

COMMITTEE OF THE WHOLE – JUNE 20, 2005

VAUGHAN CIVIC CENTRE PROJECT PHASE 1 (CITY HALL) STATUS REPORT COMPLETION OF DESIGN DEVELOPMENT

Recommendation

The City Manager and Commissioner of Community Services, in consultation with the Senior Management Team, recommend:

1. That the Vaughan Civic Centre Project (Phase 1) proceed to the Construction Document phase of the design process;
2. That the project budget be increased to take into account the following:
 - a) The estimated cost of the relocation of the existing storm sewer, in the amount of \$400,000 as part of the site preparation works;
 - b) The estimated cost of groundwater management measures, in the amount of \$375,000 as part of the site preparation works;
 - c) Increasing the load bearing capacity of the floor slabs, in the amount of \$125,000 as part of the construction budget;
 - d) Upgrading from LEED Silver to LEED Gold in the amount of \$750,000 to support energy efficiency and environmental sustainability.
3. That the cost of the Temporary Accommodations be excluded from the soft cost component of the Civic Centre budget, in the amount of \$2.7 million, and such costs be administered through a separate sub-project account and that the project budget be increased accordingly, in the amount of \$2.7 million;
4. That the City's Administration Fee be added to the budget and the proceeds from the City's Administration Fee be assigned to the City Hall Reserve Fund and that all other City fees be waived;
5. That Staff be authorized to initiate the prequalification process for the purpose of establishing the General Contractors that will be eligible to receive the tender for the construction of the new City Hall, (Vaughan Civic Centre Project: Phase 1); and that the Evaluation Committee as outlined in this report be approved.

Economic Impact

Funding for the Civic Centre project is identified in the 2005 Capital Budget. One component of the funding is the net proceeds from the sale of surplus lands. The sale of these lands has commenced, although the final proceeds are not known at this time, the prices to-date have been higher than those used in the original budget estimate. The initiatives identified above will add a total of \$4,350,000 to the project cost. The net proceeds of the surplus land sales can be used for this purpose. Future operating savings resulting from the energy conservation measures proposed in the upgrade from LEED Silver to LEED Gold, will amount to \$540,000 over ten years.

Purpose

To advise of the completion of the Design Development portion of the first phase of the Vaughan Civic Centre project and to obtain approval to make adjustments to the project budget, initiate the prequalification process for general contractors and selected sub-trades and proceed with the preparation of bid packages through the Construction Document phase.

Background – Analysis and Options

a) Background

i. Project Phasing

On November 8, 2004, Council directed that the Vaughan Civic Centre Project (Phase 1) proceed to Design Development on the basis of the results of the Schematic Design Phase.

There are a number of phases in the design and construction process. They are specified in the contract with the Architect and are shown below:

PHASE

- Schematic Design;
- Design Development;
- Construction Documents;
- Bidding and Negotiation;
- Construction Phase – Contract Administration;
- Post Construction

Schematic Design is the initial phase of the design process. It allows the architect and consulting team to advance the plan that was successful in the design competition. During this phase the building form and massing were refined along with the blocking and stacking of the individual uses, with input from staff and the community. Floor space allocations were brought to a higher level of certainty and the preliminary approach to the building systems and LEED certification was developed.

Design Development is the second phase in the process and it is now completed. During this phase the basic elements of the building were confirmed; finishes and interiors investigated; room data sheets prepared; and the nature and implications of the LEED certification measures and the building systems (e.g. heating, ventilation and air conditioning, information technology, water/sewers) were evaluated and are now understood. The completion of Design Development has resulted in a concept that is sufficiently detailed to serve as the framework for the preparation of the construction drawings.

This report is seeking direction to proceed to the next step in the process – the Construction Document Phase. The products of this phase include the construction drawings and contract documents that will form the basis for the bid package that will allow the project to go to tender to retain a general contractor. Through the Design Development process a number of issues have arisen that will necessitate adjustments to the project budget. Council authorization to proceed on these matters is being requested. In addition, direction is being sought to initiate the prequalification process to develop a list of qualified general contractors, which will be eligible to receive the construction tender.

This report was prepared in consultation with the Vaughan Civic Centre Review Working Group, which is composed of the Mayor and the three Regional Councillors.

b) Project Overview at the End of Design Development

i. The Site Master Plan

The site Master Plan reflects the long-term vision for the Civic Centre site that was part of the winning submission by KPMB Architects. It has been updated after public consultation, to show the Resource Library located adjacent to the Civic Park, with the office component being located along the Major Mackenzie Drive frontage.

The concept includes: The new City Hall (Phase 1) with a floor area of 25,758 sq. m (277,260 sq. ft.); the Resource Library of 3,344 sq. m (36,000 sq. ft); an office building with a maximum floor area of 6,503 sq. m (70,000 sq. ft) and a new Senior's residence with approximately 80 to 100 units.

The City is currently in discussions with the Region of York about the potential for a new residential building on the site, replacing the existing Maple Manor. The Region, through its Community Services and Housing Department, is in the process of developing terms of reference for a pre-development study to examine the potential costs and design options for this use. The Master Plan shows the new residence in the area to the south of the City Hall building. This is consistent with the concept proposed in the winning design scheme. It is expected that this study will get underway in the latter part of this year.

The staging of development, post Phase 1, will need to be assessed depending on which building proceeds first. Originally, it was thought that the office and library were the most likely candidates for the next phase of development. The earliest possible opportunity to begin construction on the residential building would be in January 2008, which would be at roughly the same time as the completion of the new City Hall.

If the residence proceeds first, it will have implications for the interim parking solutions and may affect how and when the library and office building may proceed to construction. This will have to be evaluated once the Regional study is completed and when a determination has been made as to the final location of the residence and the timing of its construction. There will also have to be coordination between the City Hall project and the construction of the residential building to ensure that the two projects run smoothly.

Work will continue on the Master Plan in a number of areas. These include the finalization of the access locations and designs in consultation with the Region of York, the future programming of the Civic Park and the evolution of the landscape concept.

ii. Building Form and Design

The building massing, footprint and total floor area is consistent with the concept developed to the end of the Schematic Design Phase. Consultation with the City Departments on departmental layouts is on-going and is approaching finalization.

c) Budget Update

On November 8, 2004, Council approved a Phase 1 project budget of \$89,228,343. This total included construction costs of \$71,382,675 + soft costs at 25% of construction costs, amounting to \$17,845,668.

Council also approved a funding plan, which allocated a total of \$89.3 million to the project. The funding sources included:

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|--|-----------------------|
| • City Hall and Financing Reserves: | \$17.9 million |
| • Net proceeds of surplus land sales: | \$21.6 million |
| • Annual debt servicing \$1 million supporting approximately \$11 million in debt at 6% over 20 years: | \$11.0 million |
| • Proceeds from Hydro Vaughan Distribution Inc. Dividend: | \$25.0 million |
| • Funds from Hydro Vaughan Holdings Inc.: | \$ 9.8 million |
| • Annual debt servicing not required until 2007 (\$1M X 4 years): | <u>\$ 4.0 million</u> |
| | \$89.3 million |

The completion of the Design Development phase provides the opportunity for a further refinement of the project costs. As such, the plans have been submitted to the cost consultant for review. This assessment will allow for the costs to be brought in-line with the budget or identify areas where further investment will be necessary. A number of areas have been identified to this point, which will affect the projected budget. They are discussed below.

i. Building Upgrades

Moving from LEED Silver Certification to LEED Gold

In the RFP for the Civic Centre Design Competition, the City required that the building be designed to achieve a minimum LEED Silver certification. Work through Schematic Design and into Design Development indicated that the building was meeting a high Silver standard and was approaching Gold. A decision was made at Senior Management to evaluate the measures that would be necessary to move to Gold, including the impact on the immediate capital costs and the payback time such measures would have in terms of long-term savings in operating costs.

Four measures were identified, which would allow for the project to achieve LEED Gold. The following two changes were proposed under the category "Energy and Atmosphere", "Optimize Energy Performance":

- **Move to a High Efficiency Boiler from a Mid-Efficiency Boiler:**
- **Introduce Triple Glazing at the South and West Elevations in Lieu of Double Glazing:**
- **Effect of the Introduction of the Proposed "Energy and Atmosphere" Measures:**

Total Capital Cost Increase: \$544,506
Aggregate Annual Operating Cost Savings: \$43,000¹
Aggregate Payback Period: 10 years

¹ Assumes Current Energy Prices for the first year. Assuming a 5% annual escalation in energy cost, the total savings rise to \$541,000 at the end of ten years.

The two additional measures fall under:

- **Sustainable Sites, Stormwater Management and Treatment:**

To limit the disruption of natural water flows by: eliminating stormwater runoff; increasing on-site infiltration; and eliminating contaminants through the construction of an on-site stormwater treatment system designed to remove 80% of the post development suspended solids and 40% of the total phosphorous from the runoff from less than 2-year storms. The estimated cost of this measure is \$150,000. The City will be embarking on a program to monitor the effectiveness of all its stormwater management facilities. The cost of monitoring will be part of future operating budgets and will reflect the individual pond. Future monitoring and operating costs for a Civic Centre facility are not anticipated to have a significant impact on future operating budgets.

- **Materials and Resources: Certified Wood:**

To encourage environmentally responsible forest management through the use of a minimum of 50% of wood based materials and products, certified in accordance with the principles and criteria of the Forest Stewardship Council for wood components, including framing, flooring, finishes and temporary construction uses, such as formwork, bracing and pedestrian barriers. The estimated cost of securing the required certified lumber products is \$50,000.

Achieving the Gold standard has a number of benefits. Improving the energy efficiency of the building will confirm the City's commitment to environmental sustainability by reducing both consumption and the emission of greenhouse gases. The upgrading of the boiler and the use of triple glazed windows on two elevations, while having an impact on the initial capital cost, will provide long-term savings in operating costs. The savings (and payback periods) were calculated on the basis of current energy prices with an annualized 5% increase in energy prices. With the cost of energy expected to rise over time, incorporating efficiencies into the building will help mitigate the effect of rising energy prices. The capital cost of incorporating these measures into the building was calculated to be \$544,506. The operating efficiencies achieved, in terms of energy costs, will have a 10-year payback period.

The introduction of additional stormwater controls and the use of certified wood products will help to minimize the impact of the site on the broader environment. Ensuring that stormwater runoff is controlled, managed and dispersed in a responsible manner is an important measure that assists in maintaining the health of our river systems and groundwater. Supporting initiatives that encourage the environmentally sound harvesting of forest resources will have positive effects in preserving the affected ecosystems and ensuring that the resource is available for the long-term. The estimated cost of these measures is \$200,000.

In summary, the cost of implementing these initiatives is \$744,506, composed of the following:

- Upgrading the Boiler/Triple Glazed Windows on Two Elevations: \$544,506
- Improved On-site Stormwater Management: \$150,000
- Use of Certified Wood Products: \$ 50,000

It is recommended that the above noted measures be incorporated into the Civic Centre plan and that the project budget be adjusted accordingly.

Alternative Funding Sources

In accordance with Council direction of November 8, 2004, Economic Development staff is continuing to investigate the availability of funding from a number of sources, including senior levels of government and utilities. This will be on-going throughout the design process. Any grant money obtained can be used to offset the City's costs.

Increasing the Load Bearing Capacity of the Floor Slabs

In review of the initial structural plans, Staff was concerned that the load bearing capacity of the floor slabs was insufficient to ensure long-term flexibility in the use of the building. While acceptable for standard office uses, if the building was called upon to accommodate alternative uses in the future, the floor slabs may have insufficient load bearing capacity to accommodate heavier equipment or significant areas of storage. This may limit the future use of the building. For this reason the design team was asked to evaluate the cost of increasing the building's load bearing capacity.

The design team investigated an increase in load bearing strength from 50 lb/ft² to 80 lb/ft² throughout the building. The resulting cost was determined to be \$125,000. Since this will increase the structural strength of the building, enhancing its flexibility and durability, it is recommended that the construction budget be increased by \$125,000 to effect this change.

ii. Site Management Issues

In order for construction to take place a number of issues relating to the built and natural characteristics of the site need to be addressed. Further research has revealed two such issues, both of which will have cost implications for the project.

Relocation of an Existing Storm Sewer

A storm sewer, serving Major Mackenzie Drive and the neighbourhood to the north of Major Mackenzie currently traverses the site from north to south through the former York Region works yard, which now comprises part of the Civic Centre site. The storm sewer veers to the west and encroaches on the sites of both the new City Hall and the Resource Library. Therefore, it will have to be relocated. The presence of the sewer was established during the detailed review of the servicing options for the site. It was not discovered earlier because the original plans, as provided by the Region, did not show the pipe and there were no as-built plans available. The sewer relocation will have to take place in the early stages of construction.

The engineering has not been undertaken to finalize an appropriate route or do a detailed costing. This will be done concurrently with the preparation of the construction drawings. Therefore a further report will be provided when the construction drawings are completed. In the interim an allocation in the amount of \$400,000 should be reserved in the project budget for site works, pending the completion of the detailed review.

Hydrogeology

The northeast portion of the site is characterized by a high water table. This was identified in the preliminary hydrogeology report, which was included in the RFP package issued for the Design Competition. Groundwater control is a normal part of site management during construction. However, in this case the circumstances are more challenging than normal and will result in extra cost. The City is currently in the process of retaining a consulting firm to conduct follow-up pump flow tests to establish the exact nature and extent of the condition. This information will be used to establish the control features, determine the cost implications and obtain the necessary permit from the Province.

This work will take place concurrently with the preparation of the construction drawings and will be the subject of the follow-up report. In the interim an allocation in the amount of \$375,000 should be reserved in the project budget for site works.

iii. Soft Costs

The original soft cost budget was estimated at 25% of the construction costs, as identified in the November 8, 2004 report. This is at the low end of the range of percentages typically used in the industry for estimating soft costs, which generally runs from 20% to 35%. This resulted in a soft cost estimate of \$17,845,688. This estimate is currently exceeded by approximately \$6,083,000 due to the need to account for three items.

The first is the cost of leasing and equipping the temporary office space required by the relocation of staff during construction, which totals \$2.7 million. The two additional items relate to costs that result from fees charged by the City. The first is the 3% administration fee, which is calculated on the basis of the total project cost (\$89.3 million). It is charged to projects to offset the cost of the work done by City staff in support and administration. In this instance, it amounts to approximately \$2,670,000. Similarly, there is a 1% fee, based on the construction costs (\$71.3 million) for the review and processing of the building permit application. This results in a fee of \$713,826.

The resulting total is:

Cost of temporary accommodation:	\$2,700,000
3% Administration Fee:	\$2,670,000
Building Permit Fee (1% of construction cost):	<u>\$ 713,000</u>
Total	\$6,083,000

The cost of temporary accommodations and the administration fee are not normally soft costs. If they remain in soft costs the budget will be exceeded. However, the soft cost budget based on 25% of the original construction costs (\$17,845,688) will meet the needs of the project if the following adjustments are made:

- The cost of the temporary accommodations is not included in the soft costs portion of the budget and is assigned to a separate sub-project account, specific to the administration of the temporary accommodations;
- The 3% Administration Fee continues to be applied, but the proceeds of the fee be assigned to the City Hall Reserve Fund as a contribution to the capital funding of the project, thereby neutralizing the cost implications of the fee on the capital budget; and
- The building permit fee is waived, along with all other City fees.

The new Civic Centre is one facility and it is being built to serve all taxpayers in the City of Vaughan, regardless of their location or the services they may require. City Council, the administration of the municipality and the delivery of all services will be provided and/or coordinated from the new Civic Centre. It is therefore recommended that the administration fee be assigned to the City Hall Reserve and the other City of Vaughan fees be waived.

The measures identified above will bring the soft cost budget in line with the original projections. It is recommended that the soft cost budget be amended accordingly.

iv. Aggregate Impact on Project Budget

Implementation of the recommended changes would have the following impact on the project budget:

Storm Sewer Relocation:	\$ 400,000
Groundwater Management:	\$ 375,000
Strengthening the Floor Slabs:	\$ 125,000
Upgrading from LEED Silver to Gold:	\$ 750,000
Temporary Accommodation:	<u>\$2,700,000</u>
TOTAL	\$4,350,000

The source of the additional funding has been identified as the net proceeds from surplus land sales. Recent sales suggest that land prices will be higher than the amounts originally used to develop the funding estimates. In addition, staff will review the land inventory to determine if any other lands are surplus to the City's needs. If there is insufficient funding from land sales, staff will report back to Council.

d) Prequalification of General Contractors

Prequalification of General Contractors is a standard practice in the instance of large or technically challenging projects. The process of prequalification involves the identification of a short-list of contractors that have the necessary skills and experience to undertake the project. The selected General Contractors would then be eligible to bid on the construction tender.

Because this is a project of significant scale it will be essential that the General Contractor have experience in managing large public and institutional projects. It will also be a LEED building. The contractor will need to have the knowledge and experience necessary to achieve the required level of LEED certification.

The prequalification process will be structured in the following manner. The Architect, the Professional Advisor and internal and external legal counsel will work with staff from the Buildings and Facilities Department and the Purchasing Services Department to develop the Prequalification Document. In this situation, the external legal counsel will have special expertise in construction and the related procurement and tendering processes. The Prequalification Document will identify the qualifications and standards the prospective contractors will be expected to meet and will also include the criteria upon which they will be evaluated, including the relative weightings of such criteria. The following factors will form the basis for the detailed criteria:

- A history of successfully constructing projects of a similar scale;
- Experience with large public or institutional projects;
- The qualifications and experience of the construction management team, relating to projects of a similar type and scale;
- Experience with LEED buildings or similar technologies;
- Experience in constructing on an operating site;
- The ability to meet commercial/financial requirements and obtain bonding;
- Experience in building public parks;
- References.

Prior to the issuance of the Prequalification Document it will be reviewed and approved by the City's external legal counsel. Purchasing Services will place the Call for Prequalification in accordance with the City's Tendering Policy for construction projects. The ad will appear in a local newspaper, the Daily Commercial News and on the Electronic Tendering Network (ETN), providing both local and national exposure.

On receipt of the submissions they will undergo a review procedure to establish which General Contractors meet the requirements for prequalification. The Evaluation Committee will be composed of:

- The City's Professional Advisor;
- A senior representative from the Project Architect;
- The Commissioner of Community Services;
- The Commissioner of Engineering and Public Works;
- The Director of Buildings and Facilities;
- The Director of Parks Development; and
- The Director of Reserves and Investments (as required).

The committee will be supported by a number of resources. The Purchasing Services Department and external and internal legal counsel will assist in an advisory capacity. In addition, the committee is authorized to obtain advice from external experts, if such information is necessary for the proper evaluation of the submissions.

The plan is to issue the construction tender in the latter part of this year. In order to ensure a timely process, it will be necessary to begin prequalification as soon possible. Staff proposes to issue the Request for Prequalification in July/August, with the closing date set for August and with evaluation taking place in August/September. This will allow for a report to go back to Council in September/October containing the list of General Contractors that have met the criteria for prequalification.

e) Next Steps and Timelines

The following timeline presents a summary of the planned steps in the Civic Centre development process.

- **June – August, 2005:**
 - Initiate Construction Documents Phase;
 - Completion of Departmental Layouts;
 - Issue Request for Prequalification of General Contractors in July/August with an August closing date;
 - Relocate Staff to Temporary Offices;
 - Initiate hydrogeology study;
 - Commence demolition of existing buildings on the eastern part of the site.

- **September – October – November, 2005:**
 - Continue Construction Document Phase;
 - Report to Council on results of the Prequalification process (September/October);
 - Begin required site works, including construction of interim parking and site remediation;
 - Complete required hydrogeology study and implement recommendations as appropriate;
 - Work with the Region of York on its study on the potential for development of a new residential building, replacing the existing Maple Manor;
 - Complete Construction Documents Phase and report to Council.

- **December, 2005:**
 - Issue Construction Documents to the prequalified General Contractors;
 - Close of tender.

Relationship to Vaughan Vision 2007

Section 4.2 of Vaughan Vision 2007 – “Develop a new Vaughan Civic Centre that encourages a people place”, states that: “The City undertake the necessary process to develop a new Vaughan Civic Centre; Investigate funding options and; Design and build a new Vaughan Civic Centre”.

Conclusion

The Design Development Phase of the Civic Centre project has been completed. Staff is recommending that the design team be authorized to proceed to the Construction Document phase of the project. This work includes the preparation of the building plans and bid package, in preparation for the issuance of the construction tender. Staff is also recommending that the City initiate the Prequalification process for General Contractors to establish the list of qualified contractors that will be eligible to bid on the construction contract for the new City Hall. This report sets out the recommended process for the preparation of the Prequalification documents and the evaluation of the submissions from the interested contractors.

The report also recommends that the project budget be increased to address two technical issues involving site preparation, including the relocation of an existing storm sewer and addressing the groundwater conditions at the northeast corner of the property. An increase in the project budget to move from a high Silver LEED rating to LEED Gold is also being recommended. The LEED related measures are beneficial from both an environmental and economic perspective, promising savings in operating costs in the long-term.

It is also recommended that the items covered under the soft cost budget for the project be clarified and the costing allocated accordingly. This would include: the City continuing to collect its 3% (of total cost) administration fee but with the proceeds of the fee being assigned to the City

Hall Reserve Fund as a contribution to the capital funding of the project; and the waiving of the 1% (of construction value) building permit application fee and any other City fees (e.g. the current zoning amendment). The administration fee is not normally a soft cost. The recommended adjustment would maintain consistency and at the same time neutralize the effect of this fee on the capital budget. The new Civic Centre is one facility that is built to serve all taxpayers, regardless of their location or the services they may require. Council, the administration of the municipality and the delivery of all services will be provided and/or co-ordinated from the new Civic Centre. On this basis it is recommended that the administration fee be assigned to the City Hall Reserve and that all other City fees be waived.

In addition, it is recommended that the cost of the temporary accommodation for staff, during the construction period, not be included in the soft cost budget and be assigned to a separate sub-project account specific to the administration of the temporary accommodation. Temporary accommodation is not normally attributable to the soft cost budget.

The combined effect on the project budget is \$4,350,000, if all the recommended measures are implemented. At this point in time the net proceeds from the sale of surplus lands has been identified as the source of the additional funding.

Staff will be reporting back to Council at the completion of the Construction Document Phase and when the tendering process has been completed. The costs associated with the measures identified in this report represent the best estimate of their impact on the budget at this stage of completion. As the process moves the project closer to construction, through the preparation of the detailed drawings and through the tendering process, the greater detail will provide an opportunity to finalize the costs of these measures; and to determine if any other changes to the building or site are required and what their budget implications might be. At these reporting points Council will be advised of any circumstances that require alteration to the budget and direction will be sought as to how best to proceed.

On this basis, the recommendations contained in the "Recommendation" section of this report should be adopted.

Attachments

1. Site Master Plan

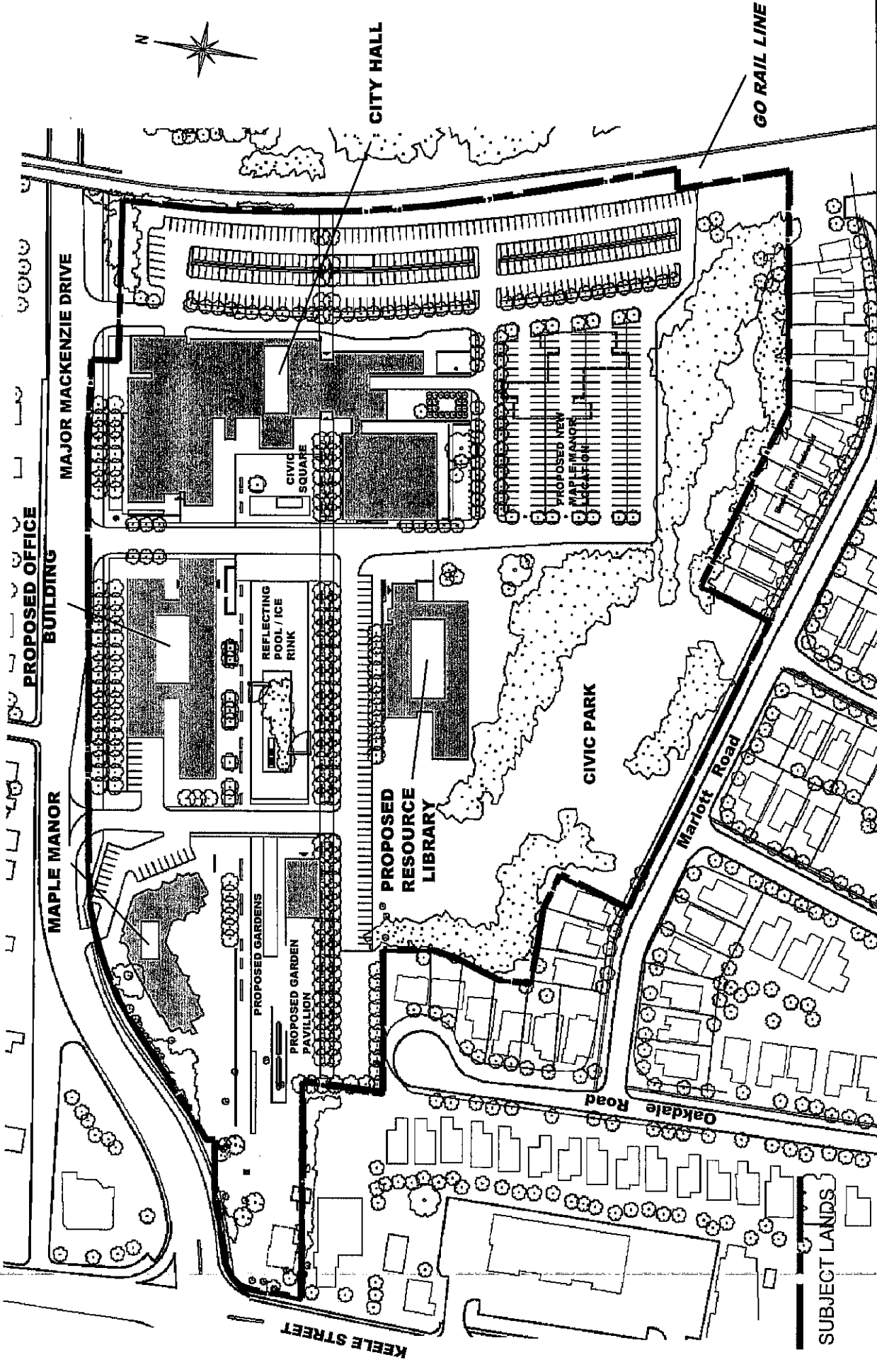
Report Prepared by:

Roy McQuillin, Manager of Corporate Policy, Ext. 8211

Respectfully submitted,

Michael DeAngelis
City Manager

Marlon Kallideen
Commissioner of Community Services



Attachment 1

Not to Scale
June 20, 2005



Development Planning Department

Concept Master Plan

Lots 19 & 20,
Concession 3

NA\DP\1 ATTACHMENTS\A.05.015