

### **Federal Street**

The opening up of Federal Street and the Sky Tower Plaza in this jointly funded public / private revitalisation project has enabled a realisation of its latent vibrancy.

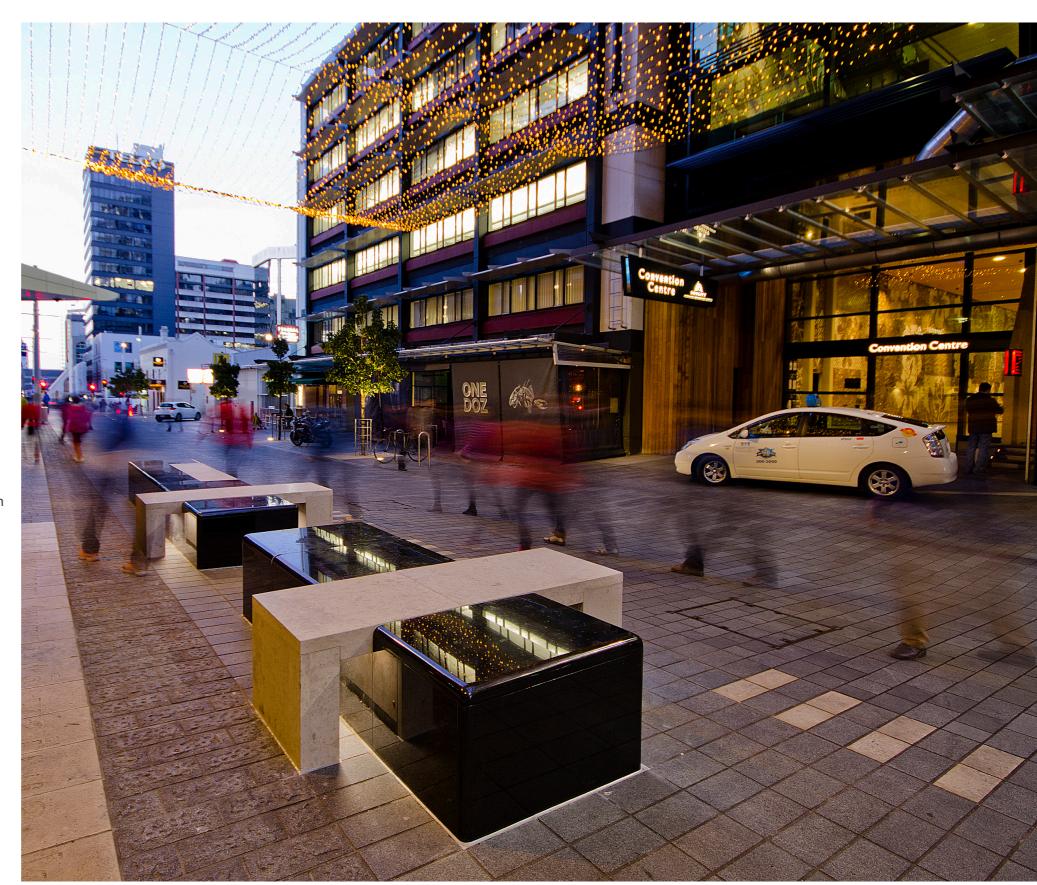
This project's achievements of simplification and transformation of quality now allows this city space to amplify the world class eateries and entertainment on offer in this unique place in the city of Auckland.

### The Brief

SKYCITY in partnership with Auckland Council and Auckland Transport sought to upgrade the section of Federal Street between Victoria and Wellesley Streets, and the plaza area beneath Sky Tower (Sky Tower Plaza).

All parties were committed to exploring the opportunity to improve these areas in order to deliver on the project objectives to deliver:

- Full integration of Federal Street into the CBD streetscape / open space network
- Greater pedestrian priority whilst continuing to cater for essential vehicular access
- An intimate, high quality pedestrian-focused street that encourages pedestrian activity
- Support of local businesses and attraction of investment by providing an appropriate level of vehicular movement and servicing activities
- A distinctive destination entertainment precinct with a unique mix of retail, cafes, restaurants and entertainment venues
- A high quality, attractive, safe and durable streetscape
- Includes the design and installation of the largest external green wall in New Zealand
- The first jointly-funded (Auckland Council and SKYCITY) streetscape upgrade project in Auckland City Centre – a new model for upgrading of the public realm through public/private collaboration and funding



# **Project Context**

The Draft City Centre Master Plan contains the vision for Federal Street Vision within the context of the city:

"... over time, Federal Street will be developed as an intimate, high quality pedestrian-focused route from Mayoral Drive to Fanshawe Street and the waterfront beyond. A precinct will develop around it with a distinct mix of retail, cafes, restaurants and entertainment venues. The street will become a High Street of the west, with the added convenience of ready-access to the main public transport route through the city along and below Albert Street."

The design team worked to ensure the project could deliver on this vision.

In November 2011, Boffa Miskell and Flow Transportation Specialists (Flow) were appointed by SKYCITY on behalf of SKYCITY, Auckland Council and Auckland Transport to undertake a contextual urban design study of the Federal Street/SKYCITY site; produce a number of potential streetscape scenarios for the upgrade of Federal Street, and undertake an urban/landscape design assessment and transport assessment of these scenarios. This included a review of each street's characteristics, including built form, ground floor activation, pedestrian and vehicular usage and context in relation to the wider vehicular network.

Findings of the study in relation to the traffic context included the need to reconsider Federal Street as a "local street", rather than the vehicular cut-through that it had become known for. Traffic counts of around 5,500 vehicles per day supported these findings; a relatively high count for a local road.

The resultant report: Federal Street Streetscape Upgrade Scenarios Assessment December 2011 concluded that the introduction of shared space and a signalised pedestrian crossing at Wellesley Street whilst maintaining the current northerly direction of flow results in the greatest benefits and smallest number of dis-benefits with regard to the project objectives. This decision was subsequently ratified by the Project Steering Group in December 2011, and underpins the design as it has been realised.

A shared space street design seeks to remove standard highway infrastructure and introduce design features such as a continuous level surface, pedestrian—scale paving and the encouragement of street based pedestrian activity such as outdoor dining. Motorists therefore perceive the shared space street as being very different from a conventional street. Recent extensive research, including that arising from Auckland's own shared space streets, has been undertaken here as well as internationally. The research has shown that motorists respond to complex environments by driving slowly, as they react to the presence and proximity of people, street furniture, activity, and to actual and anticipated pedestrian behaviour within the street. This is the type of behaviour that is beneficial in an urban context, and positively desired for Federal Street.







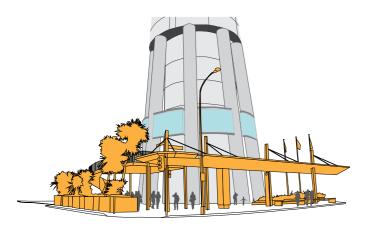


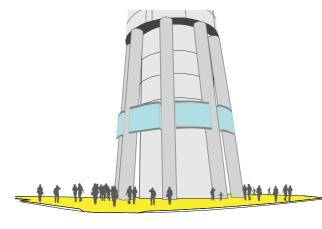
Federal Street greenwall including predominantly native species brings life to the currently less activated stretch of the street

NZILA Resene

Pride of Place

#### SKY TOWER PLAZA CLUTTER





Currently the Sky Tower is hidden behind a forest of clutter - light poles, flagpoles, traffic lights, signage, raised planters, seating and a visually heavy and obstructive canopy to Victoria Street

Any redesign of the plaza should dramatise the sense of the Sky Tower as a soaring tower emerging straight out of the ground; a pure object in space with a spacious gathering space at its base.

### Conceptual sketches promote reduction in clutter to increase legibility of the Sky Tower at street level



A bespoke 17m high flood light gantry enabled the reduction in structures at the base of the tower - the design including a reflective dish is conscious to contribute to the space without attempting to compete with the tower.

## **Design Approach**

Before its revitalisation, Federal Street suffered from the perception of being a series of unrelated blocks with a lack of through-block connectivity. However, the design team recognised that there existed the foundation for unlocking a great street with a fine-grained pedestrian route that could become the 'High Street of the West'.

The design team identified a number of issues for the project to address. These included the lack of an identifiable and enjoyable walking route, physical barriers to pedestrian movement, sporadic ground floor activation, lack of space for outdoor activity, and an inability to support night-time activity in Federal Street alone. The possibilities for the transformation of Sky Tower Plaza were of equal if not greater significance.

The Sky Tower Plaza frontage with Victoria Street was dominated by the substantial footpath shelter structure and a number of raised planters and benches. These items collectively blocked views into the plaza and upwards to Sky Tower, formed barriers to pedestrian movement from Victoria Street into the plaza, and generally created poor quality first impressions for people visiting the plaza, street and SKYCITY.

### Key design moves

Some of the key design moves included removing the raised planters and benches which has dramatically increased the ease and visual legibility of pedestrian movement between Victoria Street and the plaza. The removal of the existing substantial footpath canopy has opened up the plaza and strengthened its spatial relationship with Victoria Street, assisted in 'decluttering' the plaza, and increased awareness of Sky Tower when viewed from ground level.

The desire to remove extraneous streetscape elements from the plaza needed to be balanced against the need to provide amenity shelter and seating to pedestrians waiting at the Victoria Street bus stop. The new bus stop is sized accordingly for the number of users and its low key presence relates to the family of bus stops utilised throughout the city.

### Catering to the needs of the convention centre

At times on-street loading and servicing is significant. Events at the SKYCITY convention centre require large delivery trucks to assist with setting up or packing out events as well as the need to park broadcasting trucks within the street to cover televised events. The design responds to this need by ensuring there are large areas of activities zones that can be used temporarily for short periods of time.

### Providing additional amenity and ecology in the city

The design was careful to consider the inclusion of trees where possible as an important addition to the amenity and ecology in the city. As much of the Sky Tower Plaza is over a podium roof structure, the design, and the designers wanted to avoid the need for raised planters, placement of trees required careful coordination with underground structures as well as servicing and event requirements. A green wall treatment has been installed to the structural columns and structural beam of the west side building façade between Wellesley Street and Bellota as a way to increase planting in Federal Street.

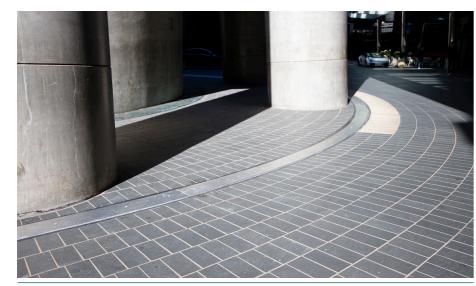
#### Bringing light to the tower

Removal of the visually intrusive pedestrian canopy along Victoria Street created an unusual situation in relation to lighting. Large banks of lighting were mounted on the shelter to provide the lighting sequences the Sky Tower plays to the city and its people. A sleek new custom-designed pole does the job that not any old light column can aspire to. The mirrored and curved underside of the new lighting column makes in interesting intervention in itself, yet still sits well with the tower itself.

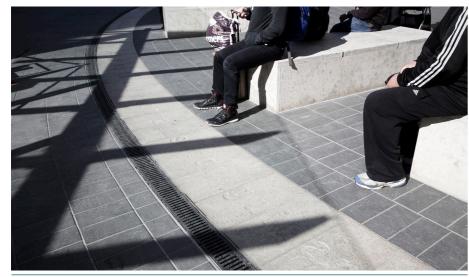
The re-design of Federal Street and Sky Tower Plaza also had the wonderful opportunity to dramatise the sense of the Sky Tower as a soaring tower emerging straight out of the ground; a pure object in the space with space and freedom to observe it.



High attention to stone detailing reduces visual clutter on the ground plane



Technically challenging radial paying



Limestone bands contain navigation references

### **Unique characteristics**

From within the base palette of materials that is common to the other Auckland shared space projects, certain interventions have been made to celebrate the uniqueness of this section of Federal Street and the Sky Tower Plaza. The limestone paving insert is used as a design device to unify Federal Street and the Sky Tower Plaza. The bold, simple band of limestone is used as a graphic element to reflect the linearity of the street within the city network of streets and lanes, and the curved section around the Sky Tower celebrates the unexpected curve in this unusual environment. The simplicity of these elements work together to visually connect the spaces and as design elements could stand alone in this design. However, the design also offers a further layer of meaning and interpretation.

## **Design Legibility**

This design element explores the idea of the point and counterpoint landmarks of the volcanic cones and the Sky Tower as icons of Auckland and New Zealand, and as landscape reference points to both new arrivals and old inhabitants. It also explores the notion of orientation and reference points in the landscape.

### Landmark, navigation and orientation

The dramatic landscape of volcanic cones is a defining characteristic of Auckland. The volcanic cones are important as visual markers in the landscape, but they also provide strong connections to the cultural environment. Volcanic cones were important to tangata whenua as vantage points and defensive strongholds, as well as providing fertile ground on the slopes to provide food for the community. In the Auckland landscape, these natural landmarks are visually offset by the built structure of the Sky Tower, which acts as a modern day orientation and reference point. In this way the natural and built landscapes can be celebrated as orientation devices, and can be seen as modern navigational devices for moving around the city.

The markings in the limestone bands reference the eight volcanic cones as identified by Auckland Council, but does also have the flexibility to accommodate references to others (for example 50 have erupted within 20km of the centre of Auckland). The name of the volcanic cones and their direction and distance are also recorded in the limestone band. The iconic nature of the Auckland landscape is also celebrated in words and poetry.

Outcomes from the Federal Street and Sky Tower Plaza revitalisation are already evident, attracting more people, more street-based activity and fewer vehicles. There is more space for pedestrians to move around in, sit in and relax in, more space for outdoor activities such as outdoor dining, events and gatherings and increased flexibility of the street environment as a public open space. Traffic calming and reduction has occurred, whilst still retaining vehicular access in the creation of an attractive destination for people to visit, spend time in and shop as well as vibrant street areas that support local businesses and attract investment.

### **Implementation**

The project team fully appreciated the importance of dedicating sufficient time to discuss the design principles with JFC (the contractor). It was key for them to understand the project aspirations in order to execute the quality and desired outcomes. They have been involved in the weekly design discussion with the client so that they could capture the overarching design visions. Boffa Miskell landscape architects ensured that the day to day communication was active to ensure an open forum to discuss design, coordination and construction matters in a timely manner.

JFC have provided great communication to the Auckland Council, Auckland Transport and stakeholders in the area during the construction phase. Federal Street is a popular destination in the city and was an operative street during the construction; it required great site management skills to ensure the safe public access with minimum disturbance and construction delay. The project team also maintained a high level of communication with local businesses, property owners and residents to ensure the stakeholders had peace of mind and a feeling of active participation in the construction works

#### **BOFFA MISKELL TEAM COMPOSITION**

John Potter – Project Leader, Associate Director
Michael Hawes – Project Leader, Associate Director
Yoko Tanaka – Associate Principal Landscape Architect
Cathy Challinor - Principal, Landscape Architect
Alex Smith – Landscape Architect
Lindsay Kirkpatrick – Senior Landscape Architect
Richard Tyler – Senior Landscape Architect
Jonathan Wong – Landscape Architect
Sho Kasuya – Landscape Architect

### OTHER KEY CONSULTANTS

JAWA Structures - Civil and Structural engineering
Traffic Planning Consultancy – Transport Engineering
Lighting Design Partnership – Lighting and Electrical Design

#### **PROJECT DATES**

2011-2014

#### **PROJECT VALUE**

Construction value landscape works \$10.2m

### **CLIENT**

**Auckland Council** 





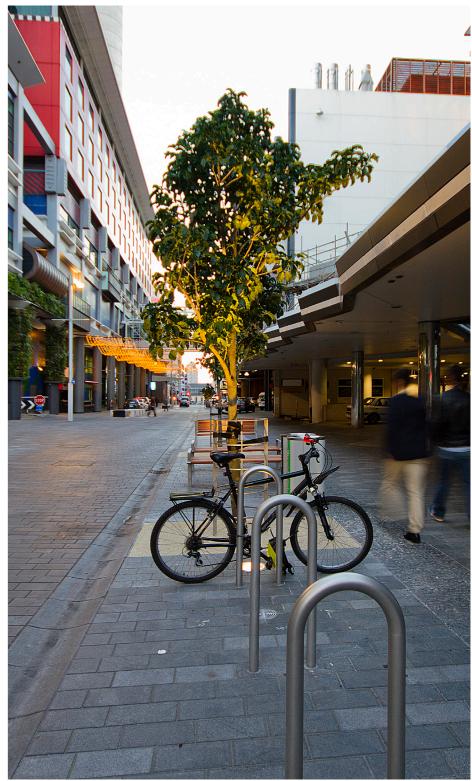


Informal seating allows permeability through the plaza

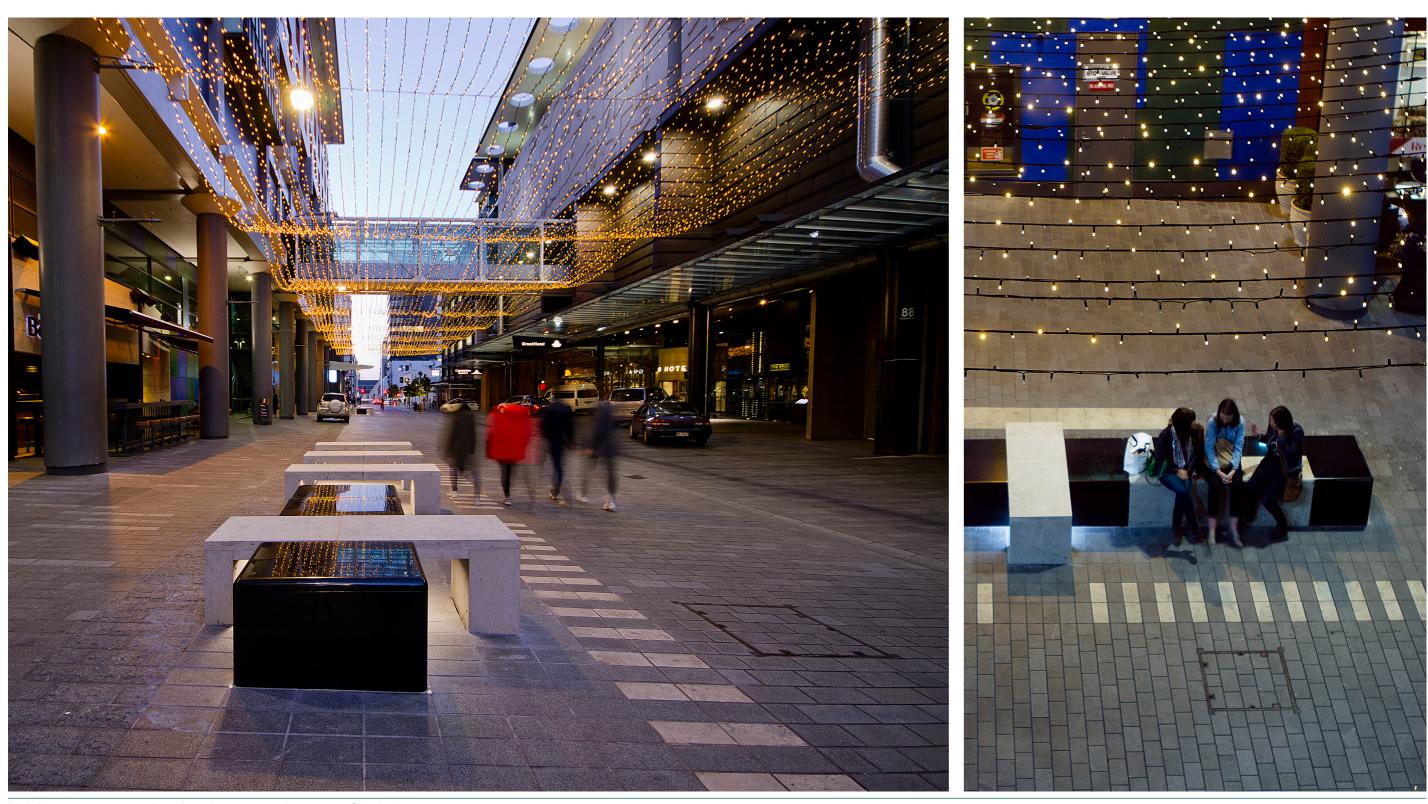


Bespoke seating provides protected dwelling points





Native tree planting and furniture clusters support activity nodes along the street



Lighting promotes a welcoming character to the street after dark