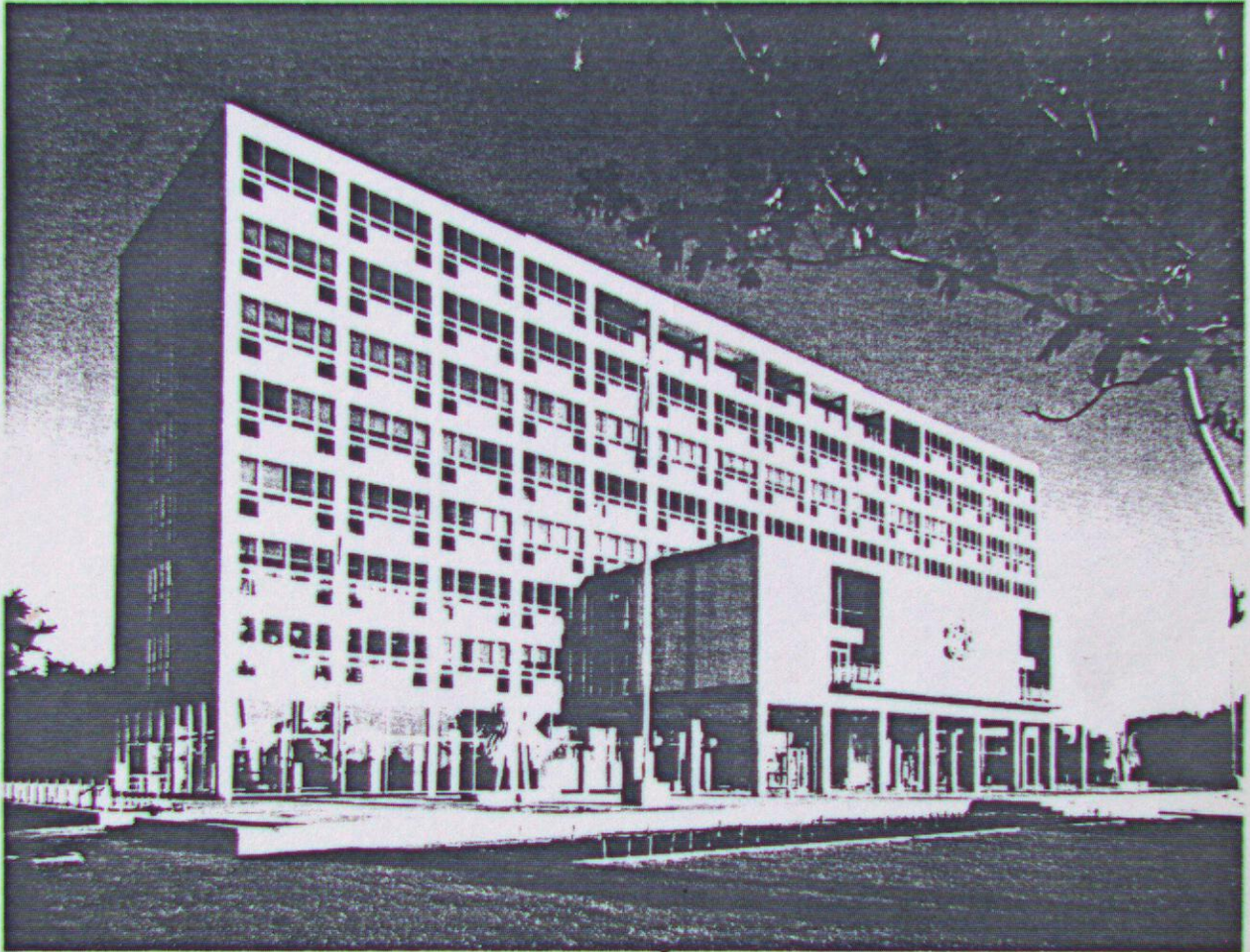




City of
Ville d' **Ottawa**



OTTAWA CITY HALL

URBAN DESIGN CONSIDERATIONS FOR THE NEW CITY HALL PROJECT

M6606

PLANNING AND DEVELOPMENT DEPARTMENT

MAY 1988

OTTAWA CITY HALL

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NOTE: Since Green Island and the existing City Hall do not conveniently align with points of the compass, the following orientation is used in this text: North -- Sussex Drive, East -- New Edinburgh, South -- the Minto Bridges, and West -- King Edward Avenue and External Affairs.

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Cover Photo: Panda Photography Ltd., Toronto (1958)

1.0 PURPOSE AND SUMMARY

1.1 Purpose

The purpose of this paper is to provide an opportunity to address a number of design and urban planning concerns which might not otherwise be considered in planning for the new City Hall complex. This paper is directed to anyone participating in the planning process for a new City Hall, including interested citizens, elected and administrative municipal officials, and prospective designers of the new City Hall complex.

1.2 Context

The importance of creating a truly magnificent City Hall Complex that would be a leading example of urban enhancement cannot be overly emphasized. Also important, in light of the fragmented history that Ottawa's City Hall has had in terms of a permanent place, is the need to retain the existing building. This unique development opportunity demands our best efforts to ensure that the new complex fulfills its symbolic role while it maintains its functional relevancy in decades to come in a City dominated by federal symbols and buildings.

Two important ways to achieve these ends would be to include advance performance standards in the building programme and developing a set of cohesive urban design guidelines. Both would help to integrate the complex with its environment while guaranteeing that the building is inviting to local people and visitors as well. Thus, the concepts contained in this report encompass a wide range of issues, most of which relate to the design of the building. Also included are suggestions for further study which will, if accepted, affect the building form and the program of functional requirements. The specific design concepts are to be treated as guidelines which are not to be interpreted as rigid rules to which the design must adhere.

1.3 Recommendations

The following is a summary of the recommendations relating to the various design issues and are either a guideline, a program requirement or a proposal for further study.

i) Views to the Site

The design and massing of the complex must make it a landmark within the City; especially from vantage points across the Ottawa River, from King Edward Avenue, from Sussex Drive and the Rideau River.

Views from New Edinburgh, Sandy Hill, Lowertown and King Edward Avenue to the Minto Bridges are to be preserved.

The informal pastoral landscape setting of the Minto Bridges and the light tracery effect of the bridges themselves must be preserved and enhanced.

ii) Views from the Site

Public viewing areas should be provided both at grade and at lookout points on the building. At grade views to the water, adjacent streets, local neighbourhoods and the landscape setting must be provided. A panoramic look provides the opportunity to view: the city, local neighbourhoods, the rivers, the falls, the Gatineau Hills, distant communities and other significant buildings of local and national importance.

iii) Pastoral Setting

Where appropriate, existing areas of pastoral setting should be integrated into the overall development concept for the island.

Note: The existing pastoral setting of the island should not be the predominant quality of the site. This may limit other open space opportunities which may become apparent in a new development of City Hall.

v) Podium

The existing ground floor of the podium should be extended to take advantage of the low elevation of the existing site.

v) Zoning

The existing "G(1.0)" zoning will permit the proposed uses, as well as the amount of floor space proposed.

i) Building Massing

The excellent solar exposure of the site should be utilized fully so as to maximize the southern portion of the site for outdoor activity spaces and the northern portion for the major building massing.

The greatest impact of the bulk of the new complex will be on the low scale New Edinburgh residential community. Therefore extra care should be exercised to minimize the size and appearance of the complex as seen from New Edinburgh.

As the essential architectural character of the existing building is to be maintained, the following design guidelines for the extension are suggested. The new building bulk may be added to the south side of the existing building.

Although, the building extension may be more appropriate if it were to be separated by an atrium or some other feature, it could have a tall tower form adjacent to but south of the existing building, for improved long distance visibility.

The transparency of the existing ground floor should be maintained as well as the existing appearance of public areas on the ground and second floors.

The existing type of exterior finishes and glazing may be maintained.

vii) Vehicular and Pedestrian Access

Comfortable and convenient access by various means of travel to the site should be maximized by extending an alternate weather protected access to the perimeter of the site. In order to help achieve this objective, an investigation of the underground use of the land north of Sussex may be appropriate. However, it should be noted that this opportunity has not been investigated or negotiated with the National Capital Commission the owner of the subject property.

viii) Site Activities

In order to enhance the community and business functions of the complex, the following site activities are suggested to attract the largest number of people throughout the year:

- Ceremonial and Formal Areas fronting Sussex Drive.
- Heritage Trail around the island.
- Heritage Centre north of Sussex Drive to reflect the history of the island, particularly the Rideau Falls.
- Public Garden to the south which may involve citizen participation in its creation.
- Informal Activities Area designed for multi-use, all-season informal and self-initiated usage.
- Heritage, civic, recreational, and cultural interpretive opportunities are to be integrated into the development of the island's open space system. The Heritage Trail should not necessarily imply a linear circuit around the edge of the island.

ix) Landscaping and Micro-climate

- a) Extensive landscaping should be designed to enhance the micro-climatic conditions, reinforce views and bring interest throughout the seasons, based upon wind and snow studies.
- b) The landscape should provide opportunities to closely observe flora and fauna from the island.
- c) A diversity of open spaces should be incorporated. This could include areas for civic functions and gatherings of various sizes and types (i.e., "garden parties", official welcomes, receptions, etc.), and informal areas and leisure opportunities for visitors and employees.

- d) Provide opportunities for: sculpture displays, floral displays, historical interpretation, water elements, photography settings and for the display of gifts to the City such as the Peace Bell from Japan.
- e) The open space areas must be able to withstand the intensity of use by visitors and employees and be developed to a high standard of materials and construction, complementary to the architectural elements.
- f) The landscape open space should be maximized not only at grade, but through the intermixing and overlapping of building and landscape; treating the island as one.
- g) A broad range of landscape architectural settings such as: urban, pastoral, historical, environmental and aquatic can be created on the island. These opportunities should be developed to their fullest potential.
- h) Physically disabled people should have access to the same range of landscape experiences as more able-bodied people.

x) Interior Aspects

Energy conservation opportunities should be maximized through the use of the solar exposure, the use of the temperature differential of the river water and/or stored snow for cooling, and the use of hydro electric power at the Rideau Falls.

Public access to the various administrative functions of the building must be made more attractive and convenient to maximize the service to the public.

The indoor environmental quality for the new complex, should be of the highest standard, including the improvement of air quality through the use of vegetation.

2.0 IMAGE AND ROLE OF CITY HALL

Historically, city halls have always been one of the most prominent buildings in any community, provided that that community is not dominated by a higher level of government, in which case civic prominence is often somewhat diminished. Ottawa is an example of the latter, even though Ottawa the capital, came into existence some three decades after the area was established as an urban settlement with its own non-federal history.

2.1 The History of Ottawa's Municipal Buildings

The image of Ottawa as a municipality has suffered from more than just dominance by the Federal Government. It has, for much of its existence, lacked that major statement of civic pride and community spirit which most cities take for granted: a city hall. Ottawa's (or Bytown's) first "City Hall" was the second floor of the West Ward Market Building, built in 1848 in the area of what is now Confederation Square (Diagram 1).

Town meetings were held there for thirty years, until 1878. The Lower Town Market was also built in 1848 with an upper hall, and was far more successful as a market than the West Ward Market, but its supporters were never successful in relocating town meetings to Lower Town.

In 1877, a monumental stone building was constructed as a new City Hall on what is now Confederation Square, and the 1848 West Ward Market was demolished. This real, as opposed to adopted, City Hall was destroyed by fire in 1931. From then until 1958, a temporary "City Hall" existed in the Transportation Building at the corner of Rideau Street and Sussex Drive, a heritage building now incorporated into Rideau Centre. In 1958, the existing City Hall opened where Sussex Drive crosses Green Island.

Thus, for nearly half of its 160-year history, Ottawa has been without an official City Hall. The present one has existed for 30 years, and neither of the previous municipal buildings survives. Therefore, Ottawa has been without the continuity of a City Hall building; and is without an "old" City Hall building as is often found in other cities its age.

2.2 The History of Green Island

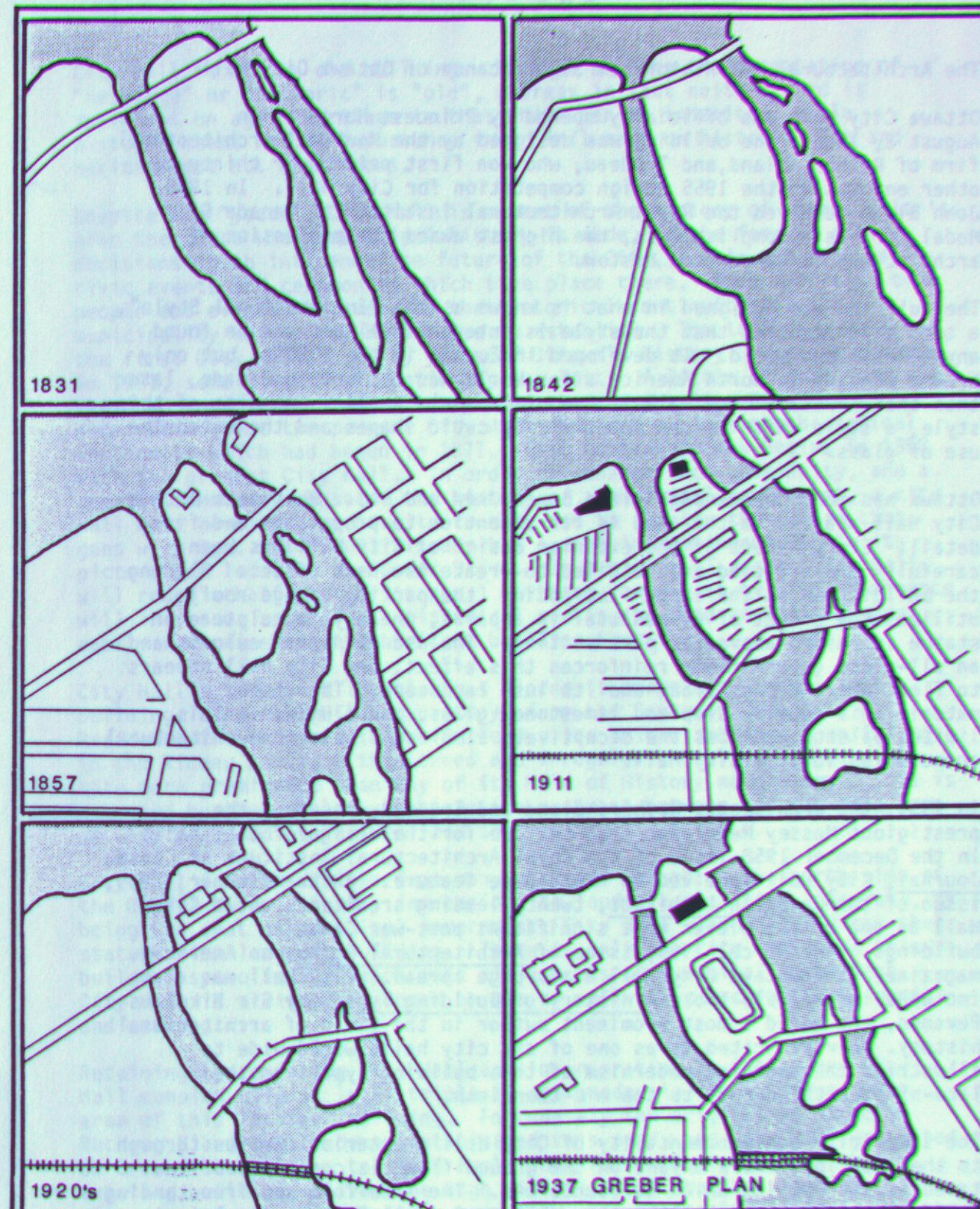
Green Island, the location of the present City Hall, is a unique location, and is an area which exhibits little of its one and one-half centuries of intensive use (Diagram 2). The present pastoral setting of trees casually-sited on grassy embankments belies the area's industrial heritage. The island was first used as a pasture by Patrick Green, hence the name "Green Island". Described by explorer Samuel de Champlain as a "wonderful waterfall", Rideau Falls was an important source of waterpower for early Bytown. Subsequently, the area around Green's pasture rapidly gave way to a mill complex which eventually produced lumber, flour, and textiles, and included foundries, tanneries, and breweries. The mill complex began in 1832, with Jean Baptiste St.-Louis's sawmill, and was enlarged by Thomas MacKay in 1843 for a flour mill and in 1848 for a cloth factory. In 1907, these stone buildings burned, but were rebuilt and continued to house saw and planing mills until the late 1920's when three federal agencies--the National Research Council, the predecessor of the National Film Board, and the Dominion Bureau of Statistics--became occupants. Some of this industrial heritage was lost with the construction of the National Research Council's building in 1930-32, and the remainder was demolished by the National Capital Commission in 1958 and replaced by parkland and the present City Hall.

One small component which escaped demolition was the Rideau Falls Generating Station. Located off Green Island next to the Falls on the French Embassy side, this hydro-electric plant was commissioned in 1908 and ceased operation in 1969. The Rideau Falls Power Corporation has made application to rehabilitate the plant to a capacity of 2,200 kilowatts.

What does remain connected to Green Island are the four white-painted iron spans of the Minto Bridges, constructed in 1900 to link New Edinburgh to Lowertown across the Rideau River via Maple and Green Islands. This was a very early effort to create a ceremonial route to link Government House and the Parliament Buildings. It was not particularly successful as a ceremonial route, but the bridges remain as a unique and important heritage resource in the City.



CITY HALL LOCATIONS



HISTORICAL PLANS OF GREEN ISLAND



2.3 The Architectural and Historical Significance of Ottawa City Hall

Ottawa City Hall was officially opened by Princess Margaret on August 2, 1958. The building was designed by the Montreal architectural firm of Rother, Bland, and Trudeau, who won first prize over thirty-six other entries in the 1955 design competition for City Hall. In 1985, John Bland received the Royal Architectural Institute of Canada Gold Medal for his accomplishments, the highest award the profession of architecture in Canada can bestow.

The building was designed in what is known as the "International Style", a term which denotes that the style is international and can be found anywhere in the world. It developed in Europe in the 1920's, but only became popular in North America after World War II; and in Canada, later than that. Ottawa City Hall is one of Canada's earlier examples of this style, a style which is characterized by cubic shapes and the extensive use of glass.

Ottawa has more than enough glass boxes, new and old. What sets Ottawa City Hall apart from the rest is its attention to proportion and fine detail. Every aspect of the exterior design of City Hall has been carefully proportioned and detailed to create the best effect. Placing the building on on the large flat podium (the parking garage roof) utilizes the effect of a "pedestal in a park", whereby a sculpture or statue is raised above its park setting. The use of narrow columns and an all-glass ground floor reinforces this effect, and City Hall appears to float above Green Island and its lush landscape. The choice of materials is equally simple: limestone, glass, and aluminum. This limited palette enhances the deceptively simple and classic architectural composition that is City Hall.

In 1959, the architects, Rother, Bland and Trudeau, received the prestigious Massey Medal for Architecture for the design of City Hall. In the December 1958 issue of the Royal Architectural Institute of Canada Journal, City Hall received an eight-page feature. In the October, 1959, issue of the Canadian Architect, twenty leading architects voted City Hall as one of the eleven most significant post-war Canadian buildings. The March, 1959, issue of Architectural Forum, an American magazine, gave Ottawa City Hall a six-page spread. City Hall was also included in the 1976 book, A History of Building Types, by Sir Nikolaus Pevsner, the world's most prominent author in the field of architectural history. Pevsner cited it as one of six city halls world-wide to illustrate the emerging modernism of that building type from the late-nineteenth century to the mid-twentieth.

The simplicity and monumentality of City Hall's exterior carries through to the interior, where anyone on the ground floor is conscious of the treed island setting which surrounds one. The free-form and freestanding stairway which ascends to the second floor Council Chamber level is in stark contrast to the rigid rectilinearity of the building's architecture. The stair is more a work of sculpture which dominates the interior public areas, rather than a means to get people to the second floor.

City Hall is not an old building. To most persons the connotation of "heritage" or "historic" is "old", whereas in fact neither word is dependent on age. Heritage is that which can be inherited, while historic means having importance in or influence on history. Age and heritage are not synonymous.

Despite its "youth", City Hall is a part of the history of Ottawa. It is also the place where municipal history is made, in the form of civic decisions which influence the future of the City, and in the form of civic events and ceremonies which take place there. More important than people and events, however, is the historical continuity for the municipality which City Hall helps to establish. The 1878 City Hall was the first City Hall in fifty years of Ottawa's history. When it burned in 1931, some historical continuity was lost. A little of that loss was regained twenty-seven years later when the present City Hall was constructed, but the present City Hall does not replace the historical continuity which had begun in 1877. That continuity now begins in 1958 with the present City Hall. In order to enhance such continuity, and a greater community sense of the history of a municipal government, a city hall must have the opportunity to age, and to acquire the patina that goes with age. City Hall already has a certain prominence due to its picturesque location on Sussex Drive. In a matter of years, City Hall will reach a half-century in age. As those years pass by, its prominence will increase, as will its historical continuity, and it will be more easily recognized as the heritage building that it is.

City Hall's prominent location has placed it among many prestigious buildings along the Mile of History, from the Governor General's Residence to the new National Gallery. Its unique setting -- an island in the Rideau River, with a treed and irregular shoreline -- gives its site more prominence than any of its Mile of History neighbours. This is enhanced by the subtle but attractive contrast between the man-made form of City Hall and its naturalized setting.

City Hall is also visible from many parts of Quebec on the north side of the Ottawa River, thereby increasing its landmark qualities. As well, by being the seat of municipal government, City Hall automatically has the stature of a landmark building. There is only one City Hall, and this building symbolically represents all aspects of municipal government. City Hall is a visual landmark by use as well as by architectural merit and setting.

Retaining the existing City Hall and incorporating it into a new City Hall complex will at least triple if not quadruple the existing floor area of this landmark building. Fortunately the original architects, Rother, Bland and Trudeau, anticipated this need, and City Hall was sited on Green Island so as to leave ample room for expansion behind the existing building. Given the high visibility of the site, its closeness to the new Edinburgh community, its pastoral qualities, and the architectural merit of City Hall, any additional construction must be designed to respect the existing building while also respecting the scale of New Edinburgh.

Consideration of the guidelines recommended in this document will help to ensure that the addition to City Hall complements its architectural



merits and landmark qualities, while at the same time the original City Hall will have further opportunity to establish its historical continuity as the symbol of municipal government in Ottawa.

2.4 The City Hall in 1987

The ceremonial route exists today, and that portion of Sussex Drive between Government House and Parliament Hill is called the "Mile of History", and was reconstructed in the 1950's by the predecessor to the National Capital Commission for that ceremonial purpose.

Sussex Drive has become Canada's most prestigious street, and the location of Ottawa City Hall at 111 Sussex Drive has given the City an opportunity to share in the Mile of History. As a result, the site of City Hall has more prominence than any other site in the City, except for Parliament Hill. The image of the City, as expressed by City Hall, therefore becomes a part of the image of Canada when the Mile of History is used for ceremonial functions during the visits of foreign dignitaries (Diagram 3).

Although the Sussex Drive Location enables City hall to express the municipal corporation internationally, it also performs the same function for the citizens of Ottawa as the Parliament Buildings do for the citizens of Canada as a whole. City Hall is the focus and image of local government. As the focus of local government, City Hall should be a welcoming place which invites its citizens to participate in local government. As the image of local government, it should present a sense of permanence, stability, and monumentality which transcends daily routines and transient issues. As a building, its design should set an example of quality development and should advance existing civic policies.

3.0 DESIGN CONSIDERATIONS

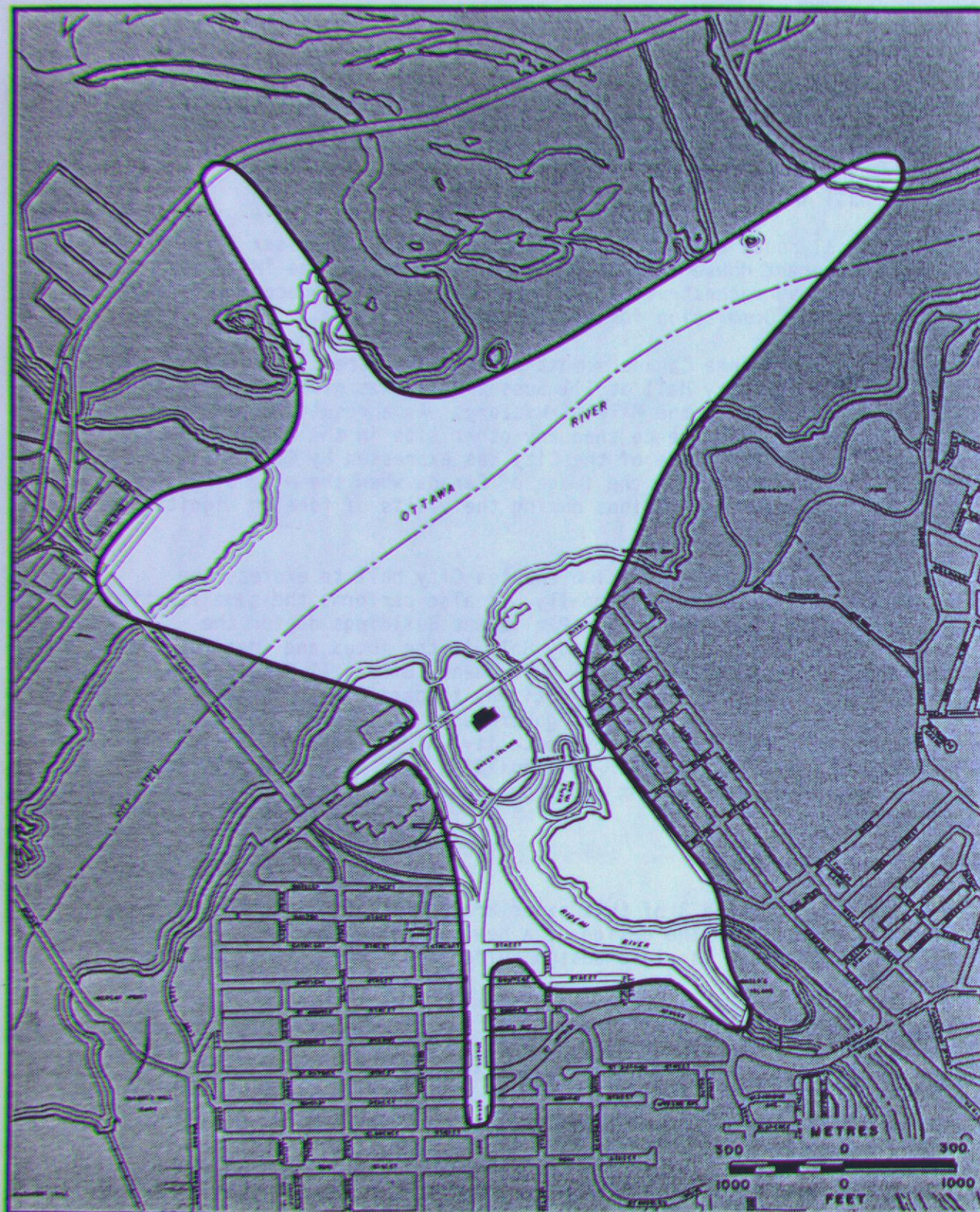
The concerns in Section 3 of this paper are presented as matters which should be addressed in the design of a new City Hall complex. They are not to be interpreted as rigid design guidelines to which a competitor must adhere.

3.1 Urban Design Context of the Site

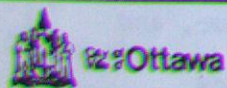
Since the site is an island, and its immediately adjacent "mainland" is free of buildings, the site is a very visible one, and the existing City Hall and any new structure would be clearly visible from the nearby streets and green areas (Diagram 4). Because the site is near the confluence of the Ottawa and Rideau Rivers, and is elevated above the Ottawa River, the site is also visible from a large area of Quebec across the Ottawa River (Diagrams 5 and 6).

3.1.1 Long Views to the Site

Although the existing City Hall is a landmark in short views to the site from Sussex Drive, New Edinburgh, King Edward Avenue, and the Rideau Falls area, it is not a landmark on the Ottawa skyline. This is because, when viewed from Quebec, there are

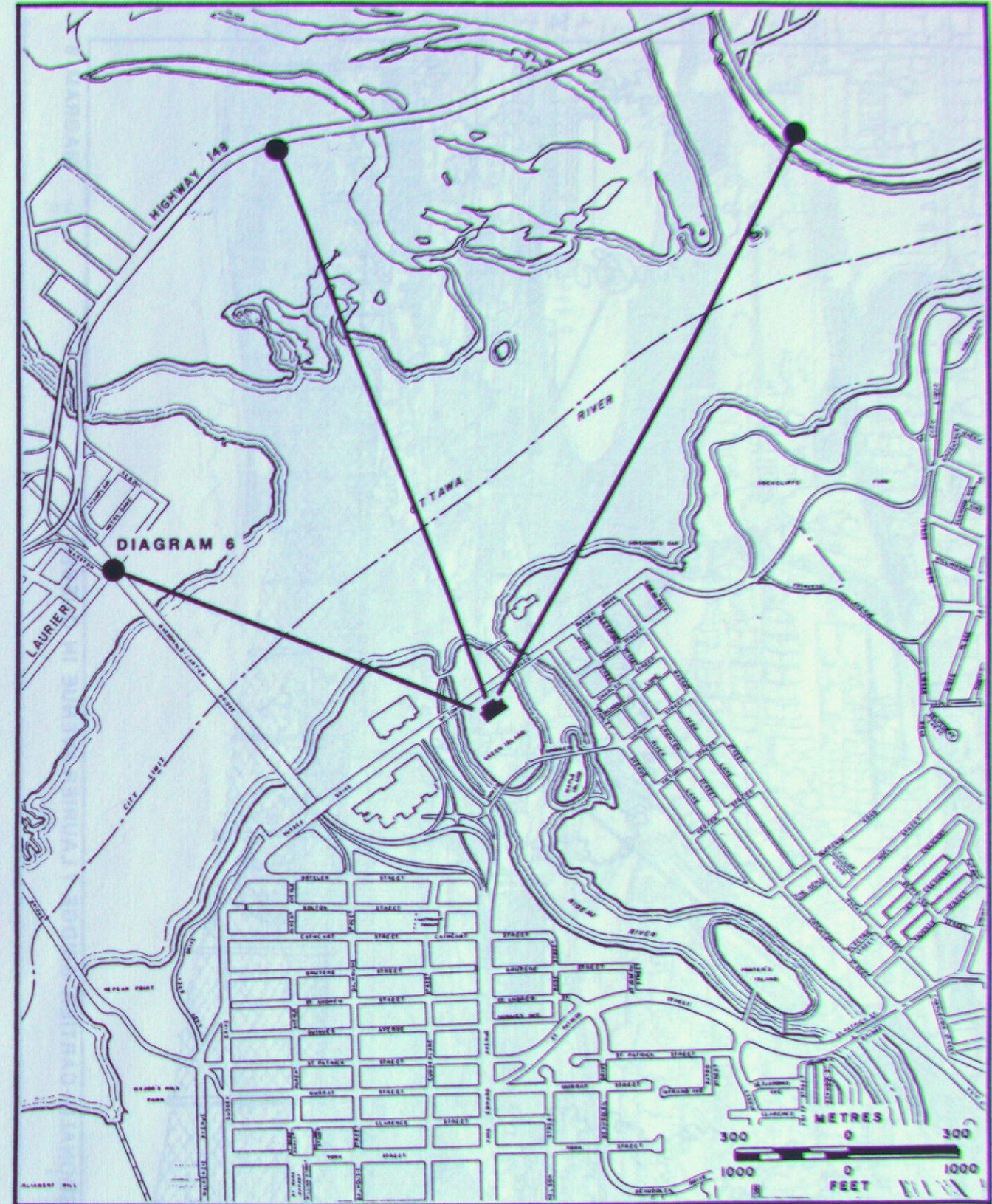


CITY HALL ZONE OF VISIBILITY
FROM SURROUNDING STREETS



CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No. 4



LONG VIEWS TO GREEN ISLAND
FROM QUEBEC



CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No. 5

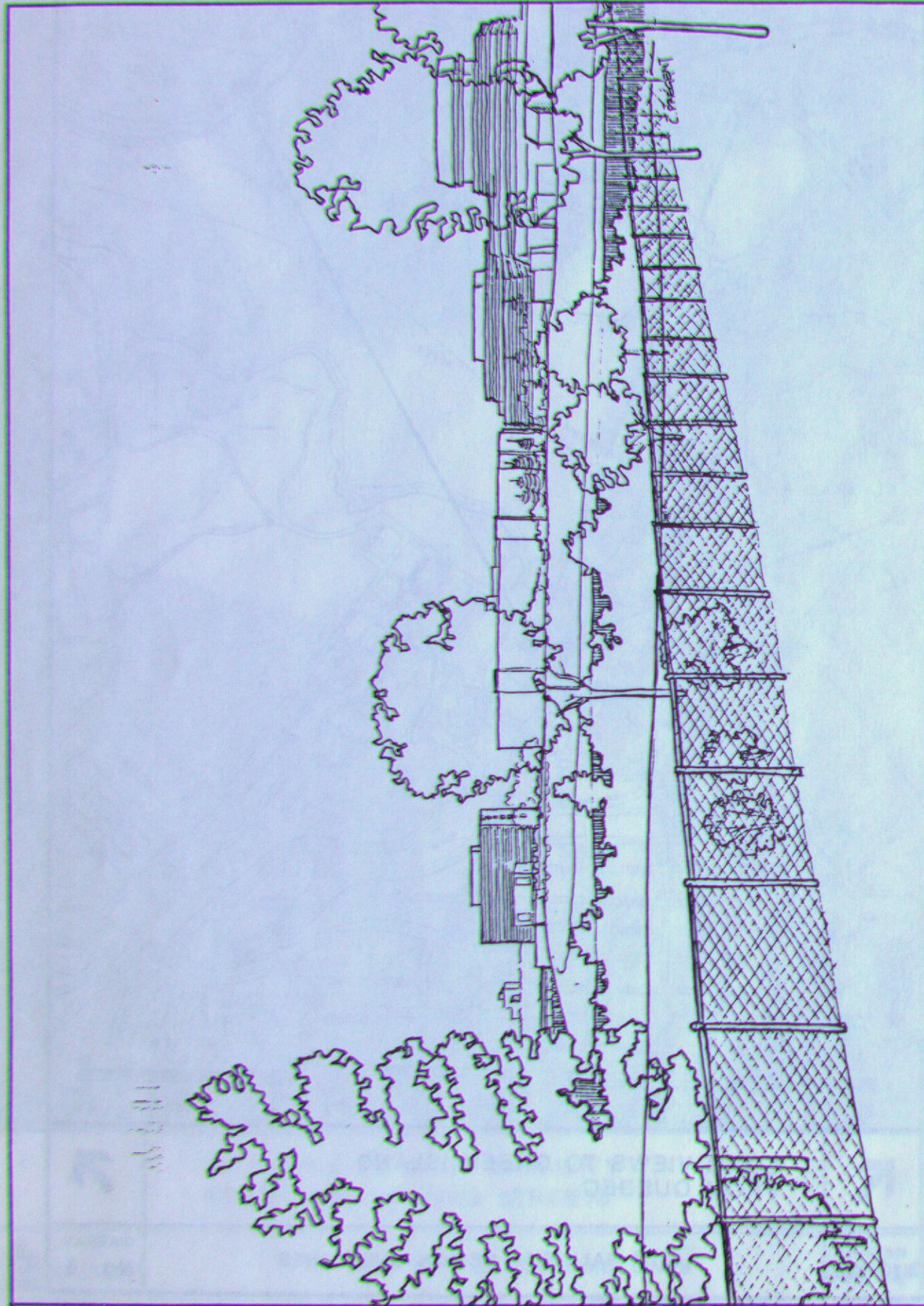
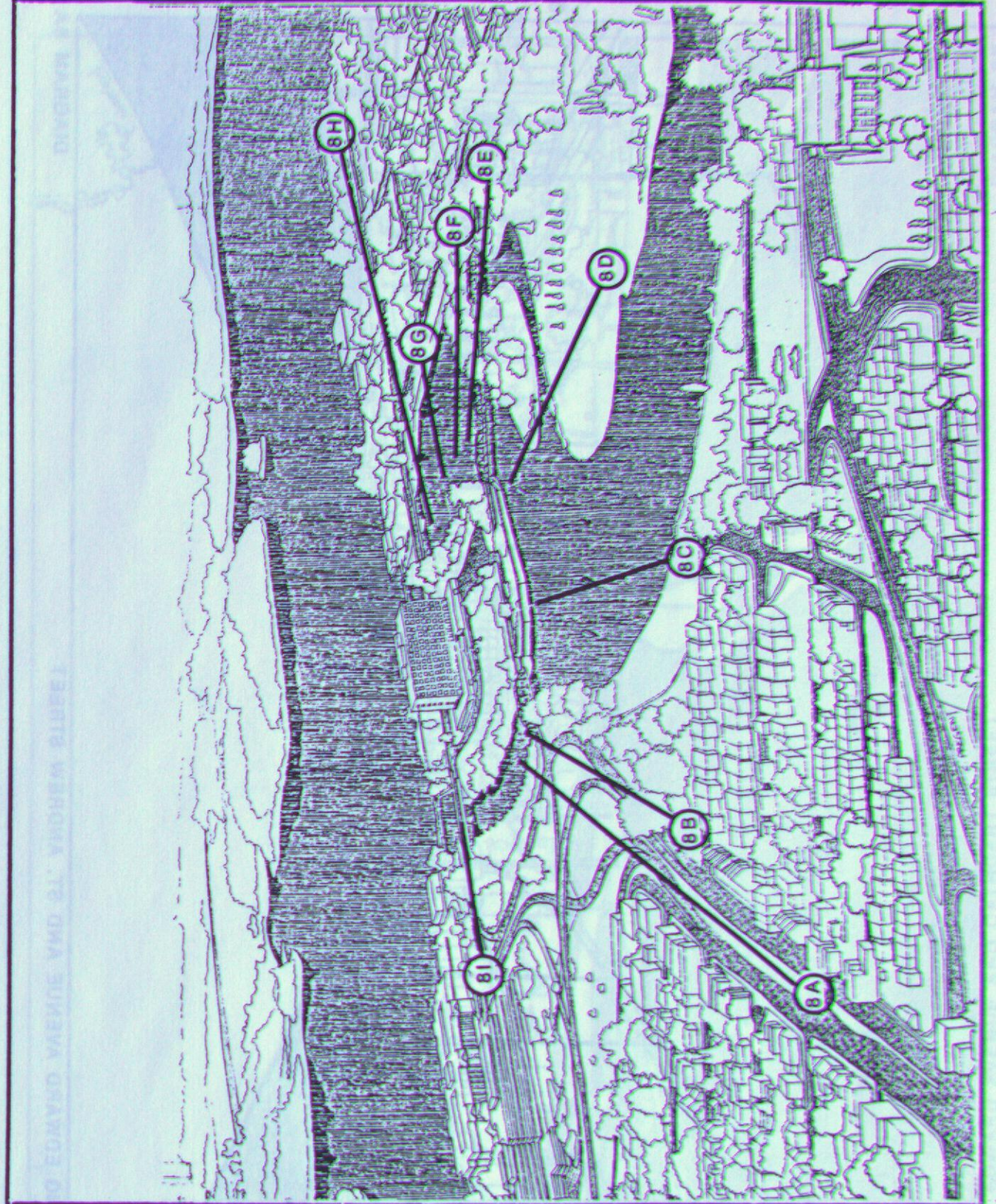
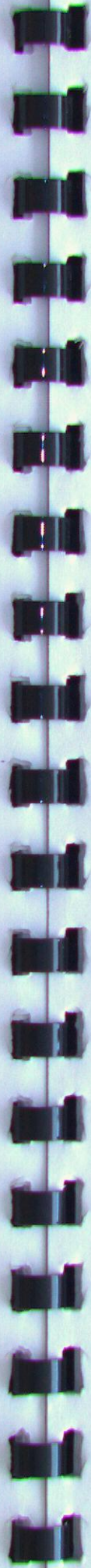


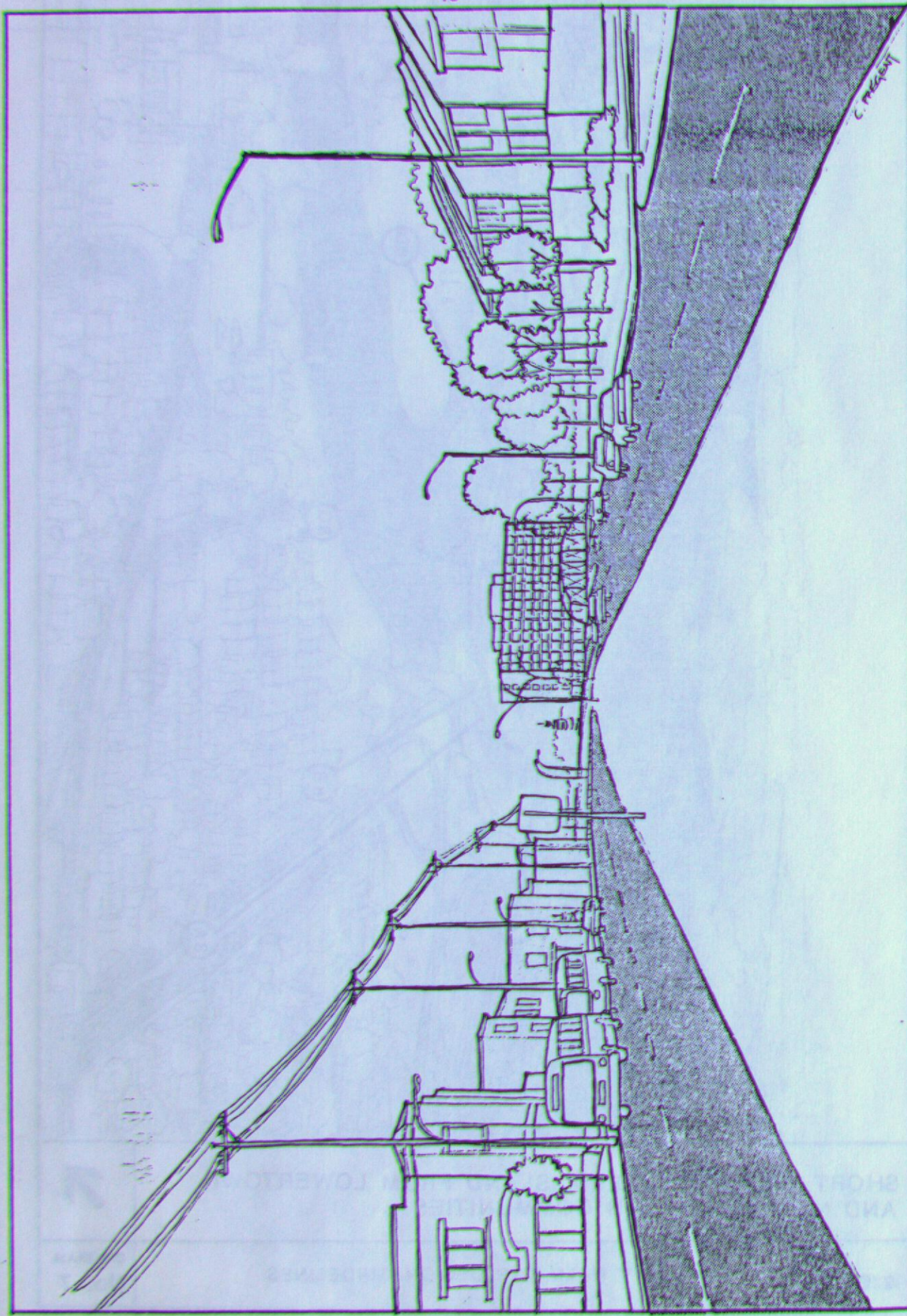
DIAGRAM 6

VIEW FROM MACDONALD-CARTIER BRIDGE / LAURIER AVENUE IN QUEBEC



SHORT VIEWS TO GREEN ISLAND FROM LOWERTOWN AND NEW EDINBURGH COMMUNITIES





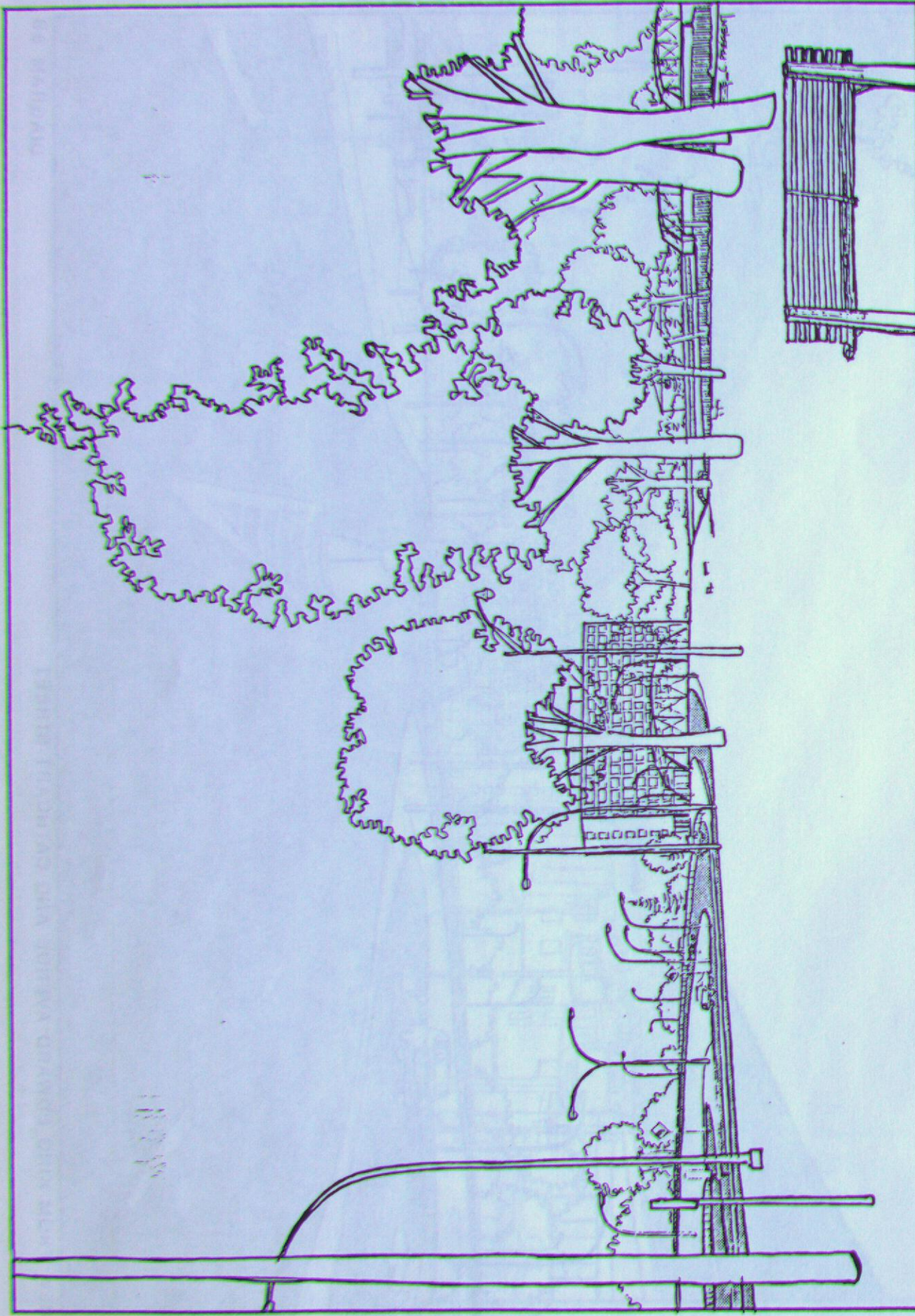
VIEW FROM KING EDWARD AVENUE AND ST. ANDREW STREET

DIAGRAM 8A



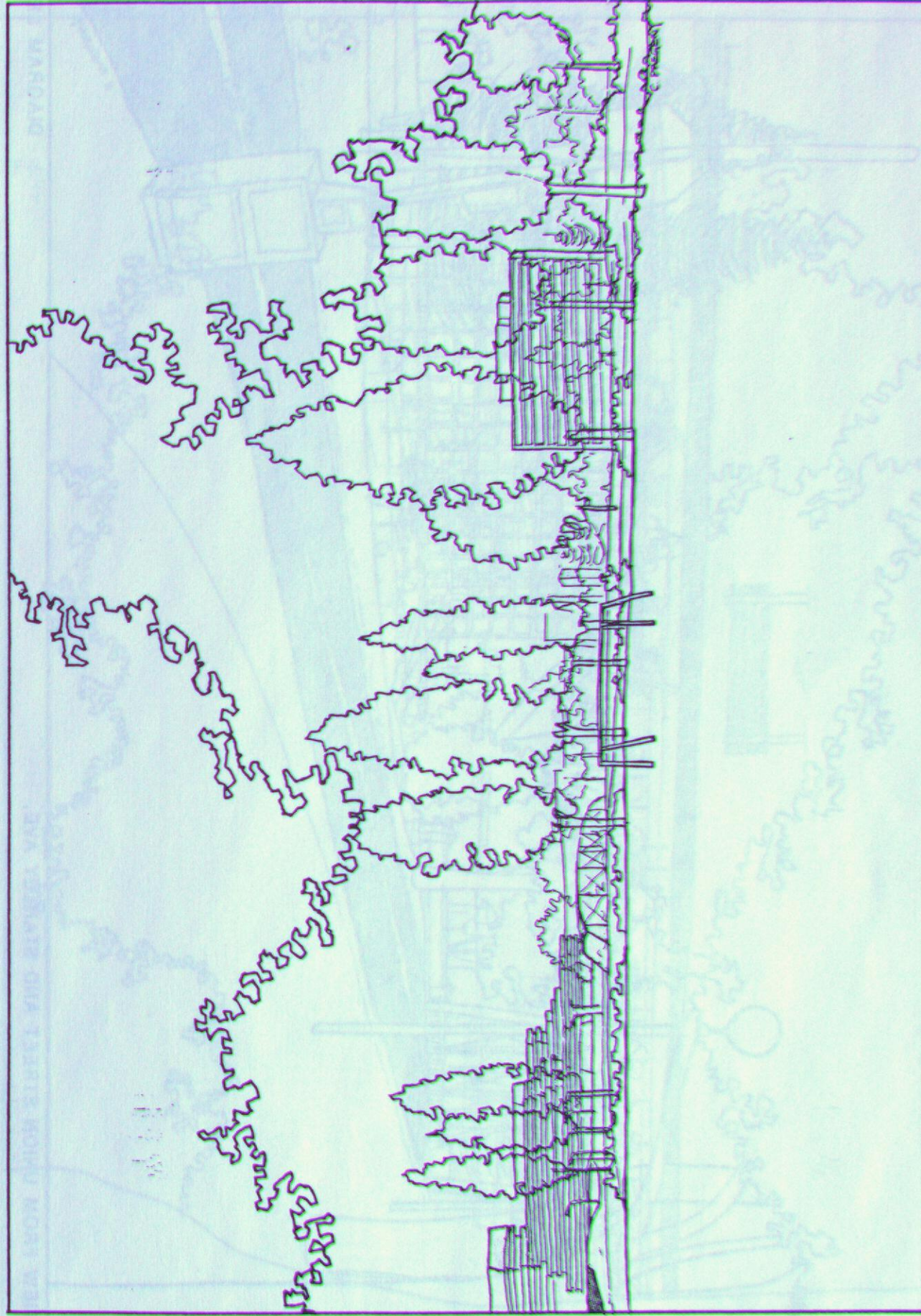
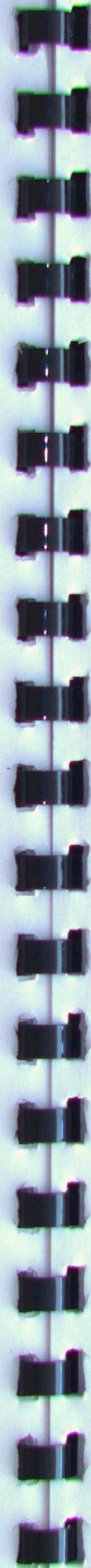
VIEW FROM KING EDWARD AVENUE AND CATHCART STREET

DIAGRAM 8B



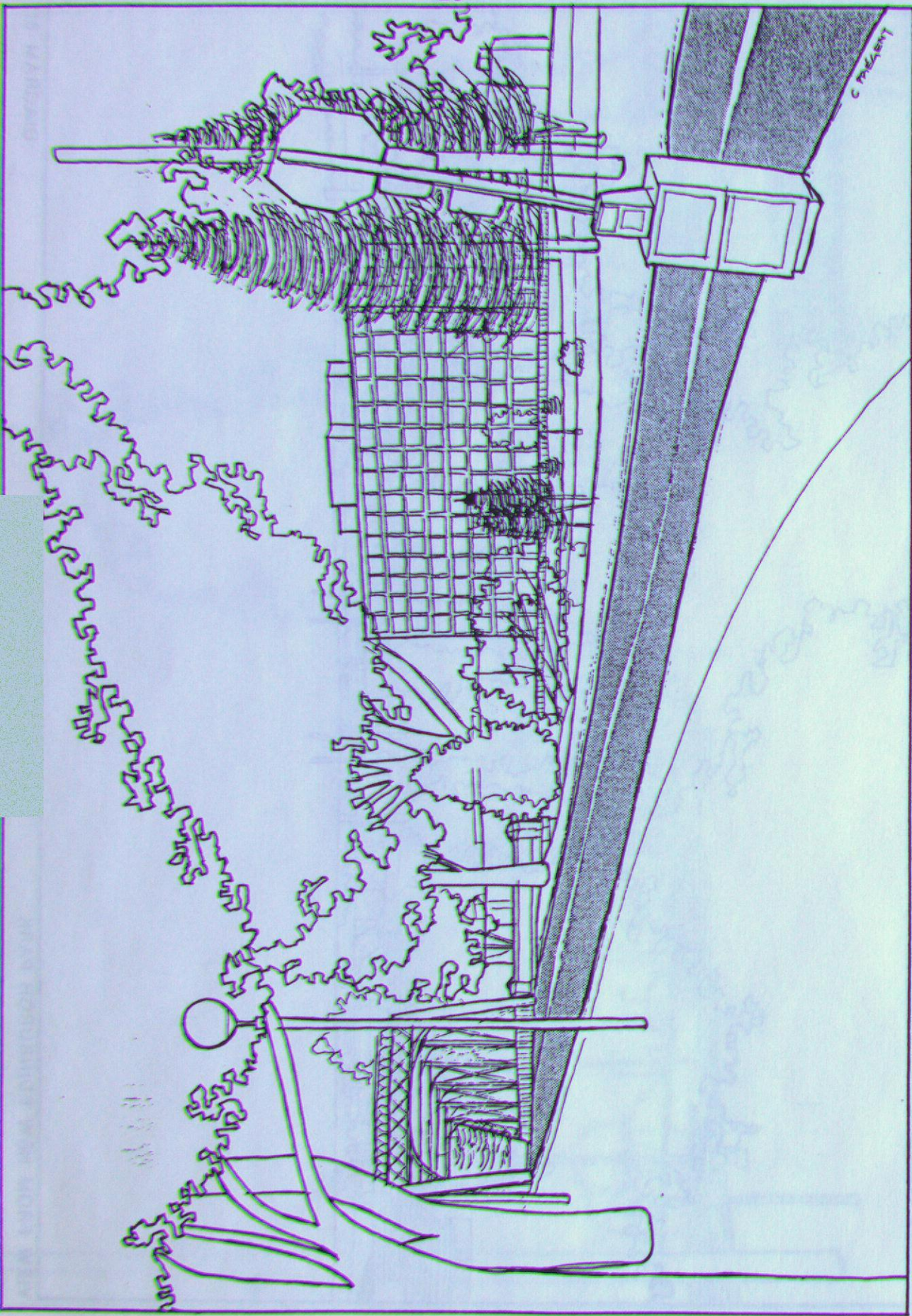
VIEW FROM CATHCART STREET AND ROSE STREET

DIAGRAM 8C



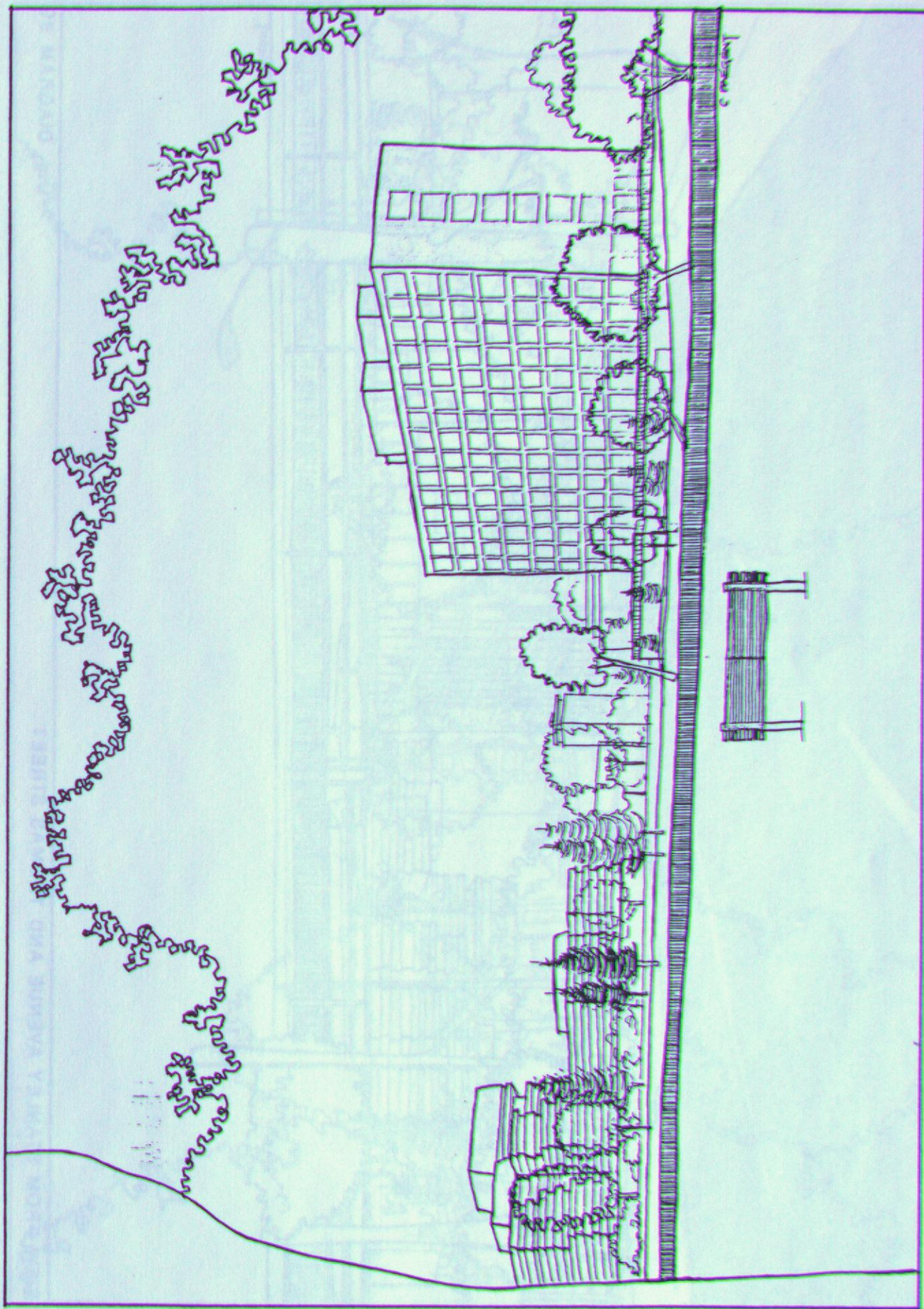
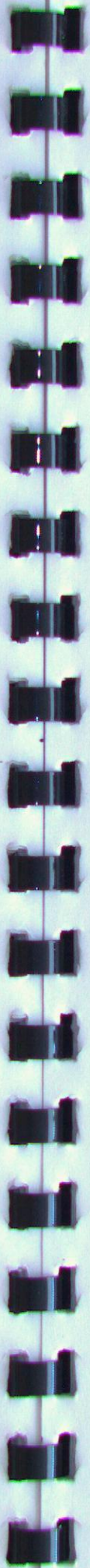
VIEW FROM NEW EDINBURGH PARK

DIAGRAM 8D



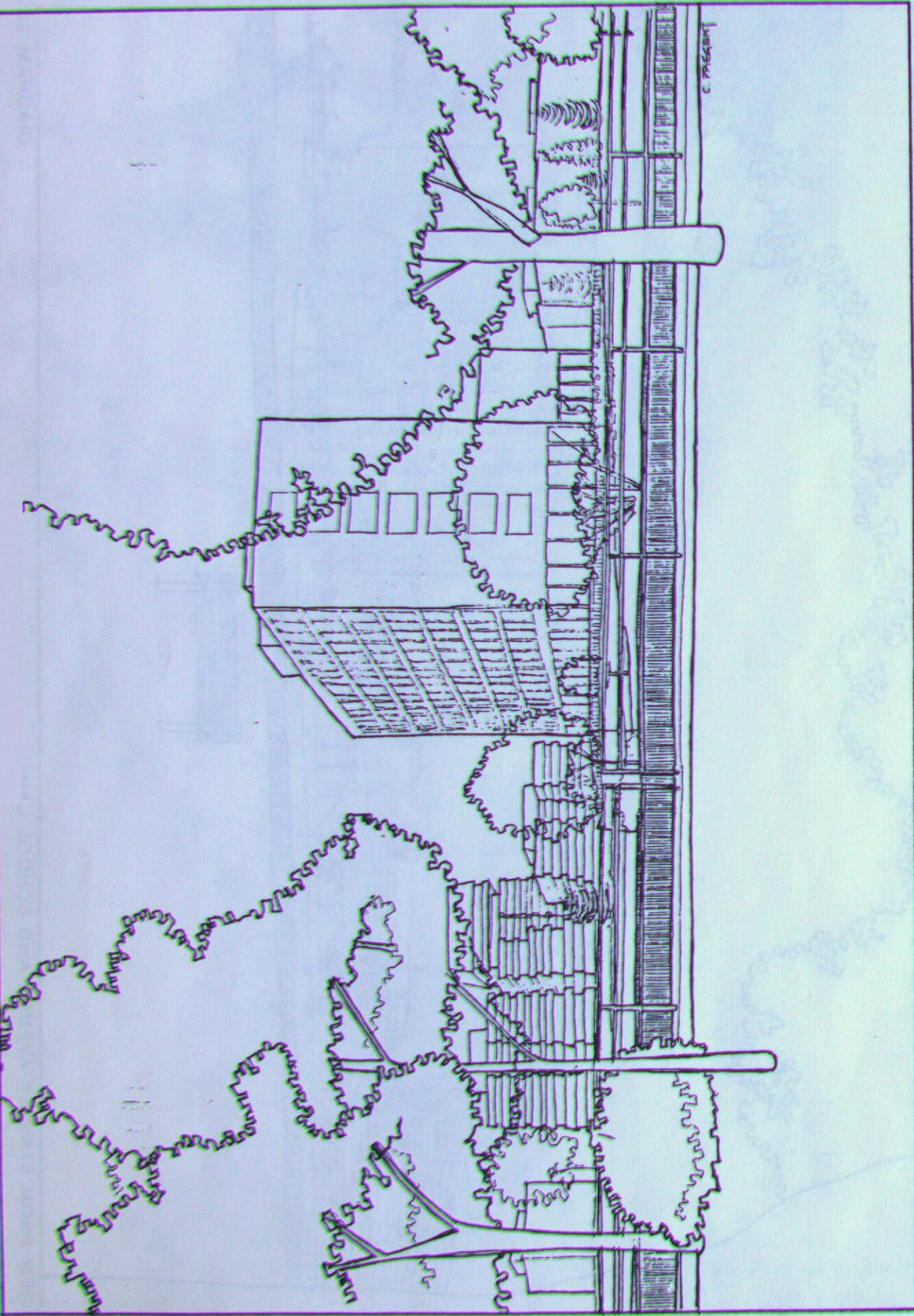
VIEW FROM UNION STREET AND STANLEY AVE.

DIAGRAM 8E



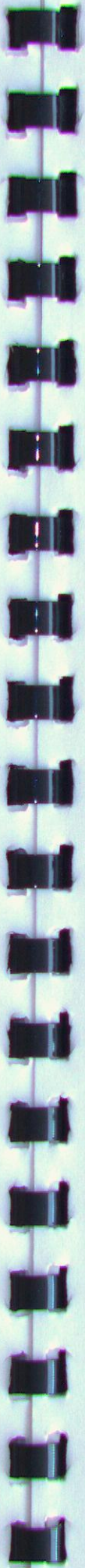
VIEW FROM STANLEY AVENUE AND SCHOOL LANE

DIAGRAM 8F



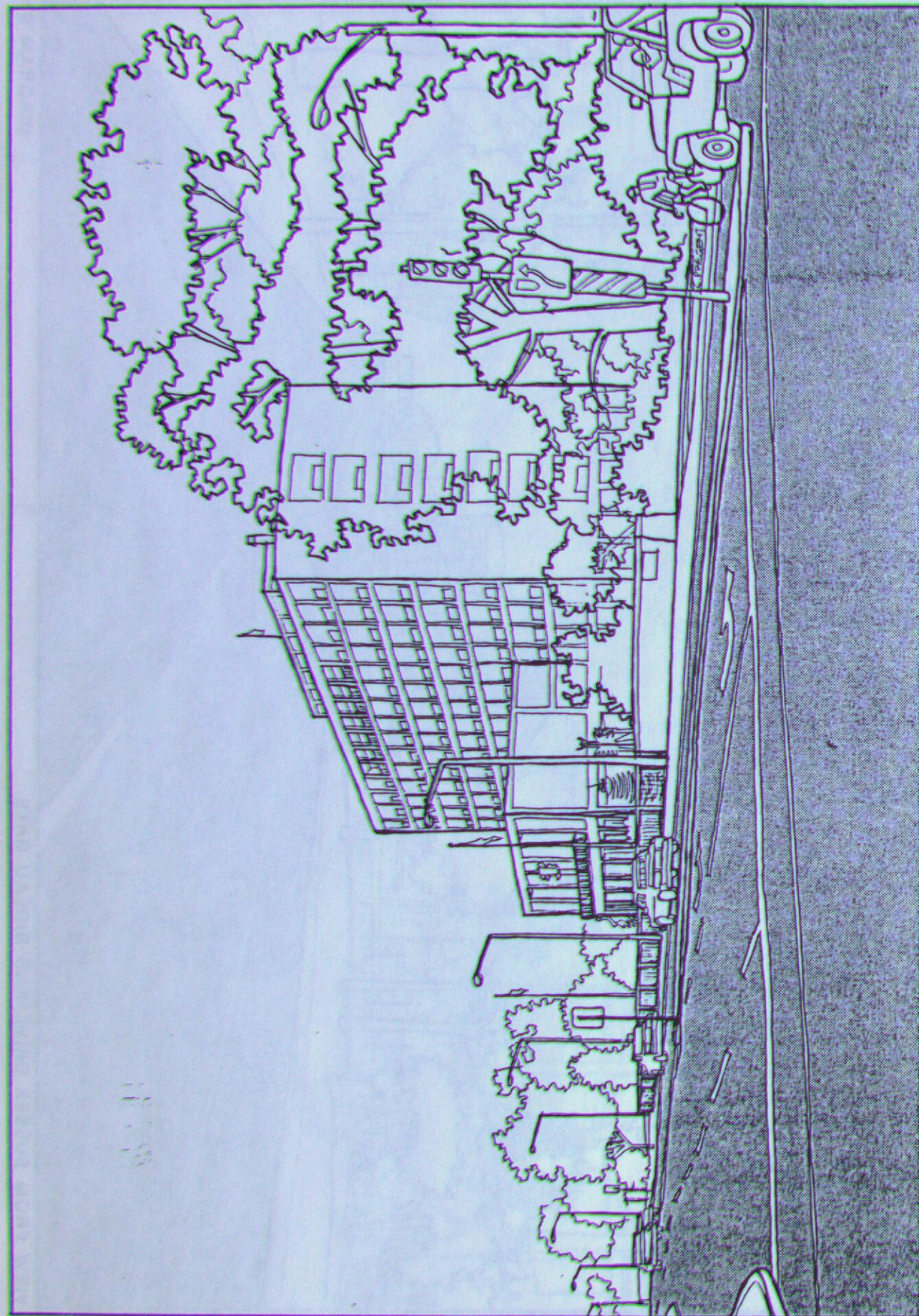
VIEW FROM STANLEY AVENUE AND THOMAS STREET

DIAGRAM 8G



VIEW FROM SUSSEX DRIVE AND RIDEAU GATE

DIAGRAM 8H



VIEW FROM SUSSEX DRIVE AND KING EDWARD AVE

DIAGRAM 8I

other higher towers in the background which eliminate the necessary contrast. From elsewhere in Ottawa, the topography is not generally high enough to provide clear views of City Hall uninterrupted by trees or other buildings. It may be desirable to enhance long views to the site by having some part of the complex act as spire or landmark on the skyline to increase City Hall's recognition factor.

3.1.2 Short Views to the Site

Short Views of the site are very significant, and vary from the monumental formality of the existing building when viewed from Sussex Drive, to the pastoral foreground provided to the existing building by the irregular shoreline and trees haphazardly tilting over the water's edge, and to the late-Victorian ambience provided by the Minto Bridges connecting Green and Maple Islands to New Edinburgh and Lowertown (Diagrams 7 and 8A to 8I).

The existing City Hall is not an organic architectural statement, growing from its island base. Instead, its glassed and transparent ground floor and raised Council Chamber successfully detach it from, and contrast it with the casual topography and vegetation of Green Island. This contrast and formality is well-suited to the Mile of History, but is less successful at the rear of City Hall, where the building's podium abruptly terminates at the parking lot. The invitation provided to the island by the Minto Bridges leads to nothing but a physically depressed parking lot once Green Island is reached. As well, the attractive informality of the Minto Bridges is a direct contrast to the concrete austerity of the Bytown Bridges which carry Sussex Drive to Green Island. Accordingly, the southern end of the new City Hall complex should provide a deliberate welcome to citizens, in contrast to the formality required by the Mile of History to the north.

VIEWS FROM THE SITE TAKEN
FROM THE EXISTING BUILDING

CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No. 8

3.1.3 Vistas from the Site

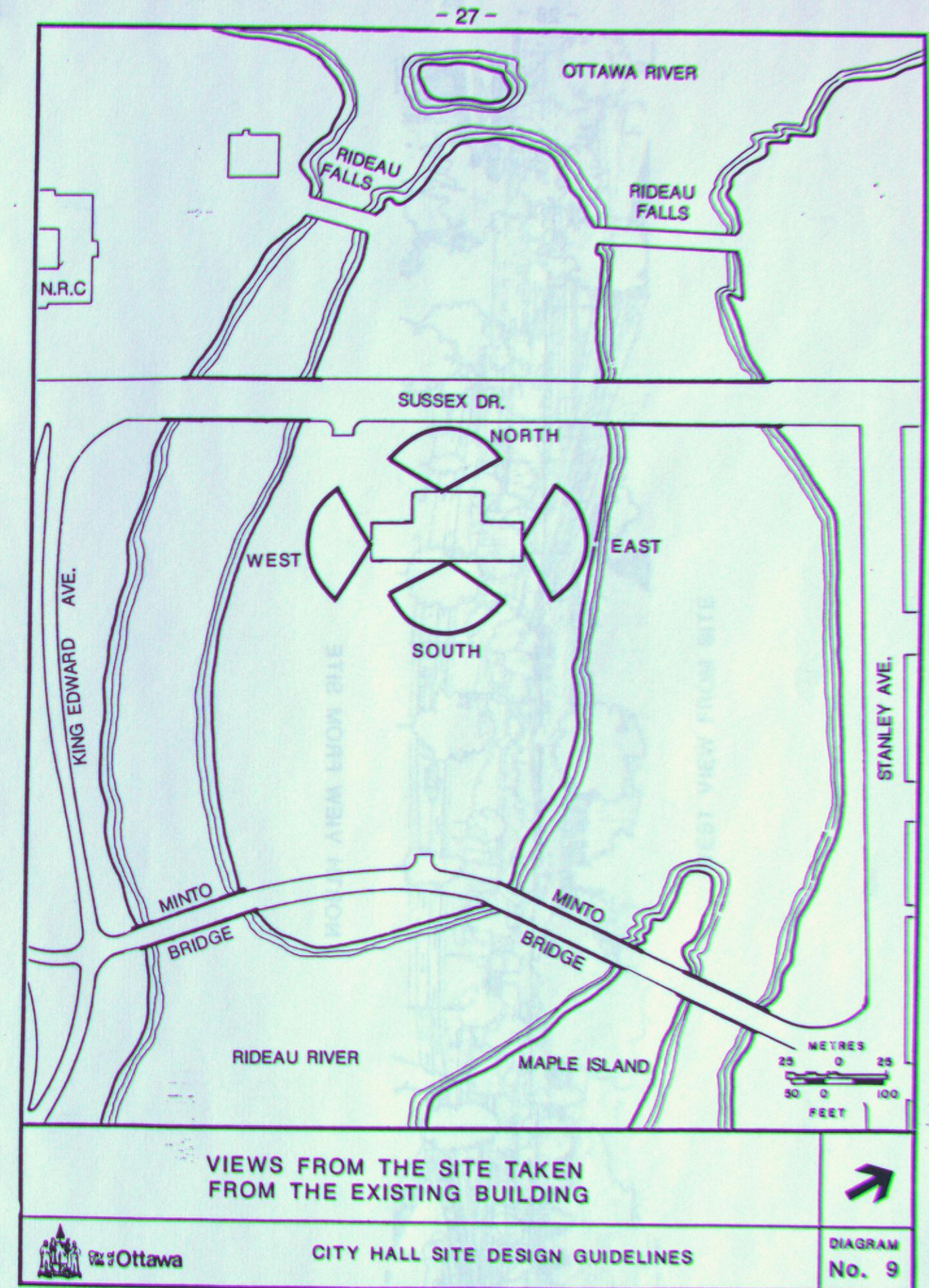
Being located at the confluence of two rivers also means that vistas from the site are distant and impressive, particularly from the upper floors and those which face Quebec (Diagrams 9A to 9E). The existing building, being long and narrow, provides a better relationship between its occupants and the outside environment than a typical office tower because the narrowness of the building permits more occupants to be within close proximity of a window. An occupant can stand in the middle of a floor and look out in opposite directions, a feature not possible in a square building. Public spaces in the existing building -- the exhibit area at ground level and the eighth floor cafeteria -- share this feature also. The added building form should be designed to take maximum advantage of these views for the occupants.

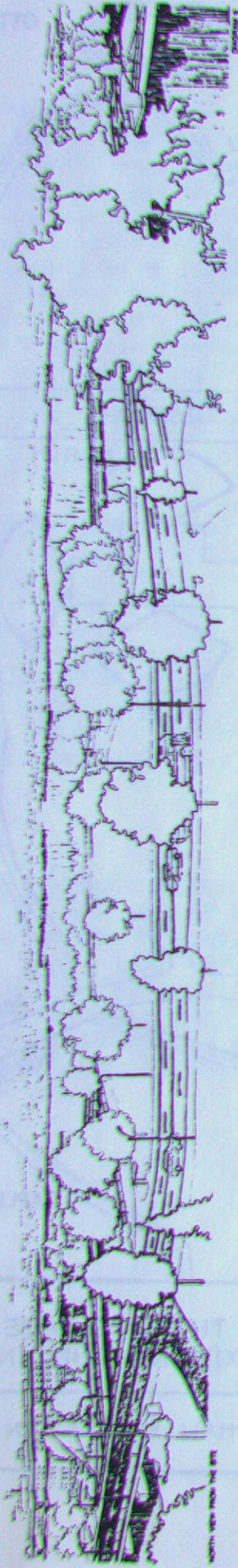
3.1.4 Landscape Context of the Site

The pastoral setting of Green Island is an important characteristic of the site. This quality is reflected off the island, in the wooded embankment along King Edward Avenue, in the grassed and treed parkland between New Edinburgh and the river's edge, and in the almost rural qualities of the Rideau River and its open space upstream (south-eastward) of Maple Island (Diagrams 10 and 11). This pastoral setting should be maintained, and to do so may require the new construction be set back an adequate distance from the island's shoreline or the building's design integrated with the site in order that this perimeter area retains its grassed and/or treed character.

3.1.5 Island Topography

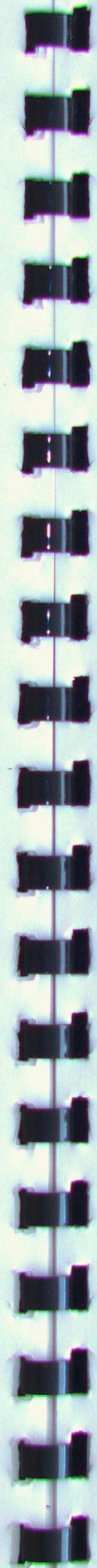
Because both Sussex Drive and Minto Bridge Road are significantly higher in elevation than the main body of Green Island -- almost to the height of the existing City Hall ground floor podium -- it may be possible to raise "ground level" of the island to approximately that of the existing City Hall podium, and thereby contain at least one level of parking "below grade". This would enable the existing river edge to be maintained, while the landscaped riverbank slopes gently up towards the new "ground level" of the building complex (Diagram 12).





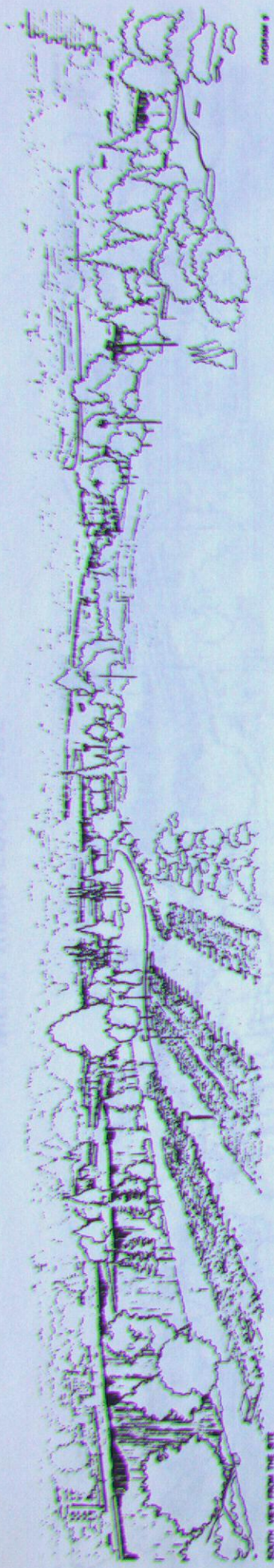
NORTH VIEW FROM SITE

DIAGRAM 9A



WEST VIEW FROM SITE

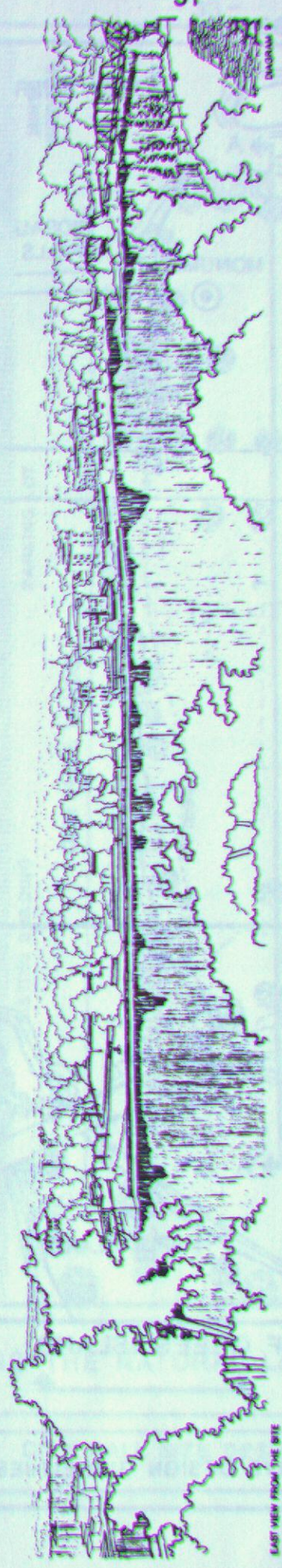
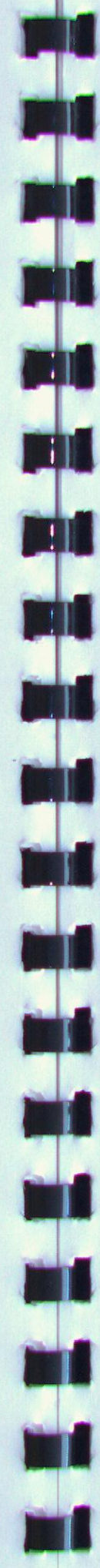
DIAGRAM 9B



SOUTH VIEW FROM SITE

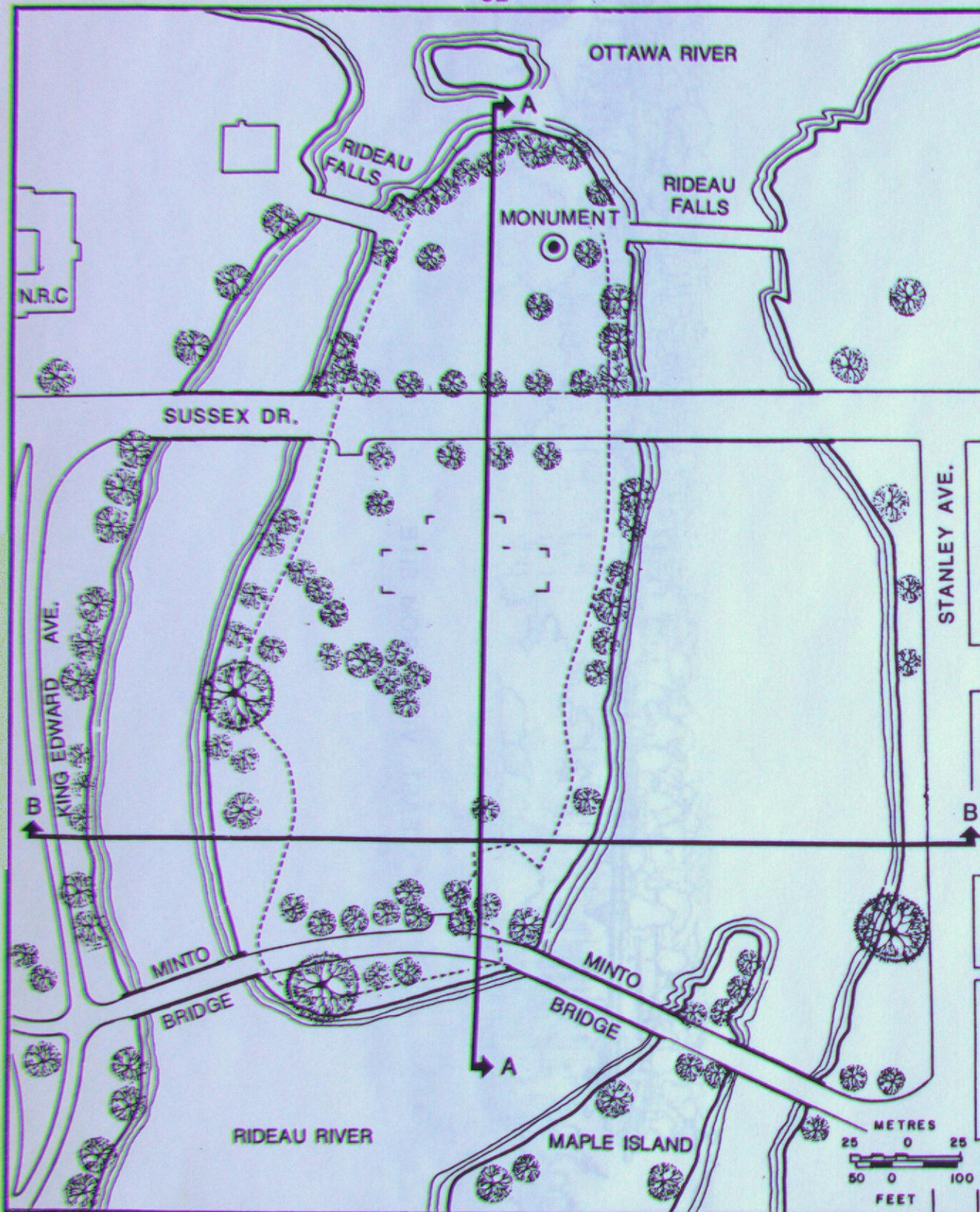
NORTH VIEW FROM SITE

DIAGRAM 9C



EAST VIEW FROM SITE

DIAGRAM 9D



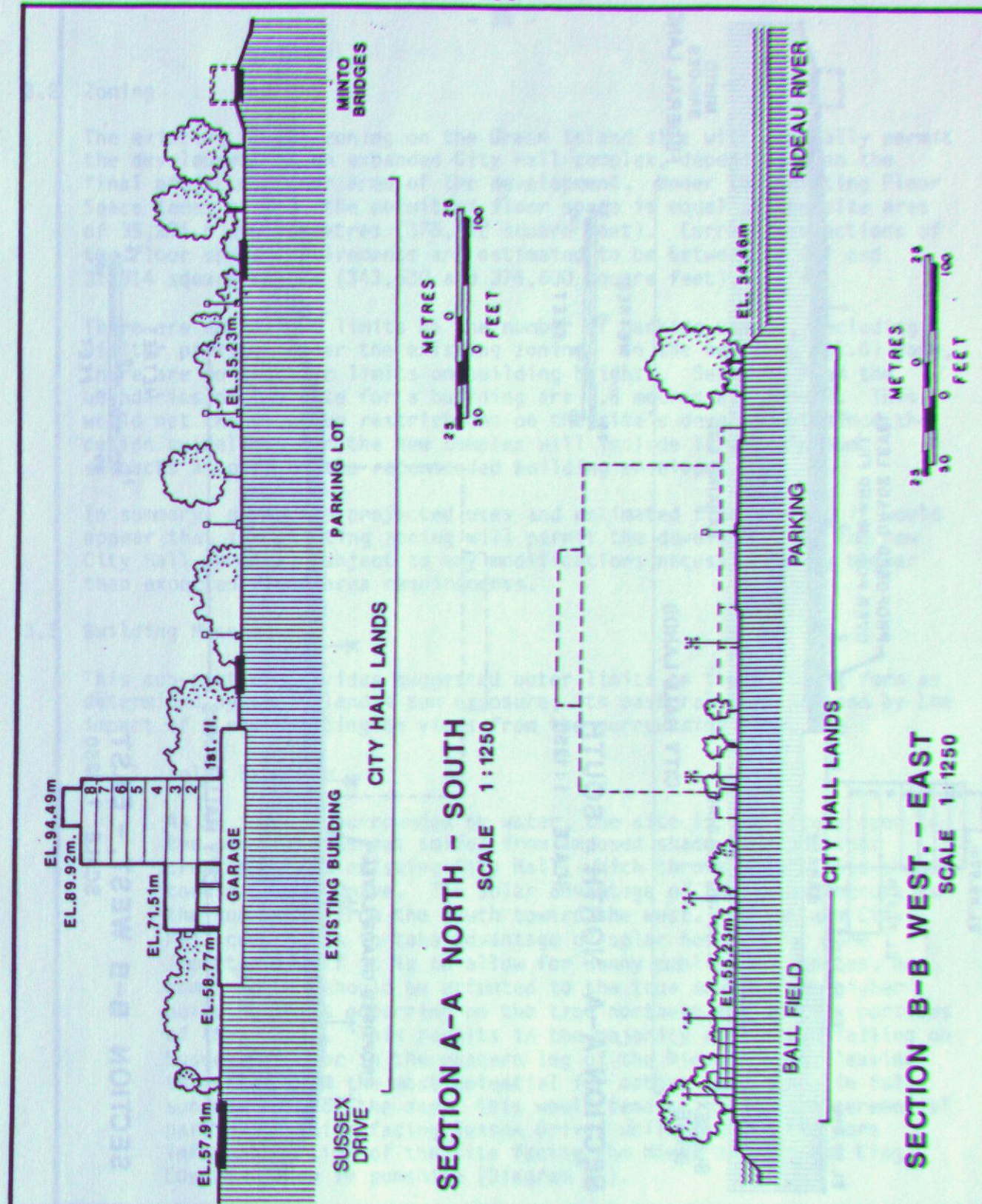
PASTORAL SETTING OF GREEN ISLAND
SECTION LINES
1% ANNUAL FLOOD PLANE



City of Ottawa

CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No. 10



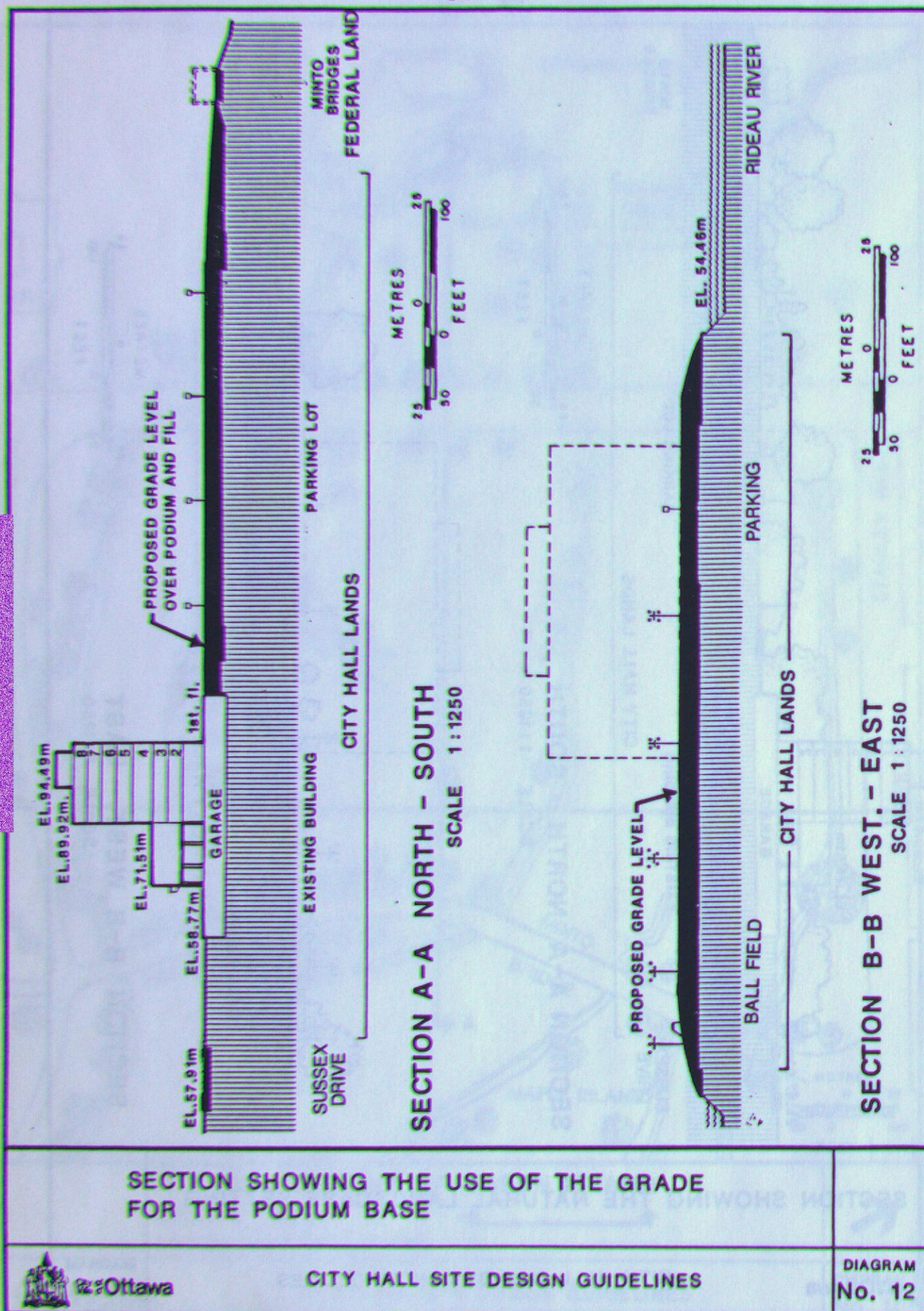
SECTION SHOWING THE NATURAL LANDSCAPE SETTING



City of Ottawa

CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No. 11



3.2 Zoning

The existing G(1.0) zoning on the Green Island site will generally permit the development of an expanded City Hall complex, depending upon the final projected floor area of the development. Under the existing Floor Space Index of 1.0, the permitted floor space is equal to the site area of 35,206.5 square metres (378,972 square feet). Current projections of the floor space requirements are estimated to be between 32,607 and 31,914 square metres (343,530 and 376,600 square feet).

There are no maximum limits on the number of parking spaces, including visitor parking, under the existing zoning. In the existing G(1.0) zone, there are no specific limits on building heights. Setbacks from the boundaries of the site for a building are 7.6 metres all around. This would not impose undue restrictions on the site's development since the design guidelines for the new complex will include larger minimum setbacks as part of the recommended building envelope.

In summary, given the projected uses and estimated floor areas, it would appear that the existing zoning will permit the development of the new City Hall complex, subject to any modifications necessitated by higher than expected floor area requirements.

3.3 Building Massing

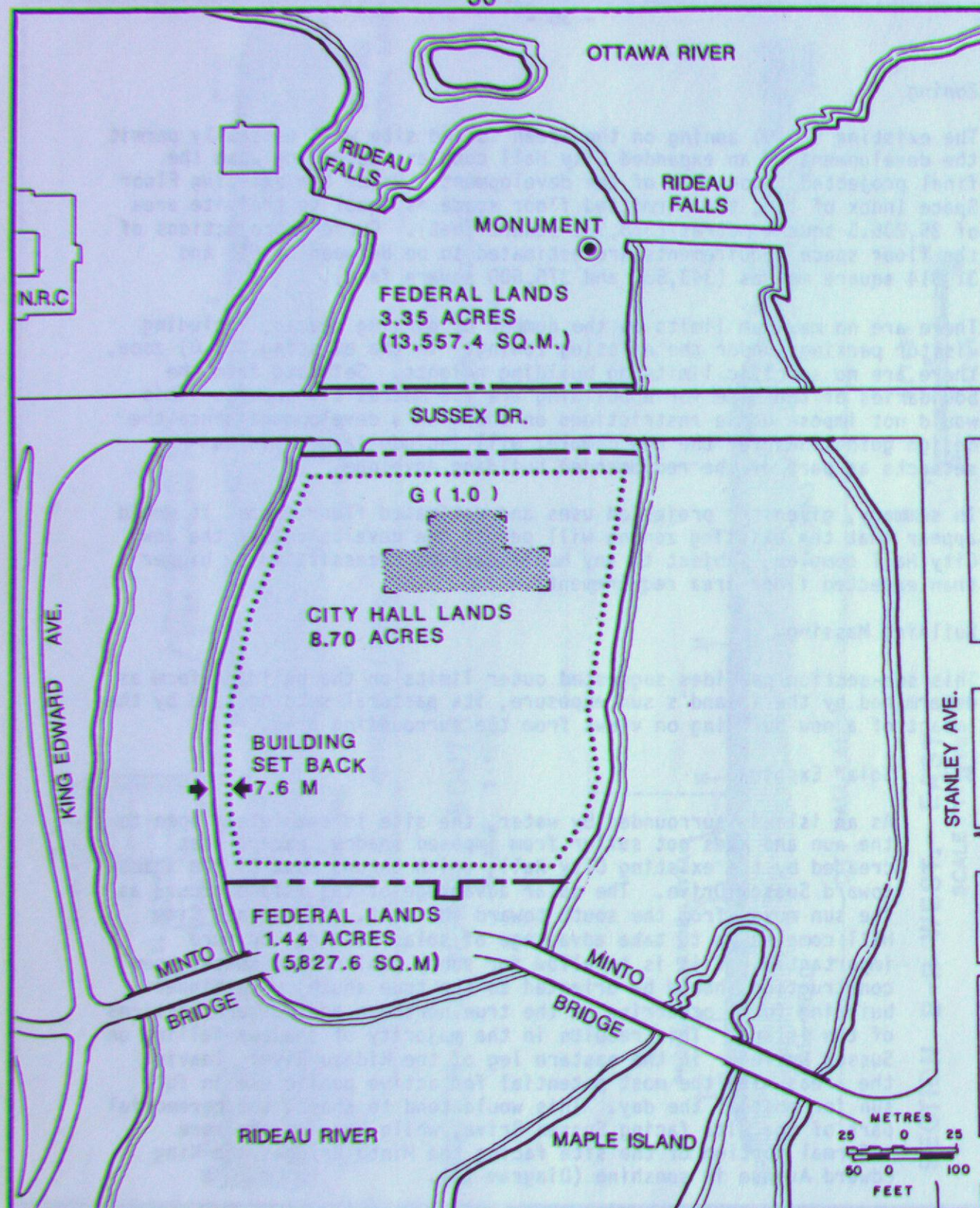
This sub-section provides suggested outer limits on the building form as determined by the island's sun exposure, its pastoral setting, and by the impact of a new building on views from the surrounding area.

3.3.1 Solar Exposure

As an island, surrounded by water, the site is completely open to the sun and does not suffer from imposed shadow, except that created by the existing City Hall, which throws most of its shadow toward Sussex Drive. The solar advantage of the island occurs as the sun moves from the south toward the west. If the new City Hall complex is to take advantage of solar heating, or more importantly, if it is to allow for sunny public open spaces, new construction should be oriented to the true south, with higher building forms occurring on the true northern and eastern portions of the island. This results in the majority of shadows falling on Sussex Drive or in the eastern leg of the Rideau River, leaving the areas with the most potential for active public use in full sun for most of the day. This would tend to shadow the ceremonial part of the site facing Sussex Drive, while keeping the more informal portion of the site facing the Minto Bridges and King Edward Avenue in sunshine (Diagram 14).

3.3.2 Massing Impact on the Surrounding Area

One advantage of the island's setting is that the number of nearby buildings or residents which may be affected by new construction is limited. There are three major public buildings within the environs of City Hall: the French Embassy, the National Research Council, and the Ministry of External Affairs. All are major



LAND AREAS AND THE ZONING OF GREEN ISLAND



City of Ottawa

CITY HALL SITE DESIGN GUIDELINES



DIAGRAM
No.13

buildings and are at some distance from Green Island, and therefore unlikely to be affected by or to have an effect on the form of a new City Hall complex (Diagram 15).

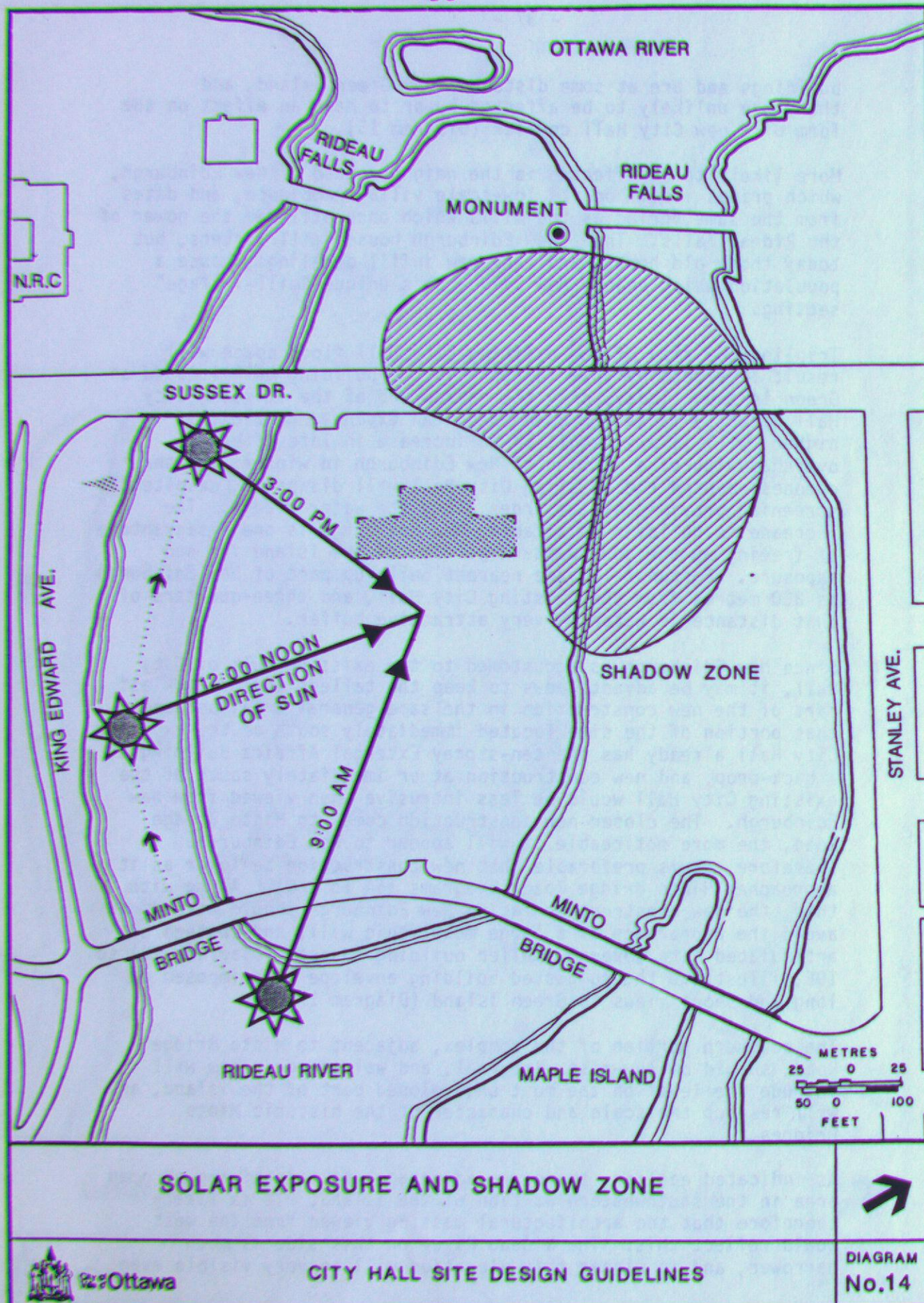
More likely to be affected is the neighbourhood of New Edinburgh, which prides itself on its low-scale village ambience, and dates from the same period as the mills which once utilized the power of the Rideau Falls. Then, New Edinburgh housed mill workers, but today those old homes, and many new infill dwellings, house a population which enjoys New Edinburgh's unique "mill-village" setting.

Tripling the size of the existing City Hall floor space will result in a considerable increase in the building bulk located on Green Island. Today, only the narrow end of the existing City Hall directly faces New Edinburgh. An expanded complex, if higher, will likely result in an increase in late afternoon overshadowing of a portion of New Edinburgh in winter; and the openness behind the existing City Hall will disappear, despite the screening provided by the trees along the water's edge. The increase in building bulk facing New Edinburgh is one disadvantage of freeing up the southwestern portion of the Island for sun exposure. Fortunately, the nearest built-up part of New Edinburgh is 200 metres from the existing City Hall, and three-quarters of that distance is water, a very attractive buffer.

Since New Edinburgh is accustomed to the existing bulk of City Hall, it may be advantageous to keep the tallest and/or bulkiest part of the new construction in the same general area, because that portion of the site located immediately south of the existing City Hall already has the ten-storey External Affairs Building as a back-drop, and new construction at or immediately south of the existing City Hall would be less intrusive when viewed from New Edinburgh. The closer new construction comes to Minto Bridge Road, the more noticeable it will appear to New Edinburgh. Therefore, it is preferable that new construction be lower as it approaches Minto Bridge Road (Diagrams 16A to 16C). Along with this, the new construction facing New Edinburgh should attempt to avoid the appearance of a large monolithic wall, and instead be articulated into several smaller building masses. Diagrams 19A to 19E, illustrate the suggested building envelope superimposed on long and short views to Green Island (Diagram 17).

The southern portion of the complex, adjacent to Minto Bridge Road, should be low-rise, informal, and welcoming. This will intrude the least on the most undeveloped part of the island, and will respect the scale and character of the historic Minto Bridges.

As indicated earlier, there are advantages to maintaining an open area in the southwestern portion of the island. It is likely therefore that the architectural massing viewed from the west would reflect this. The Rideau River on this side is much narrower, and in winter this elevation will be very visible even



if low-rise because of views through the deciduous trees between King Edward Avenue and the River. Summertime views could be enhanced by judicious removal and/or pruning of selected trees.

3.3.3 Specific Design Considerations for the Existing City Hall and its New Extension

The addition to the existing City Hall will likely at least triple if not quadruple the existing floor area, thereby having a considerable impact on a structure of substantial architectural merit. The existing architectural design is very formal and restrained, and depends on this "classicism" to create its sense of monumentality as symbol of civic government. (Diagram 18)

In the manner of most 1950s International Style buildings, City Hall was not designed to complement the landscape and irregularities of its island setting. Instead, its glassed ground floor and raised Council Chamber detaches it from, and contrasts it with the casual topography and vegetation of Green Island.

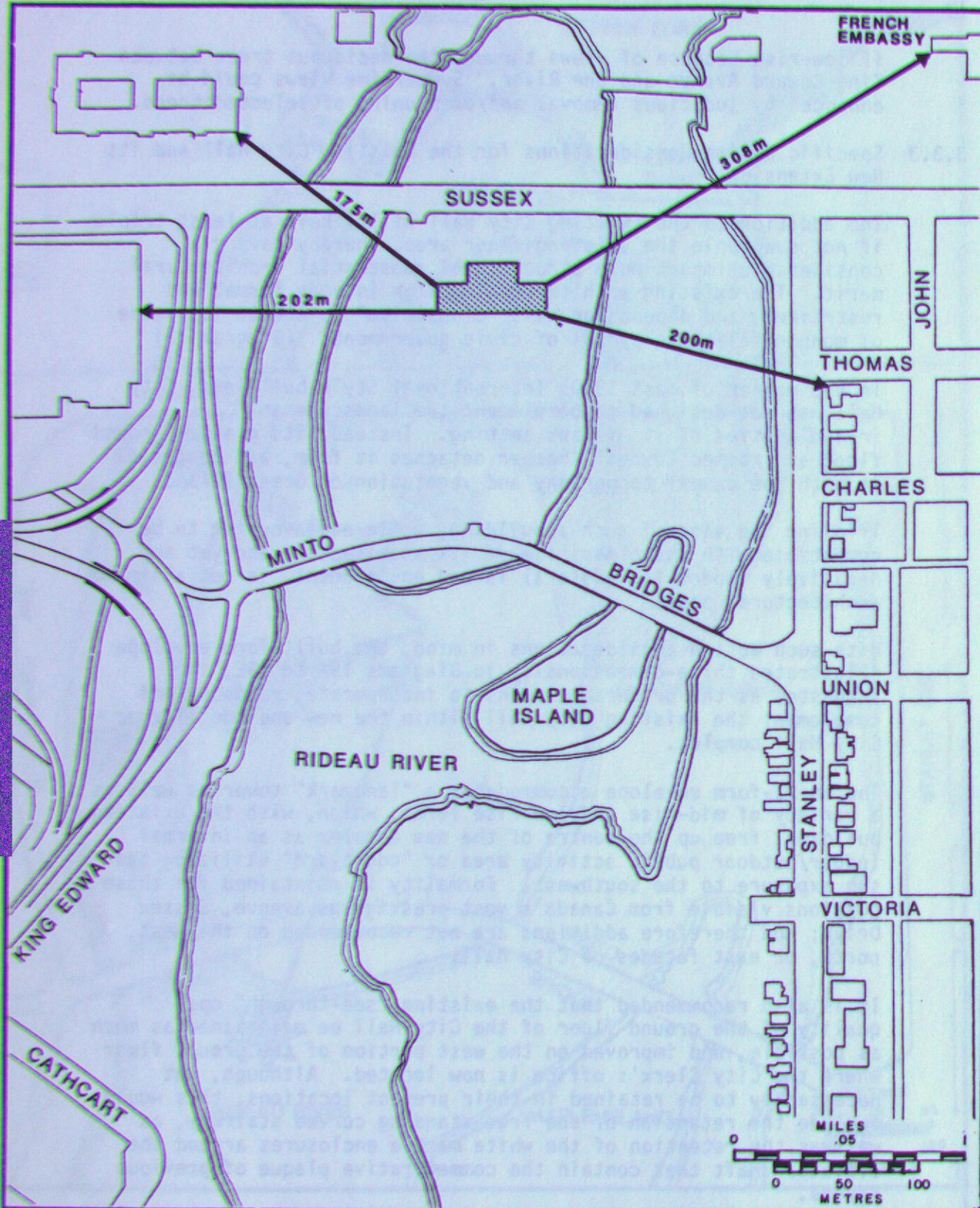
Tripling the size of such a building, while endeavouring to be compatible with the classicism of its architecture and yet not negatively impact the pastoral island environment, is not a simple architectural task.

With such design considerations in mind, the built-form envelope illustrated three-dimensionally in Diagrams 19A to 19E, is suggested as the preferable means to incorporate, respect, and complement the existing City Hall within the new and much larger City Hall complex.

The built-form envelope accommodates a "landmark" tower as well as a variety of mid-rise and low-rise forms, which, with the existing building, free up the centre of the new complex as an informal indoor/outdoor public activity area or "courtyard" utilizing the sun exposure to the southwest. Formality is maintained for those portions visible from Canada's most prestigious avenue, Sussex Drive; and therefore additions are not recommended on the west, north, or east facades of City Hall.

It is also recommended that the existing "see-through" open quality of the ground floor of the City Hall be maintained as much as possible, and improved on the west portion of the ground floor where the City Clerk's office is now located. Although, not necessarily to be retained in their present locations, this would include the retention of the free-standing curved stairway, as well as the retention of the white marble enclosures around the elevator shaft that contain the commemorative plaque of previous Mayors.

On the second floor, the following portions are not required to be retained but might warrant special consideration in any event: the lobby surrounding the top of the open stairway, with its



MASSING IMPACT ON THE SURROUNDING AREA

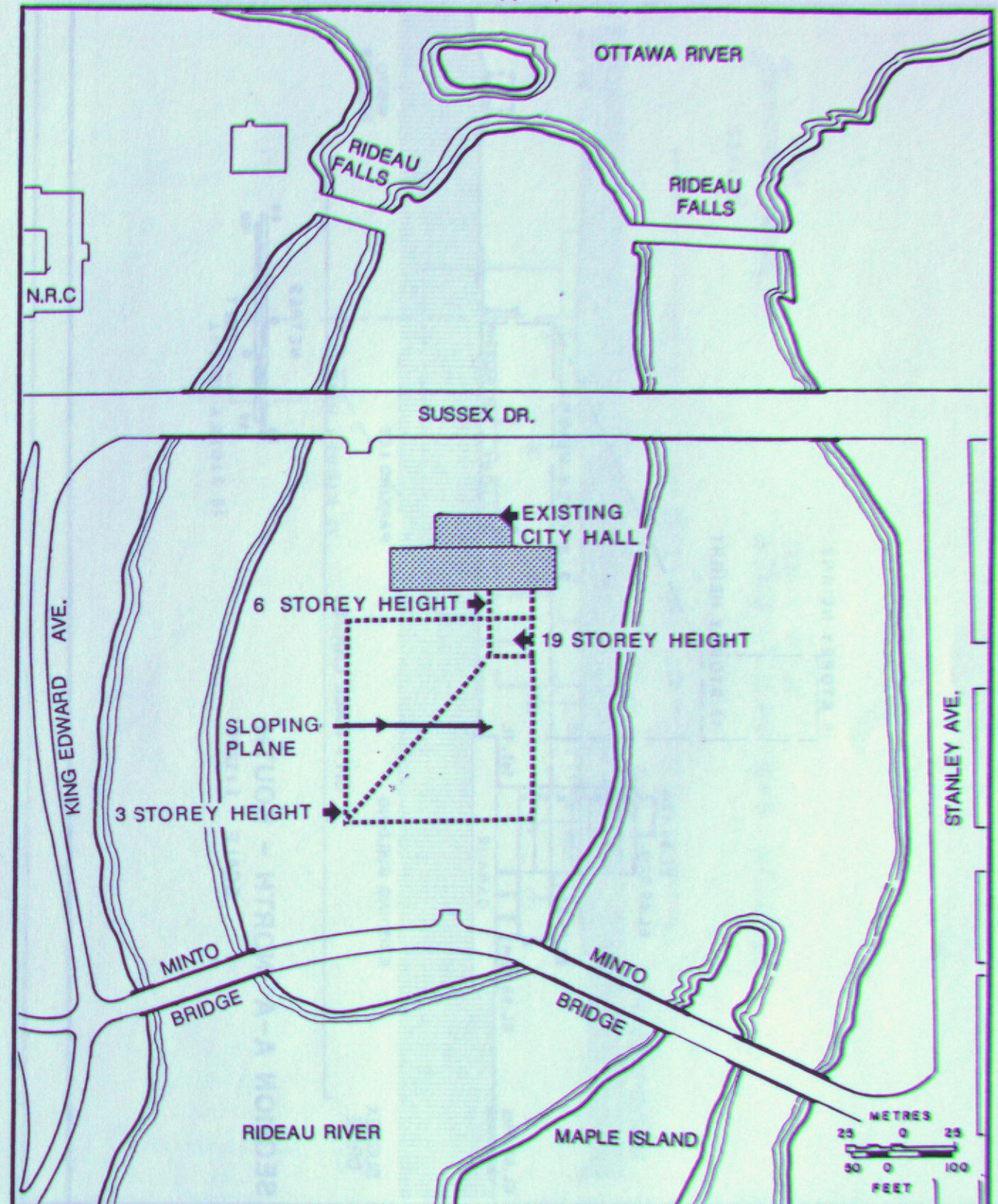
DISTANCE 000m



City of Ottawa

CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No. 15



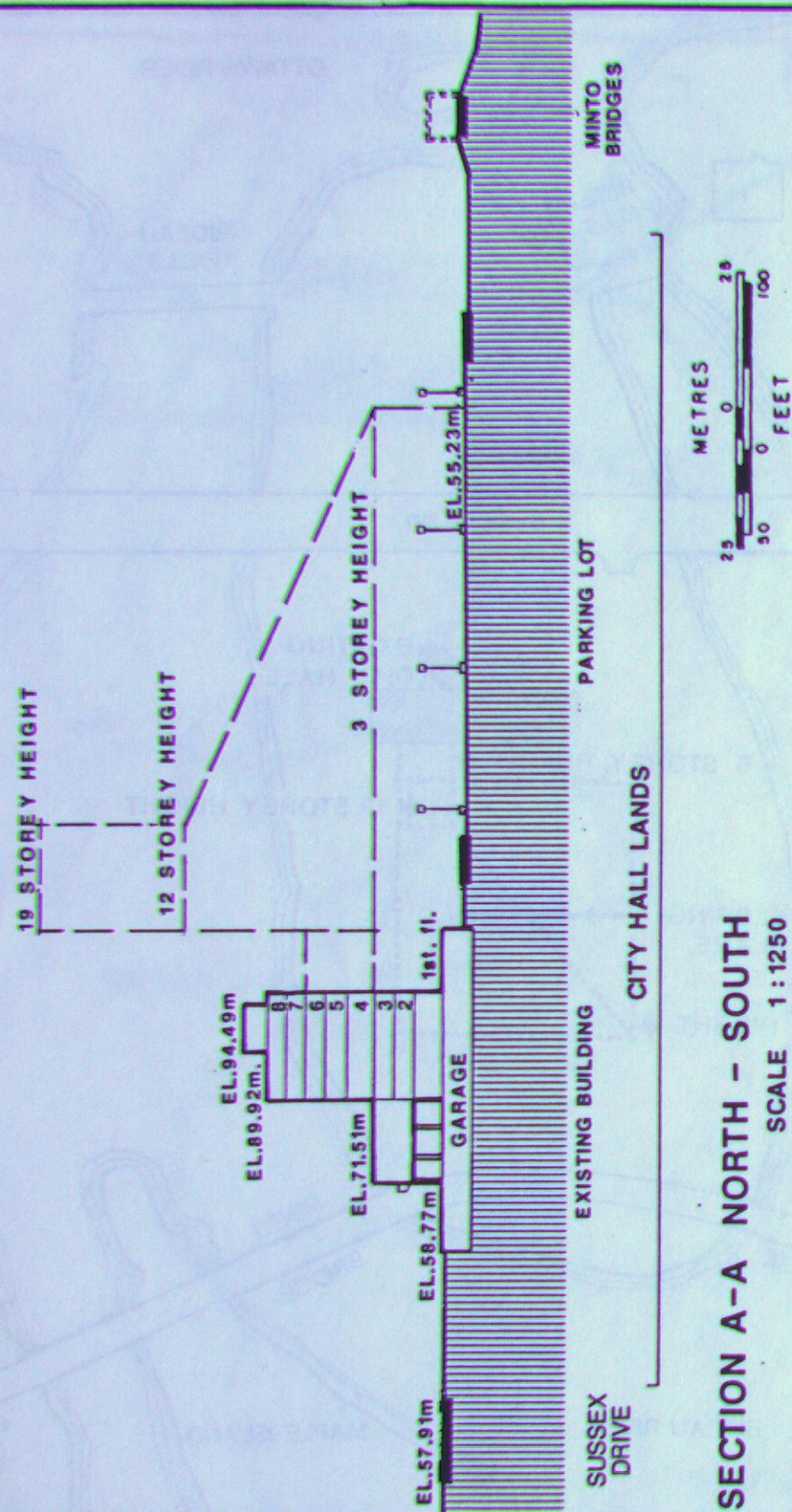
SUGGESTED BUILDING ENVELOPE FOR THE ADDITION
TO THE EXISTING CITY HALL



City of Ottawa

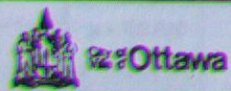
CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No.16A



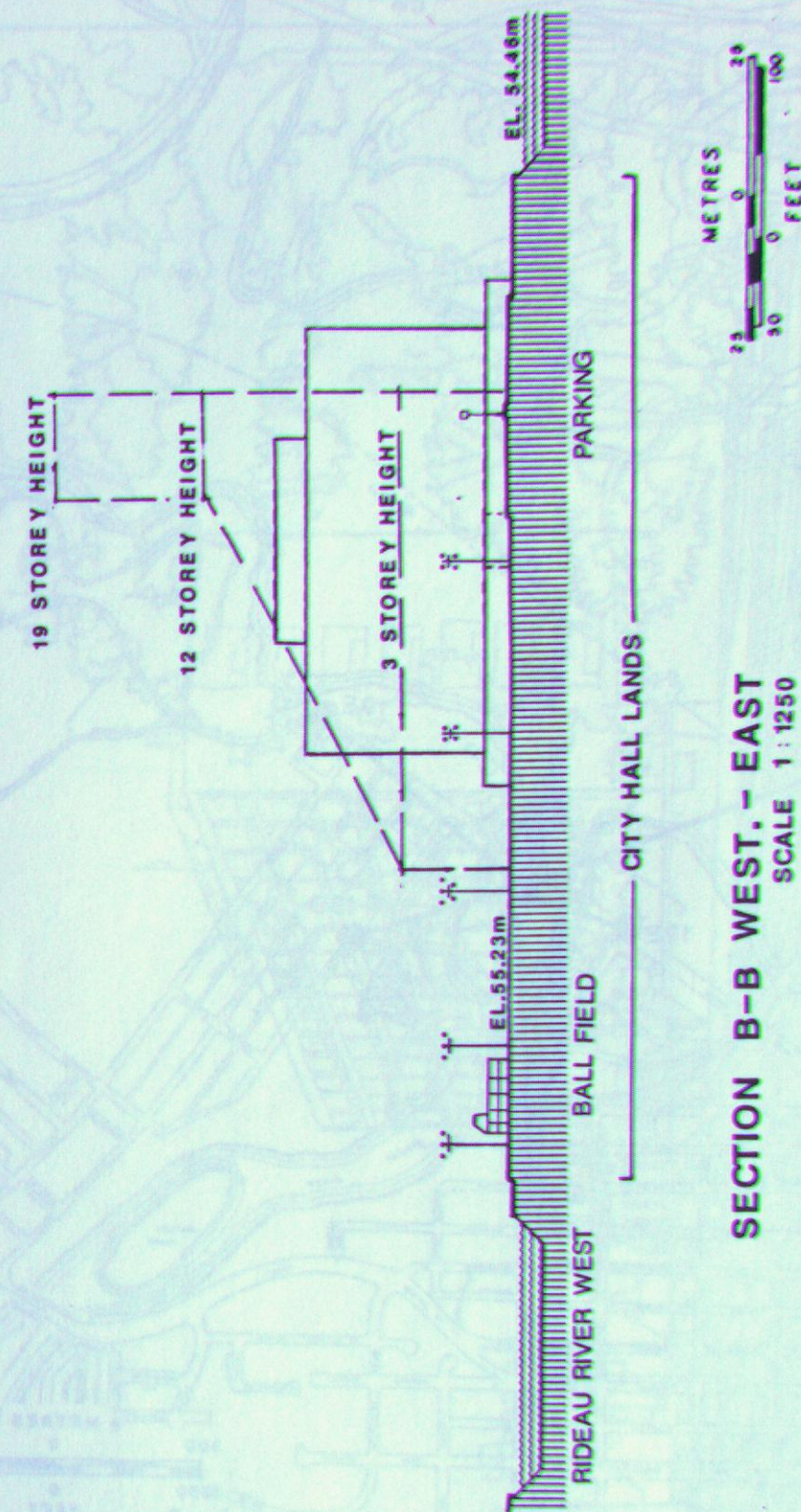
SECTION A-A NORTH - SOUTH
SCALE 1:1250

NORTH-SOUTH SECTION WITH SUGGESTED BUILDING ENVELOPE



CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No. 16B



SECTION B-B WEST.- EAST
SCALE 1:1250

EAST-WEST SECTION WITH SUGGESTED BUILDING ENVELOPE

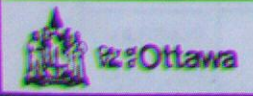


CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No. 16C

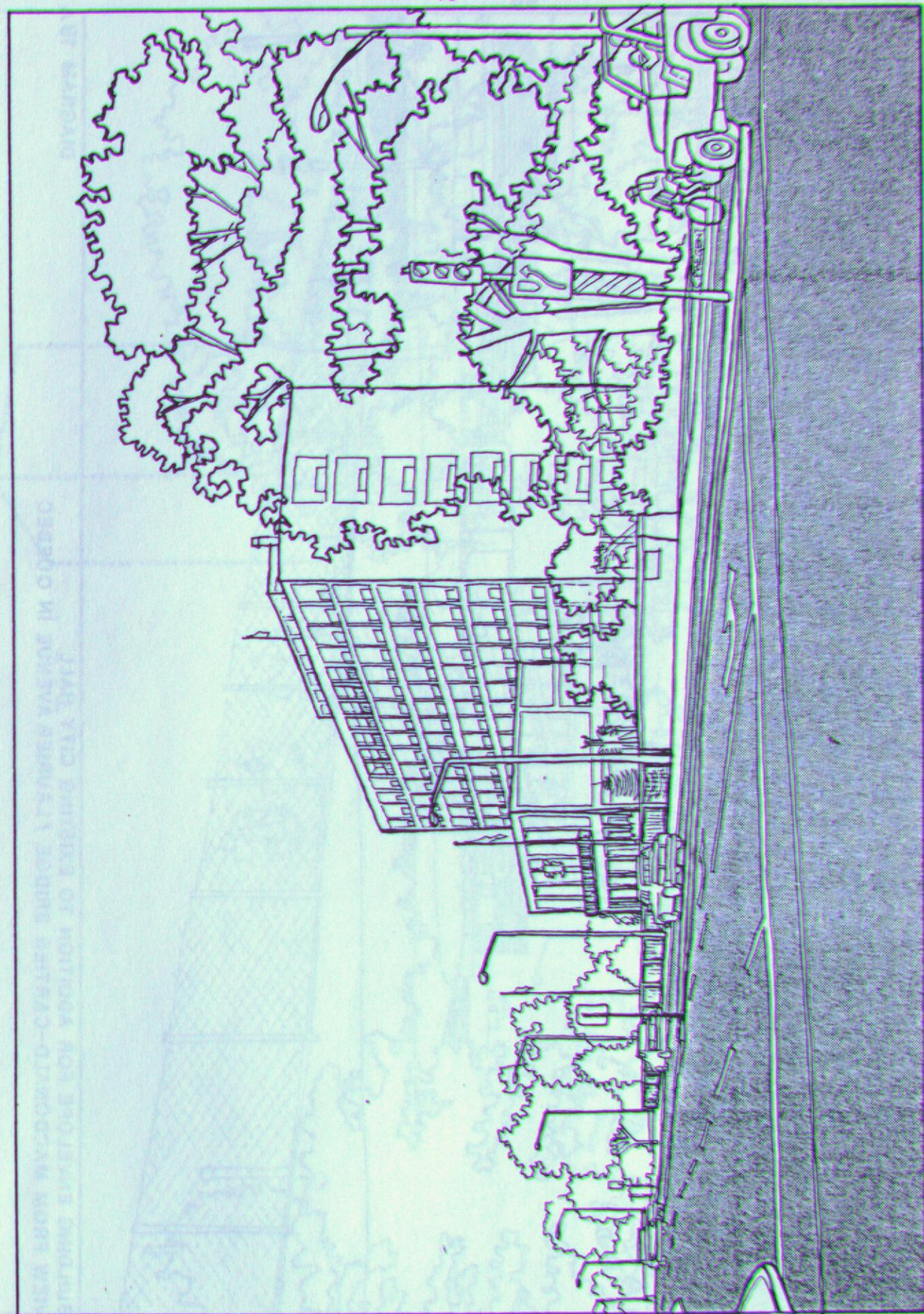


LOCATIONS OF PERSPECTIVE VIEWS SHOWING ENVELOPE



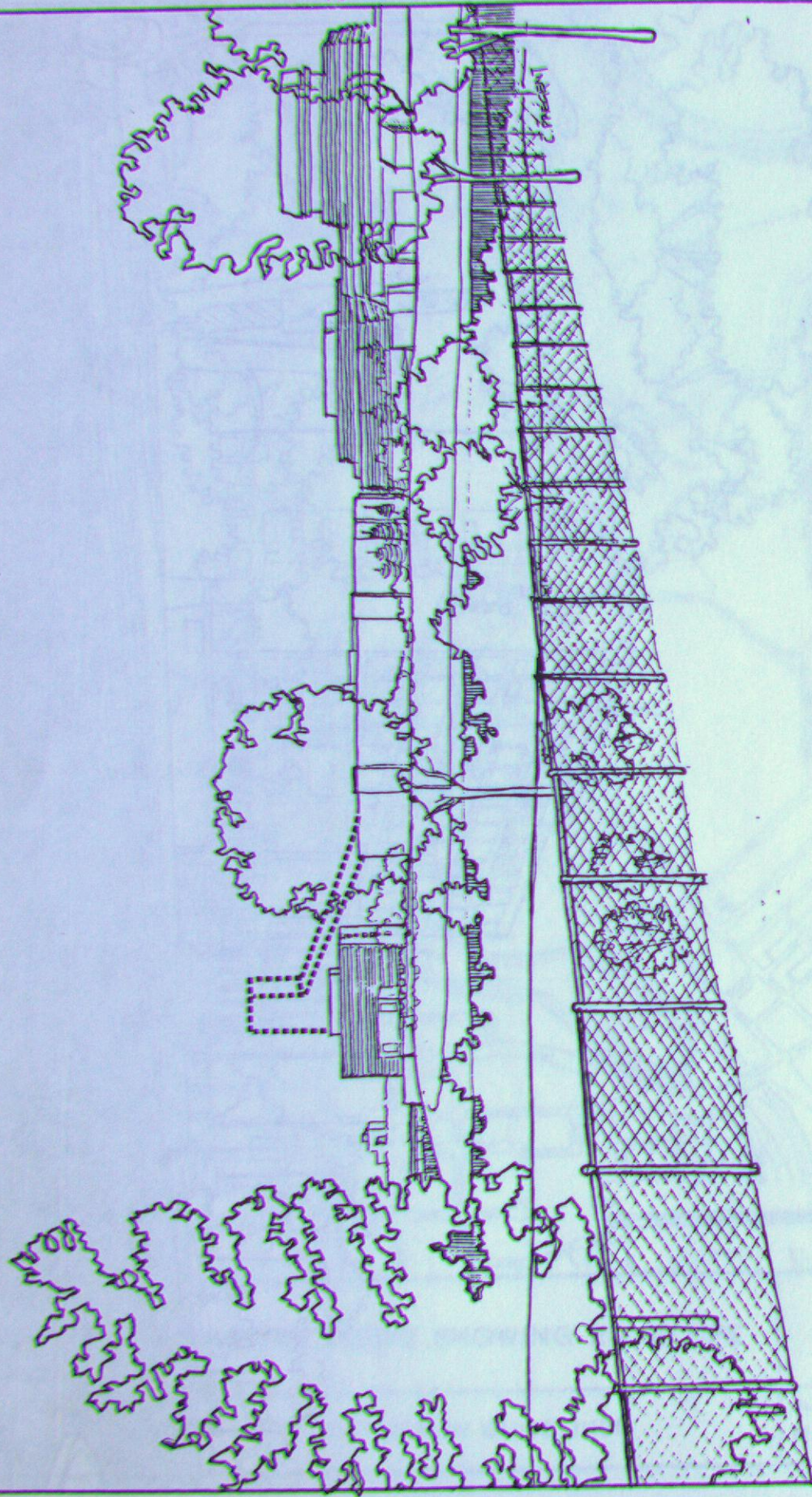
CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
No. 17



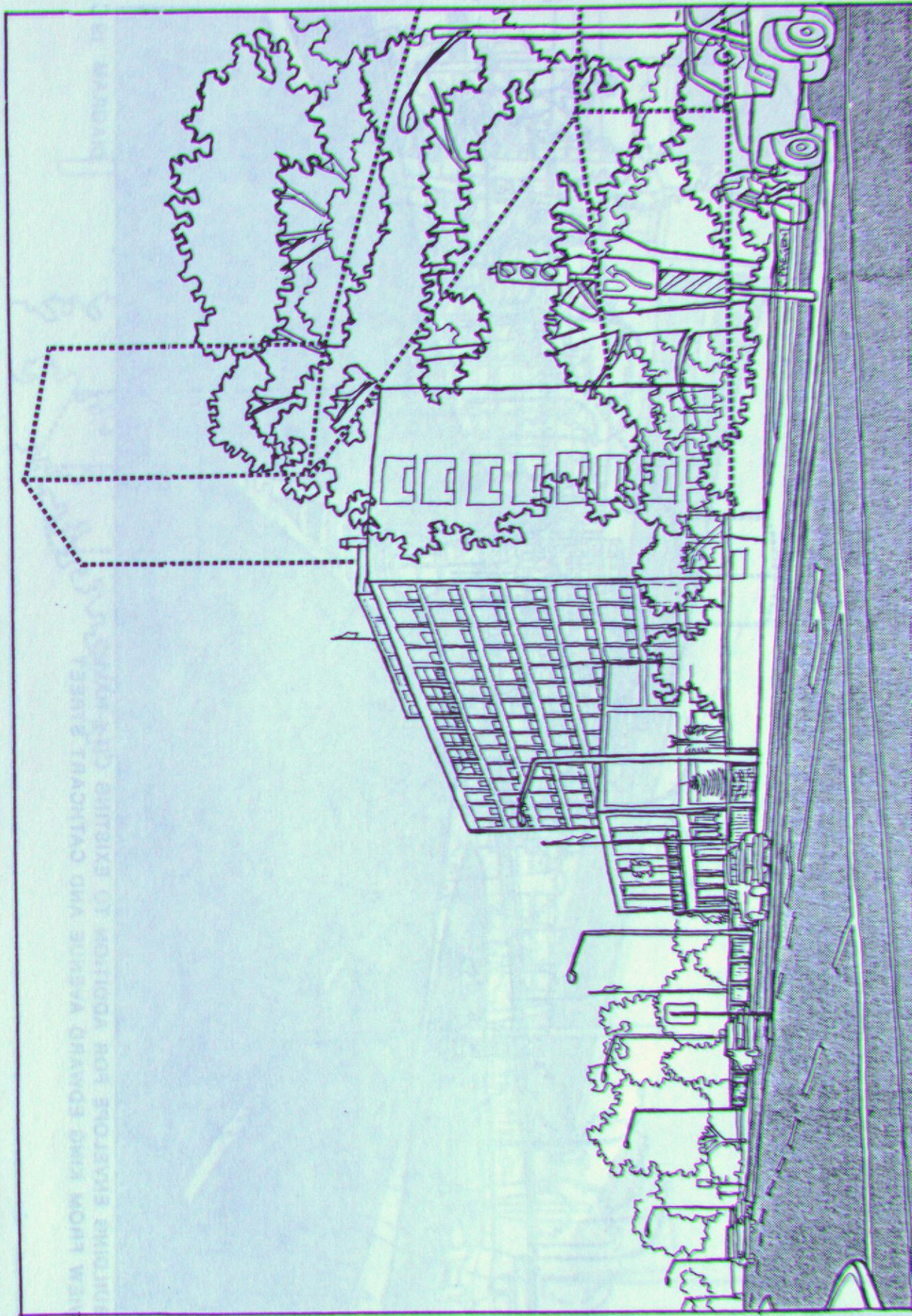
EXISTING CITY HALL FROM SUSSEX DRIVE

DIAGRAM 18



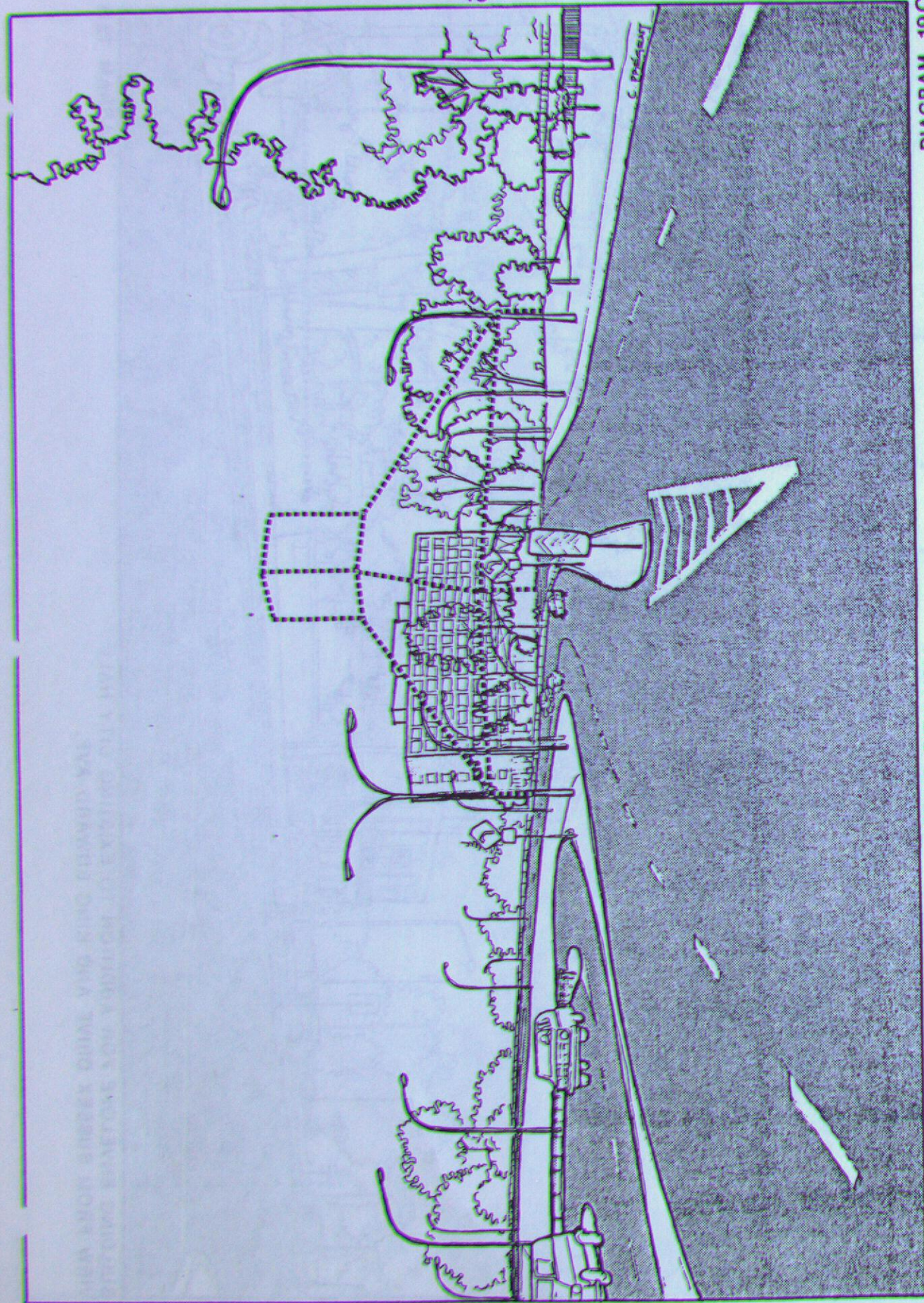
BUILDING ENVELOPE FOR ADDITION TO EXISTING CITY HALL
VIEW FROM MACDONALD-CARTIER BRIDGE / LAURIER AVENUE IN QUEBEC

DIAGRAM 19A



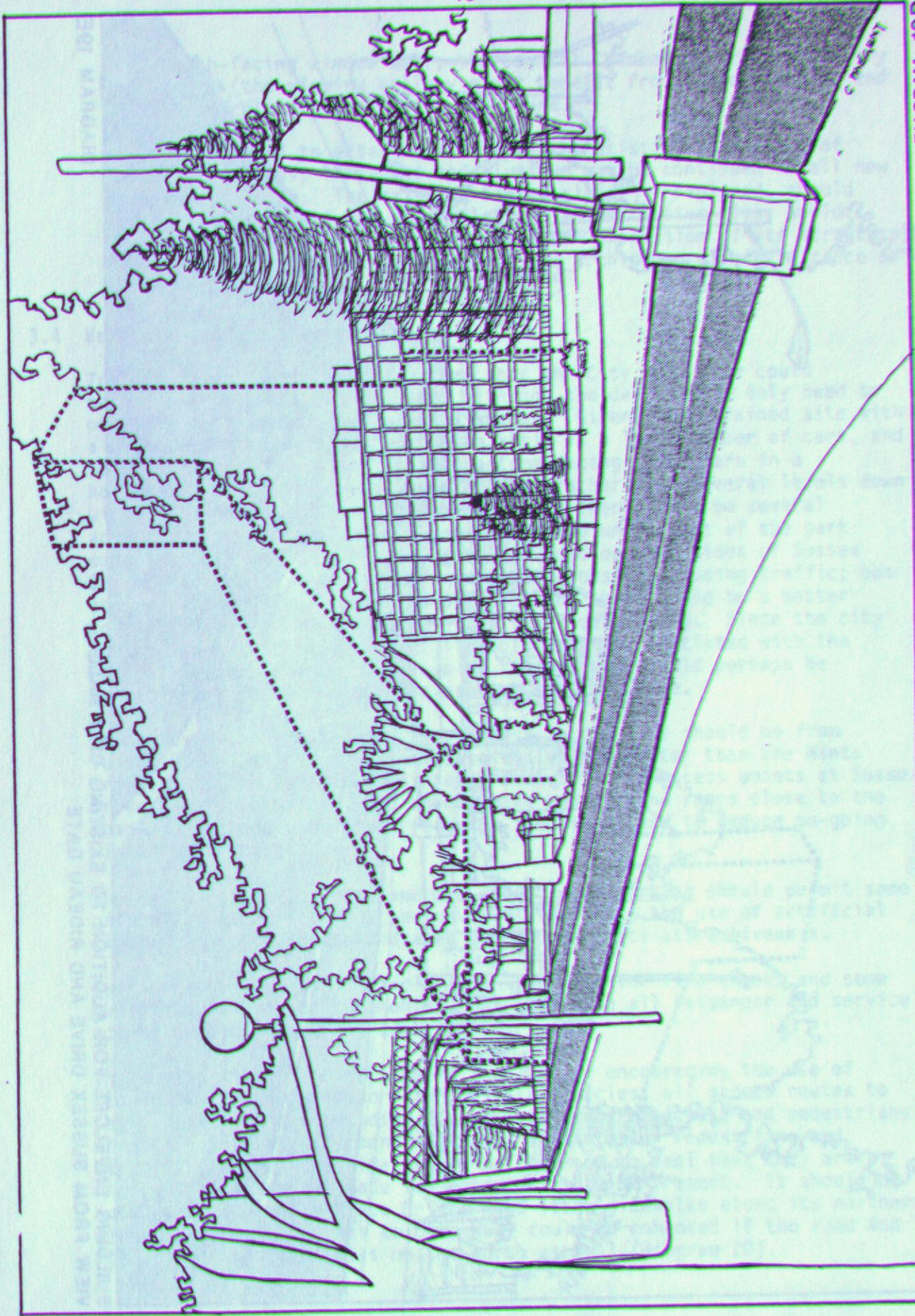
BUILDING ENVELOPE FOR ADDITION TO EXISTING CITY HALL
VIEW FROM SUSSEX DRIVE AND KING EDWARD AVE.

DIAGRAM 19B



BUILDING ENVELOPE FOR ADDITION TO EXISTING CITY HALL
VIEW FROM KING EDWARD AVENUE AND CATHCART STREET

DIAGRAM 19C



BUILDING ENVELOPE FOR ADDITION TO EXISTING CITY HALL
VIEW FROM STANLEY AVENUE AND UNION STREET

DIAGRAM 19D

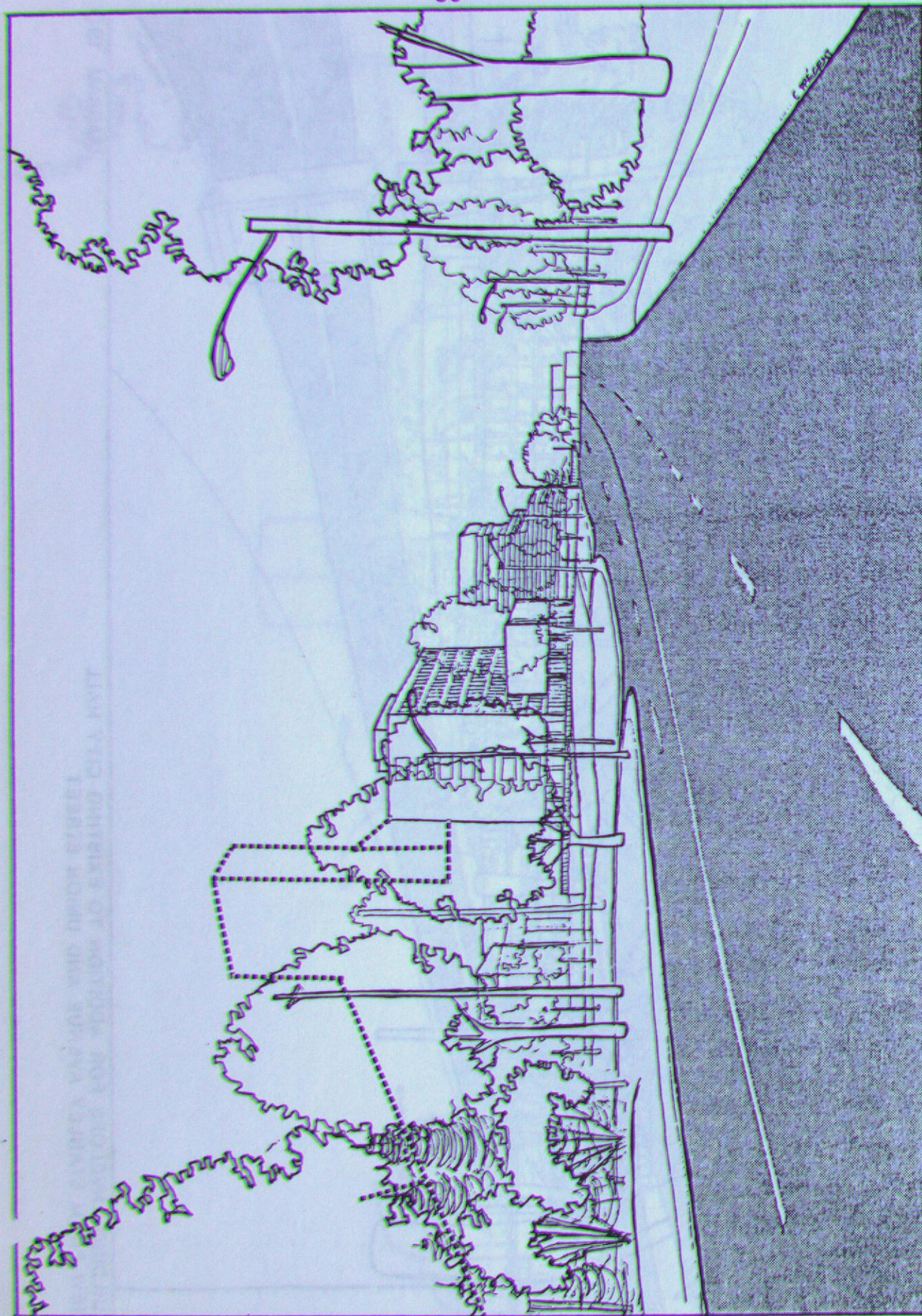


DIAGRAM 19E

BUILDING ENVELOPE FOR ADDITION TO EXISTING CITY HALL
VIEW FROM SUSSEX DRIVE AND RIDEAU GATE

south-facing window wall; the Council Chamber interior and entry doors (the viewing gallery might benefit from improvements); and the marble elevator shaft enclosure.

With regard to exterior finishes, the existing vocabulary of tinted glass, limestone and aluminum may be continued in all new construction. The existing tinted glass, if replaced, should again be tinted and not reflective as reflective glass would inhibit the existing building's clear expression of its structural framework and thus detract from the architectural significance of the building.

3.4 Vehicular and Pedestrian Access

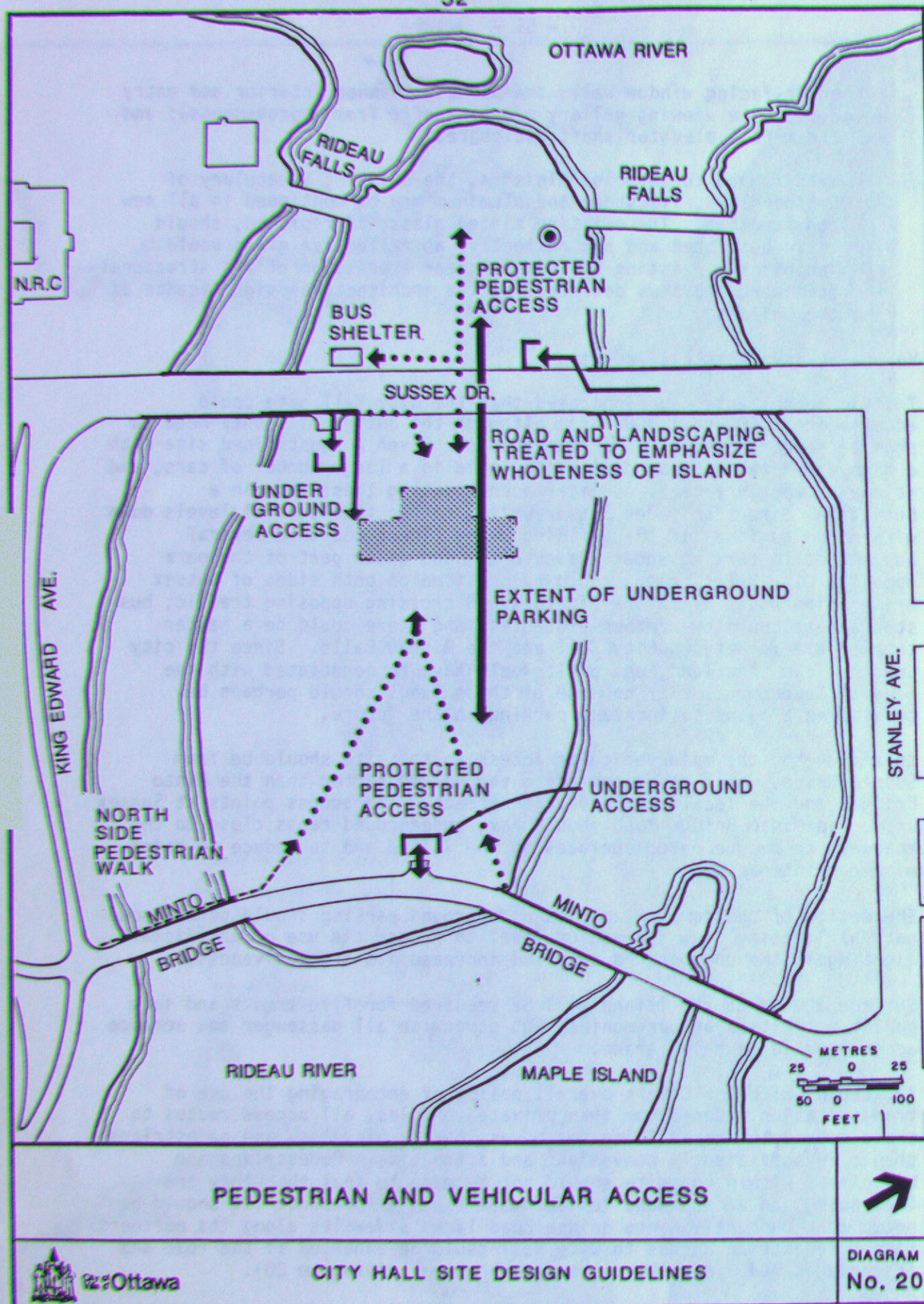
Traffic consultants have indicated that the City Hall site could accommodate 1,000 to 1,300 cars, although the design will only need to provide approximately 800 parking spaces. Given a constrained site with a high water table to be dealt with, this is a large number of cars, and it may be appropriate to consider accommodating these cars in a horizontal direction under Sussex Drive, rather than several levels down within the confines of the building mass. There could be several advantages to parking under Sussex Drive and under part of the park opposite City Hall: ramps could be provided on both sides of Sussex Drive which would allow traffic to avoid crossing opposing traffic; bus stop access could be weather-protected; and there could be a better tourist tie-in between City Hall and the Rideau Falls. Since the city does not own that land, use of it would have to be negotiated with the Federal Government. For now use of these lands should perhaps be considered a means to increase parking in the future.

In any event, the main vehicular access to the site should be from Sussex Drive, which can accommodate the volume better than the Minto Bridges and the local New Edinburgh Streets. The access points at Sussex Drive and Minto Bridge Road should have underground ramps close to the roadways to reduce paved surfaces on the island and to reduce on-going winter maintenance.

The design of the complex and its underground parking should permit some natural lighting from the podium level to reduce the use of artificial lighting in the underground area and increase its attractiveness.

Surface access to the island will be required for fire trucks and some public activities or ceremonies, but otherwise all passenger and service access should be below grade.

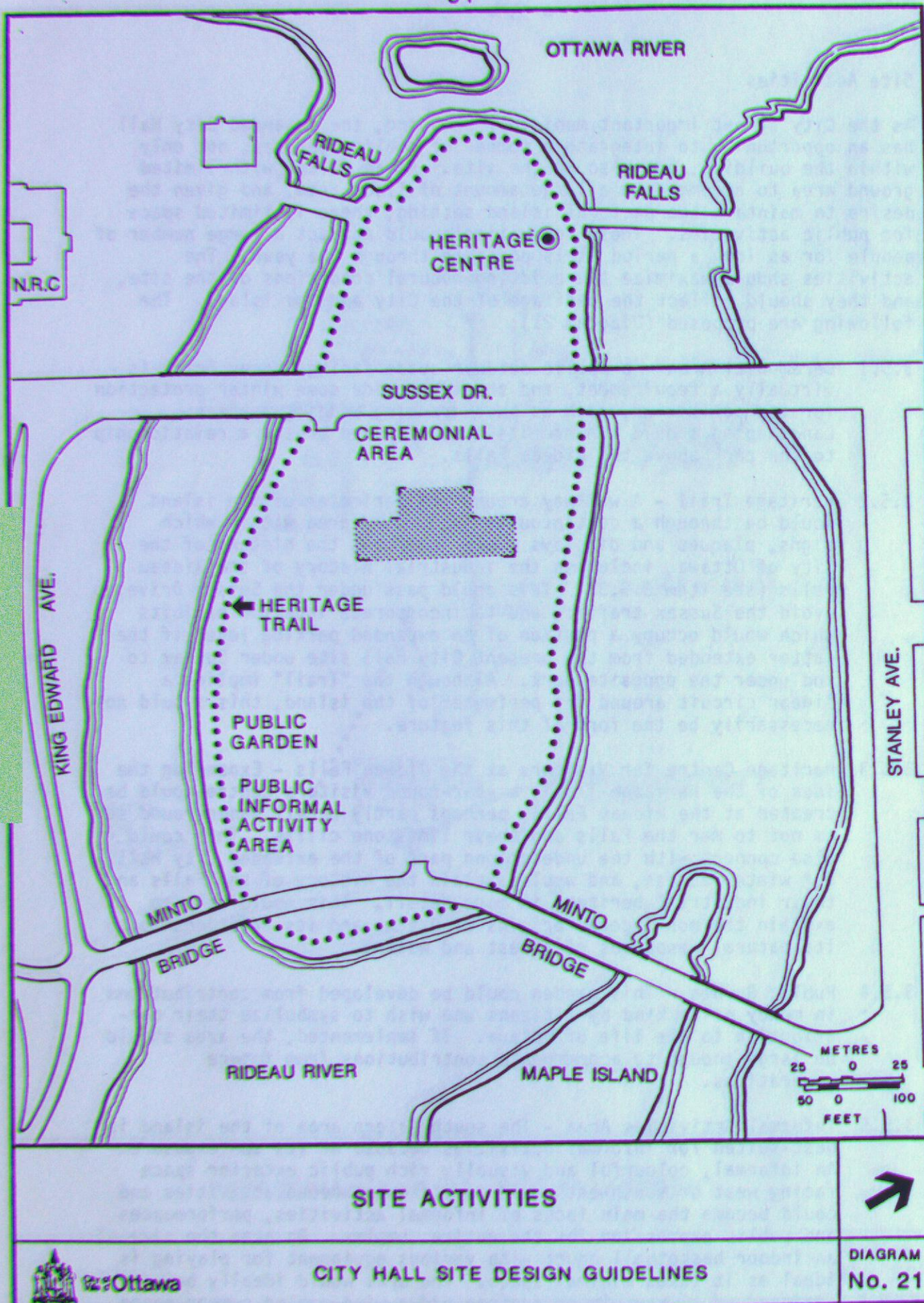
In keeping with the City's overall policy of encouraging the use of transportation modes other than private vehicles, all access routes to the site and to the building for buses, taxis, bicycles, and pedestrians should be sufficiently convenient and attractive. Pedestrians and bicyclists within the site should not be made to feel that they are "borrowing" an access made for automobiles as at present. It should be noted that currently Minto Bridge Road lacks sidewalks along its northern side. Pedestrian access to City Hall could be enhanced if the road and its bridges had sidewalks on the north as well (Diagram 20).



3.5 Site Activities

As the City's most important municipal building, the expanded City Hall has an opportunity to integrate a number of public features, not only within the building, but also on the site. As an island with limited ground area to accommodate a large amount of floor area, and given the desire to maintain the pastoral island setting, there is limited space for public activities. These activities should attract a large number of people for as long a period as is possible through the year. The activities should maximize the existing natural conditions of the site, and they should reflect the heritage of the City and the island. The following are proposed (Diagram 21):

- 3.5.1 Ceremonial Area - a public outdoor space facing Sussex Drive is virtually a requirement, and should provide some winter protection for its activities, such as photographing wedding parties. Landscaping should enhance its formality and create a relationship to the park above the Rideau Falls.
- 3.5.2 Heritage Trail - A walkway around the perimeter of the island would be through a continuously landscaped area within which signs, plaques and displays would interpret the history of the City of Ottawa, including the industrial history of the Rideau Falls (see Item 3.5.3). This could pass under the Sussex Drive to avoid the Sussex traffic, and to incorporate interior exhibits which would occupy a portion of an expanded parking level if the latter extended from the present City Hall site under Sussex to and under the opposite park. Although the "Trail" implies a linear circuit around the perimeter of the island, this should not necessarily be the form of this feature.
- 3.5.3 Heritage Centre for Visitors at the Rideau Falls - Expanding the idea of the Heritage Trail, a year-round visitors centre could be created at the Rideau Falls, perhaps partly or all underground so as not to mar the Falls and their limestone cliffs. This could also connect with the underground part of the extended City Hall for winter access, and would explain the history of the Falls and their industrial heritage in more detail. This would help to explain the non-federal origins of Ottawa and its relationship to its natural resources of forest and water.
- 3.5.4 Public Garden - This garden could be developed from contributions in money or in kind by citizens who wish to symbolize their contribution to the life of Ottawa. If implemented, the area should be large enough to accommodate contributions from future generations.
- 3.5.5 Informal Activities Area - The southwestern area of the island is best-suited for informal activities because of its sun exposure. An informal, colourful and visually rich public exterior space facing west or southwest would invite spontaneous activities and could become the main focus of informal activities, performances and public expression for the entire complex. An area the size of an indoor basketball court with various equipment for playing is ideal as it takes minimal space. The area would ideally be designed as a warm winter suntrap and a wind-cooled summer space.



With increased winter wind protection through appropriate landscaping, the southwestern area is the most suitable for winter activities again due to its excellent sun exposure. A skating area could be developed on the river between Green Island, Minto Bridge, and the King Edward bank. This could be complemented by other outdoor winter activities on the immediately adjacent part of the island. It may be possible to have a glazed interior space nearby to provide an indoor winter space related to the exterior activity area.

3.6 Landscaping and Micro-Climature

Generally, landscaped surfaces should be maximized over the entire site to maintain the pastoral character of the island. Hard surfaces should be minimized. By way of example, the quantity of hard surfacing in front of the existing City Hall is excessive.

An expanded podium base need not support only hard surfacing--grass, flowers, and low shrubs can grow quite well on a podium. Again using the existing City Hall as an example, the exposed vertical walls of the podium which now exists on the east, west, and particularly the south, should not be repeated or continued. The use of sloped and grassed earth between a podium and the water's edge can minimize this appearance.

As noted in Section 3.1 of this paper, views to and from the site are very important, and the landscaping plans should be integrated with view planning in mind in order to enhance the framing of views in both summer and winter.

The landscaping plan should also maximize the opportunity to increase color on the site in winter, since the expanded building will be the only structure on the island through which color can be added. In addition to color through landscaping, the building itself can incorporate warm colors into its winter architecture, particularly at ground level, where exterior walls and interior walls, visible from the exterior, can provide extensive color both day and night. It may be desirable to add some highly visible walls at ground level with removable color panels which can be changed to complement the changing seasons.

Although both the east and west edges of the island now have a casual arrangement of trees along the shore, the southern part of the island has a denser growth of vegetation which partially screens the existing City Hall from Minto Bridge Road. Although it may be more desirable to "open up" this end of the island since it is to become a more visible and important entry than at present, the Minto Bridges do benefit from this wooded setting. Efforts should be made to retain this high density of vegetation within 30 metres of both bridges in order to buffer the Victorian tracery of the bridges from the contemporary architecture which will not be much closer to their setting.

Landscaping should also be designed to improve micro-climatic conditions in winter for pedestrians, as well as to reduce excessive snow build-up. Wind and snow studies are necessary for this, and can also indicate how exterior spaces can be made cooler in summer and warmer in winter.

3.7 Interior Aspects

3.7.1 Energy Conservation

The location of an expanded City Hall on Green Island provides several energy opportunities in terms of sun exposure, cooling water, and hydro-electric power.

The excellent sun exposure can be used for passive solar gain for heating in the winter. Other possibilities include creating greenhouse space(s) within the complex for aesthetic reasons, and reducing the use of artificial lighting.

Summer cooling for the complex could be provided by two sources. With water flowing on both sides of the island, study should be made of using the river temperature differential of the water for cooling, rather than relying entirely on refrigeration units. The second way would be to use cooled water drawn from an insulated underground cavern filled with the snow from the existing snow dump. The ground level above could be developed into a park which would help to overcome objections to the snow dump (Diagram 22).

The Rideau Falls Power Corporation intends to rehabilitate the 1908 generating station at the Falls. The City could purchase the output of this plant, or consider the purchase of the plant in its entirety. The generating station in itself could also be an additional tourist attraction for the area (Diagram 22).

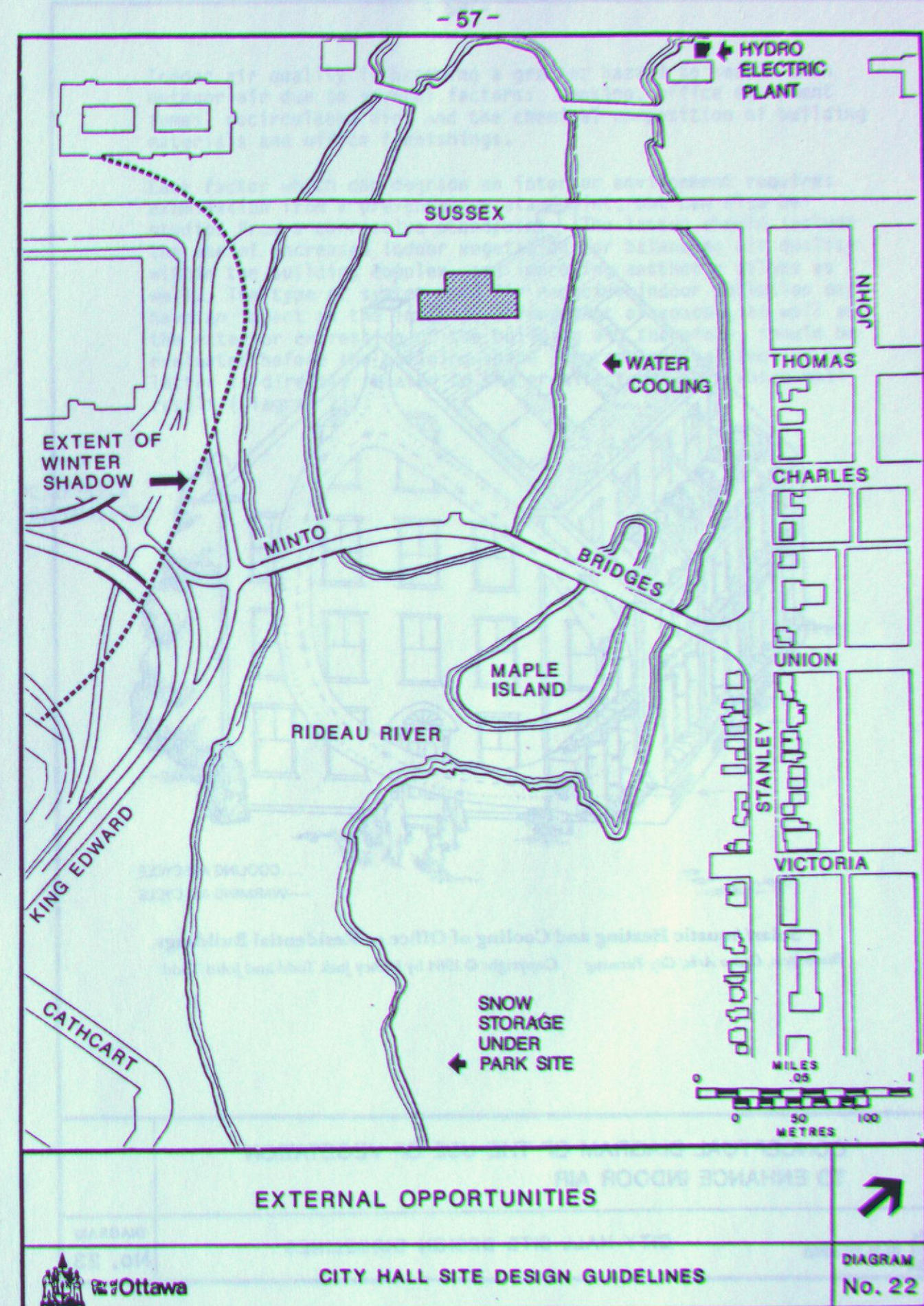
3.7.2 Public Access

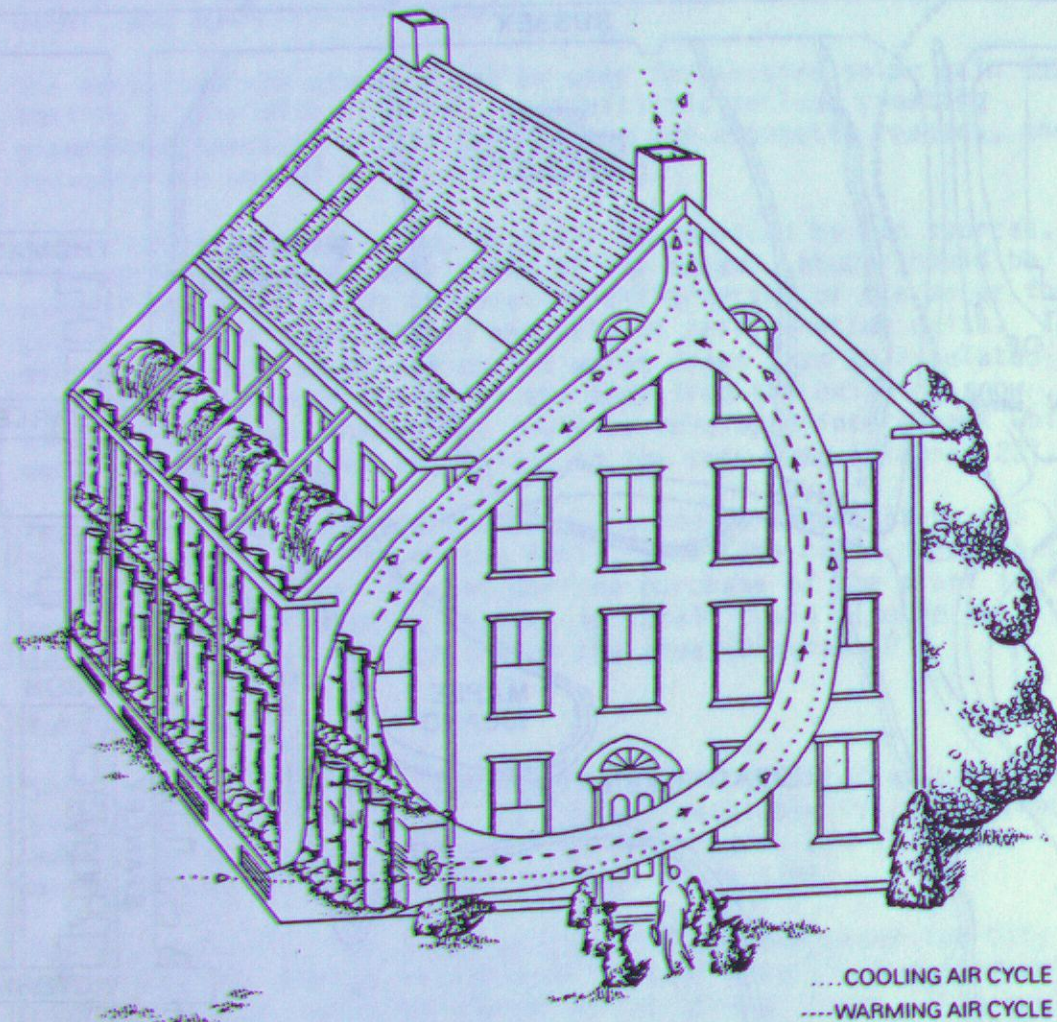
Since the City of Ottawa has adopted and implemented an extensive public participation policy, it may be reasonable to assume that public use of the building would be encouraged, and therefore would be made more convenient and more attractive.

Public facilities, and those employees from throughout the City administration who may be expected to deal directly and frequently with the public, could be placed on the ground floor. This would help to provide the public with a "one-window" approach to City Hall, and help eliminate delays in serving the public. This would require a study to determine which persons or positions require improved public access, how relocation of some staff to the ground floor would affect the internal operation of each department, and what opportunities exist to create rotating staff assignments to a lobby location.

3.7.3 Indoor Environment

Since the health and productivity of workers in increasingly related to the quality of the worker's indoor environment, the new City Hall complex should ensure that the indoor environment is the best possible given the present state of knowledge in this field.





Solar/Aquatic Heating and Cooling of Office or Residential Buildings
Bioshelters, Ocean Arks, City Farming Copyright © 1984 by Nancy Jack Todd and John Todd

CONCEPTUAL DIAGRAM OF THE USE OF VEGETATION
 TO ENHANCE INDOOR AIR



City of Ottawa

CITY HALL SITE DESIGN GUIDELINES

DIAGRAM
 No. 23

Indoor air quality is becoming a greater hazard to health than outdoor air due to several factors: smoking, office equipment fumes, recirculated air, and the chemical composition of building materials and office furnishings.

Each factor which can degrade an interior environment requires examination from a preventative standpoint, but can also be studied from a corrective standpoint. The latter should include the use of increased indoor vegetation for balancing air quality within the building complex, and improving aesthetic values as well. The type of system used for reducing indoor pollution may have an impact on the internal arrangement of spaces, as well as the exterior expression of the building and therefore, should be evaluated before the building space program is finalized, as the latter is directly related to the architectural form which will result (Diagram 23).

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