

## ***Portfolio of Environmental Design and Action***

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As a designer and member of the social, natural, built, and technical environment, my imperative is to facilitate and engage in activities that explore inclusive attitudes, transdisciplinary collaborations (scientific, humanistic, technical, creative, and spiritual), and whole systems thinking. My design ethos and skills are strongly attached to the public domain, civically oriented projects that ensure environmental and social justice. I use methods of design organization, creative exploration, mapping, information synthesis, and principles of landscape ecology to promote dialogues about the generation of place and plans for implementation. Please share with me in this exploration and inquiry.

**Abigale Jane Stangl, 2011**

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## ***Design Manifesto***

Landscape Architecture is a form of revelation, a series of acts of revealing that which was before unknown. The acts or actions of Landscape Architecture can be defined in terms of the practice of revelation and the actions that disclose new experiences and understandings of relationships in purposeful ways. The genesis of the acts, the evolution of the actions, and the associated results occurring within space and mind, intentionally and as unregulated forces, are the products of landscape architecture. Therefore, the practices become a medium through which people as well as places become and are thus revealed/exposed to the world, rather than a series of prescribed approaches.

There are many realms of actions through which the methods, processes, systems, and intentions interface to reveal complexities of our lives and environments, and thus define strong and weak relationships between terrestrial functions and human relations. However, landscape architecture, as defined, cannot function without the initial act of confirming human beings (individually and collectively) as the central position from which any other act within the field is derived. Human beings are complex creatures, and our actions, thoughts, adaptations, and attitudes have insured that our energy outputs can have great impacts.

To assume these positions, the field of landscape architecture has also taken on the task of balancing three roles, or states of being through the agents of revelation—those individuals who perform actions for the process of discovery, the landscape architects: 1) being as the receiver of revelations (the person for whom something has been revealed); 2) being as a result of the acts (the person obtaining and responding to a new understanding, new evaluation

methods, new methods of observation, new opportunities for survival, or new abilities to share and transpire the new knowledge); 3) being the dictators (a person who makes pronouncements of the actions themselves). Each of these states of being fulfills the others and establishes the premise for how landscape architects might approach or respond to each of the different realms of design actions through acts of revealing that which was before unknown to themselves or to their clients, through philosophical, theoretical, or intuitive motivations that are not defined by geography or time.

While it is futile to think that every person will take on the role of the agent (a person striving to embrace the three states of being) or that the profession can take on the abilities of an individual, the nature of existence insures that every person ventures on a path of discovery through the aid of community or themselves. Furthermore, it is very rare, if not impossible, for one individual to obtain the full knowledge, intuition, or understanding of another individual, or species, or system—although we are perpetually trying to understand how through science, religion, and technology.

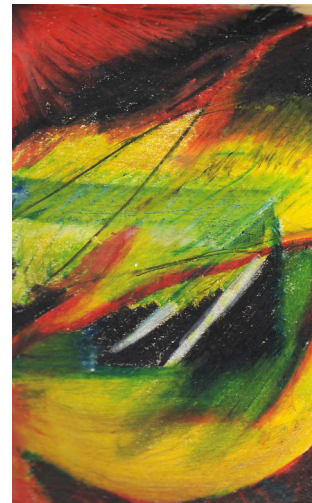
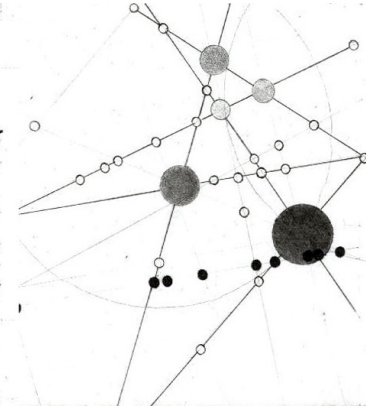
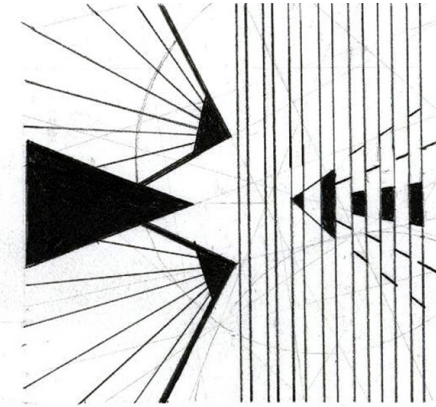
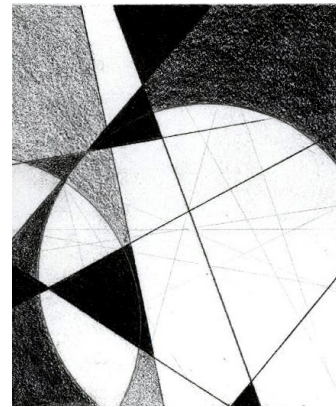
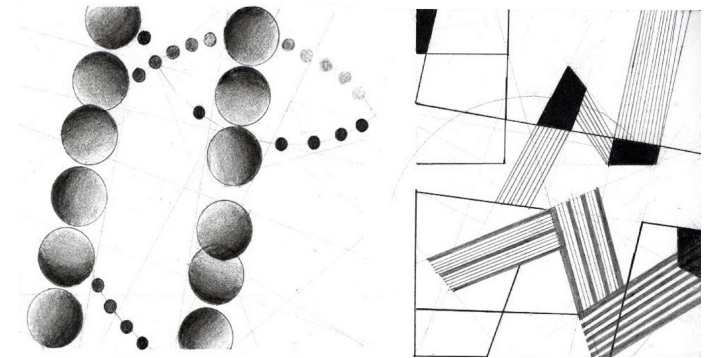
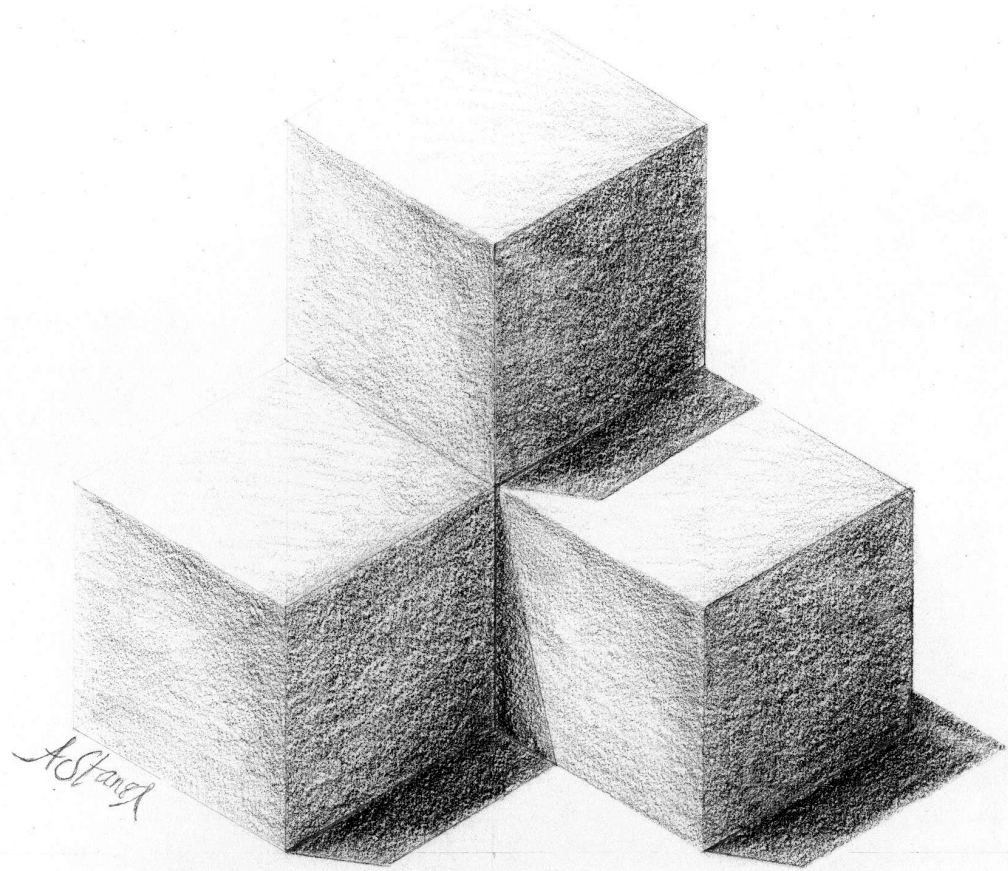
Therefore to assume the role of the landscape architect or the agent who performs actions to reveal that which was before unknown, we as landscape architects must embrace the responsibility of living and practicing as the mediator, or care taker of the three states of being (at both the level of the individual and the profession). The interpretation of this statement, as an action to reveal the purpose of landscape architecture, must then be responded to at the personal level, in relation to what has been revealed to the agent in his or her own development. There is an obligation to establish a foundation from which the process of revelation for oneself and for the sake of the rest of humanity can be explored.

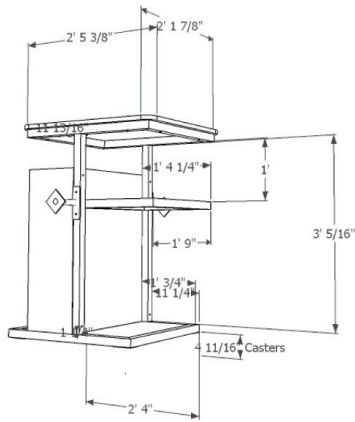
### ***This Is My Revelation***

***As the receiver of revelations (from external influences), as the result of the acts themselves, and as the dictator of actions, I am a person becoming through landscape architecture. I exist within the aim of empowering people. I am a resource for and a participant in the networks and systems that create awareness. I am a nurturer of those relationships through active engagement, inspecting, and development. My personal acts include: curiosity, creation, recognition, celebration, memorialization. Through the processes of observation, understanding, synthesis, creation, sharing, and disassociation (letting go of control) the result of these acts should result in: finding the beauty in hard places, extinguishing injustices, producing temporary phenomenological experiences, investment in long term health, and the growth of others. The direction of action, as dictated by me should: always encourage new revelations.***

## Multimedia Exploration

The exploration of colour, texture and form is a vital part of my life and understanding of the world around me. From abstract light, experiments with printing, to landscape sketches, I search for the relationships between the beautiful and ugly, the soft and the coarse, waste and abundance.





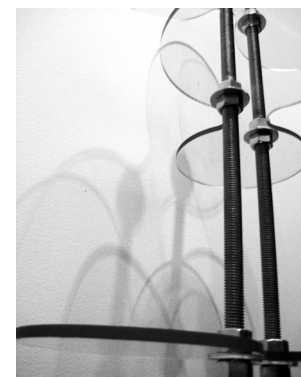
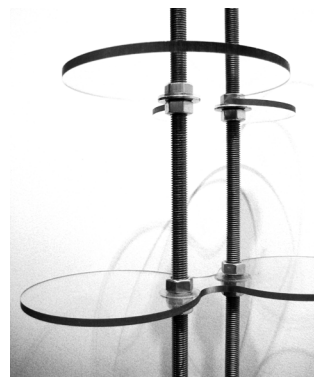
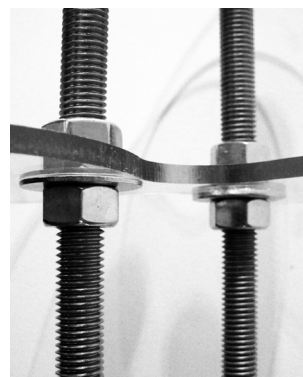
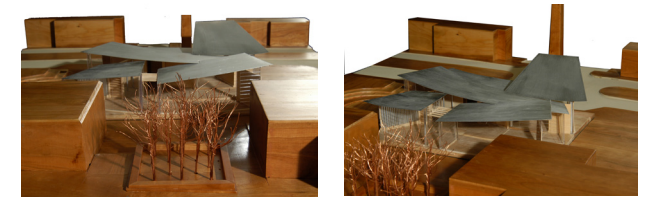
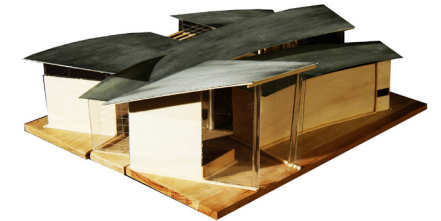
## Computer Stand Fabrication

Under the direction of a subcontractor for the Department of Homeland Security, I functioned as the project manager and codesigner of this electronics/computer stand. Presented with rough analogue sketches, I drafted and evolved the design in SketchUP and CAD. I worked with an artists to complete the fabrication.

Purpose	Item	Details	Size	Quantity	Total Quantity (x3)
Caster Attachment	Casters	Flange	4 1/16" (M/Master CABR 272476)	2	6
		Swivel	4 1/16" (M/Master CABR 272476)	2	6
		Flange Nut	1/4" 20Thread	36	108
		Lock Washer	Star or Split 1/4" 20Thread	36	108
		Bolt	Hex Head 1/4" (C)	36	108
Top Shelf Attachment	Screws	Cross Point or Phillips Head #8 WoodScrews		8	24
Cool Finger Attachment	Bolt	Hex Head 1/4" (C)		4	12
Electronics Box Attachment	Bolt	Hex Head 1/4" (C)		4	12

## Community Library Design Model

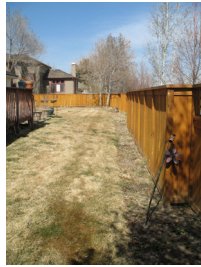
An abandoned armoury site in Boulder, Colorado has the potential to be repurposed into a site for a new community library. These models were constructed from hard wood during the conceptual library design assignment.



## Sculptural Design: Plant Stand

On the search for discarded and used materials, I unburied a collection of polycarbonate plastic sheets and threaded steel rods. After cleaning, experimenting and modifying the materials, the components were assembled into a vertical stand, which accommodates plants of different heights in a contemporary home.

# Private Residence Perennial Planting Plan and Garden

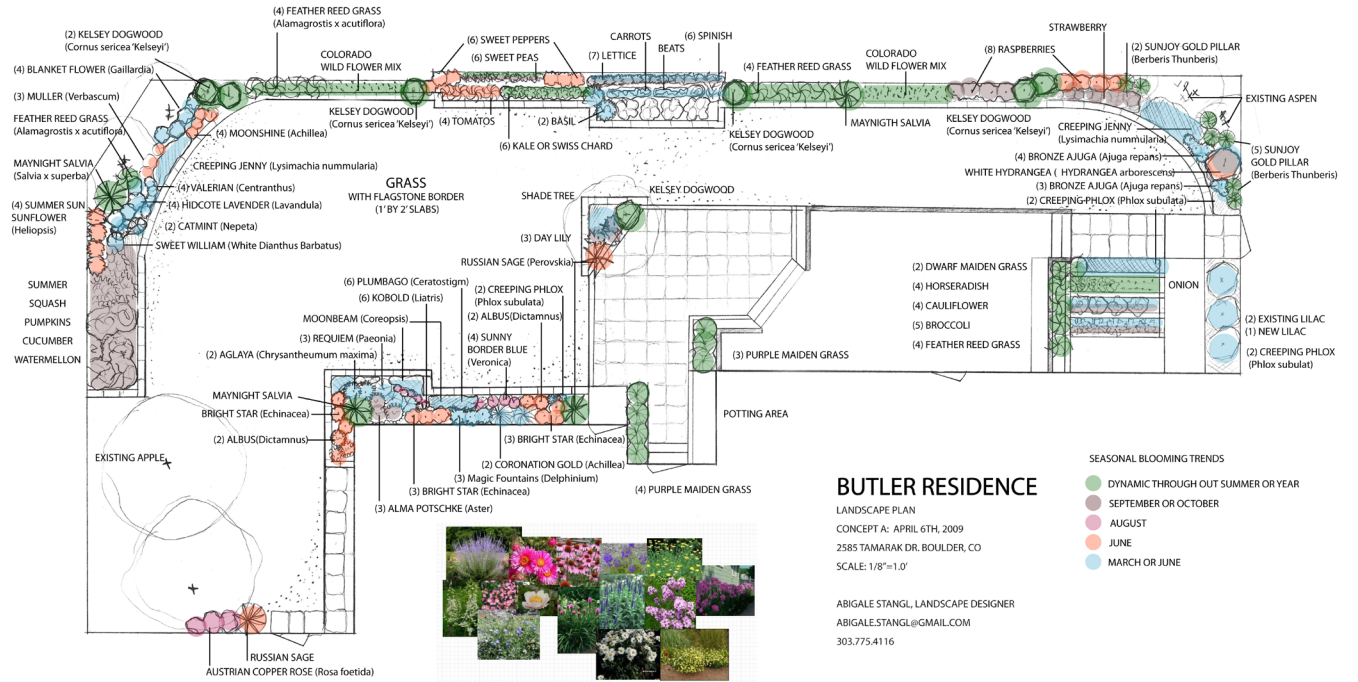


## The Butler Residence

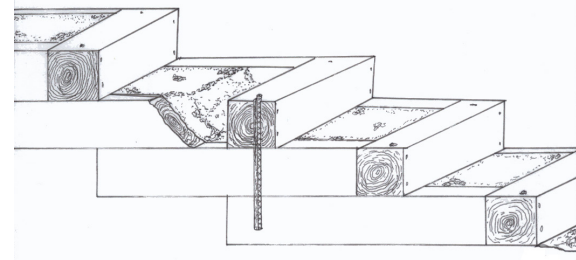
Situated within a suburban neighbourhood, this client was looking for a colourful, low maintenance garden and deck design. To establish a dynamic backyard space, I suggested a staggered garden boarder with vegetative anchors and diversity of native and perennial plants.



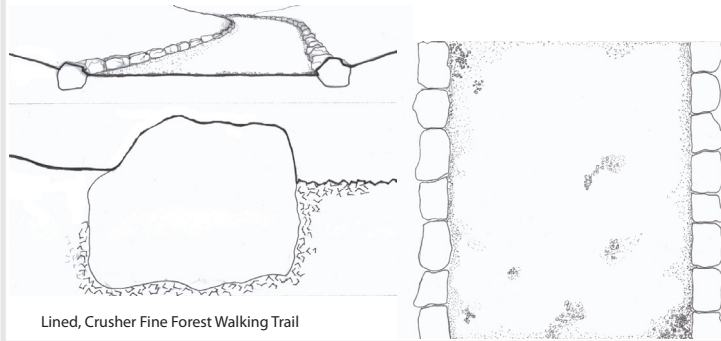
## Pre-Implementation



# Recreational Trail Maintenance Design Details



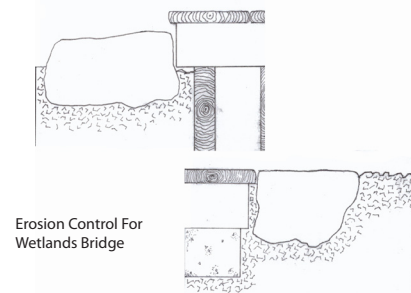
Rebar Enforced Risers to Forest Gathering Area



Lined, Crusher Fine Forest Walking Trail

## UVa-Wise Wetlands Project

The UVA-Wise Wetland Project began as an effort to remediate the impacts of acid mine drainage on the University of Virginia's College at Wise campus. These design details were used to solicit funding, perform maintenance to the site to insure safe visitor usage of a recreational trail through the wetlands.



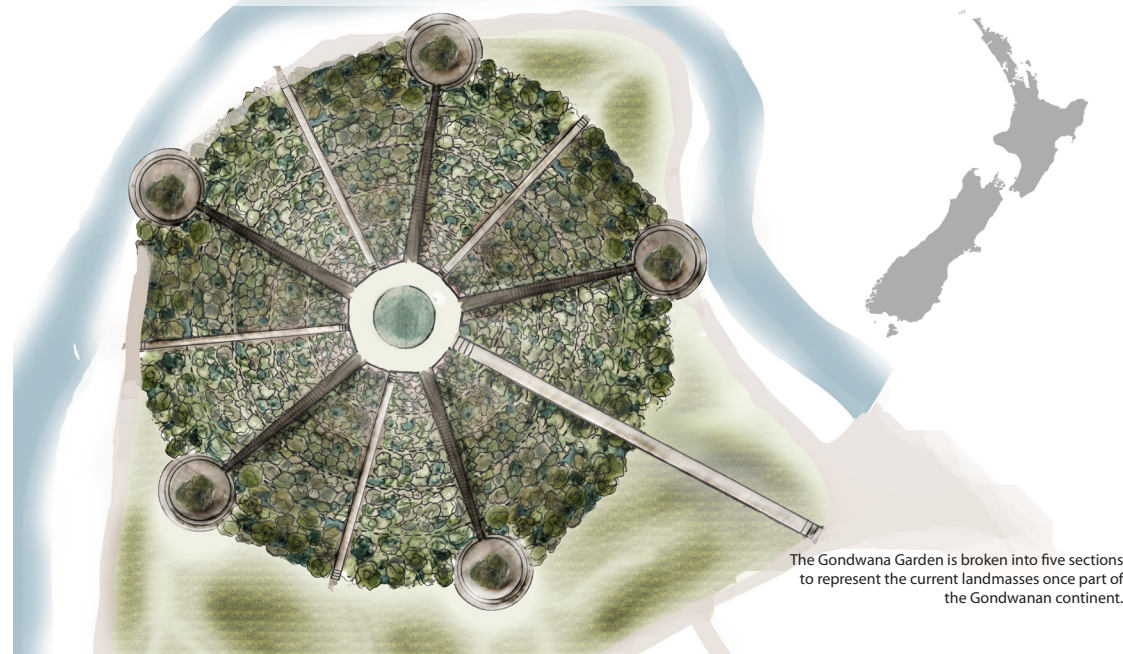
Erosion Control For Wetlands Bridge



## Needed Site Repairs



# Gondwana "Ancient Ones" Flora and Fauna Demonstration Area: Botanical Garden Design, Christchurch, New Zealand



The Gondwana Garden is broken into five sections to represent the current landmasses once part of the Gondwanan continent.

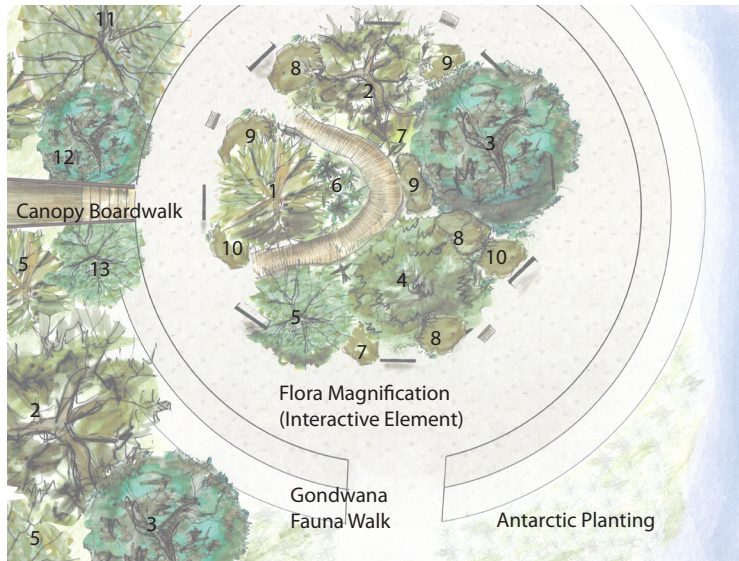
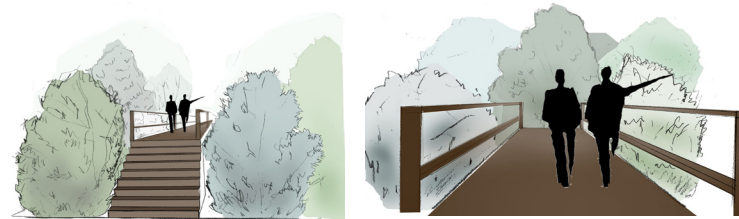


Between approximately 200 and 30 million years ago, the planets earthen formations evolved into what we know as distinct continents and geographic locations. The once unified, the southern precursor subcontinent of Gondwana incubated the planets first species. As the landmass drifted apart, the living species began adapting to the environmental conditions according to climatic and geographic conditions. What lies beyond this map however is the living floristic evidence that unquestionably connects South America, Africa, India, Madagascar, Australia, New Zealand and Antarctica as the ancient Gondwanaland.



A "rift" walkway separates each sections flora. Within each sections there is a dense and diverse ecosystem of native plants endemic to the respective location, representing the primary plant families indicated to the right. Beginning in the centre at the Extinct Plants Memorial Site and Algae Pool visitors will be reminded of the plants we have lost (anthropologically caused or not) and the origin of all plant life (algae).

Ancient Greats of New Zealand flora can be recognized, cherished, and celebrated within the Christchurch Botanical Gardens. Through the use of large scale (both in terms of the flora's size and notoriety within culture), this planting design is focused to provide visitors with a series of sensational moments during their visit, all the while learning about the diverse flora, ancient roots and their biological connections around the world. Plants were selected by their iconic standings with culture, connection to the primary plant species that existed prior to the rift between New Zealand and Australia (80 MYA).



## 1. *Agathis australis* (Araucariaceae)

*Agathis australis*, one of the few living relict plants which seems to have been present on Australia and has survived through the Oligocene" (Gibbs, 2006). One of New Zealand's oldest and largest species, standing 50 m tall with smooth bark and small oval leaves.



## 2. *Dacrydium cupressium* (Podocarpaceae)

A slow-growing tree, attaining a height of up to 50 m, although most surviving large trees are 20 to 35 m tall. It appears as an emergent from mixed broad leaf temperate rainforests. Valued for its timber.



## 3. *Podocarpus totara* (Podocarpaceae)

This is a medium to large tree which grows to around 20 to 35 m. It is noted for its longevity and the great girth of its trunk. The bark peels off in papery flakes, with a purplish to golden brown hue. The largest known living totara, is over 35 meters tall and nearly 4 meters in trunk diameter at breast height.



## 4. *Dacrycarpus dacrydioides* (Podocarpaceae)

Mature height of 55 meters, dominant in lowland forest and wetlands throughout the North and South Islands. The leaves are spirally arranged.



## 5. *Nothofagus fusca* (Nothofagaceae)

A medium-sized evergreen tree growing to 35 m tall. The leaves are alternately arranged, broad ovoid, the margin distinctly double-toothed. Pollen from Nothofagaceae species have been recorded from before 80 MYA.



## 6. *Dicksonia squarrosa* (Dicksoniaceae)

A few large fronds, sprout out horizontally and reach 1.5 – 3 m in length. They form a small "umbrella" on top of the trunk, and the plant grows up to 6 m tall. Can make habit from dead tree trunks.



## 7. *Gleichenia microphylla* (Gleicheniaceae)

Spores from this plant have been carbon dated back to 80 MYA, before Zealandia separated from Australia. Fronds forked several times, to 2 m long. A widespread species that forms large colonies in sunny damp sites around swamps, at bases of cliffs or in open forest.



## 8. *Halocarpus bififormis* (Podocarpaceae)

This tree can grow up to 10 m, but in open areas is usually a low spreading bush. Found at higher elevations in the volcanic plateau of the North Island and at lower elevations on the South Island.



## 9. *Weinmannia racemosa* (Cunoniaceae)

A medium-sized tree occurring in lowland, montane, and subalpine forests and shrub land from the central North Island south to Stewart Island.



## 10. *Toronnia toru* (Proteaceae)

Slow growing specimen tree on dry soils. Erect habit. Fragrant yellow flowers (spring). One of two Proteaceae endemic to New Zealand.



## 11. *Phyllocladus trichomanoides* (Podocarp.)

A small to medium-size tree, reaching 10-30 m tall. The leaves are sparse, leaves are only green for a short time, soon turning brown. According to Gibbs, 2006, *Phyllocladus* or celery pines were present on Zealandia at the close of the Cretaceous Period.



## 12. *Knightia excelsa* (Prodeaceae)

Grows to 30 m tall, with a slender crown. The leaves are alternate, leathery, narrow oblong. Typically grows on the North Island, however given the right conditions can grow in cooler climates. One of two Prodeaceae species endemic to New Zealand.



## 13. *Podocarpus nivalis* (Podocarpaceae)

A conifer which grows in the mountains and subalpine lands from 37° to the far south New Zealand about 46° South Latitude. Up to 5 m tall.

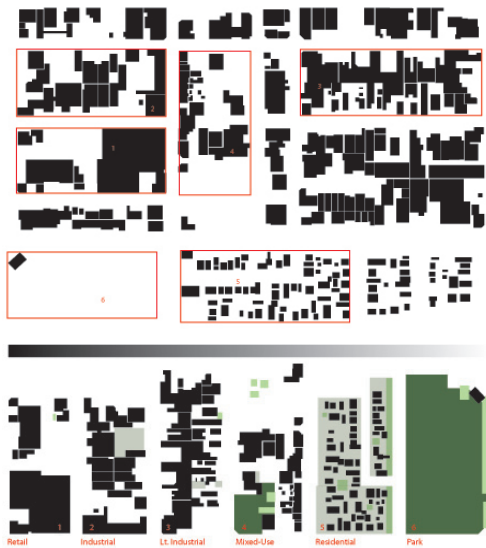


# Sydenham Square Site Analysis: Spatial Understanding and Diagramming, Christchurch New Zealand



The settlement of Christchurch was planned in England using the standard orthogonal rectangular grid of colonial settlement. Regularity was only broken by the Avon River and two diagonal streets. As Christchurch has grown beyond the point of English planning, the overall pattern has changed and become decentralized. The Christchurch Urban Development strategy has proclaimed that growth management with for Christchurch has often been criticized for being “too permissive and market-driven” and as a result the patterns of the outer city have very divergent patterns of growth.

## Sydenham Neighbourhood Transect



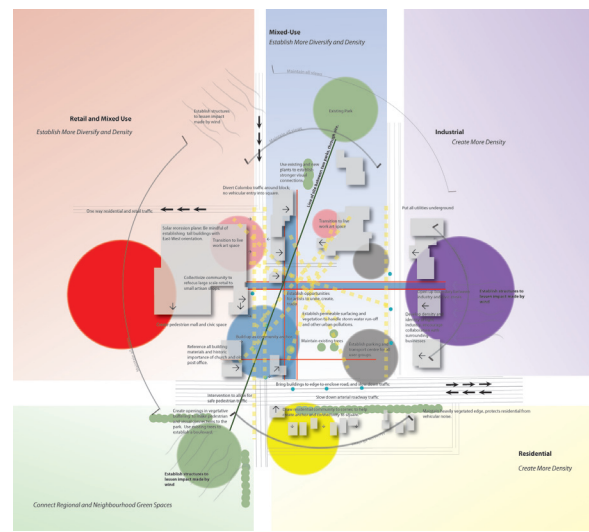
Green space and tree canopy and nearby school ground site establish the natural features of the overall neighbourhood



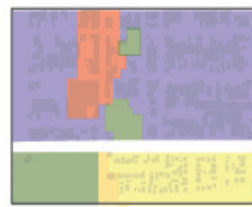
Primary vehicular nodes indicate a framework of intersections and movement around the site.



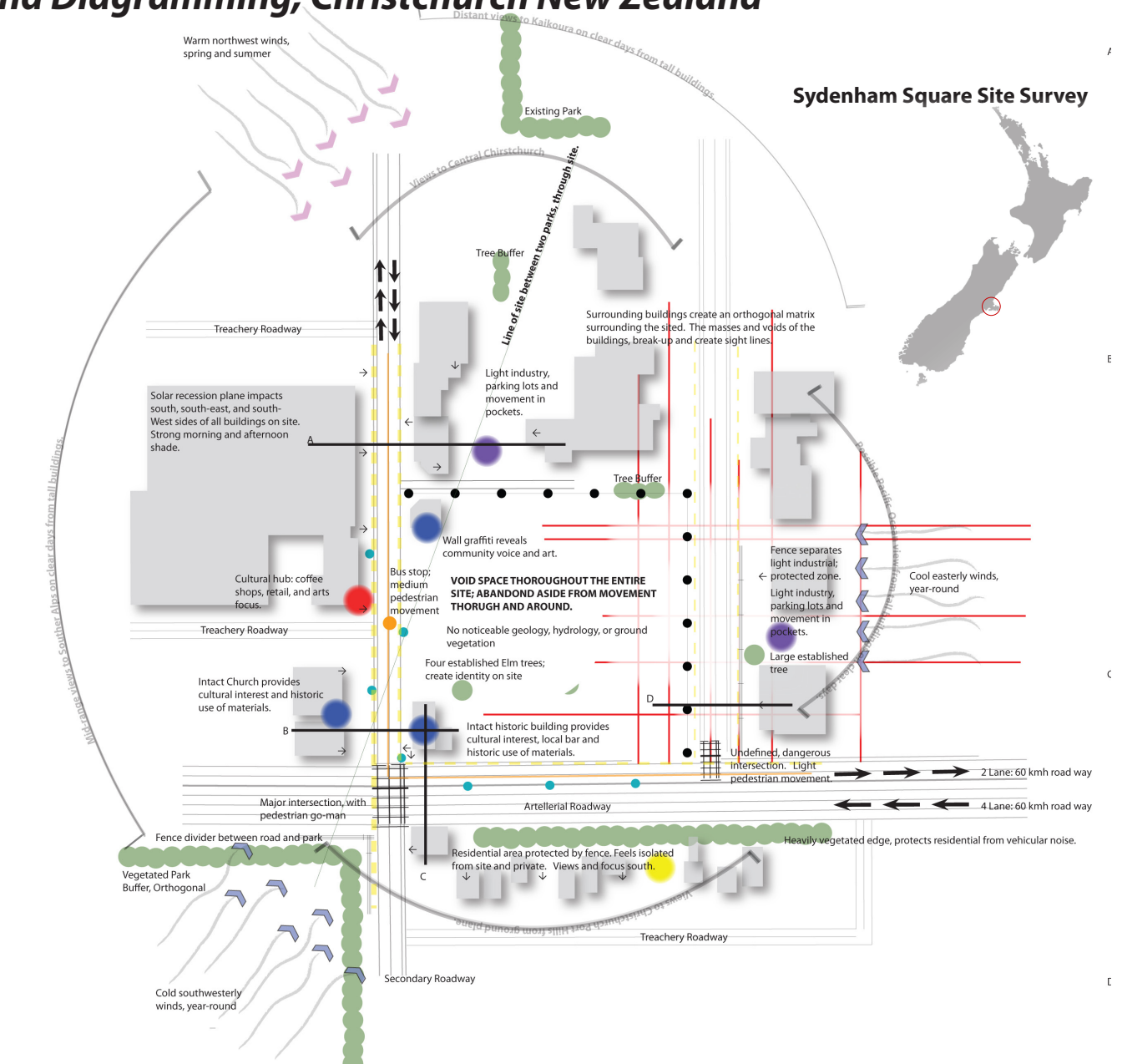
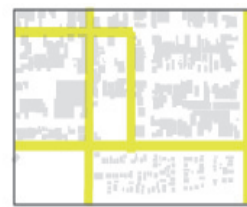
## Sydenham Square Site Analysis



Neighbourhood zoning indicates that this area is the transition point for multiple city uses.



Boundaries around Sydenham square exist in part because of the strong road axis and blocks of development



Sydenham Square sits on the south boundary of the strictly established orthogonal grid, and can be seen as a threshold community; influenced by the orthogonal character of the down town Central Business District (CBD), the angled streets of surrounding residential properties, the intersection of Brougham Street ( a primary artillery street ) and Colombo, and its overall multiuse character.



# Regional Urban Resilience Between 2010 to 2110: Regional Planning, Christchurch, New Zealand

Resilience is the property of a material to absorb energy, become deformed and then, and then recover upon unloading of the energy recover. The City of Christchurch was developed in an area which is subject to many natural disasters and potential deformation. Strategies for resilience as waters rise, land uses change, and resources diminish, is a key factor in the sustainable/long term survival of the city.

The following concept explores one conceptual possibility, which would anchor poignant corridors of the city into the underlying ecology and existing built infrastructure will allow for positive succession, densification, and diversification.

**\*\*Please Note:** This design exploration was completed one week prior to a 7.2 Magnitude earthquake in the Canterbury region, and was prepared as a conceptual approach to redevelopment before the city was dramatically impacted. The image below is of Christchurch during a subsequent 9.2 magnitude earthquake which has devastated a majority of the inner city and neighbourhoods.



## Layers of Resilience

### Resilience and Dense City Centre Character

Cultural attractions, central business district activity-highest density, the most infrastructure security, and still equitable social diversity. Opportunities for cultural expression should occur, and all infrastructure development should look to regionally effective sustainability strategies.

### Moderate Density and Resilience

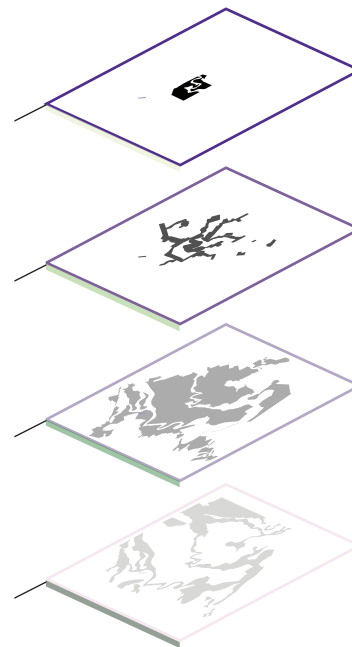
The primary reliance corridors should provide residents with unobstructed access to the respective communities, have a range of uses, and include hubs for public services including fire, gas, police, education, libraries, small industry, and high density living. These areas will provide the infrastructure needed for times of emergency.

### Primary Resilience Corridors

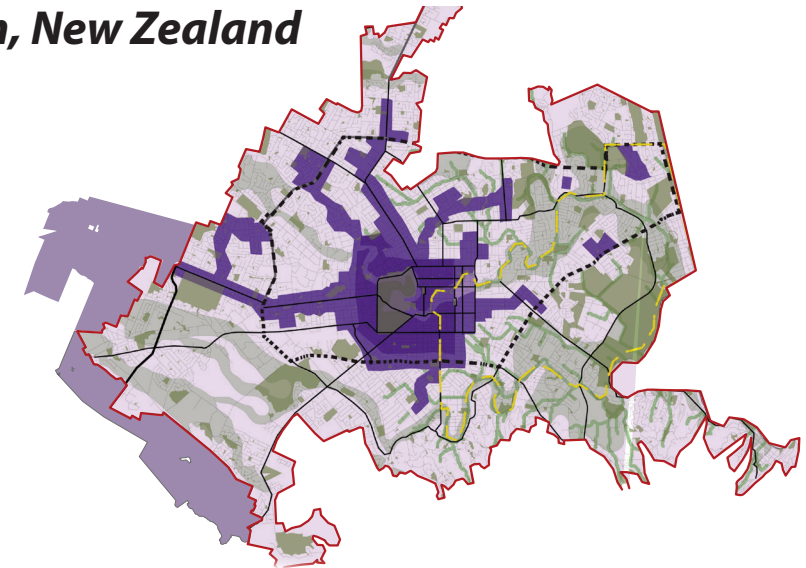
This zone acts as the buffer between the lower density areas and the resilience corridors. Much of the housing in this area is medium density with fingers of higher density laced through. The character and identity of these areas can thrive as there are balanced infrastructural amenities.

### Underlying Resilience Corridors

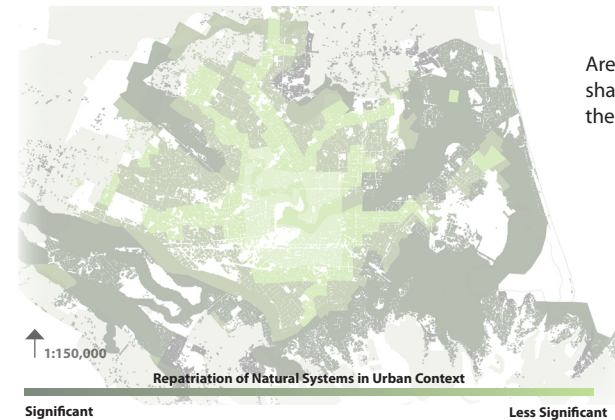
This area is most subjected to natural disasters. Density should not exceed 2010 density rates, and residential properties must also be utilized for food production. These areas are furthest from the Resilience Corridors, but can produce the most food.



- Green Connections and Waterways █
- Conservation and Park Lands █
- Vulnerability Areas, Low Density █
- Developed City Area █
- Resilience Corridors █
- Potential Growth Areas █
- Perimeter "Safety Rout"
- Bicycle Circuit █
- 2010 to 2110 City Boundary █



## Repatriation of the Natural Systems



Areas within the city that do not fall within the densest infrastructure resilience corridors shall start to assume more and more responsibility over the next 100 years to utilize the land for food production or other goods that will supply city residents with needed services. Tax incentives may be distributed to people who initiate the system.

Urban Agriculture

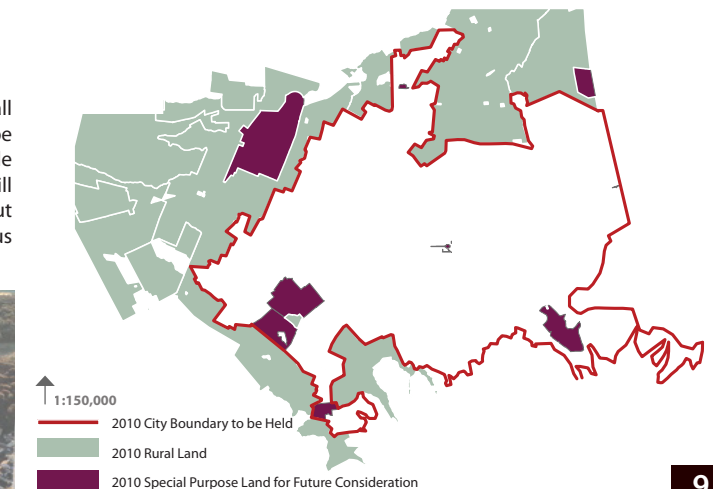


Community Shared Agriculture



## 2010-2110 Growth Boundary Freeze

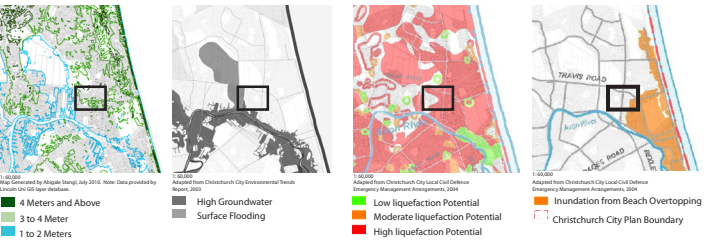
To help promote density increase within the existing city boundary, all permits for building outside of the indicated boundary should cease to be granted until the optimal density is achieved. This will maintain valuable agricultural land close to the city centre for future food needs, and will allow maximum flexibility for future generations land needs, without accruing unnecessary infrastructure costs for society today, and focus efforts towards restoration of currently uninhabitable areas.



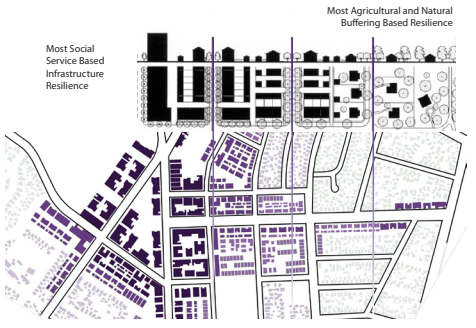
# Three Studies of Local Urban Resilience Planning: Urban Design, Canterbury, New Zealand

At every scale the strengthening of Christchurch, to insure its resilience to natural disasters, will depend upon the stabilization, densification, and repatriation of the natural and human systems. With a vision to increase density and establishing distinguishable and diverse community character, the following three urban design projects exemplify how the cite's infrastructure can become more resilient while using the existing framework.

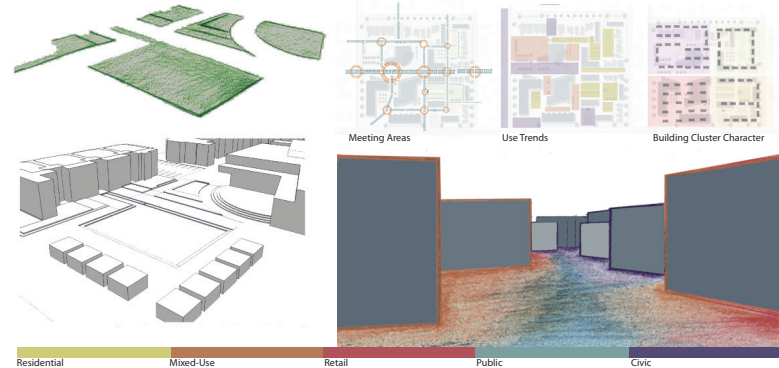
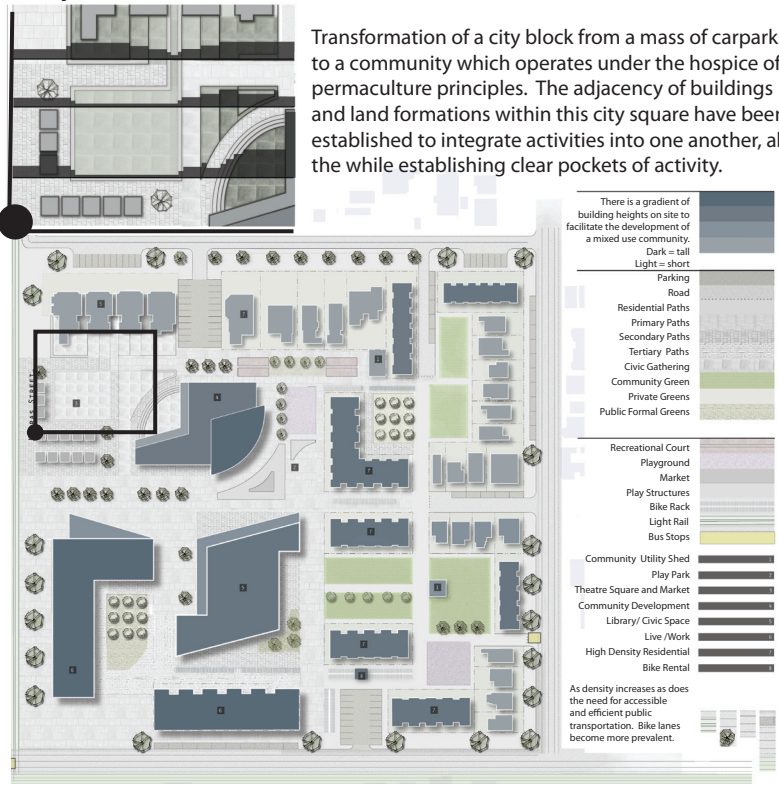
## Neighbourhood



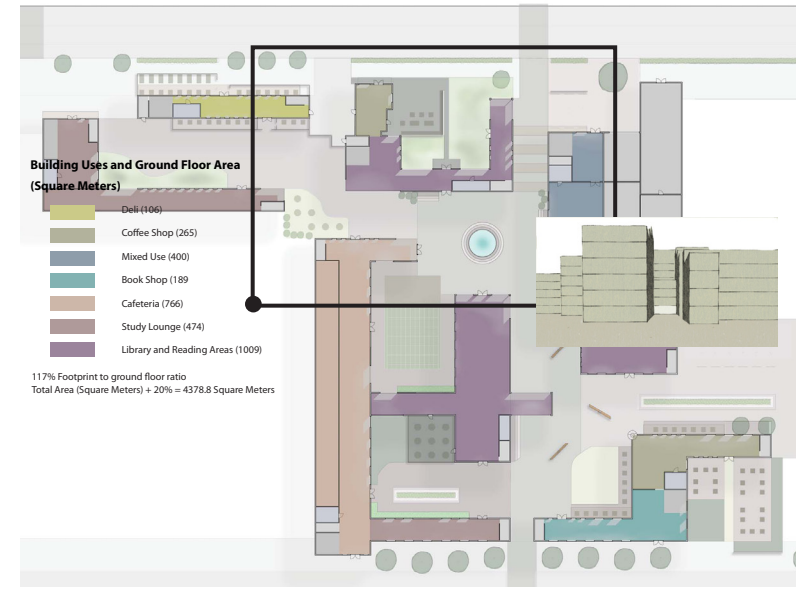
The plan above shows the maximum density envisioned for long-term development (2010 to 2110), and has been designed as a Strong Infrastructure Corridor for the community of North New Brighton. Buildings and infrastructure within this corridor should be developed or retrofitted to be resilient against the factors caused by natural disasters, while providing high density living, diverse uses, and many opportunities for community place-making.



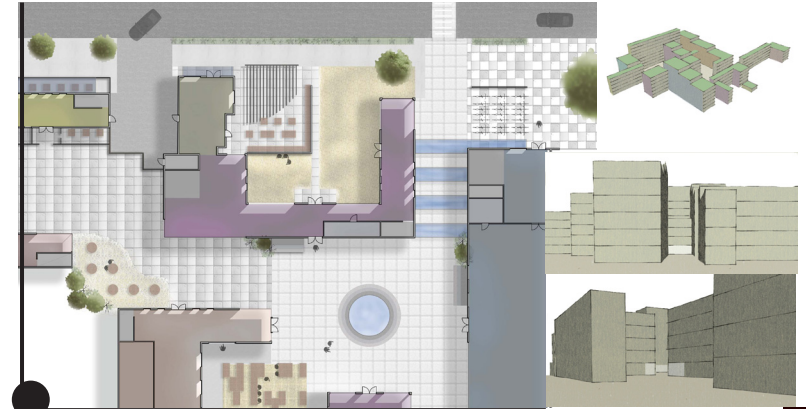
## City Block



## Commercial Plot



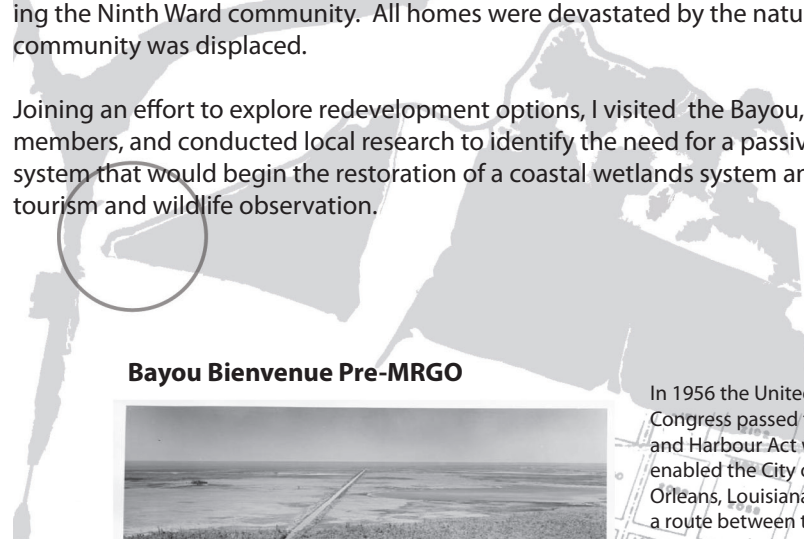
Transition of an abandoned commercial complex into a university student-housing in the heart of downtown Christchurch. The site has a variety of scaled courts to enable diversity of use, while helping the public move through the threshold of public to semi-private spaces. Use of Visual Passages, Sculptures, Changes in Ground Height, and a series of Green Roof Gardens create many opportunities for engagement.



# Bayou Bienvenue Recreation: Wetlands Restoration Design, New Orleans, Louisiana, USA

In 2005 waters of Hurricane Katrina flooded into Bayou Bienvenue and thus converged at the levees on the Mississippi River Gulf Outlet, breaking the constructed walls and quickly inundating the Ninth Ward community. All homes were devastated by the natural disaster and the entire community was displaced.

Joining an effort to explore redevelopment options, I visited the Bayou, met with community members, and conducted local research to identify the need for a passive, yet structural wetlands system that would begin the restoration of a coastal wetlands system and provide a centre for tourism and wildlife observation.



## Bayou Bienvenue Pre-MRGO

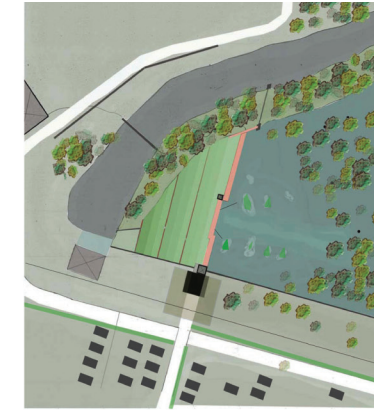
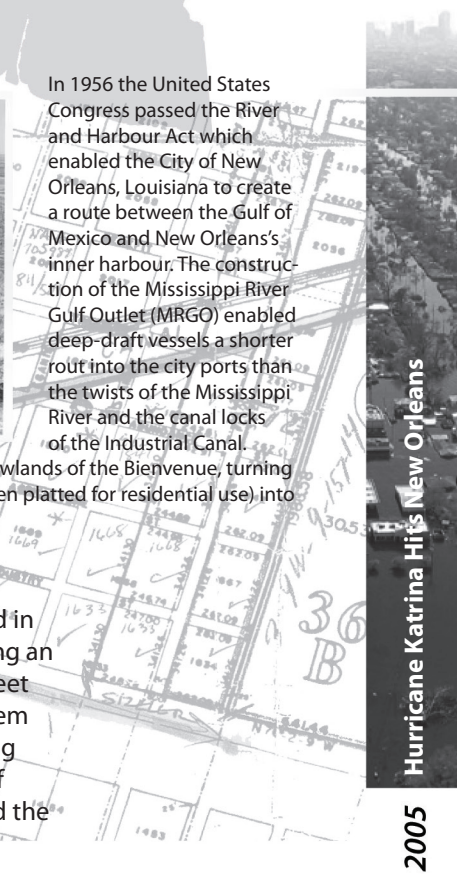


In 1956 the United States Congress passed the River and Harbour Act which enabled the City of New Orleans, Louisiana to create a route between the Gulf of Mexico and New Orleans's inner harbour. The construction of the Mississippi River Gulf Outlet (MRGO) enabled deep-draft vessels a shorter route into the city ports than the twists of the Mississippi River and the canal locks of the Industrial Canal.

Shortly thereafter, saltwater began to seep into the lowlands of the Bienvenue, turning a landscape once abundant with Cypress trees (and even platted for residential use) into an exposed, flooded basin.

## Property Map of Bayou Pre-MRGO

Many Lower-Ninth Ward residents own parcels of land in the Bayou, of which today is water and marsh. Utilizing an ordering system based in historic neighbourhood street patterns I designed a terraced, floating wetlands system to prevent harmful storm surges, while acknowledging the industrial heritage, cultural heritage, and issues of environmental justice deeply embedded in NOLA and the Lower 9th Ward.



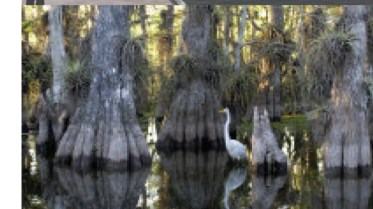
5 Years

Residents begin to return to the higher ground in the Ninth Ward; blighted structures are removed and levees are strengthened.



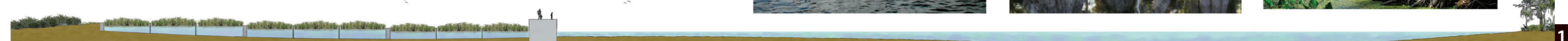
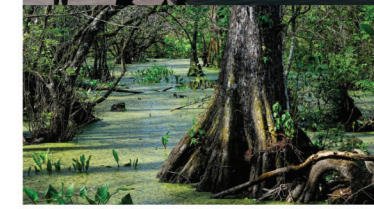
10 Years

Wetlands Terraces are functional and passively working. Rebuilding of residences begins to progress.



20 Years

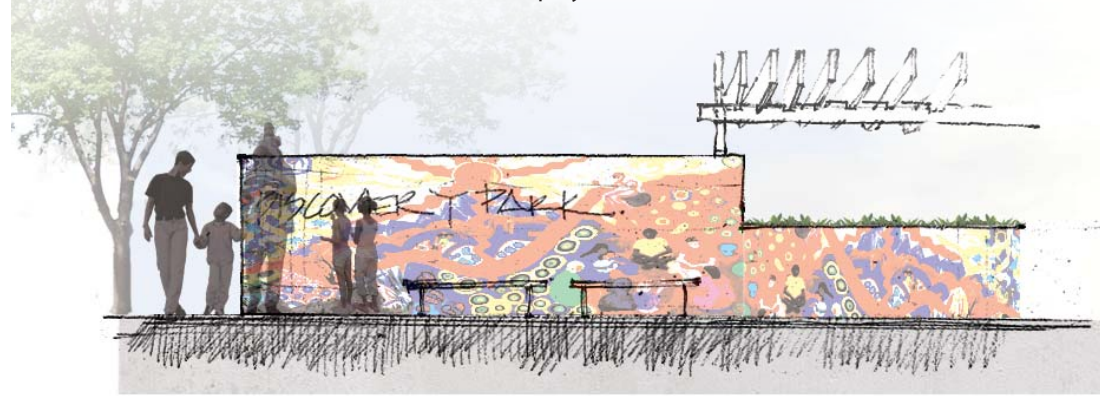
Transit Oriented Development begins to take hold near transition and established Bayou Wildlife Conservation Centre.



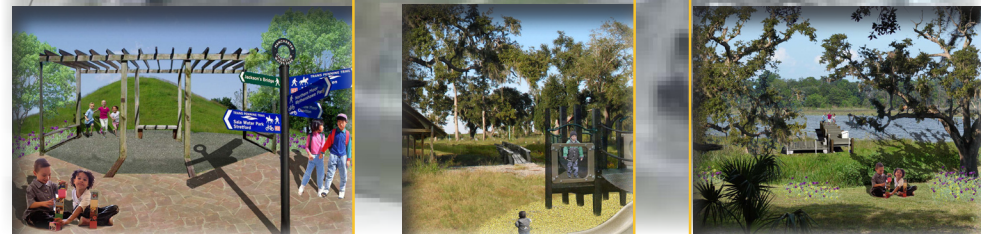
## Davant Park: Community Restoration, Louisiana, USA

In 2005 Hurricane Katrina destroyed 95% of the homes and structures in Plaquemines Parish, Louisiana. Many of the small and rural communities located along the alluvial deposit of the Mississippi River, including the community of Davant, instantly became displaced from their homes and community. Before the hurricane, Davant Park had the largest community centre and swimming pool on the east side of the Mississippi in Plaquemines.

This project began as part of the Plaquemines Silver Strand master planning initiative, one of seven parks identified for renewal. As a UCAN Serve AmeriCorps, I approached this design process as a means to provide the community of Davant with tools to build their capacity and inspire imagination for what can be created. Specific amenities include play structures and earthen mounding, safe water access, and formal and unstructured play areas.



Davant Park has been a place for recreation and barbecue gatherings for many decades. As the formal parish centre, the residents of Davant have a strong identity and sense of place. The over arching goal for this design was to remind the residents of Davant of what is available for the survival of their community.

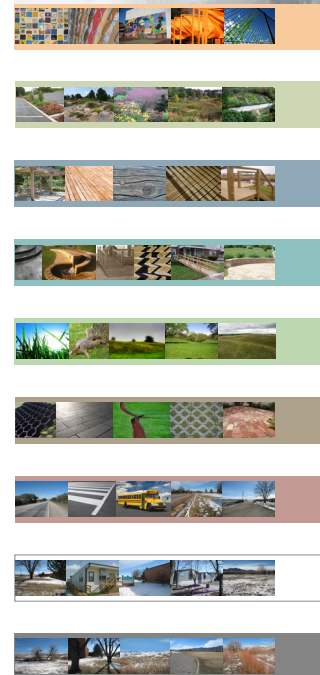
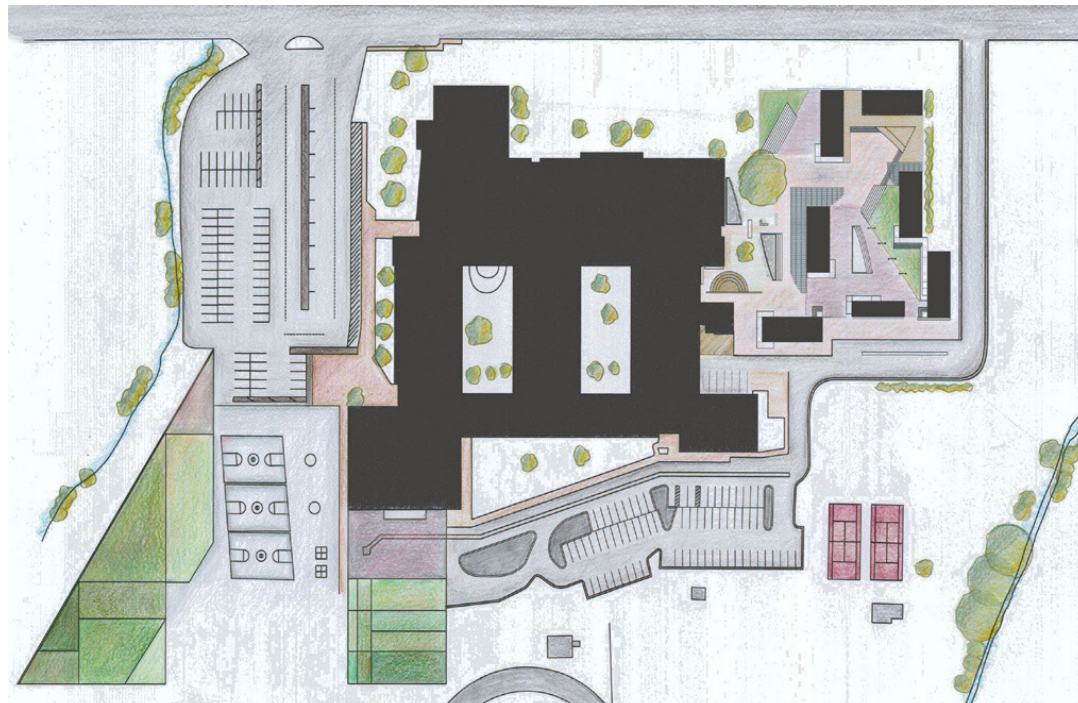
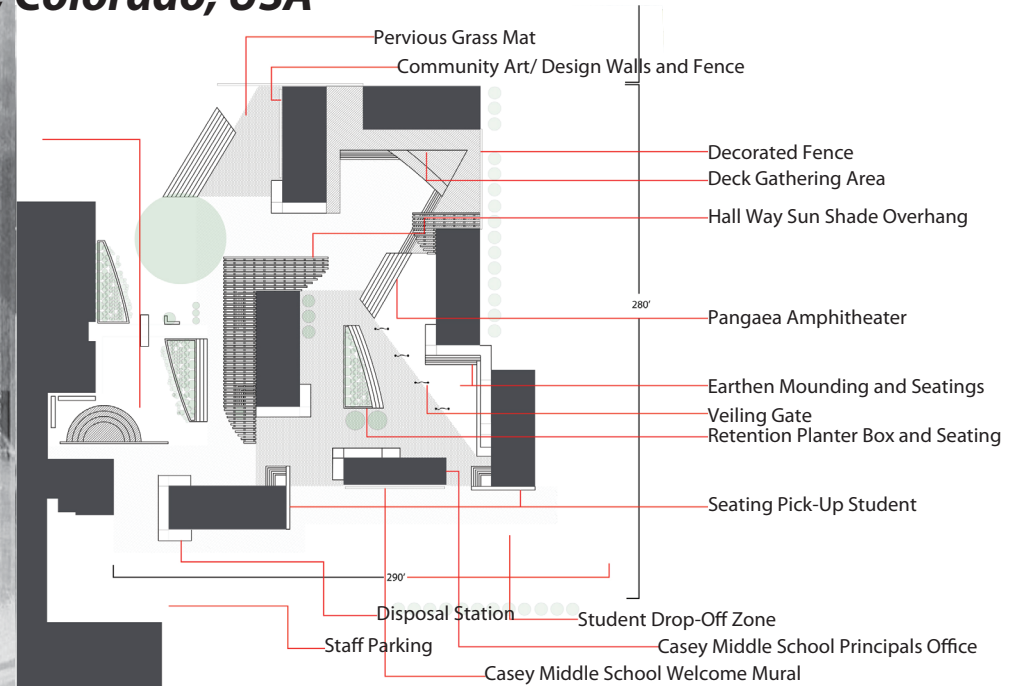


While visiting Davant Park and presenting conceptual design ideas to the community, residents voiced their immediate need for a children' park and a place for physical activity.

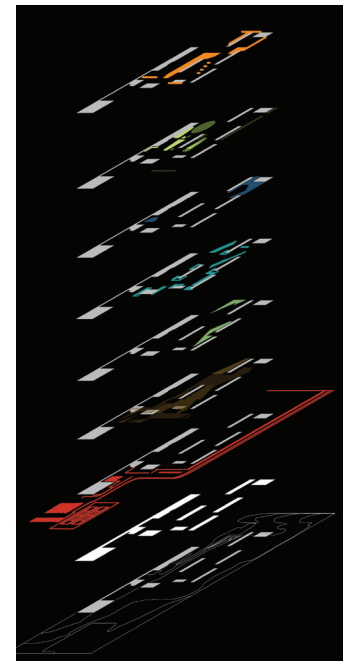
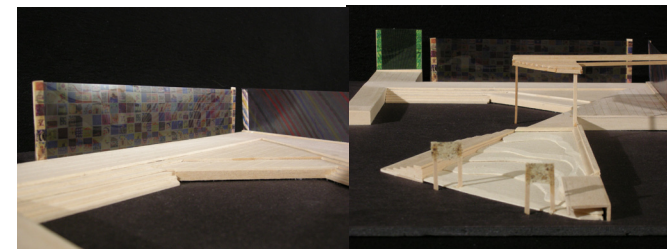
# Platt Middle School Consolidation: School-yard Site Planning, Boulder, Colorado, USA

In the fall 2006, Boulder County, Colorado residents passed a public bond measure to replace Casey Middle School with a state-of-the-art "green" school facility on its existing site in Boulder, Colorado. In January 2009 Casey Middle School community moved to the Platt Middle School campus, where Platt and Platt Choice now share their space.

The goal of the project was to incorporate three middle schools onto the same campus, while providing space for each community to maintain their unique identities. The design process consisted of meeting with area middle schools, administrations, and parent organizations to involve all parties in the planning of their temporary school.



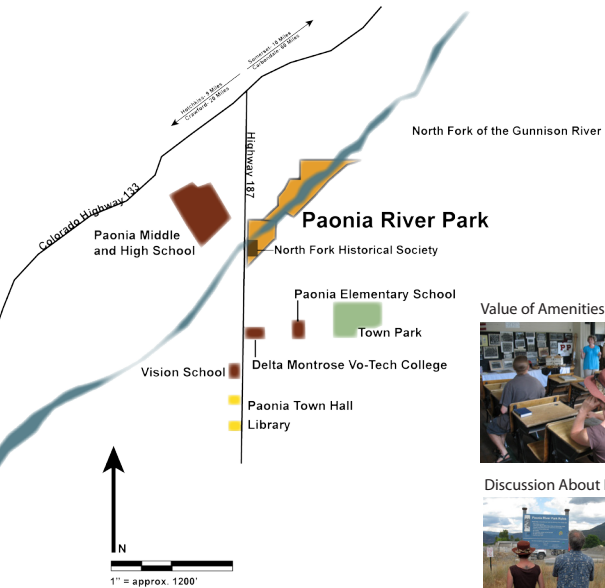
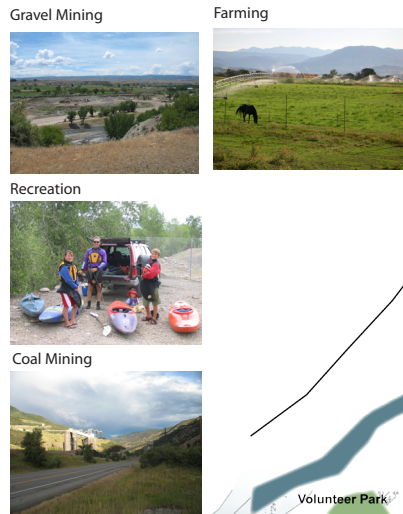
Through the formation of unique land features and veiled and revealed spaces, informal and formal gathering places were established amongst temporary class rooms. Designed with the social behaviour of middle school aged students in mind, no space is too exposed or hidden. The primary ordering system is established by the shifting vertical and horizontal planes and the changing levels as one moves through space. Each space is framed and then revealed by another.



# Paonia River Park: Community Development and Watershed Support, Paonia, Colorado, USA

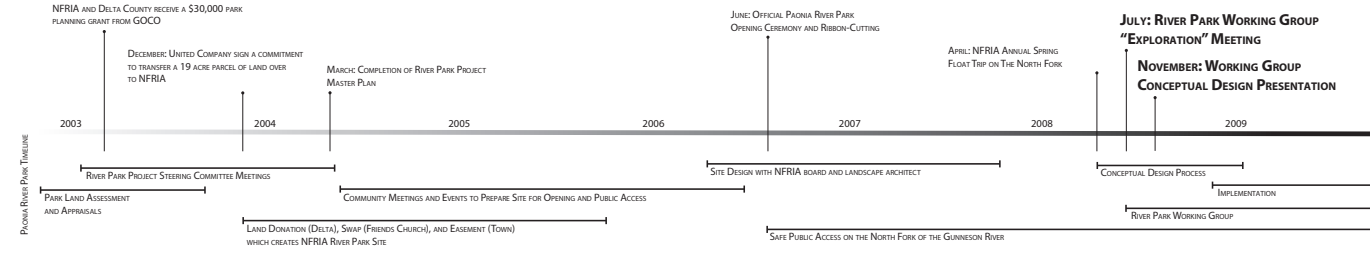
In 2003 the North Fork River Improvement Association began an initiative to create a public access on the North Fork River, now known as the Paonia River Park. Ninety-five percent of the land bordering the North Fork is privately owned, offering no public access to the river. In 2006 a local gravel mining company donated 19 acres of land to the local watershed organization and a public access to the river was created.

As the lead designer my role was to facilitate conversations and include the ideas generated from the Working Group into the conceptual design of the River park. Paonia is a small rural community, and it was critical to acknowledge the hard work that occurs in the North Fork Valley and along the river.

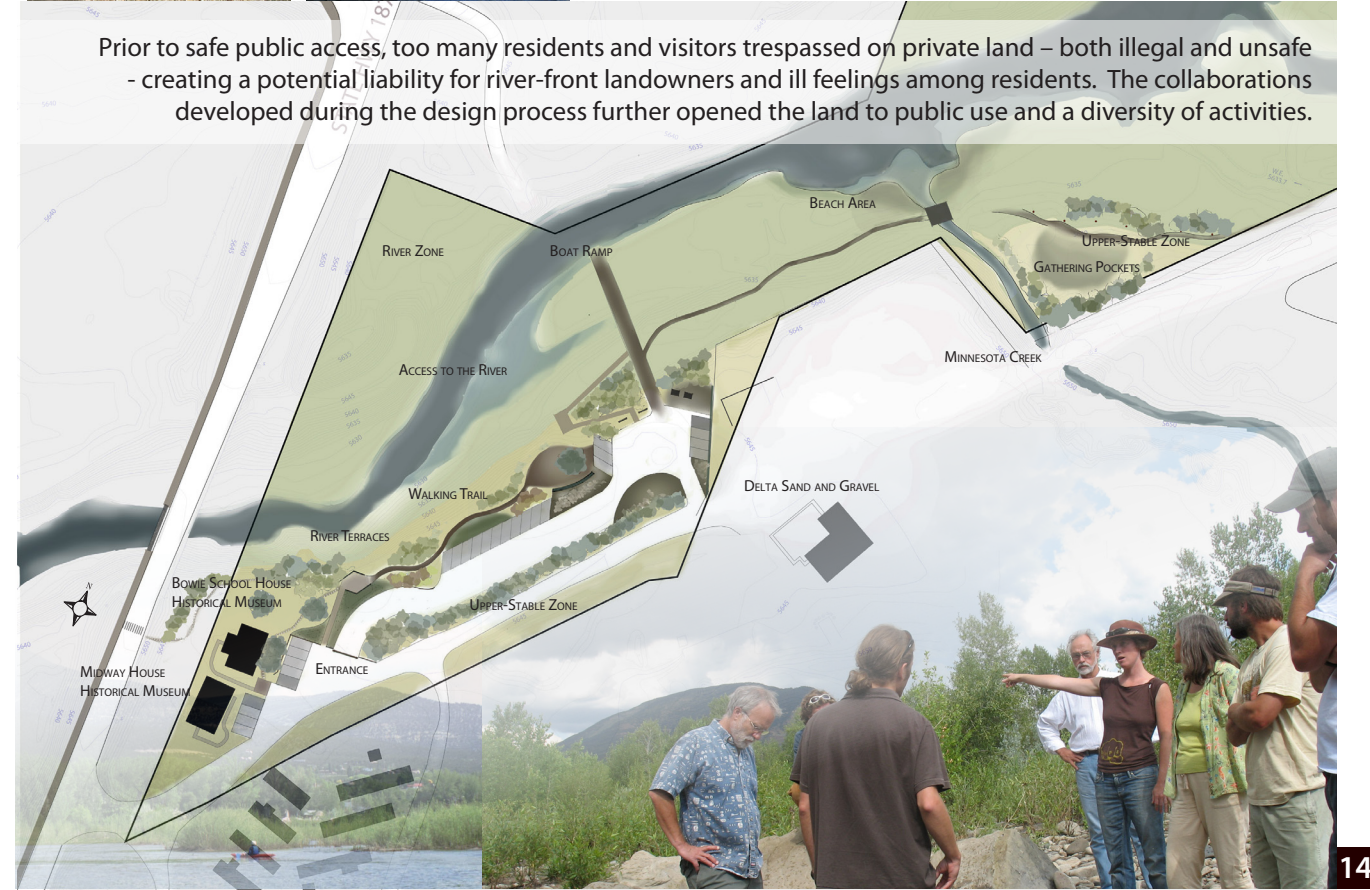


## Community Land Values Identified During Working Group Meeting

- Promotion of the river as a valued place
- Exploration of how people have changed the land to make the river work; how people have changed the river to make the land work
- Acknowledgment of the seasonality of the river and the many different park users
- The site should remain an informal place, where people are encouraged to explore and make reflections on the site.
- Explore larger opportunities created by the presence of historic buildings, the river, and schools.
- Explore opportunities to exchange resources and place-based education with regional schools; Need for more hands-on, outdoor science education facilities



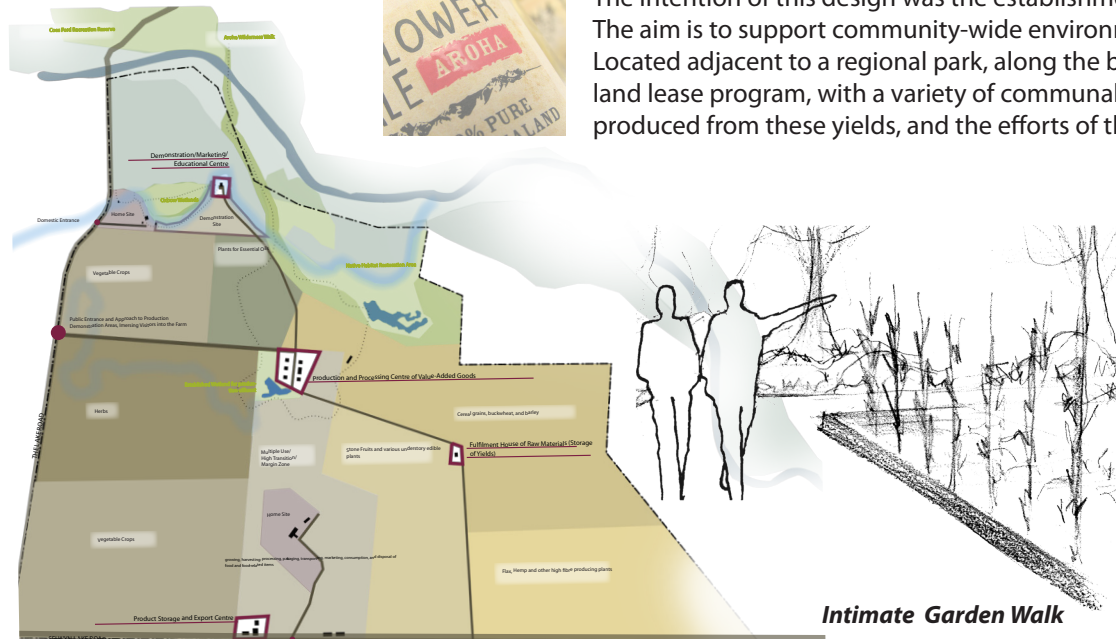
Prior to safe public access, too many residents and visitors trespassed on private land – both illegal and unsafe – creating a potential liability for river-front landowners and ill feelings among residents. The collaborations developed during the design process further opened the land to public use and a diversity of activities.



# A Sustainable Value-Added Cooperative at Waikirikiri Farm: Social Entrepreneurship, Canterbury, New Zealand



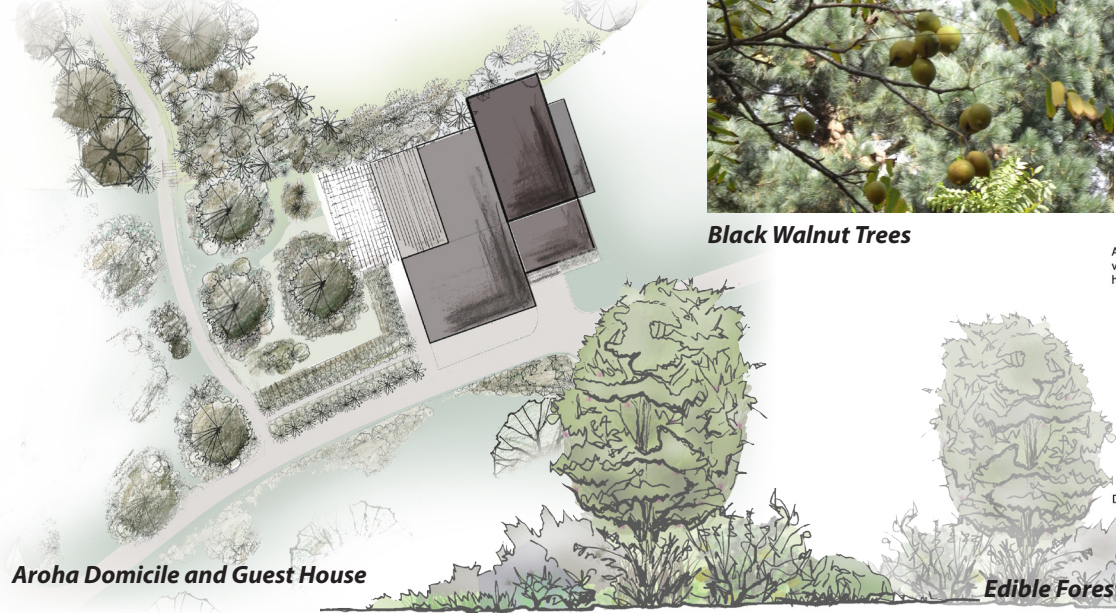
The intention of this design was the establishment of a value-added products cooperative, which sustains as a demonstration/trial site for value-added agribusiness start-ups. The aim is to support community-wide environmental stewardship in the realm of sustainable agriculture and craft, while diversifying the income stream of the client's Farm. Located adjacent to a regional park, along the banks of the Selwyn River, and the alluvial soils of the Canterbury Plains. The cooperative will function through a managed land lease program, with a variety of communal production houses that process small quantities of highly marketable products from the yields of the farm its self. Products produced from these yields, and the efforts of the lease holders, will be supported through initial development under the name of Aroha, the client's product lines.



Intimate Garden Walk

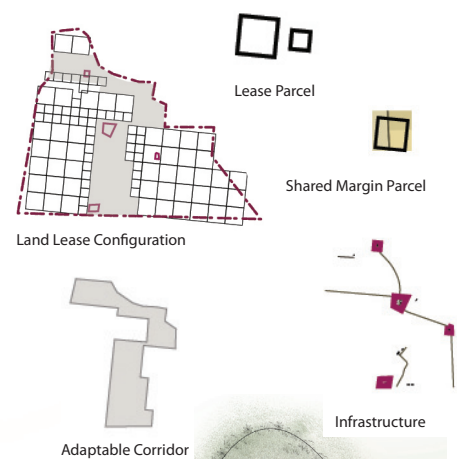


Black Walnut Trees



Aroha Domicile and Guest House

- The cooperative will provide opportunities for individuals/groups who have an affinity for sustainable agriculture who don't have resources/desire to own a farm indefinitely, or who want to be supported by similarly minded individuals and an established marketing identity. Benefits to those individuals include: trademark protection, a business structure, facilities and processing equipment, marketing and promotion, and redistribution of risk and responsibility.
- Costs to the leases will be the forfeit of a small percentage of stock of the successfully developed product, perpetually to the Dillon's, and the forfeit of individual product branding for the first years of development.
- The benefits to the Dillon Family include: the altruistic and identity (marketability) incentives from supporting development of the sustainable product community; increased revenue from the expanding Aroha product base (through the innovation of the leases' product development ideas), and a perpetual revenue stream from part ownership of the subsidiarity products, and a wider range of companies building up the consumer base for Aroha.
- To become part of the Aroha Farm Cooperative, the Dillon's would require potential leases and cooperative members to produce a through business plan, weighing the various scenarios for development including a failure plan (incentives for success), and the methods by which their product emphasises sustainability, and inter-connectedness with the other individuals and products thriving from the farm.



## Aroha Co-Op Office and Community Venue/Restaurant



- Maintain the two London Plane (Platanus X Acerfolia) that create an informal archway into the deciduous forest.
- Replicate archway effect with Pin Oaks (Quercus palustris) as seen along the approach from Coes Ford.
- Establishment of dense native shelter trees, predominantly plants in the Podocarpaceae family.
- Informal Wetlands Trail
- Native Wetlands Palanting within old river oxbow. Remove all non-native species including Willow (Salix spp.)
- Private Pedestrian Path and Informal Vehicular Access
- Demonstration Plots: Aroha Crop Inventory
- Oil Baring Plants
- Honey Shurbs
- Flax
- Hemp
- Orchard Trees
- Native Trees
- Guest House
- Home Site/ Wetlands Vista
- Wetlands Vista
- Spring Pool and Cistern
- Guest House
- Garage
- Deciduous Tree Garden (Removal of untamed shrubbery and reestablish desired tree varieties including Juglans regia)
- Maintain prominent Macrocarpa trees until large native trees establish.
- Establishment of dense native bush as part of the effort to create a strong wildlife corridor and buffer.
- A small off road carpark for visitors of the Dillon's guest house.
- Domestic Entrance

Edible Forest Garden

- AROHA Drinks
- AROHA Foods
- AROHA Personal Care
- AROHA Fibres
- AROHA Energy

# Curriculum Vitae and Contact

## ABIGALE JANE STANGL

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2200 Kbh, Denmark

### Environmental Designer and Landscape Planner

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+45 50424851

### American Address:

350 27th Street  
Boulder, Colorado  
80303, USA

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## EDUCATION

**Lincoln University, Canterbury, New Zealand, School of Landscape Architecture** **2010**

- Rotary International *Temple Buell* Ambassadorial Scholar (2009-2010)
- Graduate Diploma in Landscape Studies

**University of Colorado at Boulder, College of Architecture and Planning** **2004-2008**

- Bachelors of Environmental Design, Major in Planning with emphasis in landscape design (*G.P.A. 3.8/4.0*)
- Vice-President of Architecture and Planning Student Government (2007-2008)

## RELEVANT WORK EXPERIENCE

**Instillation Design and Fabrication Associate, Jen Lewin, Blue Ink LLC** **June 2009 to January 2010**  
Boulder, Colorado, USA

- Creative and technical sculpture development
- Materials research and adaptation
- Mechanical and electrical assembly
- Project management and events planning

**Landscape Design and Community Planner, North Fork River Improvement Association** **June 2008-December 2009**  
Hotchkiss, Colorado, USA

- Coordinated community working-group, stake-holder meetings
- Managed design visioning and development with governmental, non-profit, and community organizations
- Performed landscape design for the *Paonia River Park* on the North Fork of the Gunnison River
  - Post-industrial (gravel) landscape, floodplain morphology, community park and river access
- Performed grant writing and project support

**Environmental Planning and Watershed Coalition Intern, Alaska Conservation Foundation** **May 2007- August 2007**  
Yakutat, Alaska USA and Haines, Alaska USA

- Edited Yakutat Borough comprehensive plan for format, content, and vision in collaboration with the Yakutat Salmon Board
- Developed educational outreach materials, public radio show scripts, and educational program proposals
- Assisted with stream assessments including culvert recovery and salmon habitat evaluations
- Performed juvenile fish trapping and biological presence studies with the Takshanuk Watershed Council

**Water Resource Research Intern, Western Resource Advocates** **August 2006- December 2006**  
Boulder, Colorado

- Conducted research on strategies for meeting western city's water needs, analysis of demand and supply water use
- Contributed general research support for the WRA report "Urban Water on the Wasatch Front," 2006
- Developed educational brochures on efficient household water use, and green-build technologies

**Watershed Development and Community Coordinator, University of Virginia's College at Wise** **August 2005- July 2006**  
Wise, Virginia (Office of Surface Mining/AmeriCorps\* Volunteer In Service To America)

- Coordinated improvement of a constructed wetlands and abandoned mine land reclamation site/educational facility
- Performed fundraising, strategic planning, and community planning meetings
- Facilitated community partnerships between K-12 schools, universities, citizen and student groups, and local and federal governmental agencies.

- Coordinated a 250 person academic conference, "UVa- Wise Landscapes as Our Legacy Conference" to support the utilization of local resources and place-based models of teaching
- Developed and led environmental education based fieldtrips for up to 200 students
- Organized and led a wastewater pollution survey and monitoring project, including bacteria and benthic monitoring

**Project Development and Community Liaison, Office of Surface Mining Intern at AMD&ART, Inc.,** **May 2005-August 2005**  
Vintondale, Pennsylvania

- Supported community outreach and event planning (AMD&ART Dedication Weekend/ History Symposium)
- Performed grant writing and general organizational support
- Performed field projects, including vegetation management, stream assessments, and community education

## OTHER WORK EXPERIENCE

- The Academy Retirement and Assisted Living Community, *Care Giving*, Boulder, CO (March 2009-Jan. 2010)
- Q's Restaurant, *Restaurant Services*, Boulder, CO (Sept. 2004-May 2005)
- Jackson Hole Mountain Resort, *Lift Operations/Snowboard Instruction*, Jackson, WY (Dec. 2003-April 2004)
- Gros Ventre, River Ranch, *Ranch Services*, Moose, WY (May 2003-Oct 2003)
- Hampshire College Farm Center, *Organic Farm Work*, Amherst, MA (Sept. 2002-June 2003)

## HONORS AND AWARDS

- Rotary International Temple Buell Ambassadorial Scholarship (2009-2010)
- Giffin Soper Memorial Academic Scholarship (2007-2008)
- University of Colorado at Boulder, Deans List (2004-2008)
- AmeriCorps\* UCAN Serve, Plaquemines Parish Park Design (Fall, 2007)
- AmeriCorps\* Volunteer In Service To America Volunteer (2005-2006)
- New Vista High School, Culminating Project- Mediation and Arbitration, City of Boulder Mediation Program (2002)
- Rotary International Youth Exchange to Sweden (Junior Year, 2000-2001)

## OTHER QUALIFICATIONS AND INTERESTS

- Intermediate proficiency in Swedish, Beginners Danish
- Proficient with Mac and PC, MS Office, Adobe Suite, SketchUp
- National Science Teachers Association (NSTA) member
- ESOL (English for Speakers of Other Languages) Tutor
- Hiking, Snowboarding, Mandolin

## PRESENTATIONS

Presenter, *Landscape Architecture for Environmental Justice*, Lincoln University, School of Landscape Architecture- Seminar Series Lincoln, New Zealand, (July, 2010)

Presenter, *River Park Exploration Report*, North Fork River Improvement Association- Annual Meeting Paonia, Colorado (March 2009)

Presenter, *Building Capacity in Hardrock Mining Communities*, National Summit of Mining Communities Butte, Montana (October 2008)

Conference Organizer and Moderator, *UVa-Wise Wetlands Project- Legacy As Our Landscape Conference* Wise, Virginia (October 2006)

Presenter, *Brownfields in Coal Country, New Approaches*, Engineers Society of Western Pa.- Business of Brownfields Conference Seven Springs, Pennsylvania (April 2006)

Presenter, *Wise Wetlands, Reclamation Studio*, Virginia Lakes and Watershed Association Annual Conference Richmond, Virginia (March 2006)

Presenter, *Emerging Alternatives in Reclaiming Place, Liabilities to Assets*, Goddard College Action In Place Conference Plainville, Vermont (Oct. 2005)