

Handlebar grips need to give a critical sense of the bike's steering performance as well as offering a comfortable contact point. I appropriated the metaphor of having both good and evil entities jockeying for attention during decision making while riding. The grips feature: a slight barrel form along their length to provide maximum cushioning, the use of dual density elastomers to alleviate hand fatigue and provide comfort, and increased length to address user complaints about running out of grip surface at critical moments.

Good 'n' Evil Bicycle Grips

Raceface Performance Components Ltd.

Role:

Designer

Project Manager

Materials: Dual density injected molded elastomer

Software: Rhino, Solidworks, Adobe Illustrator, CorelDraw, Adobe Streamline



Solidworks/Photoworks rendering

The entry box is the start gate for users riding the Whizzard, a WWI head to head mat racing water slide. Users race head first holding onto foam mats with integrated handles. The entry box design's geometry and its features sought to equalize and facilitate launch for all users to ensure all get off to a racing start.

Mat Racer Waterslide Entry Box

Whitewater West Industries Ltd. (WWI)

Role:

Designer

Project Manager

Materials: Fiber reinforced plastic (FRP), hard anodized machined aluminium, existing plumbing fittings & hose

Software: Solidworks, AutoCad, Adobe Illustrator

LMG continuously enhances its program of transit shelters for specific client requirements and real-world ridership demands. After digitally retooling the existing shelter system to optimize and standardize its construction, I designed more than 30 new variants of all sizes from micro single person stops to full station shelters. I exploited the in-built modularity and flexibility that we devised into their structural steel skeletons to create custom architectural cladding, features, as well as options that enable a complimentary vocabulary between all model types and to distinguish product lines. This system offers transit authorities cohesive yet bespoke shelter infrastructure, all built around common base structures. The image shown details a station shelter concept for a new urban rapid rail system.

Transit Shelter Program

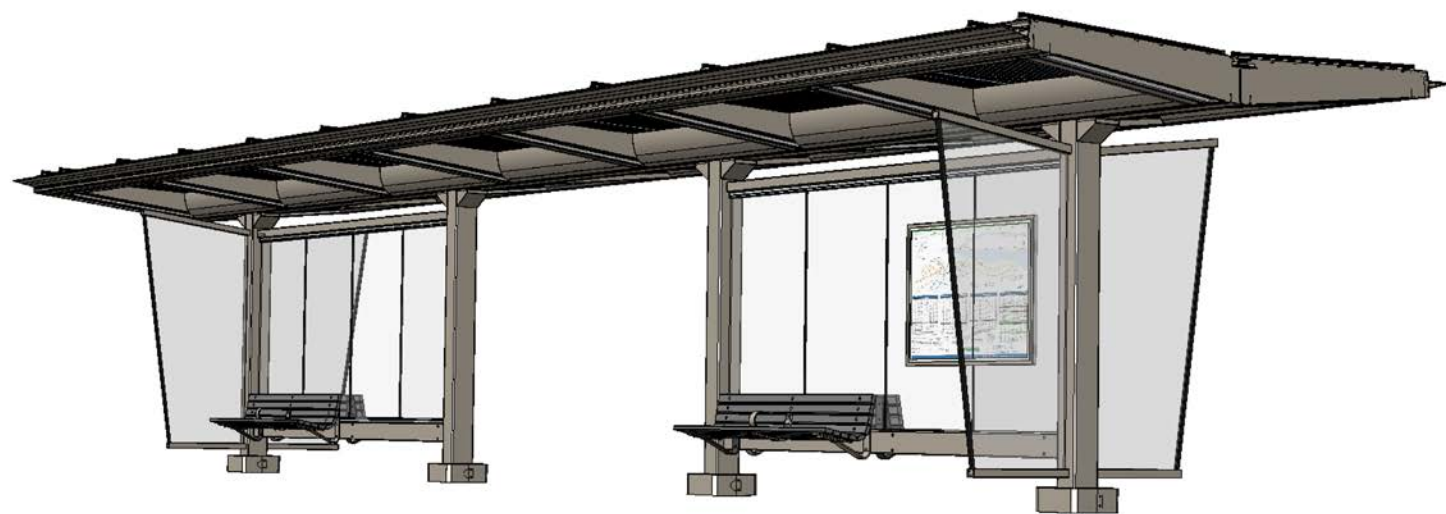
Lucid Management Group Ltd.

Designer: Alex Walker
Paraic Phelan

Role:
Designer
Design Project Manager

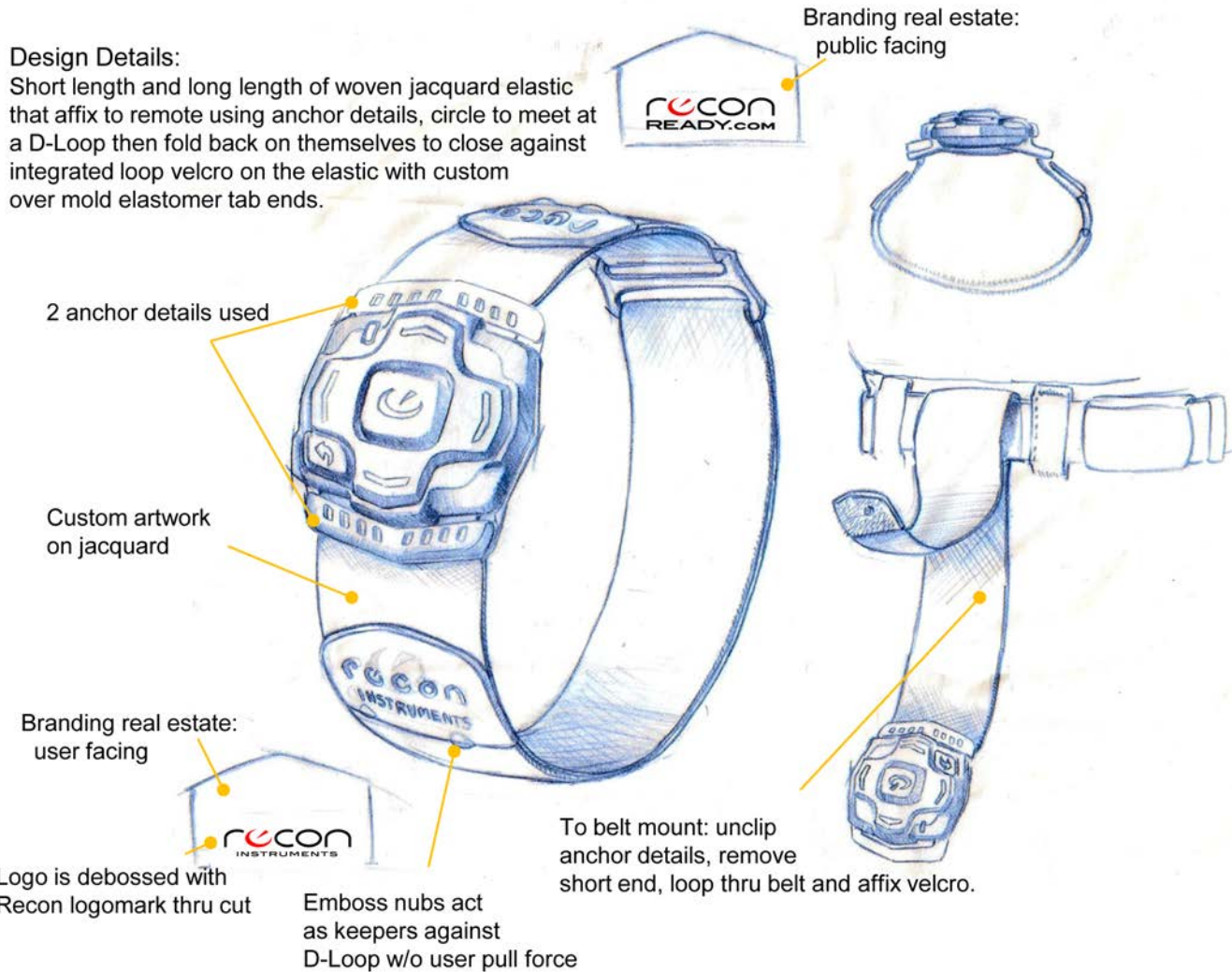
Materials: Various

Software: Solidworks, AutoCad, Adobe CS



Design Details:

Short length and long length of woven jacquard elastic that affix to remote using anchor details, circle to meet at a D-Loop then fold back on themselves to close against integrated loop velcro on the elastic with custom over mold elastomer tab ends.



The wearable wireless remote is integral to Recon Instruments' alpine heads-up display (HUD) experience and is the sole user interface to navigate all of the HUD's features out on the snow. The remote's strap design is critical for complete functionality. This is needed to allow secure fit wherever the user feels it would be most comfortable and accessible. The strap also has to be simple to attach and adjust placement with a single gloved hand. The design was refined to share materials and elements common with other snow hardgoods. The strap design incorporates woven jacquard elastic (stretch webbing) and over-moulded anchor points finished with branded end tabs with in-moulded velcro hook fasteners, to enable maximum take-up and intuitive operation.

Wearable Remote Strap Concept

Recon Instruments Inc.

Designer: Alex Walker
Mani Razaghi

Role:

Designer

Technical Developer

Materials: Injection molded Elastomer & Nylon, Woven Jacquard Elastic, PP hook fastener

Software: Solidworks, Adobe Illustrator, Adobe Photoshop

Using a kickboard allows swimmers to build leg strength and to improve overall form without putting stress on their shoulders. The kickboard designed, based on the proven tombstone archetype, includes key features to enable swimmers of all levels to maximize its training benefits. Lateral depressions run the length of the board, top and bottom, to contour to the swimmer's forearms when it is held under the body and also offer positive ridges along its edges for gripping when held at arms' length. Its slimmed nose allows for a comfortable one or two handed grip depending on the swimmer's preference or training. Being compression molded from EVA foam permitted incorporating a permanent non-slip texture to its surface. It also ensured its: lasting durability, relative lightweight, waterproofness, and resistance to pool sanitizing chemicals.

Rigid EVA Kickboard

Aquam Aquatic Specialist Inc./Nordesco Inc.

Designer: Alex Walker
Andréanne Leboeuf

Role:
Designer
Technical Developer
Materials: Compression moulded EVA
Software: Solidworks





Leg Armour

Photographer: Sterling Lawrence

The arm and leg armour are meant to offer unparalleled protection specifically functional to the requirements of mountain bikers. Through personally tested prototypes, extensive CAD modelling, rapid prototyping, and introduction of materials common to other protective equipment, these products have allowed riders to push their limits knowing themselves protected.

Rally FR/DH Armour Program

Raceface Performance Components Ltd.

Designer: Alex Walker
Ingrid Doerr

Role:

Category Researcher and Planner

Designer

Technical Developer

Materials: Injection molded PP, EVA foam, Nylon jersey fabric, Nylon webbing & binding, PP hook & loop fasteners, existing notions

Software: Solidworks, Rhino, Adobe Illustrator, Adobe Photoshop, Adobe Streamline, CorelDraw

Journey's collection targeted Generation Y, then an emerging youth market, with a line of backpacks and carry bags. The collection offered a high degree of personalization through interchangeable function modules, multiple style families, and diverse colour offerings. It also differentiated itself using the sporting shoe industry's materials and fabrication methods. I initially hand rendered all bags for the production sheets of their first catalogue and worked on art direction of the catalogue. I subsequently contributed, as part of a 3-person team, in defining coming collections along with overseeing current collection production.

Softgoods Collection

Journey Unlimited Equipment Inc.

Team: Gilly Mah
Michael Schigas
Alex Walker

Role:
Designer
Brand Strategist

Materials:
Nylon, PU, PE, PVC, pre-existing hardware & notions
Software: Adobe Illustrator, Adobe Streamline,
Quarkpress, Rhino, Solidworks





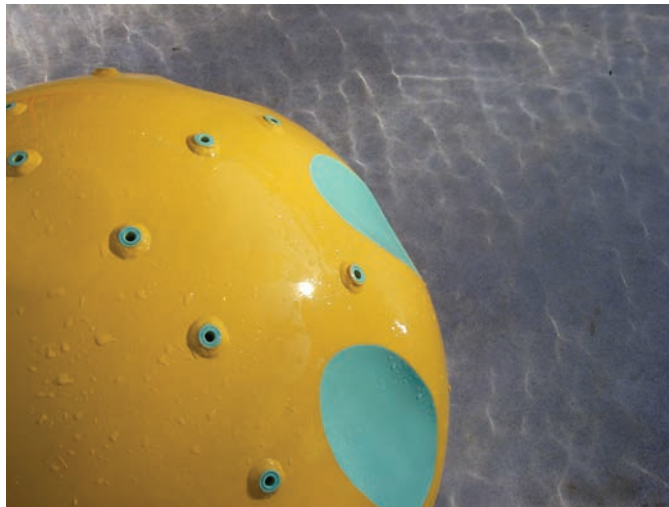
Gyroscopic sprinkler

Photographer: Hyuma Frankowski



Rotating squirt orb

Photographer: Hyuma Frankowski



Rotating squirt orb - Detail

This series of water features complemented a custom WWI waterplay structure installed for Hersheypark in Pennsylvania. They are standalone interactive play features which surround the structure and are fed by their own in-ground plumbing. Examples shown from the series of 16 are water driven centrifugal sprinklers, featuring twin rings with opposing port holes that rotate the rings in opposite directions creating a beautiful shower cone, and squirt orbs that rotate around a sleeve joint using depressed hand 'paddles' in the orb's top hemisphere. This aligns internal plumbing that fires 4 short bursts of water in seemingly random pattern from any of the orb's 16 ports.

Hersheypark Aquaplay Features

Whitewater West Industries Ltd. (WWI)

Role:

Designer

Design Manager

Materials: Galvanised & painted steel, stainless steel, existing plumbing fittings, hardware & hose, stainless steel hardware

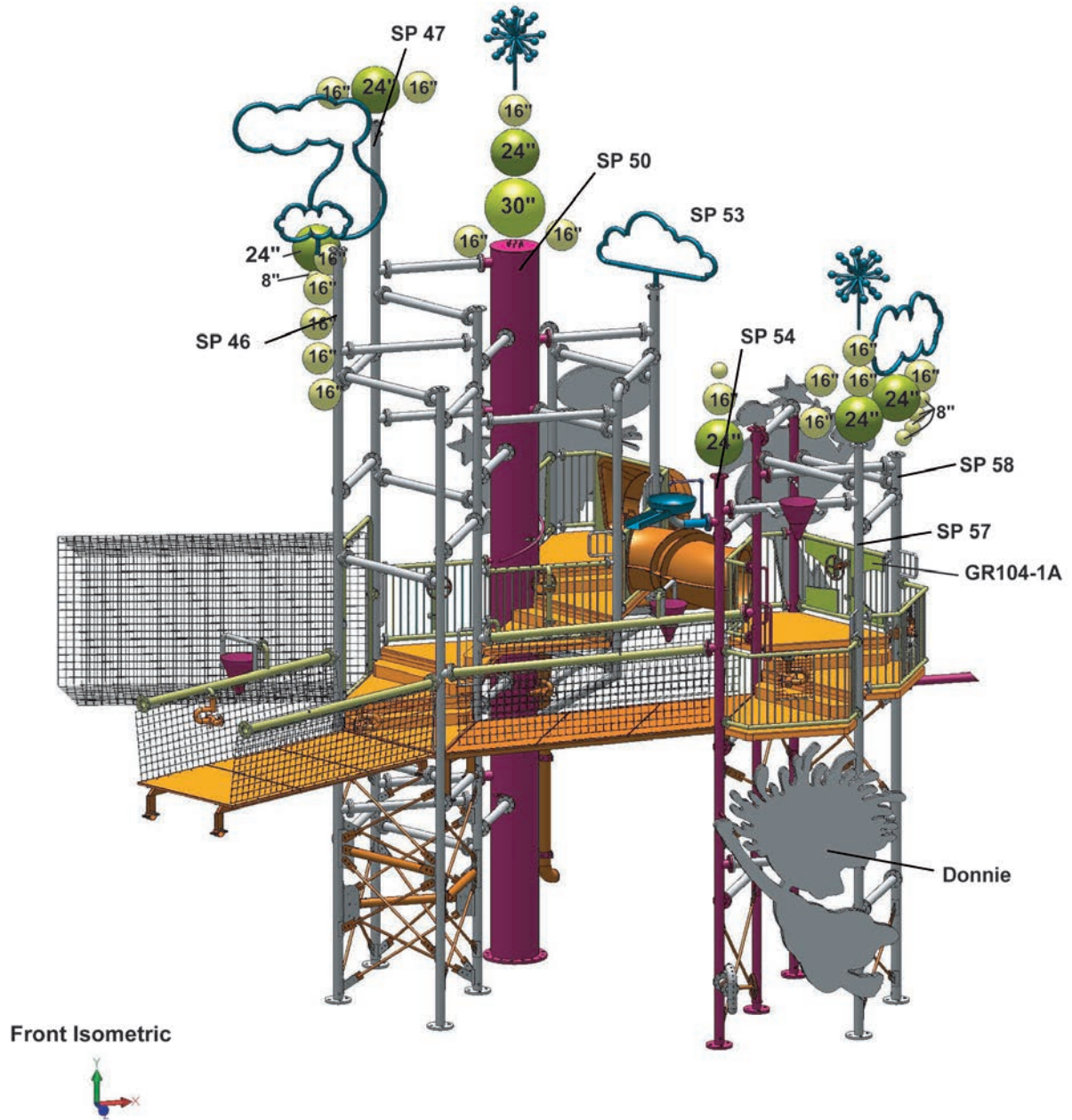
Software: Solidworks, AutoCad, Adobe Illustrator

WWI develops custom theming packages to transform their aquatic play structures into unique attractions specific to their clients' visions. I shifted the theming development process away from a 2D orthographic approach by taking advantage of on-hand engineering 3D CAD models. This method allowed for a more enveloping and considered theming avoiding dead spaces typical when using the former method often only realized when the structures were fully assembled on site. It also concurrently provided: clients with detail sign-off drawings, required comprehensive specification packages for manufacture, and detailed reference info for staff on-site. The drawing shown depicts one section of a Nickelodeon cartoon themed play structure installed in Australia.

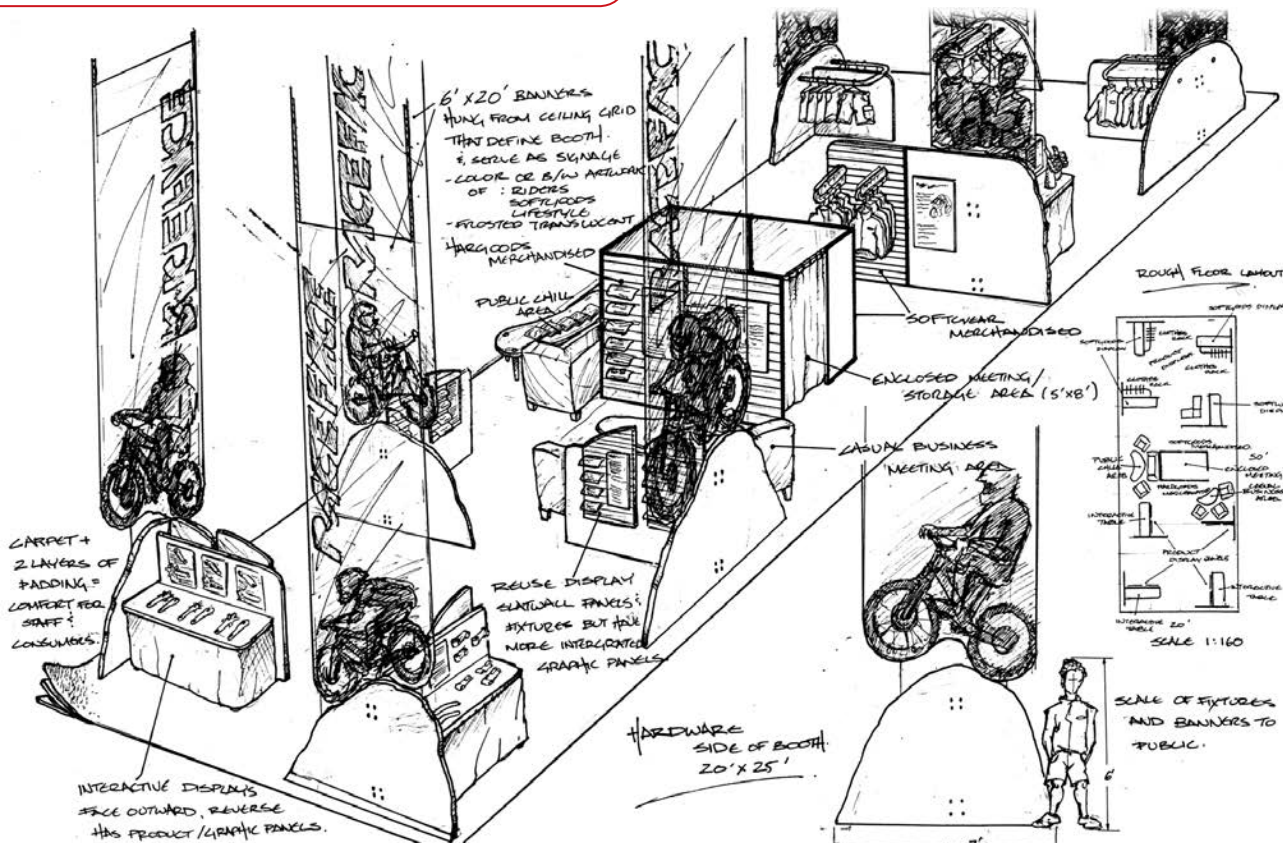
Theming Design

Whitewater West Industries Ltd. (WWI)

Role:
 Designer
 Design Manager
 Materials: Various
 Software: Solidworks, AutoCad, Adobe Illustrator



Front Isometric

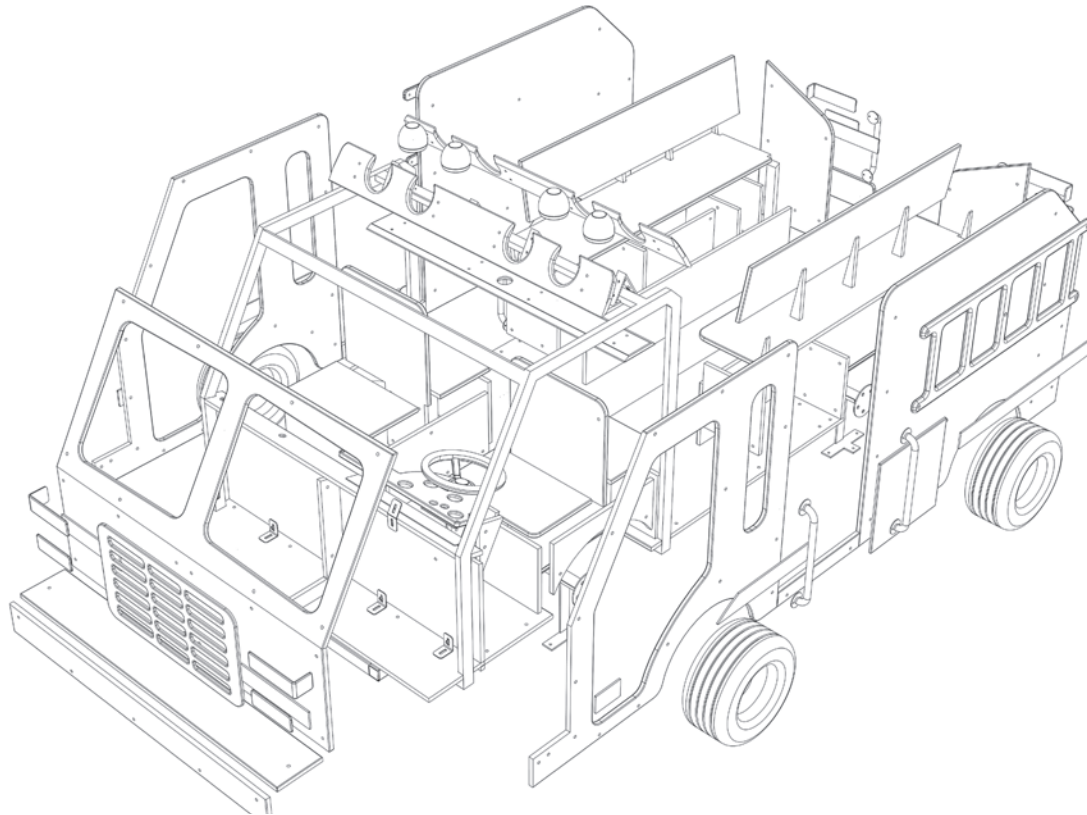


For Interbike, N.A.'s largest annual bicycle tradeshow, our aim was to generate as much visual impact as possible to continue raising Raceface's growing profile and expose their diverse line of after market components. I developed and managed construction of a 20' x 60' custom booth with tactile product displays and featured an eleven foot long crank arm that rotated over the booth's visitors. In following years, I had the opportunity to refine the booth incorporating more modularity to showcase their growing clothing collection while retaining key components of the existing booth. The sketch shown details a concept for Interbike 2001 utilizing translucent banners suspended above individual display units to distinguish various product areas.

Tradeshow Booth Designs

Raceface Performance Components Ltd.

Role:
 Designer
 Project Manager
 Materials: Various
 Software: Solidworks, AutoCad, Adobe Illustrator, Adobe Photoshop, Adobe Streamline, CorelDraw



The intent with these elements is to offer children a high degree of interactivity and for the pieces to act as departure point for their imaginations. Ten separate flat panel pieces were designed: the first series having a transportation theme & the second being specifically emergency service related. Shown here is the Fire Truck. The elements were meant to be mixed & matched to provide small townscape scenarios.

Odyssey Play Elements

Koalaplay Group Canada/Delta Play Co.

Role:

Designer

Project Manager

Materials: Machined PE sheet, machined acrylic, painted steel tubing and bar, existing auto accessories, tires, & zinc plated hardware

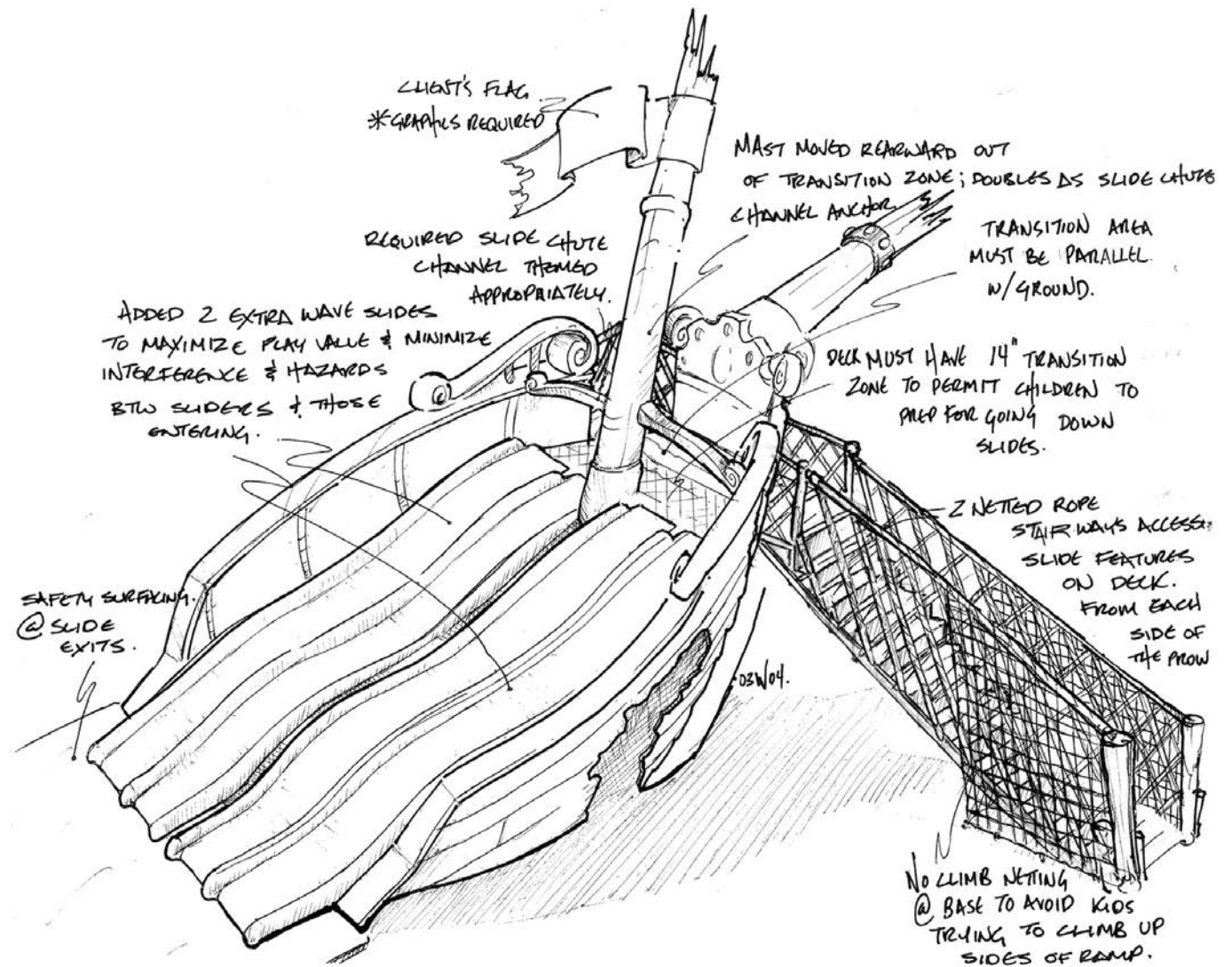
Software: Solidworks, AutoCad, Adobe Illustrator, Adobe Photoshop, Adobe Streamline

Playgrounds offer children time to interact with each other and most importantly time to let their imaginations loose. The playground was designed to take you to the ocean's floor fitting with the client's existing nautical theme. The unit consists of a broken-up galleon with 3 distinct areas to play in. Each one has their own integrated play features. Key to its success was ensuring while true to the aesthetic vision the client agreed to, all components were soundly manufactured to withstand the duress imparted from daily play.

Playground Design

Koalaplay Group Canada/Delta Play Co.

Role:
 Designer
 Mechanical Designer
 Materials: Various
 Software: Solidworks, AutoCad, Adobe Illustrator, Adobe Photoshop, Adobe Streamline, CorelDraw



To match their new building SEI wanted to increase capacity with a modern Radio Frequency machine table that incorporated maximum flexibility to meet increased demands for its family of structural engineered fabric products. Performance criteria for the table were extreme. Its 30'x 70' footprint needed: to support 4000 pds. per 6 ft. square, a central alley section that could roll away on castors to create an extra machine lane, and include hinged table leaves to bear work but fold away out of the machines' paths. It proved most cost effective to exploit existing pallet racking systems adapted to mate with a custom fabricated surfacing frame. This was surfaced with inert recycled PP sheeting to ensure operator safety and provide a robust and lasting work surface.

Radio Frequency Welding Table

SEI Industries Ltd.

Role:

Designer

Project Manager

Materials: Recycled PP surfacing, Custom pallet racking system, Furniture & misc. hardware, Casters

Software: Solidworks



These events were developed as a response and an escape to the often overly commercial and homogenous typical night out in Vancouver. I seized an opportunity to mix my love of music and design taking a historic pub, and with the help of partners and media artists, transforming its interior through lighting and projections for these one-off evenings. We drew on local talent showcasing multimedia artists to ensure guests enjoyed an atypical musical and visual experience.

Multimedia Events

Self-Produced

Designer: Alex Walker
Eugene Whang

Promoter: Mack Hardy
Alex Walker
Eugene Whang

Role:
Designer
Promoter

Platform: A/V equipment, LCD projectors, slide projectors, laptops, iPods, vinyl, CD-R, DVD-R

Software: Various





Photographer: Frank Crymble

I have built and worked in tandem with skilled artists and prop masters to deliver numerous aesthetic and, at times, functional large scale sculptures. To draw attention to Raceface's trade booth at the overwhelming Interbike show, I personally constructed an 11ft. long replica of their signature bicycle crank arm, top detail, that rotated overhead of their booth visitors on a 12ft. high support pillar. The 16ft. gorilla, below, was to be encircled by a water slide in a jungle themed water park. It was developed while working at Delta/Koalaplays with the in-house team of sculptures and painters. I was responsible for the design of its multi-piece detachable internal structural skeleton and developing all manufacturing and installation drawings.

Large Scale Sculptures

Various Clients

Role:

Designer

Design or Project Manager

Materials: Various

Software: Solidworks, AutoCad, Adobe Illustrator