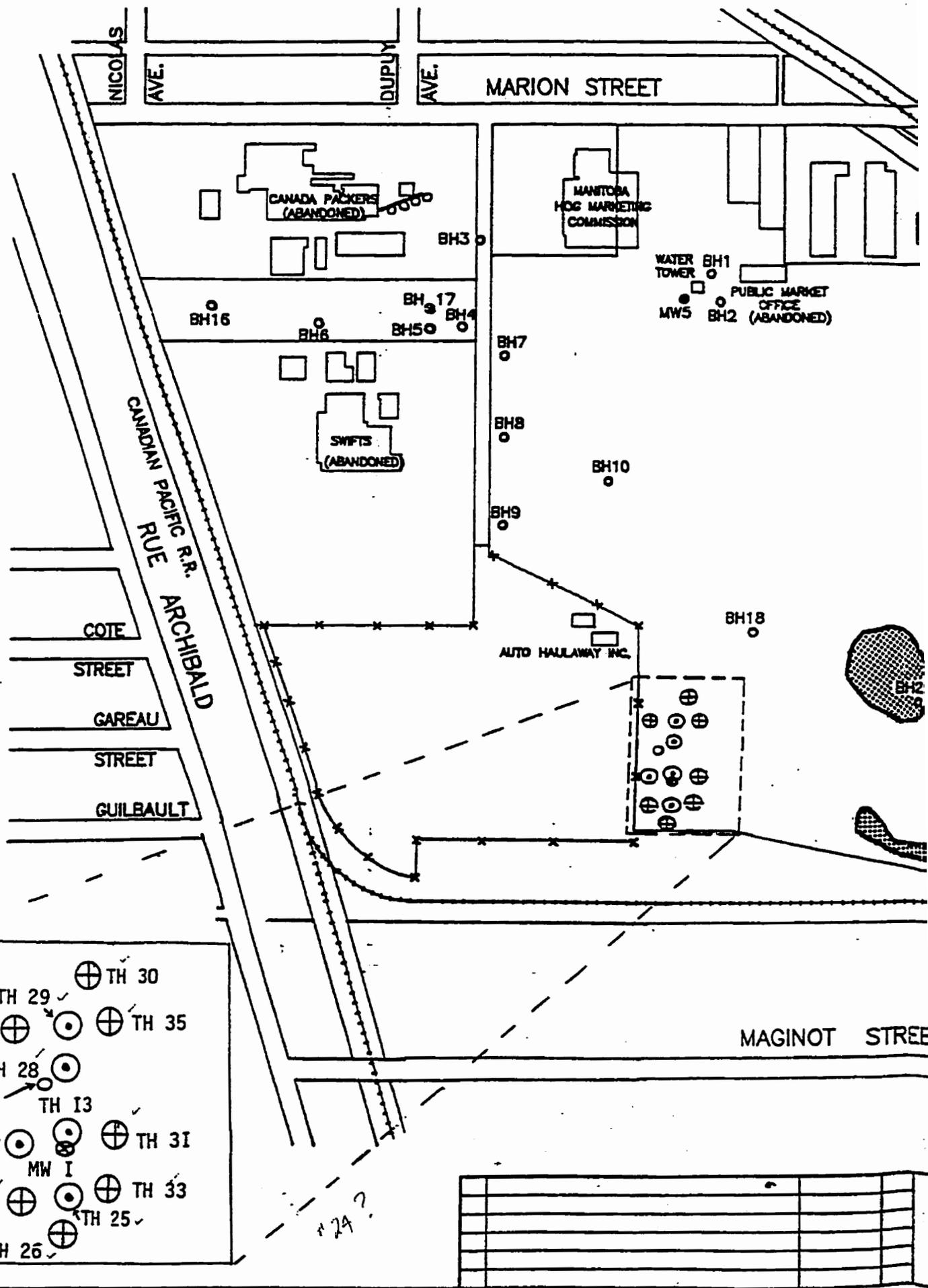
Hydrocarbon contamination exists along the west end of the property in quantities that Manitoba Environment has determined do not require further delineation or remediation.

Fill material encountered in an area at the southwestern corner of the property contains some straw and manure which could potentially produce methane gas. More work is needed to determine the amount of hydrocarbons in this fill before locating structures in this area.

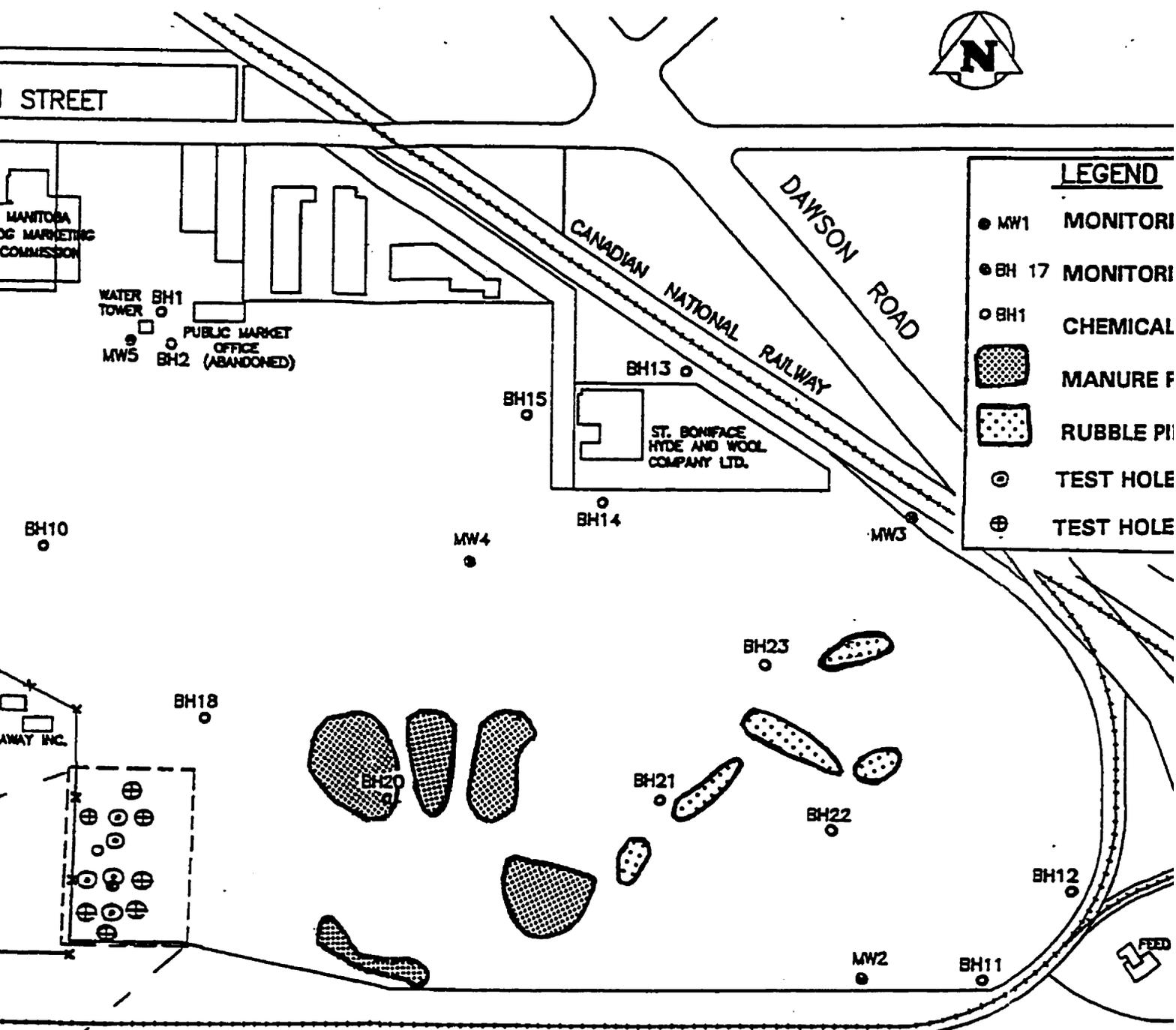
Some ground water in the till aquifer beneath the Public Markets site contains elevated amounts of lead and sulphate. It is unknown, at present, if this condition is naturally occurring. The ground water does not meet the Canadian Water Quality Guidelines for Drinking Water and should not be used for human consumption.

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NOT TO SCALE

CLIENT

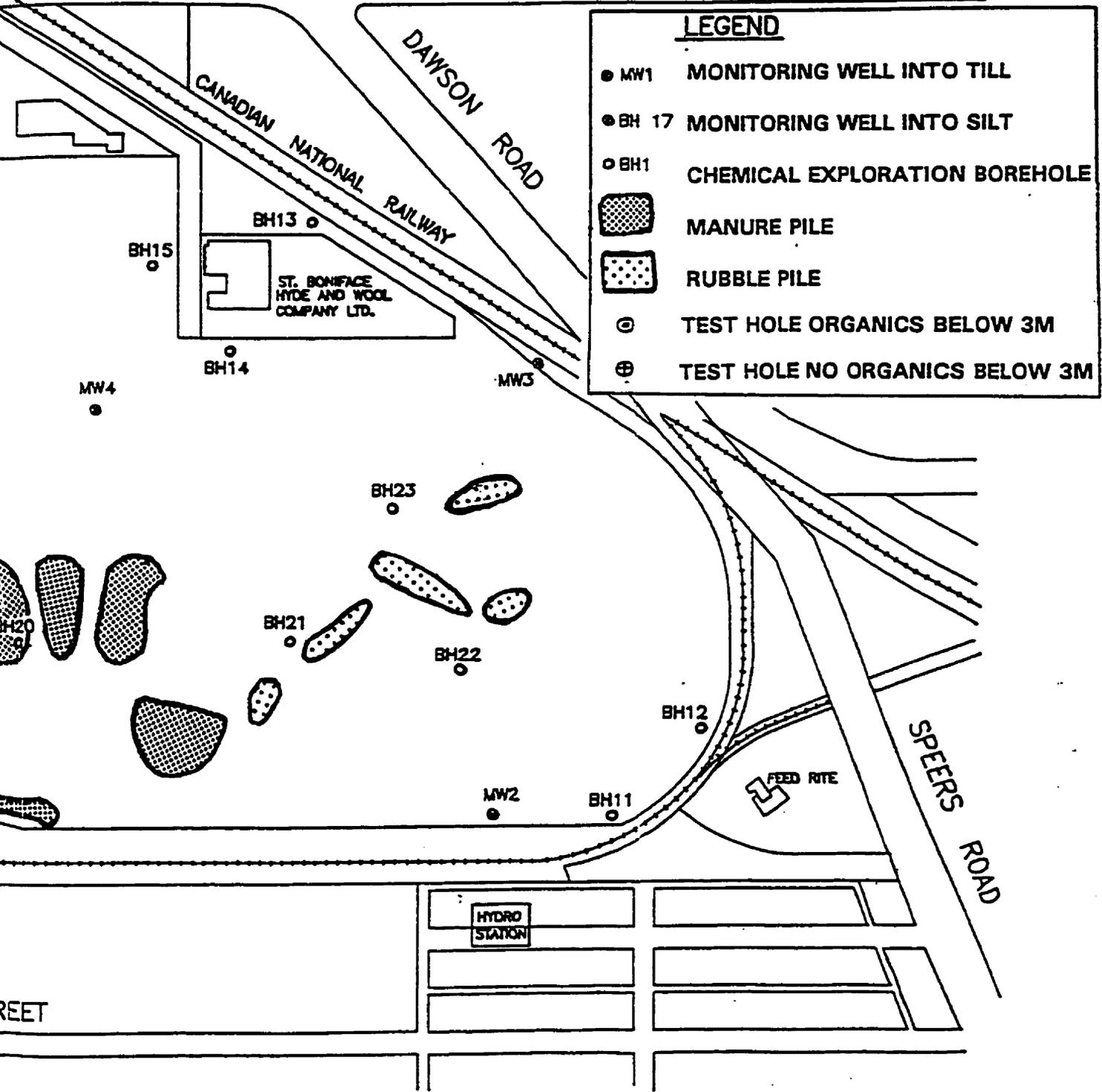
THE CITY OF

FIGURE 1

**TetrES**  
CONSULTANTS INC.

**PUBLIC MONITORING**  
APPROXIMATE  
MONITORING  
SIGNIFICANT





NOT TO SCALE

CLIENT

THE CITY OF WINNIPEG

FIGURE 1

**PUBLIC MARKET SITE PLAN**  
APPROXIMATE BOREHOLE AND  
MONITORING WELL LOCATIONS AND  
SIGNIFICANT SURFACE FEATURES

**TetrES**  
CONSULTANTS INC.

