
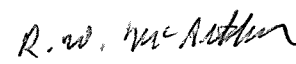

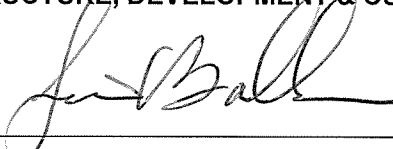

TO: GENERAL COMMITTEE

SUBJECT: SUNNIDALE PARK RESERVOIR AND BOOSTER PUMPING STATION
DESIGN ENDORSEMENT BY COUNCIL

**PREPARED BY AND
KEY CONTACT:** G. KING, P. Eng, PMP 
SENIOR PROJECT ENGINEER – ENVIRONMENTAL (Ext. 4532)

SUBMITTED BY: R. W. MCARTHUR, P. Eng. 
DIRECTOR OF ENGINEERING

**GENERAL MANAGER
APPROVAL:** R. J. FORWARD, MBA, M.Sc., P. Eng. 
GENERAL MANAGER OF INFRASTRUCTURE, DEVELOPMENT & CULTURE

**CHIEF ADMINISTRATIVE
OFFICER APPROVAL:** JON M. BABULIC 
CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That the Design of the Sunnidale Park Reservoir and Booster Pumping Station be endorsed with the following changes to the Sunnidale Park Master Plan Appendix F:
 - a) The Booster Pumping Station dimensions be approximately 9 metres by 17 metres.
 - b) The location of the Reservoir be moved approximately 10 metres westerly and 3.5 metres northerly, while not decreasing the offset from the Sunnidale Road right-of-way so that an additional 20 trees can be saved and the height of the north-east corner of the reservoir reduced.
2. That any minor modifications to the design be reviewed with the "Friends of Sunnidale" consultation group and outlined via Memorandum to General Committee prior to tender and construction.

PURPOSE & BACKGROUND

3. The design of the Sunnidale Park Reservoir and Booster Pumping Station has been well advanced including the enhanced public participation component.
4. The purpose of this Staff Report is to:
 - a) Advise General Committee of the progress of the Design
 - b) Advise General Committee that amendments to the Sunnidale Park Master Plan will be required as the Sunnidale Park Reservoir and Booster Pumping Station design has progressed.
5. Council Motion 06-G-500, as amended by Resolution 04-A-450 (Amendment #1), directed Staff to undertake the site selection/design concurrently with the preparation of the Sunnidale Park Master Plan. Further, Motion 06-G-501, as amended by Resolution 04-A-450 (Amendment #2) directed that a Sunnidale Park Master Plan Steering Committee be struck and also directed the composition of said committee. Both Motions are included in Appendix "A".

6. Council Motion 09-G-262 (See Appendix "A") adopted the Sunnidale Park Master Plan in principle which thus determined the site location of the Sunnidale Reservoir and Booster Pumping Station. (A copy of the Plan is provided in the Councillor's Lounge and the 4th Floor City Hall – Engineering)
7. Note that further to the Sunnidale Master Plan, Council Motion 09-G-267 (See Appendix "A") directs staff to present the final detail design drawings to Council for endorsement.
8. Council Motion 09-G-315 (See Appendix "A") directed staff to issue the Municipal Class Environmental Assessment (EA) Notice of Completion which identified the need for a Reservoir and Booster Pumping Station, and also confirmed that Sunnidale Park as the preferred area. The Notice of Completion was issued July 23, 2009. In addition, staff were to report back to General Committee with the preliminary design for endorsement. (A copy of the Class EA document is provided in the Councillors' Lounge and the 4th Floor City Hall – Engineering).
9. A Project Milestone History is provided in Appendix "B" that summarizes the key milestones to date.
10. Note that while outside the scope of this Staff Report, the Design and Construction Branch of the Engineering Department is project managing several Transmission Watermain projects that are to be constructed in conjunction with bringing the Sunnidale Park Reservoir and Booster Pumping Station on-line that include as follows (Note that the "Proposed" components are required for the integration of the Sunnidale Park Reservoir and Booster Pumping Station into the overall water distribution system, however they are still subject to the current Work Planning exercise):
 - a) Anne Street/Letitia Street Transmission Watermain from Anne Street Booster Pumping Station/Reservoir to Sunnidale Road (Construction completed 2009)
 - b) Anne – Cundles Transmission Watermain from the Anne Street Reservoir to the Bayfield Street Elevated Water Storage Reservoir (Completed 2010)
 - c) Sunnidale Road Transmission Watermain from Letitia Street to Wellington Street including an undercrossing of Highway 400 (Proposed design in 2010/2011, Proposed construction 2012)
 - d) Sunnidale Road Transmission Watermain from Letitia Street to Sunnidale Park Reservoir/Booster Pumping Station (Proposed design in 2011, Proposed construction 2012)
 - e) Sunnidale Road Transmission Watermain from Sunnidale Park Reservoir/Booster Pumping Station to Cundles (Proposed design 2011, Proposed construction 2012).
11. General Committee was advised that a public Open House was to be held on June 29, 2010. The objective of the Open House was to consult with the public regarding the Preliminary Design Concepts, including:
 - a) Present architectural options
 - b) Present landscaping treatment
 - c) Present design layout
 - d) General follow-up on project process.

12. The June 29, 2010 Open House was well attended, with 57 attendees. The Open House was advertised in the local papers, included in the City Page, radio advertisements, hand-delivered notifications to those residents that had previously expressed interest in the project, and a hand-delivered notice to the residents in the general area.
13. Subsequently, the June 29, 2010 Open House presentation boards were placed on the City's website. They can still be found on the project webpage at www.barrie.ca/Parks and Trails > Parks > Sunnidale Park/
14. In conjunction with the June 29, 2010 Open House, those who were interested could participate in a survey, or on line, at the above noted web address (note that the survey has since been made inactive since the official public comment period submission date has expired). The results of the survey will be discussed in the Analysis section of this Staff Report.

Sunnidale Park Master Plan

15. Section 4.4.1 of the Sunnidale Park Master Plan, specifically Table 1.0 Park Program, identifies various Program Elements for each Amenity/Facility. For the Water Reservoir and Pump House the Program Elements are shown in Appendix "C" and how they have been satisfactorily addressed in the Detail Design.
16. Section 6.2 of the Sunnidale Park Master Plan, specifically Table 2.0, identifies the Implementation Strategy. A summary of the pertinent recommendations are included in Appendix "C", and how they have been, or will be, satisfactorily addressed in the Detail Design.
17. As per Motion 10-G-201 (See Appendix A), on November 17, 2010 The Friends of Sunnidale Park Consultation Group were presented an update of the project and were shown the Design Drawings. The presentation was well received and there were no comments that would have changed the design.

Approvals/Sign-offs

18. As part of the Preliminary Design various stakeholders were circulated information, including Approval Agencies, Utilities and City of Barrie Departments. A summary is provided in Appendix "D" of the Approvals/Sign-offs that will be required.

Class EA Commitments

19. Appendix "E" summarizes the Class EA commitments and associated commitments and explains how each commitment has been addressed.

Preliminary Design

20. A Preliminary Design Report has been prepared by the Engineering consultants, Cole Engineering, entitled Sunnidale Park Reservoir and Booster Pumping Station, Preliminary Design Report, dated November 2010 that summarizes the criteria that the detail design will be developed with, based on technical requirements and public input. (A copy of which is provided in the Councillors' Lounge and the 4th Floor City Hall – Engineering)
21. In general, the design of the Sunnidale Park Reservoir and Booster Pumping Station is comprised of:
 - a) 18.4 million litre underground reservoir (dimensions approximately 40 m by 20 m)
 - b) 15 million litres per day - Booster Pumping Station (dimensions approximately 9 m by 17 m) that contains pumps, standby power, chlorination equipment, process pipework, electrical, mechanical, and instrumentation
 - c) Earthworks, Restoration and Landscaping.

22. Several design drawings have been provided (See Appendix "F") in the Councillors' Lounge and the 4th Floor City Hall – Engineering. The design drawings are approximately at the 50% stage, which means the remaining design is the detailing of structural reinforcement/connections, interior electrical detailing, process piping, instrumentation, etc. It is not anticipated that there will be any major redesigns or reworks at this stage of the design.

Architectural

23. The exterior architecture is shown in Appendix "F".
24. The internal equipment layout of the proposed pumping station has been consolidated to minimize the above grade footprint. Below grade, there is an equivalent of two stories that are required to accommodate the associated pipework. The Booster Pumping Station's simple rectangular form is enhanced by the curving roof form that provides screening of roof mounted equipment and sheltering overhangs on the north and south sides. The curved roof structure was chosen to reduce the apparent height of the Booster Pumping Station. The proposed roofing material is a durable, long life, prefinished metal standing seam system.
25. The Booster Pumping Station's exterior will have a natural stone masonry base, with a combination of cementitious panels and wood siding on the upper panels. The exposed structure and soffits will have a wood finish. High level glazing will be introduced on the north façade and a glazed section of roof will allow infiltration of natural light to the windows.
26. Exterior material colours have been selected to blend with the natural tones of the coniferous background, including the metal roofing.
27. To reduce the building maintenance due to the potential of vandalism, the natural stone base, which is proven tough and durable, has been used and windows have been placed high in the structure. A balance was sought since too much stone would make the building appear bigger and stronger instead of trying to blend into the background.
28. The interior of the building will be painted concrete block, with specialized sound absorbing boards in the stand-by generator room, including a "Hospital Grade-plus" silencer and deep acoustical louvres. The height of the stand-by generator exhaust stack has been nearly eliminated by utilizing specialized equipment that will be located within the framing of the curved roof, without increasing the building's overall height.
29. The Booster Pumping Station's overall height has been minimized as much as possible. Several strategies were investigated but ruled out, such as: placing the taller equipment below ground (however, more susceptible to flooding equipment damage); and using smaller equipment and omitting equipment (however, caused Health and Safety issues if chlorine scrubber was omitted). It was concluded that the height of the building is dependent upon the height of the chlorine scrubber and the stand-by generator, specifically in combination with a silencer. Several renditions and discussions with the designers have reduced the height of the roof; however, the current height is required to accommodate the equipment. The architect proposed several options to minimize the roof height while still maintaining functionality. To eliminate the attic space, a flat roof could be used; however there would still be screening requirements for the Heating and Ventilation equipment. The option of a curved roof was proposed which would reduce the overall height that would have resulted from a peaked roof. The curved roof provides additional architectural flexibility with overhangs, etc. The roof configuration options were presented at the Public Open House and the results are provided in the below Analysis Section.
30. PowerStream is currently studying the power supply requirements to the Sunnidale Park Booster Pumping Station. Preliminary indications are that a supplementary overhead power line will be required within the existing Sunnidale Road Right-of-Way from Cundles Road to the Booster Pumping Station site. It is anticipated that the existing poles will be replaced with taller poles but will be in the approximate same locations. There will then be a green transformer required at the

east edge of the Sunnidale Road right of way prior to bringing the power underground to the Booster Pumping Station Building. PowerStream has advised that due to the taller poles there may be a need to trim the trees at the higher levels. Also, PowerStream noted there may be a short power interruption to transfer to the new powerline in 2011. PowerStream will use their typical notification process to advise their customers of the temporary interruption.

Landscaping

31. The landscape development (refer to architectural drawings in Appendix "F") will consist of preserving existing vegetation where possible and replacement or new landscaping in keeping with the Sunnidale Park Master Plan. After detail review and on consultation with the City's urban forester, the reservoir siting was nominally adjusted to preserve the largest number of the highest quality existing vegetation. There will also be infilling of the existing coniferous edge along Sunnidale Road to provide additional screening. The planting work will take place in Fall 2010 or early Spring 2011 so that the screening will be in place prior to construction.
32. One of the key recommendations in the Sunnidale Park Master Plan was to minimize the reservoir impacts on the park. During the design development of the building and its placement within the park, the view shed from Sunnidale Road will be maintained.
33. Prior to construction of the reservoir, existing fescue grasses and topsoil found presently within the construction limit will be saved as "Seed Bank" material, and used in the restoration of the reservoir footprint and areas disturbed during construction. Gentle berms and an undulating landscape will reflect the former golf course topography and character of the park. As a result, fencing will not be required around the structure, further integrating this infrastructure into the natural character of the park.
34. A meandering pathway will cross the reservoir area, with small seating areas incorporating benches, stone and ornamental grass features, which is reflective of the park arboretum site.
35. Proposed vehicle circulation routes will be minimized with existing internal park accesses utilized where possible. Only the routes needed for daily access will have asphalt. Other routes will have a reinforced grass type surface and/or will be made part of the trail system.

ANALYSIS

36. Feedback on the preliminary design was obtained from the June 29, 2010 Open House questionnaires/survey; electronic survey; individual responses; and individual meetings.
37. The survey results are included in Appendix "G". In general the participants responded as follows:
 - a) 86% preferred the curved roofline option, over the flat roof
 - b) 98% agreed with the use of natural building materials
 - c) 96% agreed that the building should blend into the background
 - d) 79% agreed that the appropriate level of architecture has been included in the design
 - e) 83% agreed that the proposed location has kept the view shed intact
 - f) 96% agreed with the conceptual landscaping plan
 - g) 90% agreed that the information that was available was satisfactory to assist in providing response.

38. As part of the survey results, written comments from the participants are summarized in Appendix "G". Responses by City Staff are also included as part of the aforementioned summary.
39. As Preliminary Design progressed, it was evident that there would be two main issues to be addressed:
- a) In the Sunnidale Park Master Plan the approximate area for the inground reservoir was (90 m by 35 m) which is comparable to the current reservoir sizing (91 m by 38.5 m). However, the functionality of the Booster Pumping Station would require a larger footprint than what was stated in the Park Master Plan document which stated an approximate area of 80 m² (8 m by 10 m) whereas the current design requires 153 m² (9 m by 17 m).

The reasons for the floor sizing are as follows:

- i) It was found that since the reservoir floor level was lower than typical, that additional floor area was required for lifting access and a staging area to lift equipment from three floors down.
- ii) It was also deemed prudent to add an emergency chlorine scrubber system due to the proximity of the park. A scrubber has typically not been provided in the past at other water facilities due to the minimal probability of an accidental interior leak.
- iii) An additional pump was added to increase security and robustness of the overall water system.

The table below shows comparable City Booster Pumping Stations. It can be seen that the proposed Preliminary design of the Sunnidale Road Booster Pumping Station has a reasonable footprint.

| WATER FACILITY | AREA (FOOTPRINT) |
|---|-----------------------|
| Identified in the Sunnidale Park Master Plan –Proposed Booster Pumping Station sizing | 80 m2 (8 m by 10 m) |
| Proposed Preliminary Design - Sunnidale Park Booster Pumping Station (includes chlorine scrubber) | 153 m2 (9 m by 17 m) |
| Existing Big Bay Point Road Booster Pump Station | 144 m2 (8 m by 18 m) |
| Existing Harvie Road Booster Pumping Station | 198 m2 (11 m by 18 m) |

- b) The second main issue relates to the siting of the reservoir as proposed in the Sunnidale Park Master Plan – Figure F Master Plan. When the outline for the conceptual reservoir was overlain on a detailed tree Inventory, it was found that if the reservoir was shifted westerly approximately 10 m and 3.5 m northerly, that the overall quantity of trees that would be impacted was reduced. The proposed shift also saved a healthy White Pine (500 mm diameter trunk with a 10 m canopy). The City's Urban Forester and the Supervisor of Parks Planning have concurred that the proposed shift will be better for the preservation of the existing vegetation. An additional benefit of shifting the reservoir is that the ground elevation of the north-east corner will be lower by an additional estimated 300 mm.

40. There has been an effort to obtain a balance for the building's exterior in regard to cost, architectural intent and functionality. It was recognized that this building will not be open to the public, however it is acknowledged that the building will be seen from an open public area.
41. The Architectural/Engineering/Landscaping Drawings and Contract Documents will be quality checked for completeness and accuracy by City staff.
42. A comprehensive and thorough geotechnical, existing subsurface utilities and archaeological investigations have been undertaken at key locations. Recommendations from the various background reports have been checked to ensure they have been incorporated into the drawings.
43. Approval agencies preliminary comments have been received and their effects on the scope of work and budget have been assessed and incorporated into the overall budget.
44. Project cost forecasting and budgeting have taken into account the possibility of unexpected increased construction costs by establishing contingencies that reflect the project type and complexity.
45. Subject to Council approval of the recommended motion, Staff will finalize the detail design drawings. Any minor modifications to the design will be reviewed with the "Friends of Sunnidale" consultation group and outlined via Memorandum to General Committee prior to proceeding to tender and construction.
46. Staff will enter into agreements with specialty consultants/contractors (for example, biologist, roofing inspection) as required, subject to budget limitations and procurement policies.

ENVIRONMENTAL MATTERS

47. The following environmental matters have been considered in the development of the recommendation:
 - a) In accordance with the City's Energy Conservation Policy, the Sunnidale Park Reservoir and Booster Pumping Station have been designed with energy conservation in mind. Due to the unique type of building, it is challenging to implement typical LEED (Leadership in Environmental and Energy Design) Silver measures therefore the project will meet the intent of LEED where practical and cost effective. The City's Environmental Officer has provided his endorsement of the preliminary design.
 - b) Typical construction techniques will be utilized to minimize sediment and erosion originating from the construction site.
 - c) Tree protection will be in place prior to construction commencement.

ALTERNATIVES

48. The following Alternatives are available for consideration by General Committee:

Alternative #1

General Committee could choose to not endorse the design and require the Consultant to redesign the Booster Pumping Station.

This Alternative is not recommended as the public survey results show that the appropriate level of architecture has been utilized and the curved roof is the preferred design.

Alternative #2

General Committee could choose to have the final detail design drawings presented to Council for endorsement prior to going to tender and construction.

This Alternative is not recommended because key design elements of public concern have been established and are ready to be endorsed. Any minor modifications to the design can be reviewed with the "Friends of Sunnidale" consultation group and outlined via Memorandum to General Committee.

FINANCIAL

49. There are no direct financial implications related to the recommendations in this report as it relates to the endorsement of the design.
50. Construction is anticipated to begin in the Fall of 2011, subject to the approval of funding as part of the 2011-2020 Business Plan. The construction and clean-up is anticipated to be completed in the Spring of 2013. The draft 2011 – 2020 Business Plan shows the following construction and engineering cash flow with funding from the water rate reserve fund and development charges:

| | | |
|------|---|----------------------|
| 2011 | - | \$ 3.0M |
| 2012 | - | \$15.8M |
| 2013 | - | \$ 1.0M |
| 2014 | - | \$.4M (maintenance) |

The recommended design had no impact on previous budget projections (\$21.0M in 2009).

51. It is anticipated that the impact on the operating budget would be \$80,000 (2010 dollars) starting in 2013. The operating impact would include utilities, chemicals, building maintenance, staff time and equipment.

LINKAGE TO COUNCIL STRATEGIC PRIORITIES

52. The recommendations included in this Staff Report support the following City Council's Strategic Priorities:
- Attract, Retain and Expand Business for Barrie
 - Ensure Proactive Communications with the public and increased opportunities for Citizen Engagement
 - Increase fiscal responsibility to ensure controlled spending and best value for tax dollars

APPENDIX "A"



City Clerk's Office
COUNCIL DIRECTION MEMORANDUM

TO: Director of Engineering
Director of Leisure, Transit & Facilities
Director of Operations
City Treasurer

FROM: John Sisson, City Clerk

DATE APPROVED BY COUNCIL: October 2, 2006

AMENDED BY RESOLUTION 04-A-450:

AMENDMENT #1

That motion 06-G-500 of General Committee Report No. 37, Section "G" concerning the Proposed Zone 2 North System Improvements Municipal Class Environmental Assessment Schedule "B" Document be removed from Section "G" and reintroduced as Section "H".

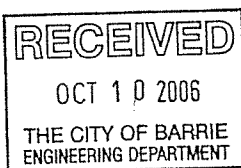
06-G-500 PROPOSED ZONE 2 NORTH SYSTEM IMPROVEMENTS MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT SCHEDULE "B" DOCUMENT

That Council consideration of the following motion be deferred until the City Council meeting scheduled for October 2, 2006:

"That, further to the direction provided in motion 06-G-444 regarding the Proposed Zone 2 North System Improvements Municipal Class Environmental Assessment Schedule "B" Document, the final site selection/project design for the construction of a water reservoir located within Sunnidale Park be undertaken concurrently with the completion of a Parks Master Plan for Sunnidale Park including the adjacent Environmental Protection (EP) Area." (File: D00) (06-G-444) (ENG045-06)"

Direction:

Director of Engineering – action
Director of Leisure, Transit & Facilities – action
Director of Operations – note
City Treasurer – note



| THE CITY OF BARRIE ENGINEERING DEPARTMENT | | | |
|--|--------|------|---------|
| | ACTION | INFO | INITIAL |
| DIRECTOR | ✓ | | RE |
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| Woyd | | ✓ | |
| FILE # | | | |



City Clerk's Office
COUNCIL DIRECTION MEMORANDUM

TO: City Clerk
Director of Engineering
Director of Leisure, Transit & Facilities
Director of Operations

FROM: John Sisson, City Clerk

DATE APPROVED BY COUNCIL: October 2, 2006

AMENDED BY RESOLUTION 04-A-450:

AMENDMENT #2

That motion 06-G-501 of General Committee Report No. 37, Section "G" concerning Sunnidale Park Master Plan Steering Committee be removed from Section "G" and reintroduced as Section "I".

06-G-501 SUNNIDALE PARK MASTER PLAN STEERING COMMITTEE

That Council consideration of the following motion be deferred until the City Council meeting scheduled for October 2, 2006:

1. That a Sunnidale Park Master Plan steering committee reporting through the Community Services Committee, be struck to help oversee the preparation of a comprehensive Parks Master Plan for Sunnidale Park including the adjacent Environmental Protection (EP) Area.
2. That the Steering Committee be comprised of two (2) members of council (one of which is the Ward Councillor), one (1) representative of the Barrie Garden Club and two (2) members of the public to be appointed through Striking Committee and that the Staff Report to Striking Committee include recommended terms of reference for the Sunnidale Park Master Plan Steering Committee.
3. That a Request for Proposals be issued for the development of a Master Plan for Sunnidale Park." (File: C00) (06-CMSC-041)

Direction:

City Clerk – Nina – note for CMSC
- Charlene – note for Striking Committee
Director of Engineering – action
Director of Leisure, Transit & Facilities – action
Director of Operations – note

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OCT 10 2006
THE CITY OF BARRIE
ENGINEERING DEPARTMENT

| THE CITY OF BARRIE ENGINEERING DEPARTMENT | | | |
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City Clerk's Office
COUNCIL DIRECTION MEMORANDUM

TO: Director of Planning
Director of Engineering

FROM: Dawn McAlpine, City Clerk

DATE APPROVED BY COUNCIL: June 8, 2009

09-G-262 SUNNIDALE PARK MASTER PLAN

That the Sunnisdale Park Master Plan be adopted in principle. (06-G-500) (06-G-501) (06-G-578) (09-G-023) (09-G-021) (09-G-184) (09-CMSC-038) (File: R00)

Direction:

Director of Engineering – note
Director of Planning – note

RECEIVED
JUN 15 2009
THE CITY OF BARRIE
ENGINEERING DEPARTMENT

| THE CITY OF BARRIE ENGINEERING DEPARTMENT | | | |
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| DIRECTOR | | ✓ | <i>DM</i> |
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| MGR OF P&D | | | |
| OTHER | | | |
| <i>Walter F. Stewart</i> | | ✓ | |
| <i>Stewart</i> | | ✓ | |
| FILE # _____ | | | |

TO: Director of Planning
Director of Engineering

FROM: Dawn McAlpine, City Clerk

DATE APPROVED
BY COUNCIL: June 8, 2009

09-G-267 SUNNIDALE PARK MASTER PLAN – FINAL DESIGN DRAWINGS FOR RESERVOIR

That final detail design drawings for the reservoir be presented to Council for endorsement. (06-G-500) (06-G-501) (06-G-578) (09-G-023) (09-G-021) (09-G-184) (09-CMSC-038) (File: R00)

Direction:

Director of Planning - note
Director of Engineering – action

RECEIVED
JUN 15 2009
THE CITY OF BARRIE
ENGINEERING DEPARTMENT

| THE CITY OF BARRIE ENGINEERING DEPARTMENT | | | |
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| MGR OF D&C | ✓ | | |
| MGR OF P | ✓ | | <i>W</i> |
| MGR OF P&D | | | |
| OTHER | | | |
| <i>Walter F</i> | ✓ | | |
| <i>Stew P</i> | ✓ | | |
| FILE # | | | |

TO: Director of Legal Services
Director of Engineering
Director of Finance

FROM: Dawn McAlpine, City Clerk

DATE APPROVED BY COUNCIL: June 29, 2009

09-G-315 PROPOSED ZONE 2 NORTH WATER SYSTEM IMPROVEMENTS - MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT - SCHEDULE "B" DOCUMENT

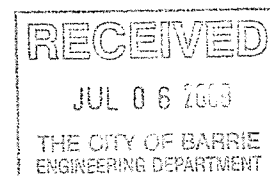
1. That based on the Municipal Class Environmental Assessment (Class EA) Study, "Proposed Zone 2 North System Improvements", "Alternative 5B – Provide Ground Storage/BPS Facility Mutually Shared by Zone 1/2N; Sunnidale Revised Site E", as shown in Staff Report ENG007-09, be endorsed as the Preferred Alternative Solution, and that staff file a Notice of Completion with the Ministry of the Environment.

2. That based on the successful completion of the Class EA process, the Engineering Department proceed with the preliminary design of the Ground Storage, Booster Pumping Station and associated watermain, and report back to General Committee with the design for endorsement. (ENG007-09) (File: W03-2N)

Direction:

Director of Legal Services - note
Director of Engineering - action
Director of Finance - note

| THE CITY OF BARRIE ENGINEERING DEPARTMENT | | | |
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| | ACTION | INFO | INITIAL |
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| MGR OF D&C | ✓ | | |
| MGR OF IP | ✓ | | <i>MD</i> |
| MGR OF P&D | | | |
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| <i>Stenop</i> | ✓ | | |
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TO: City Clerk
Director of Engineering
Police Chief

FROM: Dawn McAlpine, City Clerk

DATE APPROVED
BY COUNCIL: May 17, 2010

10-G-201 SUNNIDALE PARK MASTER PLAN CONSULTATION GROUP

1. That a "Friends of Sunnidale Park" consultation group be established to assist staff and City Council with implementation of the Sunnidale Park Master Plan.
2. That the "Friends of Sunnidale Park" consultation group may include, but not be limited to the following organizations subject to the park improvements being proposed:
 - a) The Barrie Garden Club;
 - b) Living Green Barrie;
 - c) The Brereton Field Naturalists Club of Barrie;
 - d) The four school boards (Simcoe County District School Board, Simcoe Muskoka Catholic School Board, Conseil Scolaire De District Catholique Centre-Sud, and Conseil Scolaire De District Du Centre Sud-Ouest);
 - e) The Barrie Police Services;
 - f) The First Christian Reformed Church;
 - g) Ontario Society for the Prevention of Cruelty to Animals (OSPCA Barrie Branch);
 - h) Adjacent businesses such as the Travelodge Barrie and Bayfield Mall;
 - i) The Lake Simcoe Region Conservation Authority; and
 - j) The local service clubs.
3. That public open houses be hosted once per year to provide updates with respect to the status of the Sunnidale Park Master Plan and obtain feedback from the general public concerning initiatives related to the Plan.
4. The staff in the Engineering Department be responsible for the overall coordination of the "Friends of Sunnidale Park" consultation group, and that the Engineering Department provide annual updates to Council via memorandum on the implementation of the Sunnidale Park Master Plan and on the input/recommendations from the public open house, as required. (ENG031-10) (File: R04-SU)

Direction:

City Clerk - Dawn/Carey - note
Director of Engineering - action
Police Chief - note

APPENDIX "B"

**SUNNIDALE PARK RESERVOIR AND BOOSTER PUMP STATION
MILESTONES**

| | |
|--------------------------|---|
| <p>June 2005</p> | <p>Municipal Class Environmental Assessment Schedule 'B' Proposed Zone 2 North System Improvements</p> <ul style="list-style-type: none"> • Prepared Environmental Study Report • Undertook two Public Open Houses (June 2005 and January 2006) • Update Presentation made to Council (March 2006) • Site E alternative recommended in Staff Report ENG045-06 (June 2006) • Presentation made to Community Services (August 2006) • ENG 045-06 Staff Report returns to General Committee (October 2006) <p><u>Key Motions Associated with Design</u></p> <ul style="list-style-type: none"> • Motion 06-G-500, "That, further to the direction provided in motion 06-G-444 regarding the Proposed Zone 2 North System Improvements Municipal Class Environmental Assessment Schedule "B" Document, the final site selection/project design for the construction of a water reservoir located within Sunnidale Park be undertaken concurrently with the completion of a Parks Master Plan for Sunnidale Park including the adjacent Environmental Protection (EP) Area." • Motion 06-G-501, "That a Sunnidale Park Master Plan steering committee reporting through the Community Service Committee be struck to help oversee the preparation of a comprehensive Parks Master Plan for Sunnidale Park including the adjacent Environmental Protection (EP) area..." |
| <p>April 2007</p> | <p>Sunnidale Park Master Plan Process</p> <ul style="list-style-type: none"> • Established a Steering Committee including members of Council and the public • Met with stakeholders • Undertook two Public Information Centres • Presented the Park Master Plan to General Committee for endorsement, entitled "Sunnidale Park Master Plan," dated May 2009. |
| <p>June 2009</p> | <p>Sunnidale Park Master Plan Staff Report</p> <p><u>Key Motions Associated with Design</u></p> <ul style="list-style-type: none"> • Motion 09-G-262, "That the Sunnidale Park Master Plan be adopted in principle..." • Motion 09-G-265, "That a Management Committee (Friends of Sunnidale Park) be appointed with public representation..." • Motion 09-G-267, "That final detail design drawings for the reservoir be presented to Council for endorsement..." |

| | |
|---------------------------------|---|
| <p>June 2009</p> | <p>Proposed Zone 2 North Water System Improvements Municipal Class Environmental Assessment – Schedule ‘B’ Document (ENG007-09)</p> <p><u>Key Motions Associated with Design</u></p> <ul style="list-style-type: none"> • Motion 09-G-315, “That based on the Municipal Class Environmental Assessment (Class EA) Study, “Proposed Zone 2 North System Improvements”, “Alternative 5B – Provide Ground Storage/ BOOSTER PUMPING STATION Facility Mutually Shared by Zone 1/2N; Sunnidale Revised Site E” as shown in Staff Report ENG007-09, be endorsed as the Preferred Alternative Solution, and that staff file a Notice of Completion with the Ministry of Environment.” • Motion 09-G-315, “That based on the successful completion of the Class EA process, the Engineering Department proceed with the preliminary design of the Ground Storage, Booster Pump Station and associated watermains and report back to General Committee with the design for endorsement.” |
| <p>July 2009</p> | <p>Notice of Completion Issued</p> |
| <p>August 2009</p> | <p>Class EA Mandatory Public Comment Period Expired</p> <ul style="list-style-type: none"> • No Part Two Orders received by MOE |
| <p>October 2009</p> | <p>Public Request For Proposal Issued</p> <ul style="list-style-type: none"> • For the Preliminary Design, Detail Design and Contract Administration • Cole Engineering awarded project |
| <p>June 29, 2010</p> | <p>Public Open House at Dorian Parker Centre</p> <ul style="list-style-type: none"> • Updated Public on design progress • Reviewed Conceptual designs and alternative roof designs • Public feedback/survey conducted on conceptual design |
| <p>November 17, 2010</p> | <p>Sunnidale Park Consultation Group</p> <ul style="list-style-type: none"> • Staff reviewed the project with the consultation group as per Motion 10-G-201 |
| <p>December 13, 2010</p> | <p>Design</p> <ul style="list-style-type: none"> • With respect to the Class EA, as per Motion 09-G-315, Staff is looking for General Committee to endorse the design. |

APPENDIX "C"

| SUNNIDALE PARK RESERVOIR AND BOOSTER PUMPING STATION COMMITMENTS STATUS Sunnidale Park Master Plan Section 4.4.1, specifically Table 1.0 Park Program | |
|--|---|
| IDENTIFIED REQUIREMENT | STATUS |
| Locate Reservoir near Sunnidale Road | Reservoir and Booster Pumping Station is located as per Park Master Plan with minor shift which allows: saving of a large quality tree, saving of an additional 20 trees; allows the south-east corner of the reservoir to be approximately 300 mm lower. |
| Pump House to be designed for minimum LEED Silver | Although this is a unique building, a LEED certified Professional has prepared a report, provided recommendations and continues to work to offer improvements to the design so that the Booster Pumping Station can achieve the intent of LEED Silver. |
| Protect Existing trees (identified as significant) and enhance planting buffer along Sunnidale Road | <p>The City's Urban Forester will be reviewing the Landscape Architect's Tree Protection Drawings that will be required as part of the Site Alteration Permit and the tender drawings. The Successful Contractor will be required to implement the approved tree protection plan and the City will monitor throughout construction and the Maintenance Period.</p> <p>Fencing will be placed around tree stands and individual trees to minimize the potential for the contractor to accidentally damage the remaining trees</p> <p>To increase the number of trees that are to be saved, sheet piling will be utilized so that gradual slopes can be avoided which would require additional trees to be removed.</p> <p>Prior to construction the City will implement selective specimen tree planting/management along Sunnidale Road to assist in establishing buffering and screening of the construction activities and proposed Booster Pumping Station.</p> |
| Buffered views from adjacent residential areas and park areas | <p>See notes above in regards to the Sunnidale Road buffering</p> <p>The Booster Pumping Station will be buffered from views from the north by berming and tree plantings as per the Landscape Architect's Landscaping drawings, however there cannot be trees on top of the reservoir. The view from the east will be obscured by low plantings and higher bush plantings since there cannot be trees located on top of the reservoir.</p> |
| Maintenance access and parking (combine with other functions of the Park as much as possible) | <p>The main maintenance access for the Booster Pumping Station will be located off the existing northerly access road to the existing facilities. It is anticipated that there will be one maintenance vehicle per day. The Booster Pumping Station access will be controlled to prevent other vehicles from accessing the building. Parking for City maintenance vehicles only will be adjacent to the Booster Pumping Station.</p> <p>A secondary emergency access to the Booster Pumping Station will be placed over the proposed servicing corridor which will stretch from the Booster Pumping Station to the Sunnidale Road Right-of-way. This access will be secured so that non-City vehicles will not be able to access. It will also be softscaped with reinforced pathway with grass cover so that it will not look like a vehicular access.</p> <p>Secured access hatches to the reservoir that are required for Health and Safety reasons will have the meandering pathway in close proximity to reduce the effects of vehicular traffic in the park. There may be only one maintenance vehicle relating to the reservoir per month under regular security checks.</p> |
| Security lighting | <p>Continuous lighting of the overall facility will be minimized</p> <p>The design of the security, morality and motion lighting will be reviewed as design progresses. It is anticipated that there will be no highpole spread lighting in relation to the Booster Pumping Station design.</p> |
| Pump House to be 80m2 (861ft2) in size | The proposed footprint of the Booster Pumping Station after design has been found to be larger than anticipated. This is further discussed in the Staff Report |

| | |
|---|--|
| <p>Main Trail – Granular trail with trail hardening to width of 3.0 metres where required</p> | <p>The City will be implementing the recommendations from the Parks Planning Section as to the width of the trail and the surface composition. The recommendations will be based on the trail hierarchy as outlined in the Parks Master Plan</p> |
| <p>Trails will be barrier free and has been configured to have slopes less than 8%</p> | <p>The City will be implementing the recommendations from the Parks Planning Section as to barrier free requirements for the trails that will be temporarily relocated due to the construction and the final trail layout in the vicinity of the newly constructed works.</p> <p>It is proposed to meander the trail across the top of the buried reservoir so that the trail slopes do not exceed 8%.</p> |
| <p>Seating along trails to be low maintenance and durable</p> | <p>As part of this design of the meandering pathway across the top of the reservoir, seating will be placed at locations to be approved by the City's Parks Planning Section. The City will also be installing its typical park furniture with emphasis on low maintenance and durability</p> |
| <p>Arboretum – Trail connections between the Arboretum and other parts of the park</p> | <p>Trail connections will be temporarily relocated in the vicinity of the construction to allow continued use during construction. The final restoration of the area will have a meandering trail on top of the buried reservoir that will connect the arboretum and the other public facilities within the park.</p> |
| <p>Views/Vistas – Existing views/vistas in open space to be preserved</p> | <p>The location of the Booster Pumping Station and buried reservoir have maintained the existing views/vistas in the open space area.</p> |
| <p>Views and vistas to be considered when locating seating areas, trails and other park additions</p> | <p>Location of the seating areas will be made in consultation with the Parks Planning Section</p> |
| <p>Open Space Area – Protect existing views/vistas</p> | <p>There will be no structures located on top of the reservoir so therefore the existing views/vistas are protected with the burying of the reservoir.</p> |

**SUNNIDALE PARK RESERVOIR AND BOOSTER PUMPING STATION
COMMITMENTS STATUS**

**Sunnidale Park Master Plan
Section 6.2, Specifically Table 2.0 Implementation Strategy**

| IDENTIFIED STRATEGY | STATUS |
|---|---|
| B3 - Where possible above ground utilities shall not be located on the park side of Sunnidale Road | PowerStream (Hydro) has been notified of this strategy and will be replacing the existing poles with higher poles in approximately the same location. Bell follows PowerStream's lead since they use the same poles. |
| B4 - The reservoir, pumphouse and access road be positioned in Sunnidale Park in the location identified in the Master Plan | Discussed in the main body of this Staff Report. In summary, further detailed reviews and survey of the site have concluded that by shifting the reservoir 10 metres to the west that we can save an additional 20 trees including several significantly sized healthy trees and are able to lower the north- east corner of the grading approximately 300mm, while still keeping the view shed intact. |
| B5 - Any above ground infrastructure that is to installed as part of the reservoir construction be installed to minimize impact on the park | The Booster Pumping Station height has been reduced as much as practical and we have provided enhanced landscaping surrounding the building to reduce the hard edges. The access hatches for the reservoir that are needed for Health And Safety reasons have been incorporated into the landscaping clusters and meandering pathway. There will be no communications towers as part of this project |
| B7 - Final Detail Design drawings for the reservoir be presented to Council for endorsement | The design is being presented to Council via Staff Report ENG025-10. |
| D1 - Archaeological Assessment – Stage 2 where construction is planned | A Stage 2 Archaeological Assessment has been undertaken where the construction is planned and the report has been registered with the Ministry of Culture. |
| E2 - Tree Enhancement Planting (Reservoir) | The landscaping plan will include the placement of additional trees at the Sunnidale Road Right-of-way, infilling and cluster planting to provide screening at key locations. The drawings will be endorsed by Parks Planning and the City's Urban Forester. Note that we are unable to plant trees on top of the reservoir. |
| E4 - Inventory of trees on the table lands adjacent to Sunnidale Road | Parks Planning and the City's urban Forester have undertaken a tree inventory. The information was used to determine the finalized placement of the reservoir and Booster Pumping Station to save an additional 20 trees. |

APPENDIX "D"

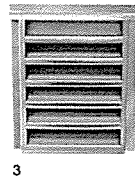
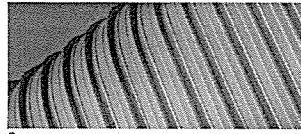
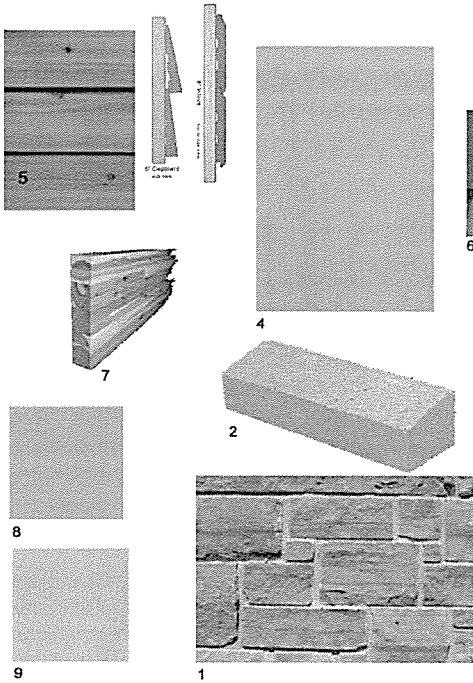
| REQUIRED APPROVALS | | |
|--|--|--|
| | REQUIREMENT | STATUS / ACTION |
| APPROVAL AGENCIES | | |
| Ministry of the Environment (MOE) | Drinking Water Works Amendment for a new Reservoir and Booster Pumping Station | To be submitted as part of the MOE/City's amendment process prior to construction |
| Ministry of the Environment (MOE) | Certificate of Air Approval for the Standby-Generator & Chlorine Room | To be submitted after tender award once Stand-by Generator manufacturer has been selected |
| Lake Simcoe Region Conservation Authority (LSRCA) | Notification only since project is outside Zone of Interest | Submission made, Confirmation Meeting Nov 25. - No further requirements |
| Department of Fisheries and Oceans (DFO) | No harmful alteration, disruption or destruction (HADD) requirement | LSRCA determined there will be no HADD. - No further requirements |
| Ministry of Natural Resources (MNR) | No cut/fill operations in a floodplain, there no permit required. Notification Only. | Notification to be completed just prior to construction commencement |
| Ministry of Culture | Archaeological Report - Stage 1 and 2 registered | Included Archaeological Report recommendations in Tender documents regarding if further findings are found. - No further approval requirements |
| First Nations | Notification only | - Provided registered Archaeological Report. - No further requirements |
| Migratory Bird Act | Ornithologist to review site and Sign-off prior to tree cutting to ensure that no fledglings will lose their nests | City to retain Ornithologist prior to construction commencement |
| Ministry of Labour (MOL) | Notice of Project to be issued to confirm MOL is aware of project | Successful Contractor to provide prior to construction and post in site trailer |
| Occupational Health & Safety Act (also City requirement) | Prepare Pre-start Health and Safety report | To be done by independent third party as construction nears completion |
| Technical Standards and Safety Association (TSSA) | Various equipment requirements | TSSA requirements to be addressed by Successful Contractor during construction |
| Electrical Safety Authority (ESA) | Various equipment requirements | ESA requirements to be addressed by Successful Contractor during construction |
| UTILITIES | | |
| PowerStream (Site) | Site Servicing Agreement (incl. Transformer) | To be obtained prior to construction |
| PowerStream (Right-of-Way) | - Cost Sharing Agreement - Municipal Consent | - Agreement to entered into prior to construction - PowerStream to obtain Municipal Consent prior to their poleline construction |

| | | |
|---|--|--|
| Enbridge Gas | Servicing Agreement | - Successful Contractor obtains approval during construction |
| Bell Canada | Servicing Agreement | Phone lines to be ordered by City's ICT Department during construction |
| Rogers | Servicing Agreement | Not required |
| Communications | A communications tower is not required therefore no permit required | No further approval requirements |
| CITY APPROVALS | | |
| Site Alteration Permit | Permit required to ensure Developer (in this case the City) is aware of the local by-law requirements for sedimentation protection and tree protection | To be obtained prior to construction . Submitted and currently under review |
| Tree Cutting Permit | Permit required to ensure Developer (in this case the City) is aware of the local by-law requirements for tree cutting | To be obtained prior to construction . Submitted and currently under review |
| Building Permit (includes Plumbing and Fire Sign-off) | Building Permit required | To be obtained prior to construction . To be submitted subsequent to Council endorsement of the Detail Design |
| Site Plan process (Planning, Engineering, Parks Planning) | A Site Plan agreement is not required however the process will be followed to ensure proper public notification of project | To be obtained prior to construction . To be submitted subsequent to Council endorsement of the Detail Design |
| Zoning | To be in compliance with current zoning requirements | Deemed to be compliant by Zoning Branch. No further action |
| Sunnidale Park Master Plan Consultation Group | Consultation | Completed November 17, 2010. |
| Energy and Water Conservation Officer | Endorsement required | Endorsement to be obtained prior to tender . Submitted and currently under review |
| Urban Forester | - Endorsement required - Monitoring during construction - Monitoring after construction | Endorsement to be obtained prior to tender and ongoing through construction and subsequent to construction . Submitted and currently under review |
| Park Programming | Notification required | To be notified prior to construction . |
| Legal | Transformer Easement | To be obtained prior to construction completion . |

APPENDIX "E"

| SUNNIDALE PARK RESERVOIR AND BOOSTER PUMPING STATION COMMITMENTS STATUS Class Environmental Assessment Schedule "B" Proposed Zone 2 North System Improvements | |
|---|--|
| IDENTIFIED ACTIONABLE ISSUE | STATUS |
| Prepare a Park Master Plan for Sunnidale Park to ensure that the proposed reservoir and pump house are located in the best location in consideration of the existing and future uses of the Park. | Completed. Endorsed by Council per Motion 09-G-262 |
| Provides redundancy to Zone 2N and increases system security to meet emergency, fire fighting, and existing and future water needs. | Fulfilled once Sunnidale Road and Booster Pumping Station are operational |
| Visual impact of the reservoir is minimized as the reservoir is generally below existing grade. | The detailed survey has shown that the north east corner of the reservoir will be approximately 4-5 feet above existing grade including topsoil and grassed cover while previous indications have noted it to be 6-8 feet. |
| Proposed reservoir to be buried and unfenced. Area will still be available as open space. | As per the preliminary design, the reservoir will be below grade and unfenced so that the area will remain as Open Space |
| Minimizes impact on open space areas. | As shown in the preliminary design, the open spaces have been preserved |

APPENDIX "F"

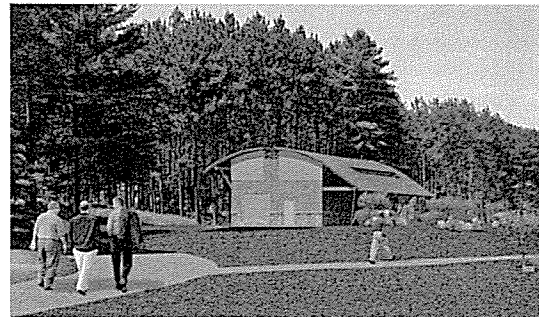
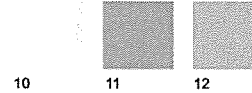


EXTERIOR COLOUR SCHEDULE

- 1 NATURAL FIELD STONE
- 2 ARCHITECTURAL SILL BLOCK COURSE - NATURAL GREY COLOUR
- 3 ANODIZED ALUMINUM (MECHANICAL LOUVRES)
- 4 PFCODIMA PRODEX - "ICE GREY" - COLOUR
- 5 GEATHANE - PREFINISHED WOOD SIDING - NATURAL FINISH
- 6 KALZIP PREFINISHED CURVED METAL ROOFING SYSTEM "FATINA GREEN"
- 7 WOOD LAMINATED BEAMS - NATURAL WOOD FINISH
- 8 HOLLOW METAL DOOR FRAMES - BM 2120-60 "NOVEMBER SKIES"
- 9 HOLLOW METAL DOORS - BM 2127-60 "FEATHER GREY"
- ALUMINUM WINDOW FRAMES - CLEAR ANODIZED FINISH (SPEC)
- STRUCTURAL METAL FRAMING (PAINTED TO MATCH DOORS)

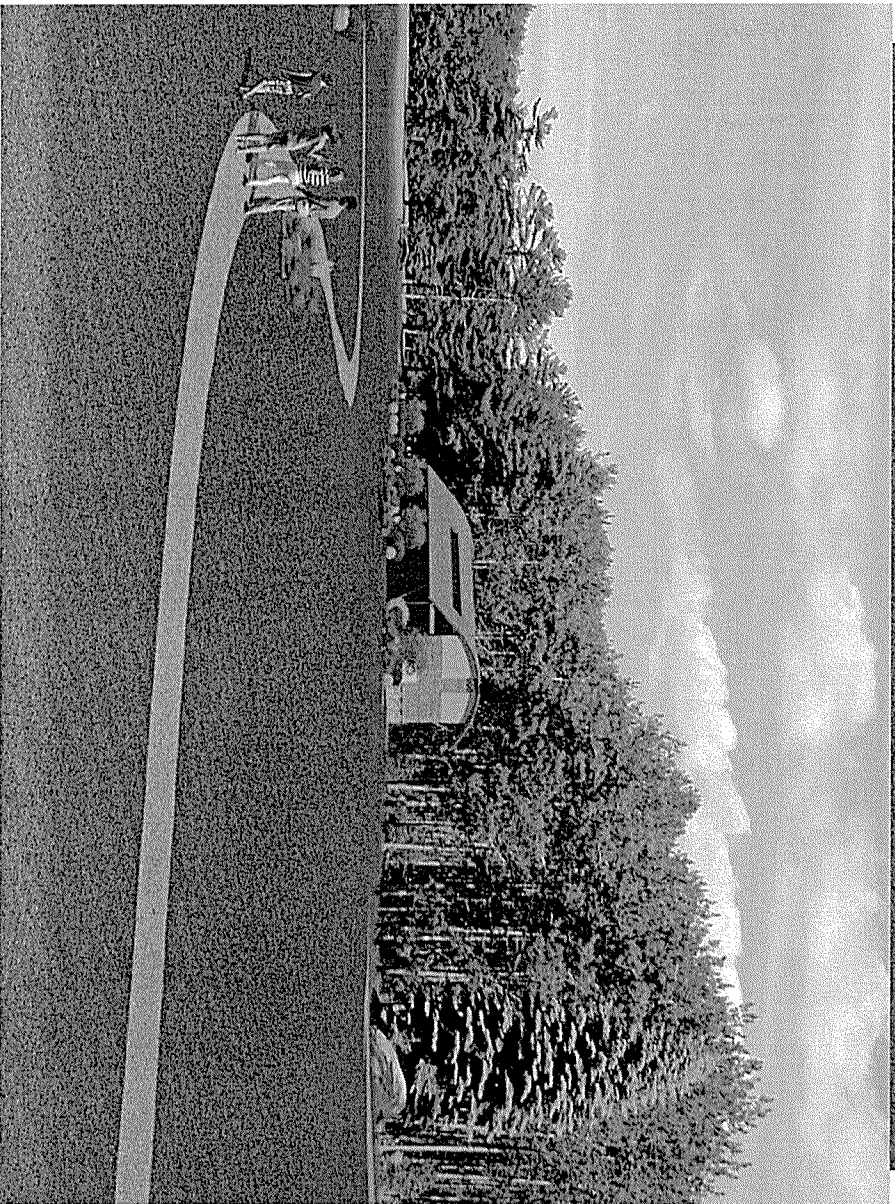
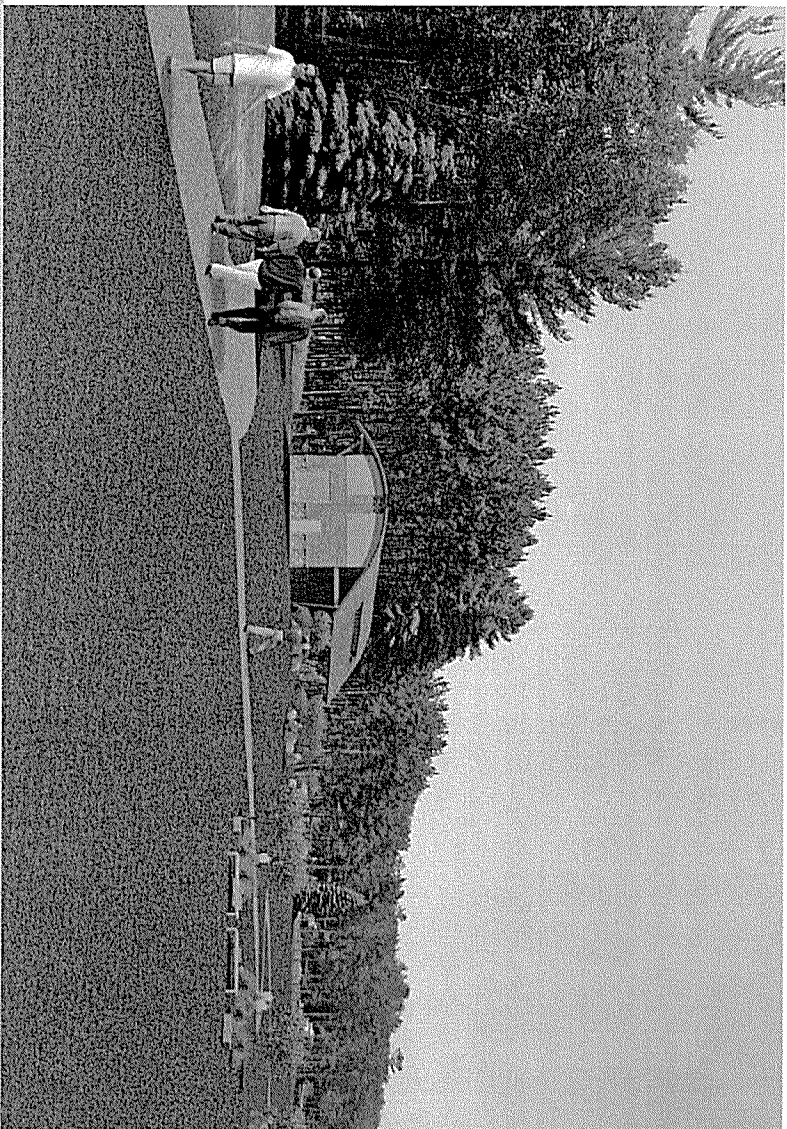
INTERIOR COLOUR SCHEDULE

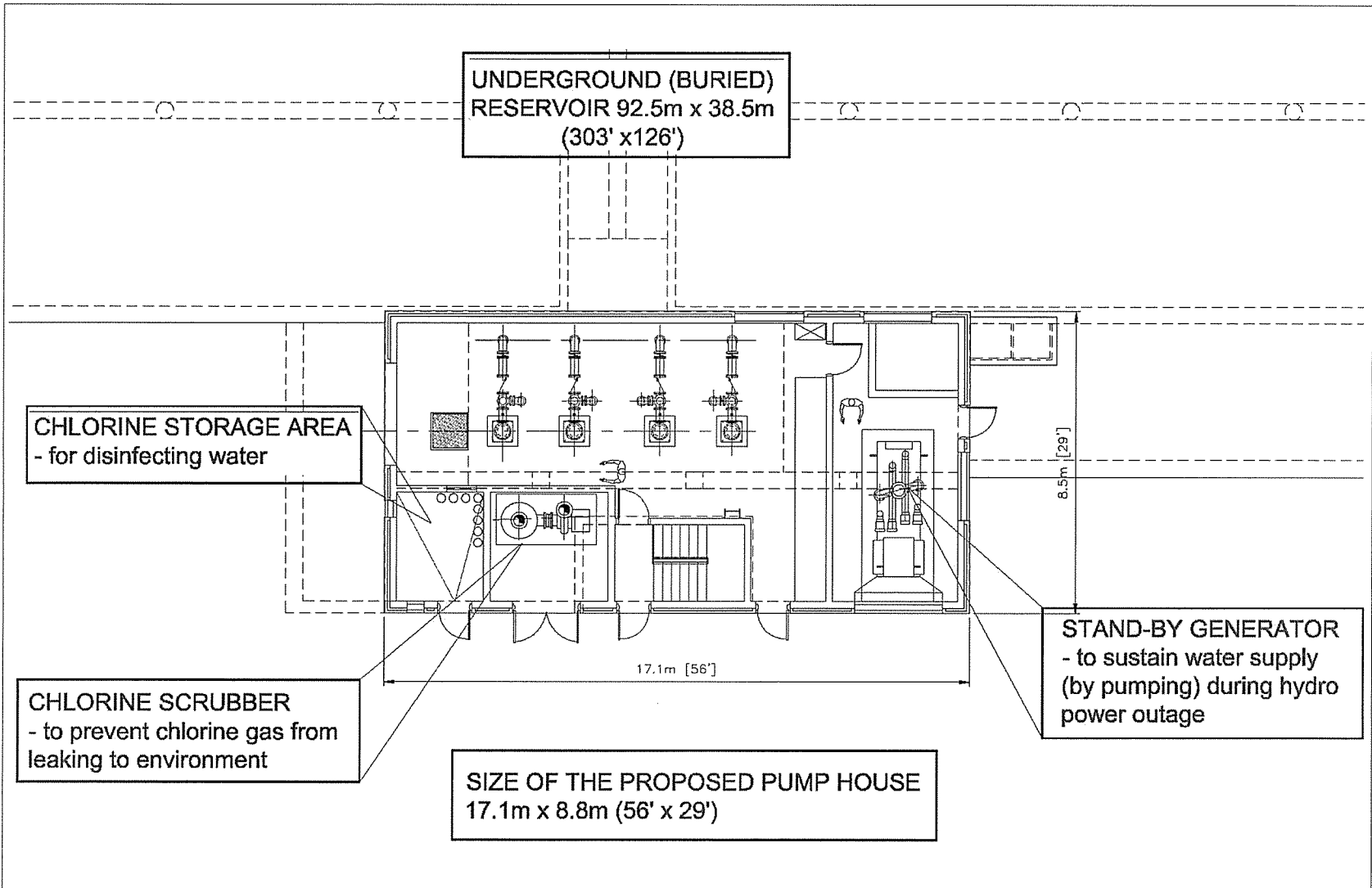
- 10 PAINT - WALLS -ICI "CHINA WHITE" MPR 451Y 74-073
- 11 STEEL HANDRAIL & PICKETS ICI "SONG SPARROW" MPR 301Y 28-041
- 12 EPOXY FLOOR - STERNSON LIGHT GREY 19

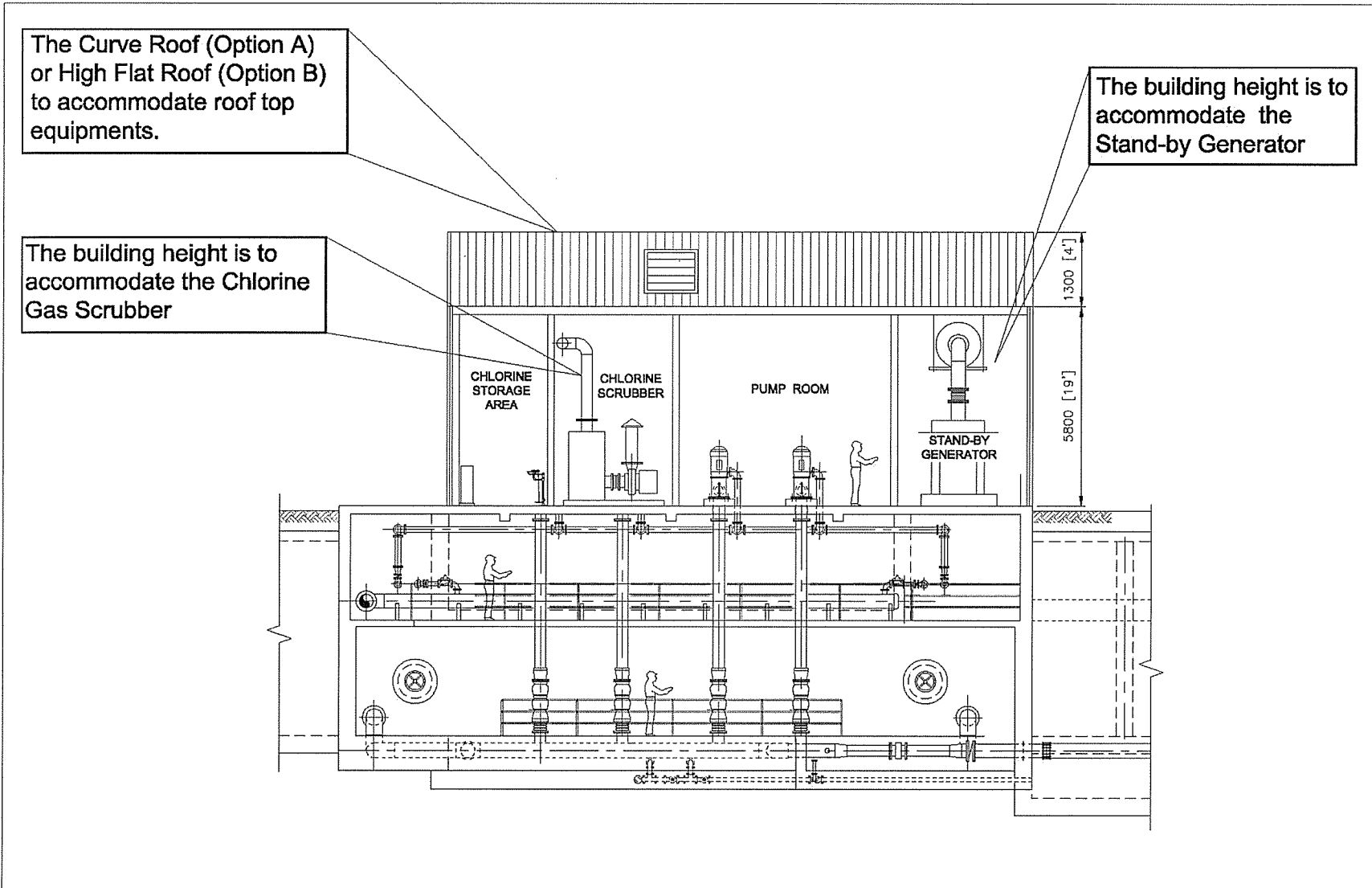


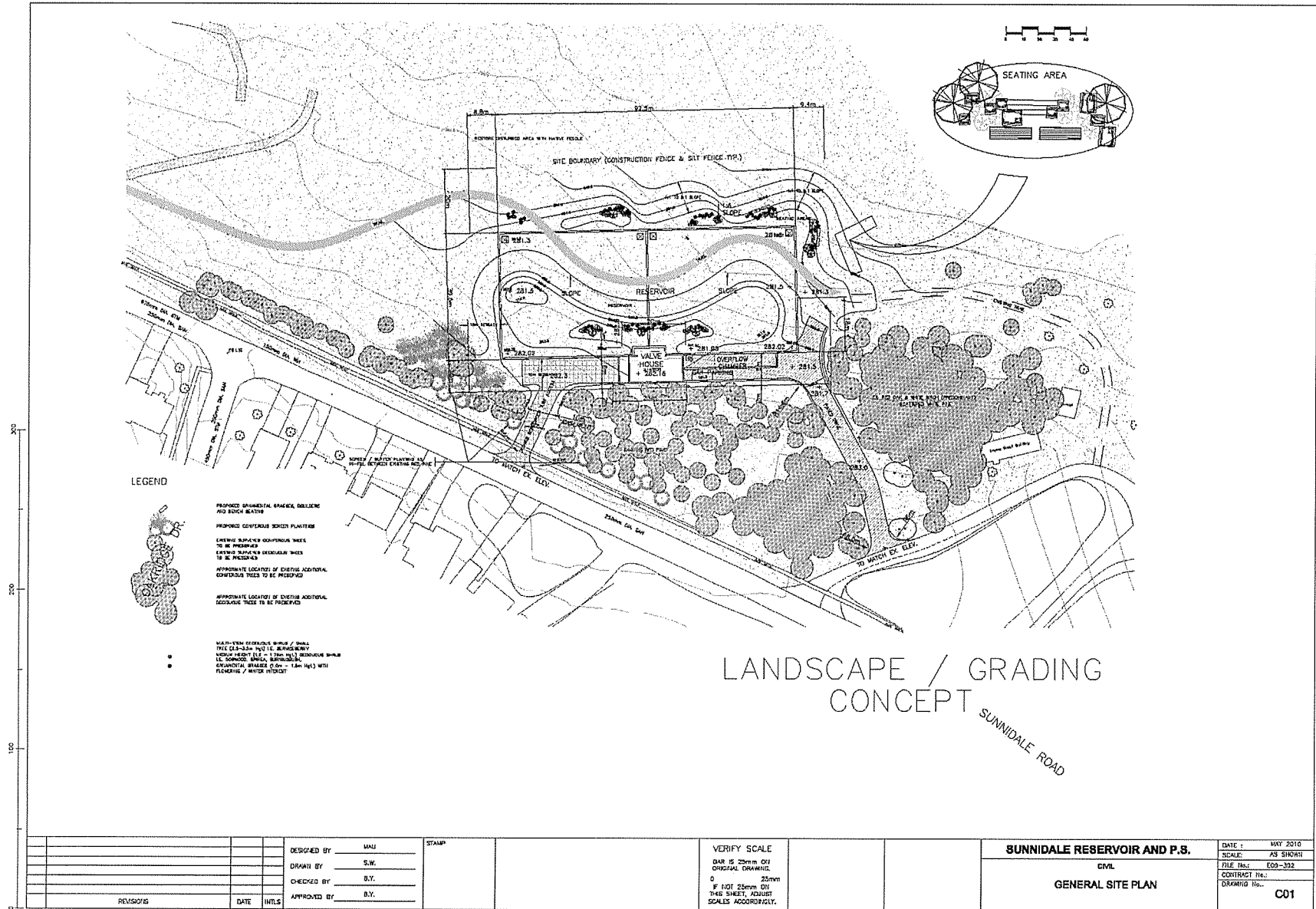
SUNNIDALE PARK RESERVOIR
COLOUR SCHEDULE OCT.06-2010











APPENDIX "G" SURVEY RESULTS AND CITY RESPONSES

| Which of the concepts do you prefer? | City Response; |
|--|---|
| (57 Responses, 86% in favour of curved Roof) | |
| Curved Roof - If it had to be one height, I would prefer option 1 with the curved roof. | No further comment |
| Curved Roof - They are all very large. Less would be more. | Designers have investigated numerous ways to reduce building floor area and height however, need to provide for minimum equipment and Health & Safety requirements. |
| Curved Roof - Solar panels Incorporated? | The remaining tall trees at the west of the site are shading the Booster Pump Station which is not conducive to solar panels use. |
| Curved Roof - The curved roof designs helps integrate the building with the current pavilion. | No further comment |
| Curved Roof - The curved roof seems more organic, and seems to let the most light through the structure. | No further comment |
| Curved Roof - Did they all have to be so ugly? | Based on the results of the public survey, 86% are in favour of the curved roof design. |
| Curved Roof - Minimize impervious surfaces where possible. Take opportunity with landscaping to demonstrate native plants. | Access treatments have been designed based on recommendations from the City's Parks Planning Branch. Asphalt will be provided for accesses that require daily Operations use. |
| Curved Roof - Siding should not be wood after the stone foundation. A slate/stone (not plaster) would be more natural to the area. | Material selection has been reviewed with the architect and the City's Facilities Staff with respect to vandalism and durability. |
| Curved Roof - Great engineering design, simple to view and understanding; pleased. | No further comment |
| Curved Roof - Upon road resurfacing of Sunnidale will curbs be added? | There will be no resurfacing and curbing of Sunnidale Road as part of the reservoir and Booster Pump Station project. The comment has been provided to the Engineering Department's Design & Construction Branch. |
| Curved Roof - I would encourage you to lower the water storage tank another 4 or 5 feet so there is no evidence of it below ground | The reservoir level Reservoir will be completely below grade. Any protrusions will be covered and addressed in landscaping. The minor shift in the reservoir location from the Sunnidale Park Master Plan has allowed the reservoir protrusion to be reduced. |
| Flat Roof - Pump house is larger than suggested. Safe removal of wildlife in the area of deforestation addressed? | The building designers have worked with Engineering and Operations to minimize the building's footprint. It is larger than original due to safety considerations. Wildlife relocation and protection of nests will be addressed prior to tree removal. |
| Curved Roof - Much thought has gone into the whole plan, keeping the integrity of the park | No further comment |
| Curved Roof - I hope there will be no restriction to public use of park before or during construction. | The immediate construction area of the Park will be fenced for public safety during construction. However, the majority of park open space and all the northern trail will not be affected. |
| Neither - I think the park is a poor location for this project. | The most suitable location has been determined through the Class EA process and the Sunnidale Park Master Plan process |

| Do you agree with the use of natural building materials? | City Response; |
|---|---|
| (47 Respond yes 98%, 1 Responds No 2%.) | |
| Yes - Care needs to be taken with colour and design. Incorporate Natural area colours (Tree trunks - barn board. Foundation Stone could look like an old barn, or perhaps river rock) | Building materials and colours have been addressed with the architect |
| No - Stone and galls okay, but wood will be susceptible to vandalism (fire, graffiti, carvings, etc) | |
| Yes - Lower portion of wood. Should be more of a slate stone. | |
| Yes - Natural is always better, conducive to the area. | |
| Yes - But not too much glass because of vandalism. | |

| Do you agree that the building should blend into the tree background? | City Response; |
|---|---|
| (46 Respond Yes 96%, 2 Respond No 4%) | |
| Yes - Everything possible to make the building disappear - colour, materials, size and form that blends in with the existing environment. | Building materials and colours have been addressed with the architect |
| Yes - I am more concerned that trees are not removed. | Some trees will have to be removed, however, the area of removals is largely unhealthy trees. The latest design has shifted the reservoir location and we have saved an additional 20 trees and a 500 mm diameter White Pine. |
| Yes - Plant trees to hide it. | Buffering with trees has been strategically placed, however, trees cannot be placed on top of the reservoir. |
| Yes - Plant trees completely around the eye sore. | |

| Do you agree that the appropriate level of architecture has been included in the design? | City Response; |
|--|--|
| (34 Respond Yes 79%, 9 Respond No 21%) | |
| No - Make as small as possible. | Building size has been reduced to bare minimums while maintaining equipment and worker clearances |
| No - Prefer a natural looking building | Building materials and colours are natural including stone and wood |
| Yes - Concrete should be coloured prior to use to reduce future maintenance | Exterior concrete will not be used. |
| No - Why painted concrete and not coloured? Future maintenance would be easier. | Exterior concrete will not be used. |
| No - A more pleasing design would be better. | 86% of respondents are in favour of architectural design. |
| Yes - Ugly is ugly. | |
| No - not painted block. | There will be no painted block for the exterior |
| Yes - As natural as possible to blend in with surroundings. | Building materials and colours are natural including stone and wood |
| Yes - I agree with current proposal-natural building materials. | No further comment |
| Uncertain. Haven't received enough information to see evolution of the design. | 90% of respondents are satisfied with the level of information provided. Design information was on City website since June 29 Open House |

| Do you agree that we have kept the view shed intact? | City Response; |
|---|---|
| (35 Respond Yes 83%, 7 Respond No 17%) | |
| Yes - Good compromise between keeping the forest cover and maintaining the view shed. | No further comment |
| Yes - The plan seems to keep it intact, minimizing impact on the park. | No further comment |
| Yes - Provided trees are not removed, the view is secondary to this | The location of the reservoir and Booster Pumping Station were determined in the Sunnidale Park Master Plan |
| No - More trees are needed to hide the structure. | Taller shrubbery has been added to landscaping plan |
| No - A circular roof will hide it. | A circular roof cannot be placed on the reservoir |
| Not Sure - Difficult to envision sight lines from diagrams/drawings. | Air photo is available on the project website |
| Yes - Mostly. Hopefully no chain link fence with barbed wire. | No chain-link fence is incorporated into the design |

| Do you agree with the conceptual landscaping plan? | City Response; |
|--|---|
| (45 Respond Yes 96%, 2 Respond No 4%) | |
| Yes - Before you order the red fescue seeds, you should take a sample of the existing fescue and have it identified for variety. | A topsoil seed bank technique will be utilized to harvest the existing fescue grasses |
| Yes - More in this case is always better regarding landscaping. | Taller shrubbery has been added to the landscape plan |
| Yes - Plus locating the pumping station to save the more valuable tree stock - the deciduous ones. | No further comment |

| Has the information been provided to satisfactorily assist you in providing a response? | City Response; |
|---|--|
| (43 Respond Yes 90%, 5 Respond No 10%) | |
| Yes - I think that the pumping station needs at least one more design. | With 86% favouring a curved roof and 90% satisfied with the information provided, there will likely not be any further major changes |
| No - Would appreciate a more comprehensive brochure about the project. | 90 % were satisfied with the information provided. Information can be found on the City's website |
| Yes - Please ensure that the off leash dog walking park remains intact. | Off leash area is outside project zone |
| Yes - It would be good if you would design a building which is less visible. Blends in better with the background and park. | Planting will be used to reduce building view. Building materials and colours have been addressed with the architect |
| Yes - Dislike appearance and did it need to be so tall. | Building was designed to meet minimum equipment & worker clearances |
| Yes - Doesn't belong in the park, City should preserve the park that was given to them. | Location and need were addressed during the Class EA and Master Plan process |
| No - Its already a go, I don't feel like I have any input. | Public input opportunity was provided during the Class EA and Park Master Plan process and Open House. Several suggestions have been incorporated into the design. |
| Yes - Very helpful. | No further comment |

| Miscellaneous Comments | City Response; |
|---|---|
| <p>Reduce overall height, there doesn't seem to be the need for the building to stand so tall as it currently is designed. A permanent overhead rail for moving pumps was mentioned, is there an Option to use a portable system. Prefer the location on the master plan. The pumping building should disappear and not be noticed.</p> | <p>Building designed to meet minimum equipment & worker clearances. Operator preference is permanent crane due to Health and Safety reasons. 86% of respondents are satisfied with level of detail and architectural effort put into the building. The building height has been determined by the height of equipment and maintenance requirements. The equipment cannot be placed below ground so as to minimize damage due to potential flooding.</p> |
| <p>The most critical issue about the reservoir location, from the point of view of the BFNC, is the great number of trees to be removed to allow for the actual reservoir structure and the ten metre wide construction buffer around it, as well as the access roads. The original proposal shows the removal of 148 trees and the alternative layout to increase tree preservation still removes 128 trees (of which 5 are considered poor health/dead)</p> | <p>A balance between locating the facility within the park, and minimizing tree removal was achieved during the EA and Park Master Plan process.</p> |