



## **STAFF REPORT**

To: Board of Management  
Toronto Zoo

From: Robin D. Hale  
Chief Operating Officer

Subject: **2011 - 2020 CAPITAL WORKS PROGRAM**

Date: 2010-09-21

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### **Summary:**

The 2011–2020 Capital Works Program was presented to the Management Committee at its meeting on 2010-09-09 and as a result of their review and recommendation, is hereby submitted to the Board for approval.

### **Recommendation:**

**It is recommended that:**

- 1. the 2011-2020 Capital Works Program (Schedule I attached) be approved by the Board; and**
- 2. that staff forward a request to the City to adjust the 2011 Capital Target for the Zoo to \$4,500.0 thousand in 2011 and \$6,000.0 thousand in subsequent years.**

### **Financial Implications:**

The 2011-2020 Capital Works Program (CWP) is comprised of fifteen (15) City debt funded projects and eleven (11) externally funded projects listed in priority order. The City funded request within the CWP will require a total gross cash flow of \$63,605.0 thousand and \$58,500.0 thousand on a net basis after outside funding sources. The total gross cash flow required in 2011 is \$5,755.0 thousand, including \$1,255.0 thousand of carry-forwards from 2010.

On a net basis, the amount of new funding requested for 2011 is \$4,500.0 thousand (including previously approved funding) after outside funding sources. The requested amount is over the City's debt target by \$500.0 thousand as a result of recent positive events related to the securing of Giant Panda's for the Toronto Zoo. As discussed later in this report, it will be necessary to increase the capital target to \$6,000.0 thousand in subsequent years to demonstrate the City's commitment to the asset and to leverage external funding.

### **Background:**

The 2010-2019 Capital Works Program Planning documentation has been submitted (in draft) to the Financial Planning Division of the City of Toronto for review, analysis and forwarding to the Budget Committee and Executive Committee for approval by Council. Any changes by the Board will be communicated to the City.

In the 2010 submission, the Budget Committee recommendation supported the position of the City Manager and the Chief Financial Officer that the capital plan for the Toronto Zoo should only include projects with confirmed funding sources (see Schedule II). As such, consistent with the City's guidelines there are several key projects submitted as "S7" within the City budget collection system (CAPTOR). As projects classed by the City as "S7" are defined as projects that are required but, due to funding constraints are not included in the 10-year capital plan, this unfunded need creates additional pressures. As such, the plan as submitted is reliant on the Toronto Zoo's and City's ability to secure non-City funding for capital projects resulting from the significant fundraising campaign. The expectation is that externally funded projects not included in the Council Approved 10-Year Capital Plan will be added in the future when fundraising results are realized.

The basis of the current CWP is the prior year's approved CWP and the following major reports completed previously: the Building Audit Report and Site Services Study, the Revenue and Visitor Experience Enhancement Study, the report on Information Needs 2000, the North Zoo Site Redevelopment Schematic Design, the Animal Health Facilities Feasibility Study, the Educational Development Feasibility Study, the Audit of Animal Exhibits & Holdings, and the Elephant Feasibility Study. The plan is also a continuation of the Zoo's twenty-five year Capital Master Plan of 1990 and is consistent with the directions provided in the 2009 Strategic Plan. The status of the capital projects is outlined in Schedule III.

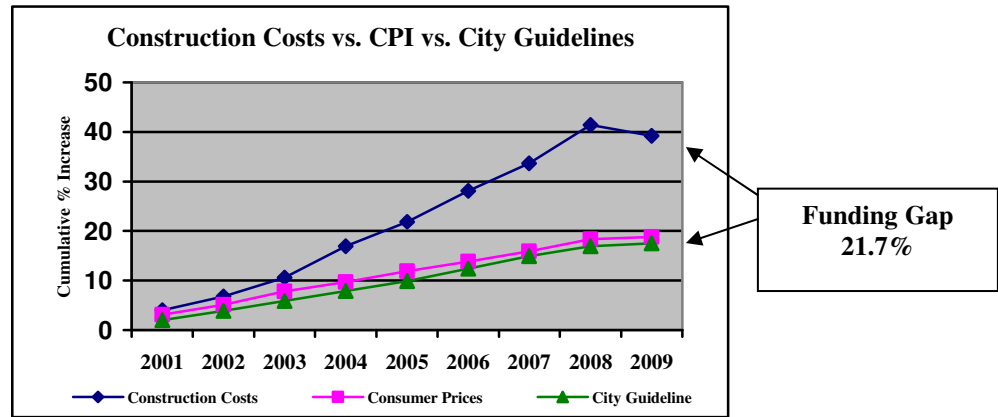
The Capital request is necessary to permit the Zoo to maintain a state of good repair of its assets, meet heightened public viewing expectations and satisfy our future accreditation requirements. With an estimated 1.3 million visitors annually, the Toronto Zoo intends to remain one of the top zoos in North America and a destination of choice.

### **Comments/Discussion:**

#### **Significant Issues / Challenges**

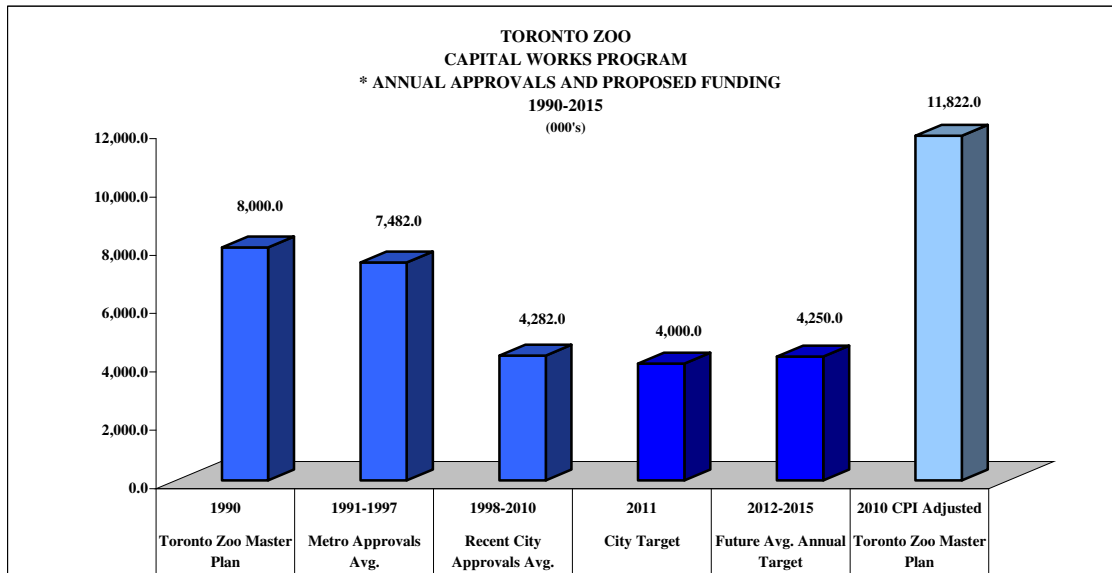
There are significant pressures faced by the Zoo in the 2011-2020 Capital Plan in attempting to meet its strategic objectives, while remaining within the capital targets established by the City of Toronto. An immediate pressure results from the debt target which has been reduced over the past few years to a level of \$4,000.0 thousand in 2011. This annual amount of \$4,000.0 thousand remains for 2012-2013 and although the debt target increases to \$4,500.0 thousand for 2014 and beyond, this remains a significant pressure and challenge as construction costs continue to escalate at rates much higher than inflation. In Toronto, the Construction Index increased by 39.2% between 2001 and 2009, while the Consumer Price Index for the same

period increased by 18.8%. The chart below indicates the increased gap between the costs of construction, CPI, and the City’s guidelines between 2001 and 2009.



The construction cost escalation issue exerts significant pressure on the Zoo and the tendering of large construction project given the capital funding and debt target constraints of the City. In the 2011-2020 Capital Plan, the Toronto Zoo has remained consistent in its philosophy related to project budgeting and design adopted in 2009, by including amounts for various projects within the Capital plan that better reflect the realistic cost of construction on a project by project basis. This costing practice is the optimum approach for costing the program to meet the requirements and objectives of each project based on the determination of the respective project elements and specifications.

The disparity in funding is further emphasized by the following chart that projects the annual amount of \$8,000.0 identified in the Toronto Zoo’s 1990 Capital Master Plan into current day amounts based on changes in the CPI. The chart indicates that the annual amount of \$11,822.0 should be invested in order maintain the Zoo. Based on the concept of the owner (City of Toronto) accepting responsibility for 50% of the cost of maintaining and enhancing its asset, we are requesting an increase in the debt target in future years to \$6,000.0 thousand annually with the remainder of funds to be raised by the Zoo.



### External Funding for Capital Projects

As a partner with the City, the Toronto Zoo remains committed to working with the City to obtain more “non-City” funding for capital projects. Following the orderly wind-up of the Toronto Zoo Foundation on 2009-05-29, by agreement with the Board, the Foundation’s financial assets were deposited with the Toronto Community Foundation.

The fundraising program has now been assumed by the Board and the capital campaign is proceeding based on the campaign feasibility study completed by DVA Navion (January 2008) and the Campaign Readiness Plan prepared by KCI - Ketchum Canada (February 2009). Accordingly, recoveries for various projects classified as externally funded have been reflected in the 2011-2020 Capital Works Plan.

The following discussion provides further information on the projects included in the Capital Works Plan.

### 2010-2014 Capital Projects – City Funded

#### Giant Panda Project

Zoo staff completed a concept study on the construction of a Giant Panda Exhibit in 2004. The Giant Panda exhibit is to be built to allow for a captive breeding program that is essential for the survival of this species. Conservation programs that contribute to the preservation of the Giant Panda and their habitat in the wild in China will also be established. A Giant Panda exhibit together with a Chinese Village (garden, teahouse, etc.) would be a major attraction for the Toronto Zoo and the GTA. This project would also attract cultural interest from the Canadian-Chinese community in Toronto Zoo programs. The concept study included a plan and costing of project options and a detailed review of the conservation and research potential for the species.

In 2010, the Board approved the entering of a tripartite agreement with the Calgary and Granby zoos to commence discussions with the Chinese representatives towards the possibility of a shared cooperation agreement for the Canadian zoos.

For 2011, a Consultant will need to be hired to design the Giant Panda exhibit and proceeding with this project is subject to receipt of outside funding and securing an agreement with the Chinese government for the supply of pandas and for conceptual design.

#### North Zoo Site –Eurasia / Canadian Wilderness

The North Zoo Site Redevelopment Feasibility Study, which included the Eurasia Rehabilitation Plan, the Canadian Wilderness Experience Concept Report, and the Tropical Americas Rehabilitation Plan, was adopted by the Board of Management in September 2003.

The overall project will complete the more efficient integration of visitor site circulation changes at the Zoo by bringing key Canadian animal exhibits now in the Rouge Valley up onto the tableland. The existing Canadian Domain exhibits are in need of major renovations for the welfare of the animals and viewing by the public. The need to eliminate the long walk and steep hill at the Canadian Domain for the primary Canadian/North American animal experience is necessary because of the absence of the Domain Ride. Although the Valley is a spectacular backdrop, the area has received visitor complaints concerning the long walk and steep hill.

The construction is phased to minimize operational disruptions for Zoo staff/public and to provide for an extended period of opening events.

In 2010, the detailed design for Eurasia (Phase II) and the Canadian Wilderness (Phase III) will be completed. This involves the refurbishment of the existing Eurasia area, the creation of Mixed Woodland and Boreal Forest areas and a Canadian Wilderness Orientation Centre to complete the Canadian experience at the Zoo. These areas were included together in order to complete the design for support of the fundraising case for the high priority Canadian Wilderness. Funding for Eurasia construction is included for 2011 for completion prior to the Canadian Wilderness.

The Eurasia Rehabilitation (Phase II) will consolidate and intensify the experience by shortening the visitor path in the existing Eurasia area. A key component of the improvement includes a themed ride in the area as recommended in the Revenue & Visitor Experience Enhancement Study. Renovation of this area in 2012-2013 is necessary to make way for the Phase III construction, which will be completed subject to external funding (see page 14)

#### Penguin Exhibit

As outlined in the Capital Master Plan for the Zoo, plans for this new exhibit are underway in 2010 and will reintroduce penguins into the collection. Design will be completed in 2010 and construction will commence which includes modifying the vacant African fur seal exhibit and holding to accommodate penguins from the temperate regions of the world, rather than the Antarctic species which are more frequently exhibited. This approach reduces both the construction and on-going operating costs.

This project is within the current debt target and in 2011 modifications to the holding and the exhibit for penguins will be completed, creating the potential as a special attraction for revenue generation. In addition to improvements to the holdings and exhibit pools for temperate climate penguins, modifications to the existing grandstand for public shows and barrier free access to both the under water and above ground viewings will be completed.

### Animal Health Centre

In early 2004, staff and consultants developed the program for the provision of a separate quarantine facility and a new animal health centre.

Construction of the Quarantine Facility was completed in 2007, as the first phase of the Animal Health Facilities project. The Quarantine Facility enabled the Zoo to meet accreditation standards of the American and Canadian zoological associations that require quarantine of incoming animals for the protection of the existing collection. The existing animal health facility has evolved within an original Zoo animal holding building. It does not meet current hospital standards as detailed by various inspecting groups. Major deficiencies include: traffic flow problems; multiple functions of clinical and surgery rooms; inappropriate animal holding rooms which do not provide adequate environmental control for sensitive species; lack of recovery facilities; lack of appropriate holdings for large hoofed stock; narrow hallways; inadequate storage for equipment and supplies; lack of crate-washing facility; and limited vehicle access.

In 2010, detailed design of a new animal hospital and research facilities is underway and will be completed in 2011 for use in the construction of the facility and to provide support for fundraising. The construction phase is currently classed as a "S7" project (requiring external funding sources) and is scheduled for 2013-2014 subject to the funds raised in the capital campaign. The new Animal Health & Reproduction Centre will be specifically designed for medical and surgical care of zoo species, and will provide specialized housing for hospitalized animals. The facility will be equipped to provide maximum efficiency, comfort, and safety in handling and care of animal patients, in a professional and hygienic setting. The fundraising campaign includes this project and support from the community is expected. The construction of the AHC is a key accreditation and state of good repair issue and has been deferred since 2007 to accommodate the capital targets.

Of note is the fact that the detailed design will cost less than the amount originally pre-approved for 2011. This has facilitated the reallocation of \$491.0 thousand for other key projects within the debt target for 2011.

### Elephant - Winter Holding

This Project involves the expansion and modification of the elephant exhibit to provide additional space for the elephants and enhanced viewing experience for visitors. As standards for housing and husbandry of elephants are continuously evolving and improving, a feasibility study was undertaken in 2008 to study the future requirements of caring for these animals in the Zoo and for maintaining a herd of elephants into the future. The intent of this project is to

provide exercise space for the elephants and enable public viewing in the winter months. The public viewing area would be themed with the current African Savanna.

The Elephant Feasibility Study has identified the following improvements to be undertaken initially to address the issue of winter holding facilities at the Zoo:

- 1) Enlargement of holdings by converting the inside moat into elephant space with additional doors, training barriers, rubber matting and deep sand floors.
- 2) Provide heated windbreak structure and lower elevation of upper paddock to increase cold weather use of the paddock and provide a year-round exercise area for the elephants.

Currently, the Zoo is undertaking a business case analysis of the Elephant Program for consideration by the Board. In 2011, funding has been allocated to facilitate the decision process related to maintaining the herd of elephants in the future and to commence design and construction work on the enlargement of the holdings, with interior renovations as noted in item 1) above. Detailed design would be completed in 2012 and subject to the provision of external funding, construction work would commence in 2013 with completion in 2014 for the renovations necessary to make the yards more conducive to winter use and include the provision of two windbreak/shade/heat shelters, lowering of the elevation at the existing shade structures to reduce wind, provision of radiant heat (geothermal) at the exhibit substrate and provide a training wall to allow public viewing of demonstrations.

### Food Services

In 2008, external seating areas were covered at the side of the Africa and Americas restaurants to provide additional capacity in the summer and shoulder seasons after the seasonal closure of the snack bars at the Zoomobile stations. In 2009, restaurant seating was also renovated in the Americas as part of the North Zoo Site – Tundra Trek Project.

In 2010, renovations and expansion of the Peacock Café were completed by Compass Group Canada Limited as part of its agreement with the Zoo.

### Front Entrance

The Revenue and Visitor Experience Enhancement Study (1998) recommended enhancements to admissions, retail and food services. The existing main visitor entrance to the Zoo is deficient and outdated in a number of aspects. The shortcomings include inefficient admissions, inadequate visitor amenities, lack of orientation for first time visitors, insufficient orientation space inside the front entrance, unmemorable front entrance, entrance/exit turnstiles are oriented opposite to the norm and the food facility is not directly accessible. The renovations proposed for the front entrance are designed to achieve improved ticketing, to provide an iconic gateway to the Zoo, to enhance the hospitality experience for visitors, and to locate retail and food opportunities directly in line with the visitors' path of movement to maximize retail opportunities.

In 2011, a study is planned to determine the feasibility of design, build, operate scenarios for the front entrance. Design work for the new front entrance and related food services would commence in 2013, with construction to follow in 2014, subject to securing external funding.

#### Giraffe House Refurbishment

The giraffe house is one of the Zoo's original wooden structures, built in 1973. Due to its deteriorating condition it needs to be upgraded or replaced in the near future. The Giraffe House was listed as a major concern in the AZA Accreditation report in 2007 and therefore the project is being advanced in the CWP. Construction of a new house closer to the present exhibit would correct the above problems and provide visitor viewing during times of inclement weather when the giraffe are restricted to the house and adjacent yard.

The new house would need to incorporate the latest space and material standards as well as green energy to reduce utility usage. It would also require a giraffe restraint unit installed in the house, a new floor with non-slip flooring material, sufficient storage and services, and a shelter / shade enclosure to provide year round adequate exercise area for the giraffe. Also required, is more indoor stalls and outdoor yards to provide adequate housing for breeding / surplus needs.

In 2011 design work would commence on the new house, yards and winter facilities. Construction would take place in 2014-2015.

#### Orangutan II & III: Indoor/Outdoor Exhibits

In 1994, the orang-utan holding capital project (Phase I) was completed. The current indoor exhibit is a design from 1974 and does not meet current zoo exhibitry standards. The Orang-utan Phase II is an exhibit improvement project to upgrade the indoor living conditions, animal enrichment and living space for the orang-utans and will also ensure a new standard of state of good repair. The area will be redesigned and renovated as a Borneo/Sumatran Rainforest habitat for these intelligent primates. The Phase III design includes provision for connection to a new outdoor exhibit at the south side of the Indo Malaya Pavilion. There is currently no outdoor area for the orang-utans. A seasonal outdoor exhibit is desirable for the behavioural enrichment of the animals, to be constructed as the final phase of the original Orang-utan Project.

The combined indoor/outdoor project would provide for a new landscape immersion visitor experience including education and interactive features and ensure a new standard of animal care.

In 2015, a feasibility study would be completed based on the initial concept report. Detailed design would then be scheduled with construction to follow in 2016-2017 subject to availability of external funding.



### Gorilla II: Outdoor Display

A Gorilla Feasibility Study was completed in 1993 and updated in 2001. The plan provides for a new outdoor display to be extended up the hill to the north, towards the Family Centre. The wire mesh roof will be eliminated and viewing will be over a moat or through glass. Behavioural enrichment components will be included in all aspects of the project.

This project will improve visibility for visitors and provide a larger, more enriched environment for the gorillas. With increased size, the exhibit will be better able to withstand increased seasonal use by the gorillas.

Detailed design of the exhibit will occur in 2018 with construction completed in 2019.

### Hippo House & Exhibit Refurbishment

The hippo house is one of the zoo's original concrete structures, built in 1973. It needs to be upgraded or replaced to acceptable standards for breeding, animal management, winter holding and public viewing. A new house would incorporate the latest space and material standards as well as green energy to reduce utility usage. Construction of a new house closer to the present exhibit would correct the above problems and eliminate visitor viewing problems during times of inclement weather when the animals are restricted to the house. Also include for installation in the new house would be a restraint unit, new floors with non-slip flooring material, sufficient storage and services, and a shelter / shade structure to provide year round adequate exercise area for the hippo's. Also required, is more indoor stalls and outdoor yards to provide adequate housing for breeding / surplus needs.

The new / refurbished exhibit would be planned to allow for underwater viewing, keeper talks and winter viewing.

This project would be planned and constructed subsequent to the Elephant paddock expansion and design work would commence in 2018 with construction of a new house, yards and winter facilities to follow in 2019-2020.

### Mandrill Outdoor Exhibit

The current indoor exhibit will be enlarged as part of the African rainforest South Renovation project to be completed in 2010. The proposed new outside exhibit would need to be meshed in with a glass outdoor public viewing area constructed by the Africa Tembo Market. No disruption would result to the market as this is currently bordered by a wooden wall and animals in the outside area could also be viewed from inside the pavilion.

Having both an inside area and an outside area would help in managing this species as it would result in the potential to run two separate groups and rotate them between the indoor and outside areas. Design for the project would be completed, tendered and the contract awarded in 2020, with construction to follow in 2021.

### Building & Services Refurbishment

The Building & Services Refurbishment project, the result of a Building Audit Report approved by the Board in 1998, implements the repair or replacement of building components requiring attention over the next 10<sup>+</sup> years. Since 1998, items of immediate concern, including the replacement of mechanical and electrical equipment in over 25 buildings on site, have been completed. Site services (gas, water, hydro) were reviewed and evaluated in a similar manner in 1999.

To assist with future planning an Audit of Animal Exhibits & Holdings was completed in 2007 to determine the current repair status and future maintenance and replacement requirements, in compliance with accreditation standards, and to provide a comparison to similar holdings/exhibits at other accredited Zoos.

In 2010, improvements will be completed to the south half of the African Rainforest Pavilion in conjunction with exhibit refurbishment work (see Exhibit Refurbishment Project). The visitor pathway will be upgraded to meet barrier free standards and comprises a significant component of the project. Additionally, roof replacement work for the Operations Complex and installation of roof safety anchors at the Indo-Malaya pavilion will also be completed in 2010.

In 2011, replacement of roofs and skylights at Pavilions and animal holding and service buildings are planned. Replacement of deteriorated glazing, walls, ceilings, siding, windows and doors at various Zoo buildings identified in the Building Audit will also continue in 2010. Included in the work plan is replacement of the ventilation system in the Americas Pavilion and upgrades to the building automation system, as well as continuation of high voltage transformer replacements.

### Exhibit & Holding Refurbishment

Exhibit & Holding Refurbishment is a multi-year plan involving various initiatives to renovate exhibits throughout the Zoo site.

Renovations to the exhibits in the south end of the African Rainforest Pavilion are on-going in 2010, with an expected completion in the the fall. This project includes plans for a theatre, located at the original central stairs area and associated animal amenities, such as feeders, waterers and animal behavioural enrichment devices in a natural design. An upgrade to the Mandrill Exhibit is also part of this project to replace old exhibitry which is essentially original (1974) in style and operation. Completing the project will be renovation to the Chameleon holding and construction of a nursery that will allow viewing of baby snakes and chameleons.

For 2011, replacement of the deteriorated Siberian Tiger Holding is planned to be completed as part of the Eurasia construction to meet accreditation, animal welfare and state of good repair requirements. The holding building is of 1974 vintage and does not provide the necessary space requirements for current animal management needs. There is no keeper space and no flexibility in the movement of animals. The building envelope (roof, windows, and walls) and the caging system have reached the end of their economical life cycle. It is very likely that the

2012 inspections by AZA for accreditation will find this building not up to current standard due to these limitations. Utilization of a pre-cast concrete structure is proposed for this holding building to reduce the costs to within the budget allocation.

### Information Systems

The Information Needs 2000 Report, approved by the Board in April 1999, outlined the various systems that needed replacement at the Zoo including points of sale, data warehousing, biology and conservation records system, document management and imaging, telecommunications and financial systems.

In 2003, the Toronto Zoo launched a project to replace the Zoo's core financial, retail and administrative systems with a public sector version of an off-the-shelf Enterprise Resources Planning (ERP) software package. A contract was awarded for the ERP system to be phased in over the period of 2005-2007. The Financial module was implemented in 2005 and the Service Management module went live in 2006. The Point of Sale systems were completed in 2007, and the Human Resources / timekeeping modules and Fixed Asset ledger were completed in 2008.

In 2010, the Zoo's network was expanded to include the restaurants and a distributed Mesh network will be set-up later in the year to improve radio and network communications on site. Additionally, enhanced HVAC systems for the main computer room were installed and various technological enhancements were implemented to enrich and export the Zoo experience and transform the Toronto Zoo into the world's leading zoological institution when it comes to leveraging technology to teach people about animals, ecology and conservation.

In 2011, the Zoo will complete its replacement of outdated hardware (Zoo owned PC's, and peripherals). Additionally, various technological enhancements, including digital signage, will continue with the objective of enriching and exporting the Zoo experience to expanded markets through the extension of the Toronto Zoo Network to multiple locations and the setup of a secondary network. In 2012, the BIOCON animal records database will be replaced with the new Zoo Information management System (ZIMS) which is being adopted by leading zoos across North America.

### Grounds and Visitor Improvements

The Grounds and Visitor Improvements Project addresses the needs of the public concerning visitor amenities, the appearance of indoor and outdoor areas, improvements to site circulation and visitor orientation.

In 2010, the Zoo developed an accessibility plan to address the requirements of the Accessibility for Ontarians with Disabilities Act in order to commence the installation of improvements throughout the site. Also, additional seating and fencing were added at the new Carousel ride to enhance visitor impression and safety. New signage was added to improve the directional flow for visitors.

In 2011, the Zoo will continue with the provision of additional seating, shade and drinking water fountains and washroom enhancements at various locations around the site. Pathway and picnic area improvements are also scheduled. For 2012 it is proposed to commence implementing the recommendations provided in the accessibility plan developed in 2010.

### **Externally Funded Projects**

The projects outlined below include several initiatives that would address many significant SOGR issues for the Toronto Zoo. Although these projects represent key requirements for the sustainability of the Zoo, in accordance with City submission guidelines they have been submitted as “S7” within CAPTOR. To reiterate, projects classed by the City as “S7” are defined as projects that are required but are not included in the 10-year capital plan due to funding constraints. This unfunded need creates additional pressures as the plan submitted is reliant on the Toronto Zoo’s and City’s ability to secure non-City funding for capital projects through the significant fundraising campaign. It remains our understanding that externally funded projects not included in the Budget Committee recommended 10-Year Capital Plan may be added in the future when fundraising results are realized.

The externally funded projects include the next phase of the Schofield Memorial Garden, construction of the Canadian Wilderness (Phase III of the North Zoo Site Redevelopment Project), Giant Panda Exhibit, construction of the Animal Health Centre designed in 2010-2011, Tropical Americas Exhibit design and construction (Phase IV of the North Zoo Site Redevelopment Project), the Elephant –Paddock Expansion, Hippo House & Exhibit Refurbishment, Centre for Sustainable Life and Learning, Breeding/Holding Facility; Rouge River Interpretive Centre and Safari Jeep Ride. The 1990 Master Plan will be updated in 2011-2012 to determine what specific projects and their priorities are to be further developed in the CWP.

#### Schofield Memorial Garden

This project is being done in partnership with the Dr. Schofield Memorial Foundation, subject to full funding from the Foundation as the monies become available. The exhibit, which is formally called the Dr. Schofield Statue and Memorial Garden, is a themed node in the Eurasia area of the Zoo comprised of a garden, buildings and a statue to commemorate the life and achievements of Dr. Francis Schofield, a Canadian humanitarian who worked in Korea.

The preliminary concept includes the following components: main entrance feature, perimeter wall, Korean information building, Dr. Schofield Memorial Hall and statue, and a stone garden. Provision for an Asian pheasant facility to activate the site is also integral to the plan. Final project elements, scope and details will evolve as the design process proceeds. At this point, the overall cost is estimated at \$5,000.0 thousand, with design to be completed in 2010 and construction incrementally during the period 2010-2012, as funds are raised for the various components.

This project is the start of a concept that would have cultural and special interest groups in the Greater Toronto Area utilizing the Zoo site for special functions, festivals, special Zoo days, weddings and cultural events. The overall conceptual design, detailed design for the first phase of the gardens (including the statue, entrance gate, pagoda structure and pond), statue installation and interim landscaping were completed in 2010.

In 2011 the first phase of the gardens, including pathways, entrance gate and wall, pagoda structure and pond will be constructed should external funding be available.

### Giant Panda Project

Based on the progress consortium efforts of the three Canadian zoos initiated in 2010, finalization of a cooperation agreement with the Chinese government, and securing of the required funding sources, construction could be scheduled for the 2013-2014 timeframe.

### Animal Health Centre – Construction

As a follow-up to the detailed design of the the Animal Health centre to be completed in 2011, construction of the facility would be scheduled in 2013-2014, subject to the funds raised in the capital campaign. The facility will be equipped to provide maximum efficiency, comfort, and safety in handling and care of animal patients, in a professional and hygienic setting. To reiterate, the construction of the AHC is a key accreditation and state of good repair issue and has been deferred since 2007 to accommodate the capital targets.

### Elephant Paddock Expansion

In accordance with the 2008 feasibility study the second phase of the improvements includes the construction of a 3000m<sup>2</sup> dayroom for winter use, (including public viewing), a new holding building and off exhibit yard to permit breeding for the long term stability of the collection, increased paddock space, and improved visitor amenities. The study examined various options and unused space that could be utilized to expand the existing elephant paddock. The existing Bush Camp area would be relocated further west where the old Africa paddocks area was located. There is the opportunity to build larger paddocks which will greatly improve the space and distance that elephants can walk, socialize and play. This would result in healthier conditions for the animals and expand awareness of elephant needs, while meeting increased public expectations and exhibit standards for elephants in captivity. This expansion would also enhance visitor viewing, for the walking public and people riding the Zoomobile.

The Feasibility Study has made specific recommendations and costing projections for this work scheduled in the 2015-2017 time period.

### Front Entrance & Food Services

As mentioned previously, a study is planned to determine the feasibility of design, build, operate scenarios for the front entrance in 2011. Subject to the availability of external funding and sponsorships, the detailed design and construction of the new front entrance would be scheduled for 2013-2014. The intent of this project is to enhance the overall visitor experience through improved ticketing, provision of a memorable entrance/exit to the Zoo, location of

retail and food opportunities directly in line with the visitors' path of movement to maximize retail opportunities, and to provide an enlarged plaza.

### Canadian Wilderness

Phase III of the North Zoo Site Redevelopment Project relates to the Mixed Woodland Biome/Boreal Forest Biome. It completes the Canadian Wilderness Experience area and will feature a new Orientation Centre, moose, beaver and otter exhibits, and a drive-through bison/elk paddock on the Zoomobile tour. Funds are provided in the budget in 2014-2016. Unfortunately, this phase of the project is classed as "S7" and it is a major concern that this categorization removes City focus from this key exhibit and State of Good Repair (SOGR) requirements for the Toronto Zoo. These projects are intended to result in revitalized exhibits and a reduction of essential SOGR backlog issues. They will also address key accreditation issues that such exhibits must be built to modern animal care standards while ensuring that the Toronto Zoo continues to meet increased public expectations.

### Breeding Holding Facilities

Increased breeding and holding space is required if the Zoo is to meet its commitments to the various collaborative breeding programs for endangered species (i.e. Species Survival Plans and other programs). It has become clear that the quality of future collections will be determined by the commitment made today to animal breeding.

The availability of animals has decreased as wild animal populations disappear and as regulations governing animal collection and distribution have become more restrictive. Many animals breed poorly on exhibit. Holding space is required for both large hoofstock and for specimens which must be brought indoors for the winter, and for temporary housing of animals during cleaning/maintenance of exhibits. The project was identified in the 1990 Toronto Zoo Master Plan.

One of the most important contributions zoos can make to conservation is participation in captive breeding programs. This cannot be achieved without appropriate breeding facilities.

### North Zoo Site – Tropical Americas

The Tropical Americas rehabilitation represents Phase IV of the North Zoo Site Redevelopment and will involve the relocation and consolidation of the South America exhibits along with the refitting of a portion of the exhibits in the Americas Pavilion for Tropical American animals. Funds are provided in the project budget in 2017-2019, however, the cost estimates will need to be re-adjusted based on recent project experience (as outlined previously in the North Zoo Site – Canadian Wilderness / Eurasia section).

### Educational Development

A Feasibility Study was completed in 2006 for a Centre for Sustainable Life & Learning. The Centre would support the development of interactive programs and learning strategies, provide professional training and to position the Zoo as a leader in development, evaluation, research and dissemination of formal and informal programs. The Centre for Sustainable Life &

Learning will be an innovative, dynamic, state of the art building that provides ecologically and socially responsible learning space for a wide variety of visitors and users. It will also be an institution that continuously educates users and visitors about the efficiency of its functions, and the mandate and activities of the Zoo. Once the Centre is built, the Zoo will then be in a position to take the lead on biodiversity issues as a participant in the City's designation as a "Regional Centre of Expertise in Education for Sustainable Development". The Centre will serve teachers at all levels to receive more intense and effective learning experiences that relate directly to the curriculum.

Detailed design of the Centre for Sustainable Life & Learning is proposed for 2018 with construction to follow in 2019-2020, however the phasing is dependent on the availability of outside funding.

#### Rouge River Valley Interpretive Centre

This exhibit will display plants and animals found in the Rouge River Valley. Working with partners such as the Rouge Park Alliance, Ontario Ministry of Natural Resources and Parks Canada, the Zoo intends to highlight conservation species found in this unique riverine habitat. The Rouge Valley is an important ecosystem and has also played an important role in the cultural heritage of both native peoples and the citizens of the City of Toronto.

The Rouge Valley exhibit will be constructed in close proximity to the Canadian Wilderness Experience and will provide Zoo visitors, especially educators and school groups, with the opportunity to see native species such as the endangered redbreasted dace, brook trout, lamprey, and aquatic invertebrates. It is intended that a series of exhibits will showcase upper river regions to the lower stretches reaching the estuary at Rouge Park marshes at Lake Ontario and the influence of human development on these habitats and the species community changes that result.

#### Safari Jeep Ride

Development of thematic rides to enhance revenue and the visitor immersion experience includes a Safari Jeep ride in the African Savanna, planned for 2020.

#### **Conclusion:**

The Toronto Zoo has an enviable reputation as a premier North American attraction that combines exceptional value for the public while performing an important conservation and educational role in the community. To date, over \$150.0 million has been invested in the City's asset through the Capital Works Program. The 2011-2020 CWP represents a balanced approach to maintaining the existing facilities, providing a sufficient level of animal care and keeping the Zoo informative and interesting for our guests.

The Zoo's initiative to secure external fundraising represents a true partnership effort in attempting to reduce capital financing pressures for the City while meeting the development needs of the Zoo.

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R. D. Hale  
Chief Operating Officer

List of Attachments:

Schedule I – Capital Works Program 2011-2020  
Schedule II - Council Approved 2010-2019 Capital Works Program  
Schedule III – Capital Projects Status Report