OC Transpo Articulated Bus Garage 755 Industrial Avenue Ottawa, Ontario

City of Ottawa Artist Proposal January, 2009



# Bus Dreams

Mark Ashby Alex Grünenfelder Sarah Hay Andrew Lau



Design Nerds

Cover Letter Bus 125 Route Map Context Climate & Technology Site Plan Concept: Bus Dreams Concept Diagram Installation and Implementation Concept Sketch Team Bios References Appendices: Portfolio Image List Team Résumés



Dear Selection Committee;

It is our pleasure to submit this proposal for the OC Transpo articulated bus garage project. Project team members: Mark Ashby, Alex Grünenfelder, Sarah Hay, Andrew Lau, in affiliation with the Vancouver Design Nerds, are active in the fields of Architecture, Fine Art, Graphic Design and Electronic Design. The team assembled for this project share a commitment to collaborative work and creative engagement of the public realm of the City. Their experience and interests are complementary and driven by contemporary concerns of energy, ecology and community engagement in the civic context.

The RFP issued by the City of Ottawa requests an energy-efficient (LED) light installation to be installed permanently on the berm facing Industrial Avenue on the 200+ meter southern boundary of the project site. The RFP challenges artists to: evoke the function and activities of the site and the facility, to consider the linear path of motorists along the new sound wall, and to uphold the environmental performance standard of the facility.

The proposed project is an open-ended response to the criteria set-out above; creating an engaging and enduring art-piece as well as a platform supporting the work and experimentation of a future generation of artists.

Yours Truly,

Mark Ashby, MAIBC

202-244 East 14th Avenue Vancouver, BC, V5T 2M6 604.720.7795 mark@atelierpapier.ca

January 6th, 2008

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Bus 125 Route Map



#### Context:

Industrial Avenue is characterized by the City as a 'major road'. The surrounding area is zoned for industrial uses and is characterized by low-level industrial buildings and a preponderance of parking, loading and vehicle circulation. The linear arrangement of industrial parcels results in atypically long frontages and an autooriented landscape. Bus service on Industrial Avenue is discontinued on weekends and evenings further indicating that activity is diminished after hours and any night shift workers in the area expected to drive.

The success of an art installation on Industrial Avenue depends on its accessibility to motorists. All light-based work demands darkness for best effect. This challenges the artwork to engage a fleeting and transitory audience in the evening and, in the early morning and afternoon of the winter months.

#### Climate & Technology:

This project requires a substantial investment in exterior lighting. The extreme climate of Eastern Ontario demands careful selection of technology and hardware that will function as designed long into the future and that the piece be designed to facilitate maintenance. This proposal uses tested technology that is rated for exterior applications. Complex combinations of materials are avoided and solidstate technology with no moving parts is recommended.

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Site Plan



#### Concept: Bus dreams

The proposed bus yard evokes the homesteads of early settlers, their livestock corralled in the clear starlit darkness of the long Ontario winter. As cattle crowded together against the cut of the wind were their dreams infused by the cascading crystals and frozen spires in the sky? Or was it the other way around? Perhaps, as some hear strains of alien music in the northern lights, the spray of illusory colour was simply a trick of the eye, a cow's dream projected into the heavens.

Up to two low-resolution screens are constructed using exterior rated polychromatic LED light fixtures projecting through a diffused lens. The screens are mounted in the sound wall facing Industrial Avenue. The screens are capable of reproducing still or video images in super-low resolution or digitizing information feeds through a graphic interface.

The screens are remotely responsive, presenting a visual representation of external information feeds such as Environment Canada weather data or bus "health" as monitored by the electrical heating system used in the bus yard. The screens respond according to a program, changing pattern and colour in response to changes in temperature, wind and precipitation. The project can also support a web-based interface in the future, allowing artists and members of the public to create and submit programs for broadcast on the screens.

The screens are also locally responsive to traffic on Industrial Avenue. Light sensors in the vicinity of the screens identify changes caused by car headlights that creates a unique "noise" disturbance that interrupts the ambient program of the screen. Each event is unique, changing in accordance to the brightness of the headlights, the speed of the passing car and the ambient light and snow conditions.

In the prevalent reality of single-occupant vehicles, the experience is personal and touching. It is an acknowledgement of the individual in the anonymous isolation of traffic, but it is also a message; the car is a powerful tool and its ubiquity affects the city, the community and the environment. In contrast to the inherently social and cohesive nature of the bus, solitary confinement in a car is a self-imposed condition with serious consequences both for the social milieu of the City and the environment as a whole.

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## Installation and Implementation:

A matrix of LED monopoint fixtures will be installed in a galvanized metal housing. Waterproof fixtures are recommended for long-term durability and reliability of the installation. The fixtures will be covered by a continuous diffuser of laminated film and glass or resin approximately 2.4m high x 4.2m wide. The fabrication of the lens is important and some development is required to determine its proper thickness and composition. The completed assembly will be installed in the sound wall at the location(s) shown above.

A brief simulation of the screen in action is provided on the enclosed CD. (Refer to VDN\_SIMULATION.MOV)



Waterproof polychromatic LED monopont fixture



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Concept Sketch

#### **Project Team Bios**

**Mark Ashby** is an architect based in Vancouver, BC. He is a graduate of the University of British Columbia School of Architecture in 2004 and recipient of the Governor General's Student Medal for Architecture. Through his architectural and artistic practice, he is engaged in continuing inquiry into the urban, cultural environment in North America and abroad. Recent work includes: "Living Box", International Architectural Competition, 2005 (Honorable Mention), which was exhibited at the Surrey Art Gallery in 2008, "Digital Video Intervention - temporary intervention in public space", 2006, with Alex Grünenfelder, "Cube - a new model of real estate ownership for Vancouver", 2008 with Alex Grünenfelder. "Cube" was featured at Pecha Kucha Night in Vancouver, and at Centre 'A' Gallery, Vancouver, both in 2008.

**Alex Grünenfelder** is a graduate of McGill University. While professionally active in the field of graphic design, he also maintains an art practice that draws on his background in electro-acoustics, furniture design, and philosophy. An interest in combining the technical and collaborative methods of graphic design with the speculative, critical and social discourse of the liberal arts lead him to become a founding member of the Vancouver Design Nerds in 2004.

**Sarah Hay** is a Vancouver based artist / designer with a specific interest in environmental and social sustainability. A recent graduate of the Masters of Applied Arts in Design program at Emily Carr University, her thesis explored the slow movement as it relates to the design process. She constructed a seaworthy raft out of salvaged materials (timber pallets, HDPE 200L barrels, inner tube, bamboo and fishing net) as a way to test and apply the theoretical aspects of slow design. She is committed to collaborative design processes that deeply consider human experience, life cycle thinking, and social innovation. Sarah Hay's current practice includes creative strategy consulting and commissioned artwork for the City of Vancouver Olympic Village.



Andrew "Bruce" Lau is keenly interested in the intersection of art, technology, and sustainability. His most recent work, a wearable LED cape with 192 individually programmable lights, was exhibited at Maker Faire 2008 in San Francisco Bay Area, and featured in both Make and Craft blogs (http://blog.makezine.com/ archive/2008/05/led cape.html) Andrew designed the electro-luminescent lighting system on the Mondo Spider. (www.mondospider.com) As a web designer, Andrew donated his expertise to various local non-profit organizations such the Vancouver chapter of Engineers Without Borders, the Endangered Ecosystems Fund of British Columbia, and eatART (Energy Awareness Through Art). (**www.** eatart.org) Having obtained his undergraduate degree in Engineering Physics at UBC and his Masters Degree from UC Berkeley, Andrew is currently a director and co-founder of Zaber Technologies Inc., a Vancouver based company specializing in precision robotic control systems. (www.zaber.com) Through the collaborative and open-source project Heliomatrix, Andrew hopes to visually demonstrate solar power in an artistic way, inspiring others to find utility in the awesome potential of the sun. (www.heliomatrix.org)

The **Vancouver Design Nerds** are a network of collaborating designers and artists who share a desire to engage design opportunities with a spirit of creative play and to challenge the normative environment of the city. The diversity of the group enriches the design process and revealing innovative results. Design Nerd members are active in the fields of architecture and urban design, green building consulting, graphic design, industrial design, mechanical and electrical engineering, fine arts and systems design. (**www.designnerds.ca**)

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# **Professional References**

## D. Thor Elverum

Assistant Professor Design and Sustainable Systems Emily Carr University of Art + Design Email: delverum@eciad.ca Phone: 604.844.3800

# **Bill Pechet**

PECHET and ROBB studio limited Email: pechet\_robb@telus.net Phone: 604 732 0697

## **Kierstin De West**

CEO and Cofounder Ci: Conscientious Innovation Email: kierstin@ci-shift.com Phone: 604 877 1277

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http://blog.makezine.com



	Title:	South East False Creek civic infrastructure art package:
		Explorations in Spatial History
	Medium:	Aluminium, iron, steel, paint
	Date:	2008 - ongoing
	Dimensions:	varies
	Budget:	\$80,000
	Location:	South East False Creek Private Lands, Vancouver, BC
Pr	oject Credit:	Sarah Hay, Alex Grünenfelder

Artist: Andrew "Bruce" Lau

controller, batteries.

Title: LED Cape

Date: 2007 Dimensions: 48"x48" Budget: \$500



Hay/Grünenfelder

Description: The City of Vancouver, and PWL Partnership Landscape Architects, commissioned a series of artworks for the publicrealm infrastructure of the South East False Creek - the site of Vancouver's Olympic Village. Developed concepts evoke a deeper understanding of historical change in space and time and the possibilities for our present and future that may be found in the past. All elements are currently entering implementation and fabrication phase for permanent installation in 2009.

Location: Vancouver, BC Project Credit: Andrew "Bruce" Lau Description: A programmable garment scrolls patterns and lights in a matrix of red LEDs. Developed for use in night-time art and performance events, the LED Cape provides an adaptable

Medium: Fabric, surface mounted LEDs, conductive thread, micro-

- platform for both interactive and pre-programmed media.
- Artist: Sarah Hay
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Sarah Hay - (initial concept development, story boards,
interaction design, usability testing, installation)
iSpy
Smart Board, wood, burlap, projector, computer
2004
36″x48″x28″
\$2000
Carleton University School of Industrial Design
Sarah Hay, Serge Beaulieu, Shane Ellis, Geoff Hunt, Nadia
Collins
An interactive kiosk whereby visitors are challenged, in a

- a playful manner, with questions surrounding energy consumption in the home. The design features an interactive touch screen with projection from above and simple flash programming which leads them through the game.
- Artist: Mark Ashby, Alex Grünenfelder because 2 dimen Title: Cube Living Medium: Unbuilt Date: 2008 Dimensions: 12"x12"x12" Budget: \$1000 Location:: Vancouver, BC Project Credit: Alex Grünenfelder (Concept design & development, graphic description), Mark Ashby (Concept development, narrative development & script) Description: Cube is a multimedia exploration of land speculation and hyper-dense real estate development in the globalized urban environment, Cube is a one-cubic-foot unit of real estate. Cube Living was presented at the Vancouver Museum Pecha Kucha

Night and at Centre A Gallery in Vancouver in conjunction with

"Showroom"



January, 2009



Alex Grünenfelder



Sarah Hay

Vancouver Design Nerds











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Artist:Vancouver Design NerdsTitle:Urban Video InterventionMedium:Digital projector, tripod, computerDate:2006Dimensions:Varies by locationBudget:\$500Location:Vancouver, BCProject Credit:Mark Ashby, Alex Grünenfelder,<br/>Eesmyal Santos-Brault (Design, Flash<br/>Programming, Execution)

**Description:** A series of experimental video interventions in public spaces within Vancouver using animated and still images superimposed on iconic buildings and spaces. The project created a series of provocative juxtapositions evoking social values applied to public space and the history, development and the native landscape of the downtown peninsula.



- Artist: Mark Ashby with EHDD Architecture & Clearscapes Architecture and Art
  Title: Exploristore
  Medium: Welded steel, T&G siding, glass marbles, light
  Date: 1999
  Dimensions: 12'-0"x12'-0"
  Budget: Approx. \$20,000 door (\$430,000 total project)
  Location:: Raleigh, NC
  Project Credit: Marc L'Italien (Project Manager), Mark Ashby (Project Architect), Steven Schuster (Collaborating Architect)
  - **Description:** The 12'x12' sliding portal to Exploris Children's Museum retail space is designed to create a dramatic focal-point for visitors to the museum. A 9-foot diameter oculus of glass marbles captured in perforated stainless-steel is back-lit in its open and closed position. In keeping with the museums mandate for hand's on learning, the door is an irresistible tactile experience for visitors.





Mark Ashby

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