

4. Built Form – Height Massing

The 52 storey tower sits atop a podium of 6 levels of retail, 1 level of cinemas and 2 levels of conference and hotel lobby. The tower is presented as a very tall narrow sleek form with its axis orientated in the north south direction. As such its narrow face presents to the waterfront and allows views towards the Waitemata Harbour past its bulk. Modulation of the tower is apparent at three different scales. At the Macro scale the tower form is broken into three parts these are separated by the skydecks which provide an open exterior space which will provide amenity for hotel guests and restaurant patrons as viewing and activity spaces. They also perform important functions in modifying the wind sensitivity of the tower, providing fire refuges and air handling. There is some question as to the viability of planting in these locations so this is not offered as a design feature in this proposal. It is expected that the detailed design of these spaces will include appropriate landscape details to improve the amenity of occupants but these will not be at a scale that will impact on the visual appearance of the tower. At an intermediate scale the composition of the elevations and vertical circulation cores gives a vertical emphasis to the façade. At a more detailed scale the specific glazing system design and the organisation of flush and exposed mullions provides three dimensional modulation at a more human scale.

5. Architectural Design

The Design of the Building is a tower and podium form. The tower is composed of an extruded plan to create a contemporary and striking form. The play between solid forms and the gaps breaks down the massing. The angled roof offers a suitable termination of the building against the skyline and is in dialogue with the sky tower “pod”. In addition various elevation treatments are employed on the façade. These further reduce the bulk and differentiate the components of the building.

6. Building relationship to Site

The proposed building occupies the entire site at podium level. The tower occupies the western frontage with a north south orientation.

7. Street Level Frontages/Entrances

The main hotel entry is via the porte cochere on Albert St. Loading docks and carpark entry is from lower Albert St. The main entry to the shopping mall is on the corner of Vitoria and Elliott St. The main cinema entrance is on the corner of Victoria and Albert St. By extending the retail on Victoria as far as possible towards Albert St the route to the Entrance at the corner of Albert and Victoria can be achieved without stairs in a direct line from the intersection. This reinforces the natural desire line that occurs in this location. There is a direct through site pedestrian route from Elliott St at the end of Darby St to Albert St. There are secondary Mall entrances on Albert St and Victoria St. The Victoria and Elliott St frontages contain active retail spaces that access directly from the footpath to better support street activation. The street elevation of Albert and Victoria Street is a traditionally

composed wall of stone clad structural columns between shopfront glazing to the street frontage. Above, the wall is composed of a series of modulated and fractured bays that are eroded at the corners revealing clear glass that provides visual connection to the activity inside. Urban scale windows on Elliott and Victoria St give the opportunity for further activation of the street frontage.

The Albert Street Frontage is dominated by the Lower Albert Street Slip lane creating a physical separation and consequent disjunction between Albert Street and the building frontage.

5.6.3.1.d gives clear direction on the urban design qualities of the street frontage of buildings sought for the city. In particular

5.6.3.1(d)1.f Building Frontages at Street Level must contribute to pedestrian vitality interest and public safety.

This includes a variety of architectural detail and maximising doors, window openings and balconies fronting streets and other public open spaces.

The proposed design has two entries to the third floor of the retail mall. There is a generous pedestrian plaza at this level with a generous pedestrian connection to a neighbouring plaza and a direct diagonal connection from the Albert/Victoria St corner. The hotel entrance is clearly visible beneath the porte cochere that has been scaled to provide a positive impact on Albert Street. This will be a locale of constant activity with guests arriving and departing at all times creating interest and vitality. The overlooking and monitoring that will be afforded by this activity will enhance pedestrian safety.

5.6.3.1(d)1.g) Building entrances should be visible and easily identifiable from the street and directly accessible from street level.

All building entrances are clearly visible and accessible from the street, they are differentiated in importance and function through modulation of the elevations.

5.6.3.1(d)3.c) Generally, the main building entrance should be located on the corner at street level and designed as an integral part of the corner element.

Major entrances to the shopping mall and cinemas are located at the corners of the Site. The Hotel Entrance is located centrally on Albert St under the Porte Cochere. The pedestrian plaza at the corner of Albert and Victoria mediates between the functionally separate entrances on site.

5.6.3.1(d)5.b) Activities which engage and activate streets, through site links and public open space at ground level are encouraged

Street frontages are either public open space or retail frontage at ground level. A through site link is provided from Elliott to Albert St.

5.6.3.1(d)5.d) Ventilation and fumes from parking structures or other uses should not be exhausted into the adjacent pedestrian environment.

The ventilation duct occupying the corner of Albert and Victoria in the previous design has been relocated to the interior of the building. There are no proposed ventilation elements at or near the street level.

5.6.3.1(d)5.e) Particular attention should be paid to residential building design at or near ground level to avoid 'privatising' adjacent streets or public open space.

The public plaza space is accessible at grade from the new foot path located to the East of Lower Albert St. There is only a change of material to indicate any change in status. This will enhance public "ownership" of the plaza in front of the building.

5.6.3.1(d)7.b) The design of vehicle ingress and egress to sites should be primarily considered from the perspective of pedestrians and cyclists, particularly in terms of visibility and the use of paving materials.

The vehicle crossings to Albert St give access to the porte cochere for entry to the Hotel. These have been designed to give priority to pedestrians through application of surface finishes and use of level changes to slow traffic.

5.6.3.1(d)7.c) Frontages should be designed as far as possible to avoid multiple service and access interruptions to frontage continuity.

Service access is via the lower Albert Street service lane. One way in and out access from Albert Street is for arrivals and departures from the hotel and is the only viable option for vehicle access.

5.6.3.1(d)7.e) Where alternative vehicle access is available, the creation of new vehicle crossings across frontages within the Pedestrian Orientated Areas is discouraged.

Despite 4 road frontages (including lower Albert St) the only viable location for vehicle access is Albert St. The impact of vehicle crossings in this location have been minimised through the design choices made.

8 Facades

The façade design produces an elegant expression. A variety of materials and finishes are proposed for the façade. This helps to further model the building. All elevations present visual interest. The tower façade is modulated through the formal interplay of shape and function. The West façade is folded and extended at each end to bleed into the sky as is the West Façade. A 50 storey fin wall layers against this folded wall housing a stair and offers a strong vertical emphasis.

9. Roof Profiles

The angled roof structure forms a crisp outline on the skyline. Each side of the building can be read as a separate element and becomes a large formal gesture of appropriate scale. The detailed design including lighting will provide clarity of the roof forms.

10. Antennae and technical attachments.

No antennae are proposed. Any future attachments will be kept behind the glazed parapets in order to ensure that they have no visual impact.

11. Materials

Concrete slab and shear wall construction with glazed curtain wall. The variety of materials and finishes will necessitate review at detailed design stage.

12. Outlook

Outlook is provided from apartments over Albert and Elliott Street. The outlook amenity of the residential units far exceeds the council standards.

13. Accessibility

The podium and tower are accessible to all levels via pedestrian entries or lifts.

14. Driveways over public footpaths, vehicle access, service, loading bay, cycle parking

There are a total of 4 vehicle crossings to the development. Two two way crossings to the basement parking and loading bays from Lower Albert St and two single crossings to the porte cochere.

Criteria 5.6.3.1(d) gives clear direction on the urban design qualities sought for the city in relation to the design and provision of vehicle crossings in particular:

5.6.3.1(d)7(c) Frontages should be designed as far as possible to avoid multiple service and access interruptions to frontage continuity.

5.6.3.1(d)7(e) Where alternative vehicle access is available, the creation of new vehicle crossings across frontages within the Pedestrian Orientated areas is discouraged.

The porte cochere is a necessary element for the operation of a 5 star hotel. Whilst this results in two extra crossings on Albert St it is a necessary component of the building as a whole. The redesign of this area results in a more active open pedestrian plaza that encompasses the entire space.

15. Traffic Impacts

Are discussed in the traffic report

16. Signage and Advertising

It is expected that the urban windows to the shopping mall will provide merchandising opportunities for retailers. There will be signage to entrances to the mall and Hotel as indicated on the plans. There is no proposed signage on the tower.

17. Safety and Security

The development of this vacant site has inherent safety advantages. Active retail uses and hotel accommodation of this lot will enliven this part of the city and make it safer.

18. Demolition

The site is a vacant lot and no demolition is required.

19. Sustainability

The redevelopment of a brown field site in the central city is an inherently sustainable proposal. This removes development pressure from greenfield sites. Intense development of the central city provides efficient use of public infrastructure that enhances green values.

20. Compliance with Urban design Panel recommendations

The proposal has been to the Urban Design Panel twice. Following the first presentation a number of changes were made. This led to a broad support for the proposal expressed in the minutes of the second presentation (04 July 2013). There were five recommendations made to assist with the design development of the proposal.

They are as follows.

1. In regard to the podium/tower relationship the panel endorses its earlier comments and notes that the revised proposal has satisfactorily addressed this issue.

No change was needed.

2. In regard to the Podium, the Panel supports the changed approach to the expression of the podium facades and offers the following comments.

- **The panel notes that a further floor level has been added to the podium and considers that the architectural expression of the podium has accommodated this successfully.**
- **Given the CBD location of the proposed podium retail the Panel considers that a greater degree of façade transparency is required. This could be done in a way that increases the fractured nature of the current façade design.**
- **The Elliott and Victoria Street entry should convey a much stronger entry invitation and statement**
- **The Panel welcomes the design revision that has achieved a clear and direct through site link. However, the legibility and invitation to this link from Elliott to Albert Sts, when viewed from Darby St should be enhanced. Increased transparency through the building could be considered as an option.**

The design of a stronger entry invitation at the corner of Albert and Elliott St is achieved through the introduction of large scale Canopy set at a level that respects the importance of the corner. The corners of the building have a greater level of transparency in order to invite entrance.

The entry at the Albert and Victoria corner is set back from the corner to allow for the pedestrian plaza in what will be the sunniest part of the site well protected from the prevalent winds. There is

no canopy in this location as the provision of a canopy here would serve to confuse the separation between the retail and Hotel entrances that are located on Albert St. The setback allows a direct entry to the mall from the corner without resort to stairs thus enhancing the pedestrian experience. It also enables the main entry to the Hotel to be visible and legible from the intersection. The marker for entry follows the same strategy as the Victoria and Albert Corner.

There are large scale openings in the Elliott and Victoria St elevations of the podium that provide visible clues as to the activity that takes place within the mall. These will provide the transparency that is required in this location and avoid the risk of a monotonous façade at upper levels. Central on the North elevation is a large window opening into the lobby spaces for the Hotel and the ballroom. There is a balcony on the Elliott and Victoria Street corner that further enhances transparency and activity on the podium. This balcony gives direct access to the Ballroom and provides a visual clue to its location within the podium.

The entry strategy is extended to the through site link entry at the intersection of Elliott and Darby St. This provides greater invitation to this link when viewed from Queen Street.

The elements that make up the external wall of the shopping mall serve to mitigate the scale of the proposal by providing a varied and sophisticated visual backdrop to the street. The composition is mindful of the emphasis needed at the entrant corners and the throughsite link. This is where the transparency of the glazing is at its greatest. In Elliott Street this building will serve as the retail anchor at the north end of the street with Smith and Caughey serving that function to the south.

3. In regard to the Albert Street Canopy:

- **The Panel considers that this is an appropriately scaled gesture which allows the tower to effectively meet the street edge. The Panel considers that Albert Street as a whole suffers because of the lowered section that provides service access and will benefit from the addition of such a canopy. The Panel recommends further design studies to refine the canopy element and its supporting structure. As a part of this, the Panel encourages consideration of how the canopy design could also relate to the importance of the Albert and Victoria Street intersection.**

The design of the canopy and its supporting structure needs to be resolved in detail during the detailed design phase of the process. This will be subject to council review prior to the issue of a building consent. The angle of the canopy has been adjusted to further emphasise the vertical seam in the eastern elevation. This accentuates the rising line of the edge of the canopy as it approaches the corner. The corner is left unencumbered in order that it function as a public space.

4. In regards to the tower:

- **The Panel previously noted that its modelling was insufficient and suggested that this be at a scale greater than façade elements such as mullions and fins. The Panel considers the design development of the tower now achieves this expectation.**
- **The Panel considers that a stronger expression of the seam line down the western elevation is needed including its extension to interlock with the crown element.**

- **The Panel understands that no signage is intended on the tower. The Panel agrees that keeping signage restricted to the podium levels is an important outcome.**

Design studies of a stronger expression of the seam line have been explored but they show that this strategy results in unsuccessful outcomes. The seam becomes too isolated as an element within the composition and as a result the part tends to overwhelm the whole. The change in detail on the crown more successfully integrates the seam line into the whole.

5. In respect of the “crown” feature

- **The Panel considers that the approach proposed could be very successful or alternatively could have negative visual impacts depending on how its design is developed. Key issues will include the detailed understanding of its faceting, materials, colour, transparency and lighting.**
- **The Panel considers that this is a critical element that warrants comparative design studies including possible reference to successful precedent examples elsewhere, in order to give sufficient confidence in respect of its overall proportion, scale and visual impact on the Auckland Skyline.**

The design of the Crown has been developed to more closely align with the detailing of the tower. Further the glazing has been lightened to enhance the lightness of the tower as it bleeds into the sky. It was felt that this was important in order to ensure that the crown was not too visually dominant as part of the entire composition. The western half of the crown has been stepped up by a level in order to reduce the size of the largest Western wall of this element. The result is a more integrated whole that elegantly completes the tower whilst not overwhelming it.

QUEEN STREET VALLEY PRECINCT

As it falls within the Queen Street Valley Precinct The design of the Elliott frontage is subject to design controls these are assessed below. As it forms a continuation of the podium these design controls also inform the design of the Victoria Street frontage.

14.4.7.2 Design Assessment Criteria

a) Buildings shall be designed to address and align to the street boundary. However, minor modulation and variance of the frontage layout, such as recessed pedestrian entrances, is acceptable to avoid architectural monotony provided that the overall continuity of the frontage is not compromised.

The building is designed to address and align with the street boundaries of Elliott and Victoria Streets. The major entry at the corner of Elliott and Victoria is appropriately recessed to provide a statement of entry. Elsewhere the rhythm of stone clad structural columns interrupts the shop front glazing and retail entrances providing a scale at street level that is in keeping with the scale of retail frontages in the Queen Street valley.

b) Building levels aligned to the street boundaries shall incorporate design elements which acknowledge the existing human scale and character of the precinct. In particular:

i) Frontage height and design should have regard to existing buildings in the vicinity and maintain a consistent scale. This does not mean a rigid adherence to a single height but it does mean a respect for the general appearance of the surrounding blocks.

The western side of Elliott St exhibits significant variation in height. Whilst higher than the Atrium building immediately to the South the proposed building is of a similar height to the neighbouring Crown Plaza Hotel building. The Podium is significantly higher than the podium of the building opposite on Lorne Street but this building is out of scale with the surrounding area by having such a low podium (at places only single level). This building should be seen as a partner to the Smith and Caughey building at the south End of Elliott Street and is of a comparable height to this existing department store. Together these two buildings will anchor the ends of the Elliott St retail precinct. On Victoria Street the podium is of a similar scale to the newer buildings opposite.

ii) Design of frontages should include vertical and horizontal details which avoid dominance of frontage elements larger than historically present. Where existing sites are amalgamated, the frontage design should have regard to the existing “grain” of development and convey a residual sense of the original subdivision pattern.

The frontages are composed of vertical elements that respect the historical scale of development in the Queen Street Valley. Larger scale openings at Street level then a fractured geometry above. Into this are inserted larger urban scale openings that allow the podium to be appreciated at a distance greater than immediately adjacent.

iii) The consistency of the existing character in a cohesive streetscape should be maintained with new buildings acknowledging the scale, sense of proportion and level of intricacy of adjacent heritage buildings in the Precinct. However, new buildings should be sympathetic to those heritage buildings and should not replicate or imitate the architectural detailing or style.

The proposed façade is composed of a number of elements of differing scale that provides a legible expression of the activities inside. They also respect the largely vertical subdivision of historic facades found within the precinct and the level intricacy evident at a detail level. The cues for the development of these elements are drawn largely from the heritage buildings in the vicinity rather than the immediately adjacent Atrium on Elliott development.

iv) Design at ground level must contribute to the continuity of pedestrian interest and vitality, particularly for those frontages where the activities control under 14.4.6 applies. However, frontages entirely of glass (curtain walling or continuous shopfront glazing) must not be used at street level as they detract from the streetscape. Where feasible, restoration of original ground level detail should be included in plans for buildings adjoining heritage buildings or for alterations to heritage buildings.

The activity control applies to the Elliott Street frontage where an elevation of retail shopfronts is interrupted at regular intervals by faceted stone clad structural columns. Whilst the activity control does not apply to the Victoria Street frontage this same strategy has been followed adjacent to the footpath. By offsetting internal floor levels

along Victoria Street 3 retail units have been created that visually and physically connect directly with the street.

v)At upper levels, large expanses of blank walls must be avoided. In particular, the proportion of walls and windows on elevations should reflect any patterns existing in retained heritage buildings. This will tend to favour solid walls penetrated by a pattern of windows above verandah level, articulation of floor levels and an appropriate treatment of the parapet level. A hierarchy of window size is encouraged to create a distinction between the top, middle and bottom level of the frontage.

The upper levels of the Podium elevation are composed of three major elements. Heavily modelled pilasters form the basis of the wall composition. Between these elements are vertically scaled windows that relate to the scale of the interior floor levels. These elements are interrupted by larger glazed elements that compose invitations to entry at corners of the building and create transparent opportunities to express the retailing activity of the interior at the external wall line. The base of the podium is clearly delineated over the bottom two levels. There is a strong expression and articulation of the verandah form. The top of the podium is articulated with a screen that emphasises the corner of Elliott And Queen St whilst appropriately capping this element of the building.

c)The design of upper setback levels should relate naturally to the lower frontage height levels in an acceptable architectural manner such as continuation of an elevational rhythm or recognisable visual theme or proportion.

The tower element is so far removed from the podium on Elliott Street that there is the opportunity to explore differing architectural expressions without the danger of visual incoherence.

d)Design of buildings on corner sites should take advantage of the corner where possible. In particular, designs should recognise the importance of corner sites in linking the narrow street spaces to the wider, more expansive intersections and public open spaces. Building design on such sites should “address” the corner with symmetry and formality.

The corner of Elliott and Victoria is celebrated as the major entry to the shopping mall. The glazed façade is eroded at the corner of Albert and Elliott to expose the interior of the mall at this location. . Symmetry is inappropriate when dealing with streets of such differing character. Instead the composition reflects the importance of the corner and provides a dialogue between the differing conditions that come together at this point.

e)Materials used in new buildings should have regard to existing buildings, but new and contemporary interpretations in form and detail may be used.

The building is proposed to have stone cladding to the lower levels with Aluminium and glass cladding above. Use of self coloured quality materials rather than just paint finishes references the quality of material used in traditional construction.

f) Designs must provide strong architectural cues to accessways and through-site links, with portal or clearly indicative entrance imagery, so as to enhance the visible sense of pedestrian access to the area. The criteria under Clause 6.7.6.4 should be referred to for the incorporation of appropriate design features which contribute to a safe and comfortable pedestrian environment.

Entrances are energetically celebrated with the introduction of oversized glazed elements at the corners and the entrance to the through site link. These elements contain within them the ability to connect with the interior of the building to provide visual interest and create a streetscape that changes and responds to particular events over time. The lighting of these elements will strictly comply with the relevant limits imposed by the district plan.

g) Frontages should be designed as far as possible to avoid aggregated service and access interruptions to frontage continuity, by dispersing such requirements along available frontage.

Service access is from lower Albert St. Frontage continuity is uninterrupted along the Elliott and Victoria frontages.

CONCLUSION.

The proposed building fulfils the requirements for a quality addition to Auckland that will have a positive impact on the existing urban fabric. From the tower that is designed in juxtaposition skytower with an essentially linear north south composition in contrast to the circular composition of its taller neighbour. It also faces the sky tower and reflects its presence with a physical distortion of the Western elevation. This will create a more legible skyline in Auckland where the two tallest buildings complement each other rather than fighting. At street level the building is composed of finer grain elements that respect the character of the precinct and add interest and vitality to the immediate and surrounding streets. The Fine grain and complexity of the podium provide an addition that does not dominate the surroundings but does add to them in a positive way. This is a building that confidently takes its place in Auckland and will create a significant renaissance to area around Aotea Square that has been languishing in recent years as development has focussed on the waterfront.

Paul Brown

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Wednesday, 11 September 2013

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 Attn: Paul Brown

Elliot Tower - External Lighting Concept for Resource Consent

Dear Paul

Further to your request in relation to establishing a benchmark for appropriate external lighting levels for the above noted development we have considered this and offer our advice following.

An appropriate illumination level for the top of the tower can be considered as subjective given the limited regulations in place.

Auckland Council has two local laws surrounding this issue in Lighting section 13.5 of the environmental protection bylaw, 27B.3 Lighting of billboards and AS4282 (Australian standard for "Control of Obtrusive Effects of Outdoor Lighting"), However, these bylaws are not entirely appropriate for the question of façade and lighting a large tower.

The following advice taken from Environmental Impact Analysis - D.2 Artificial Light and Glare (City of LA) we consider to be more appropriate for a building of this size. On this basis the D.2 controls are commented on with recommendations for the Elliot Tower:

- **Building Façades:** The maximum measurable luminance of the illuminated building façade should not exceed 40 cd/m². As LA has a high level of energy conservation controls we believe for Auckland a range from 50-150cd/m² is more appropriate and should be comparable to neighbouring buildings such as Sky Tower.
- Additionally, an area weighted average of field measurements for the LA regulations shall not exceed 10 cd/m², on this basis we would recommend for Auckland 30 cd/m² for any single contiguous façade area greater than 700 square meters in area.

For the top of Elliot tower this would give an average lux value measured on the plant area of approximately 30-40lux. In addition to the above Auckland bylaws states that illuminance from specified light sources should not exceed 50 lux at the property line of the nearest residential property or light sensitive receptor. This will also need to be complied with.

We trust the above is sufficient for your immediate purposes, should you require anything further please contact the undersigned.

Yours sincerely



Matthew Lee
 Director, Auckland Manager



MT HOBSON GROUP
Town Planning & Resource Consent Solutions

ATTACHMENT SIX

WIND ASSESSMENT

Our Ref: 32239.007

**WIND TUNNEL INVESTIGATION OF THE
PEDESTRIAN LEVEL WIND ENVIRONMENT IN THE
VICINITY OF THE PROPOSED DEVELOPMENT
OF THE ELLIOT TOWER AT 106-108 ALBERT ST,
AUCKLAND**

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17th September 2013

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SUMMARY

Wind tunnel tests were performed on a 1:400 scale model of the existing site, and the proposed development of the Elliot Tower at 106-108 Albert St, Auckland. The tests measured the pedestrian level wind environment in the vicinity of the existing building and the proposed building with the surroundings modelled in detail for a radius of about 400 m centred at the subject building.

The pedestrian wind tests consisted of ground level investigations of wind conditions using erodible bran flakes as a wind speed indicator. The results of the wind tunnel tests were combined with long term Auckland Meteorological data and analysed by computer to predict the percentage of time that various wind speeds are likely to be exceeded in the vicinity of the existing and proposed developments. The resulting data were used to put the areas into Auckland City District Plan wind categories.

The wind tunnel tests and subsequent analysis in terms of the City of Auckland District Plan, Central Area Section, Operative 2004 (Rule 6.12) shows that the development complies with the requirements regarding pedestrian wind environment.

1. Introduction

Clark Brown Architects contacted UniServices in August 2013 and requested a wind tunnel test on the development of the Elliot Tower at 106-108 Albert Street, Auckland. Modelling was subsequently carried out to drawings prepared by Clark Brown Architects. The model and its surroundings were inspected by a representative from the architects on 4th September 2013 and approved with some minor modifications. Wind tunnel testing was carried out on 4-5 September.

The existing site comprises a split level car park, incorporating the lower part of Albert Street as additional car parking. The site is bounded by Elliott Street, Victoria Street West and Albert Street.

The proposed development consists of a 42 storey rectangular tower situated on the northeast side of a 10 storey podium. The total height of the tower parapet above street level is 213m. The tower is approximately 45m wide (N-S) by 25m deep (W-E). The main entrance is on the Albert Street side, with a substantial canopy over lower Albert St, which allows entry to the building basement. Canopies run along the Elliott Street and Victoria Street West elevations, with the exception of the northwest corner where there is no canopy over the entrance.

2. Test Procedure

The pedestrian level wind investigation was carried out in the low speed test section of the de Bray wind tunnel located in the Aerodynamics Laboratory of the Department of Mechanical Engineering at The University of Auckland. Figures 1 - 4 show the model of the existing buildings from the north, east, south and west respectively. Figures 5 - 8 show the model of the proposed building from the north, east, south and west respectively. Figures 9 and 10 show the wind tunnel and model looking upstream and downstream respectively.

A standard layout of trip fence and roughness blocks was placed upstream of the model (as shown in Figure 9) to produce onset flow resembling that of the natural wind. In the present case, flow over Category 3 type terrain (residential housing), as set down in the New Zealand Wind Loading Code AS/NZS1170.2:2011 was used as the target wind structure.

A bed of erodible material (bran flakes) was sprinkled over the area to be tested and the wind speed increased until the bran flakes moved to form an eroded pattern. During testing, a computer acquired images of these patterns and determined the erosion patterns corresponding to different wind speeds. These were obtained for the predominant wind directions 0, 30, 60, 90, 210, 240, 270 and 300° (other directions being ignored because of their relatively low frequency).

3. Analysis

Measurements have been made using a hot-wire anemometer to establish the wind speed, at a model scale height equivalent to 1.5 m in full scale, at which the bran flakes were eroded from under the wire. Having established this wind speed the ratio between wind speed at 1.5 m and the reference point at 200m (full scale equivalent) may be deduced by simply noting the velocity at 200m when erosion in a particular region occurs. It is then assumed, in keeping with general wind engineering practice, that this ratio holds for all wind speeds from the particular direction.

In the present investigation, a computer image processing system, developed by Eaddy [1], was used to study each situation in detail. This system automatically performs the analysis outlined by Flay [2], producing colour images that contain the pedestrian level wind categories, for each test situation. The system determines the velocity ratio for every pixel in the area under investigation for each of the eight test directions (maximum of 442368 points). These values when combined with the climate data gave the wind speed frequency results that were used to categorise the area according to the ACC criteria. Wind category A is shown as white, B is green, C is red, D is blue and category E is yellow. It should be noted that with this system erosion must occur for at least one wind direction for it to be categorised. Areas where no erosion occurs appear in the images in the background

colour (dark grey) but are also category A. Typical locations and activities associated with each category are given in Table 1, which is a simplification of Figure 10.1 Performance Categories, from the City of Auckland, District Plan, Central Area Section, Operative 2004.

Table 1 Performance Categories

Performance Category	Pedestrian Activity	Typical Location
A	Sitting for long periods, reading, eating	Major and minor public squares, parks and other public open spaces
B	Sitting for short periods	Minor pleasure areas in road reserves
C	Walking	General footpaths and areas around buildings
D	Walking faster	Carriageways, car parks
E	<-----Dangerous to pedestrians----->	

4. Results and Discussion

The region studied in the present investigation is Elliott Street, Victoria Street West and Albert Street in the vicinity of the proposed development. The various wind comfort categories, as defined by Auckland City Council, are each shown in a different colour in Figures 11 and 12.

It can be seen in Figure 11 that with the existing site modelled, most of the areas on Elliott Street and Victoria Street West are white or un-coloured, (i.e. they are category A) with some areas of green (category B). Albert Street is mainly categories A or B. There are some significant areas of red (category C) on the plaza covering Lower Albert Street adjacent to the building on the south side of the site. Most of this results from westerly and northwesterly winds hitting the face of the building and being transferred down to street level.

It can be seen in Figure 12 that with the proposed development modelled, the wind environment categories are significantly different. There is more category B on Elliott Street. Victoria Street West and Albert Street are both category B with significant areas of category C on both. However, the area of category C on the plaza covering Lower Albert Street has largely been reduced to category B. The generally increased wind speed exceedance levels on Victoria St West and Albert St are a result of winds from the west and northwest being directed down to street level and accelerated around the corner of the podium.

The results show that the surrounding area appears to comply with the City of Auckland Council District Plan criteria for pedestrian level winds. There are no areas of footpaths or carriageway that exceed wind comfort category C.

5. Conclusions

The wind environment in the vicinity of the site of the proposed development of the Elliot Tower at 106-108 Albert Street has been studied in the wind tunnel using erosion techniques.

The wind tunnel tests and subsequent analysis in terms of the City of Auckland District Plan, Central Area Section, Operative 2004 (Rule 6.12) resulted in most areas in the vicinity of the modelled existing buildings to be categorised as either A, B, or category C.

The presence of the model of the proposed building in the tests has caused a significant change to the wind comfort categories determined from the tests. Many areas in the vicinity of the modelled proposed development have been increased from category A to category B and there are areas of category C either side of the north-eastern corner of the building. However, the area of category C on the plaza over Lower Albert Street has largely been reduced to category B.

Figure 10.1 of the District Plan states that carriageways should be no worse than category D, and that general footpaths and areas around buildings should be no worse than category C. The wind environment on Elliott Street, Victoria Street West and Albert Street in the vicinity of the proposed apartment building meets this requirement, and therefore the building complies with the City of Auckland Council District Plan, Central Area Section, with regard to wind control.

6. Acknowledgements

The assistance of David Le Pelley with this study is gratefully acknowledged.

7. References

1. Eaddy, M.J. *Pedestrian level wind measurement using computer image processing*. ME Thesis, University of Auckland, 1999.
2. Flay, R.G.J. *Pedestrian-level Wind Investigations using Cork Grain Erosion Techniques*. Department of Mechanical Engineering Report, ME G91-02, The University of Auckland, November 1991.



Figure 1 The model of the existing site viewed from the north



Figure 2 The model of the existing site viewed from the east

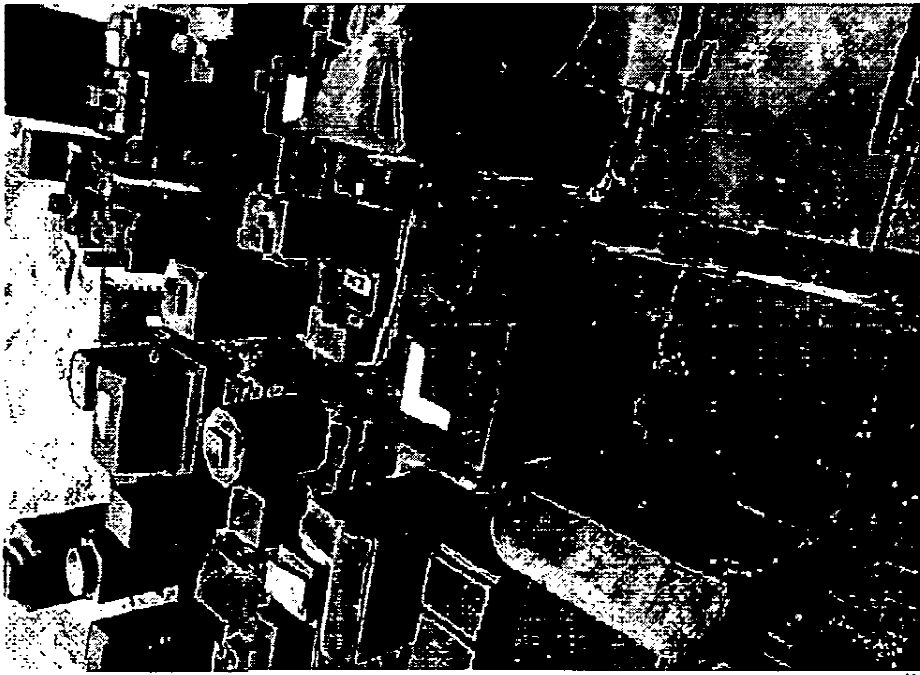


Figure 3 The model of the existing site viewed from the south

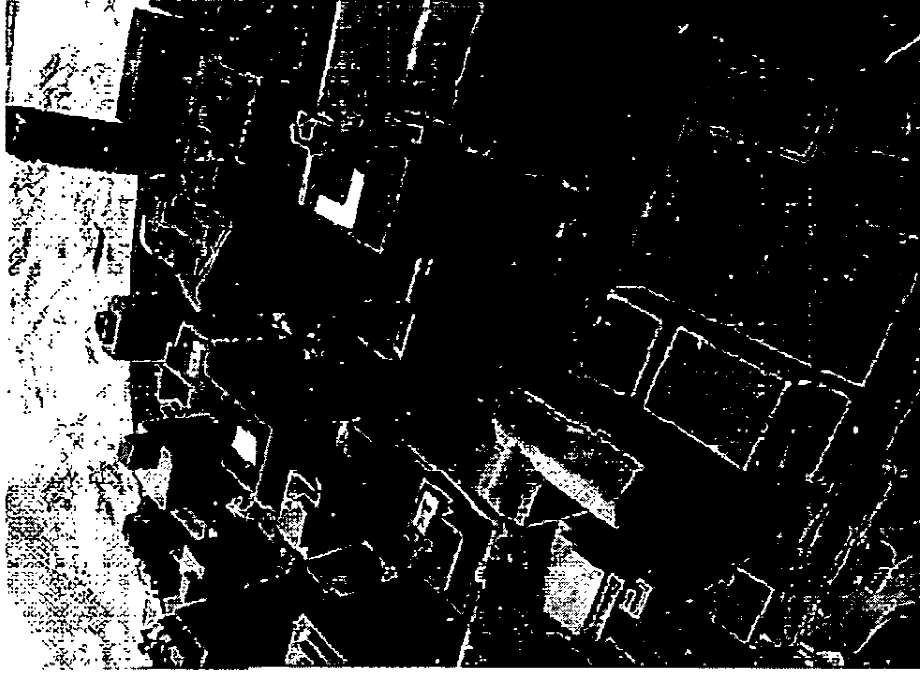


Figure 4 The model of the existing site viewed from the west

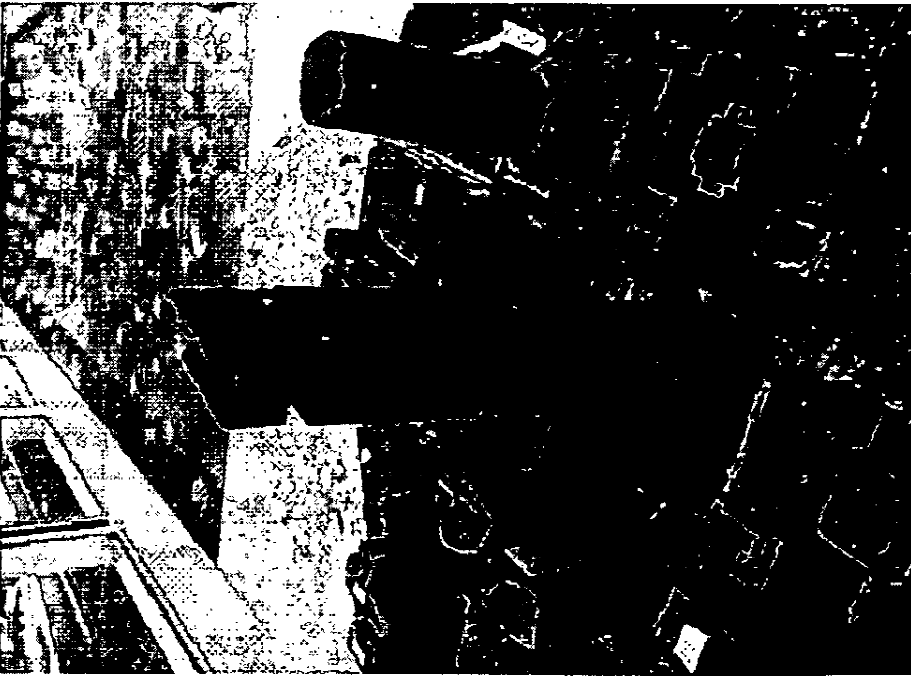


Figure 5 The model of the proposed development viewed from the north



Figure 6 The model of the proposed development viewed from the east

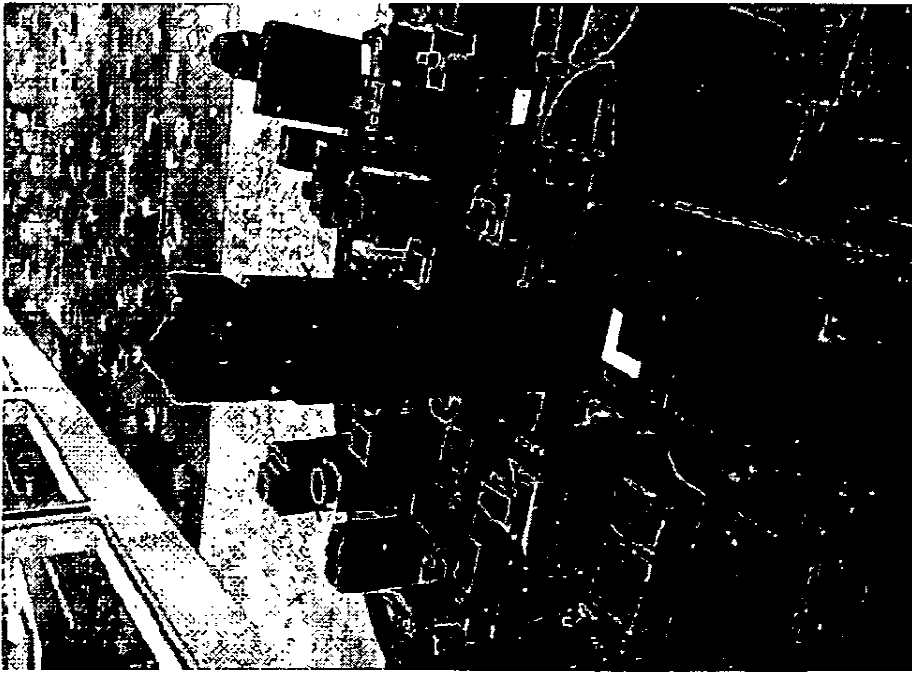


Figure 7 The model of the proposed development viewed from the south



Figure 8 The model of the proposed development viewed from the west



Figure 9 General view of the proposed development embedded in model of surroundings looking upstream (southwards) showing roughness blocks and trip barrier.

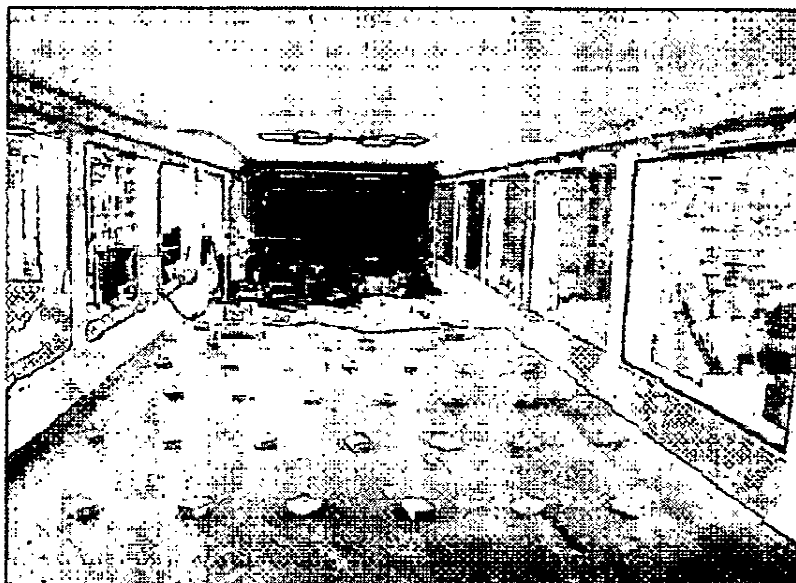


Figure 10 General view of the proposed development embedded in model of surroundings looking downstream (eastwards).

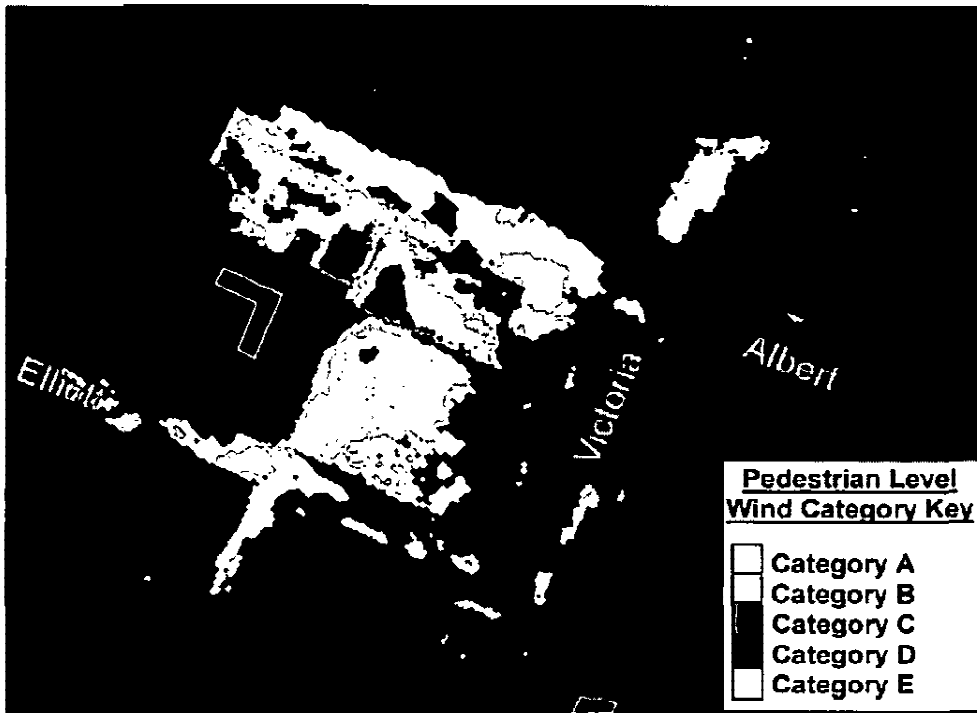


Figure 11 Wind categories in the vicinity of the existing site at 4-12 Elliott St, Auckland. (North is to the right of the figure.)

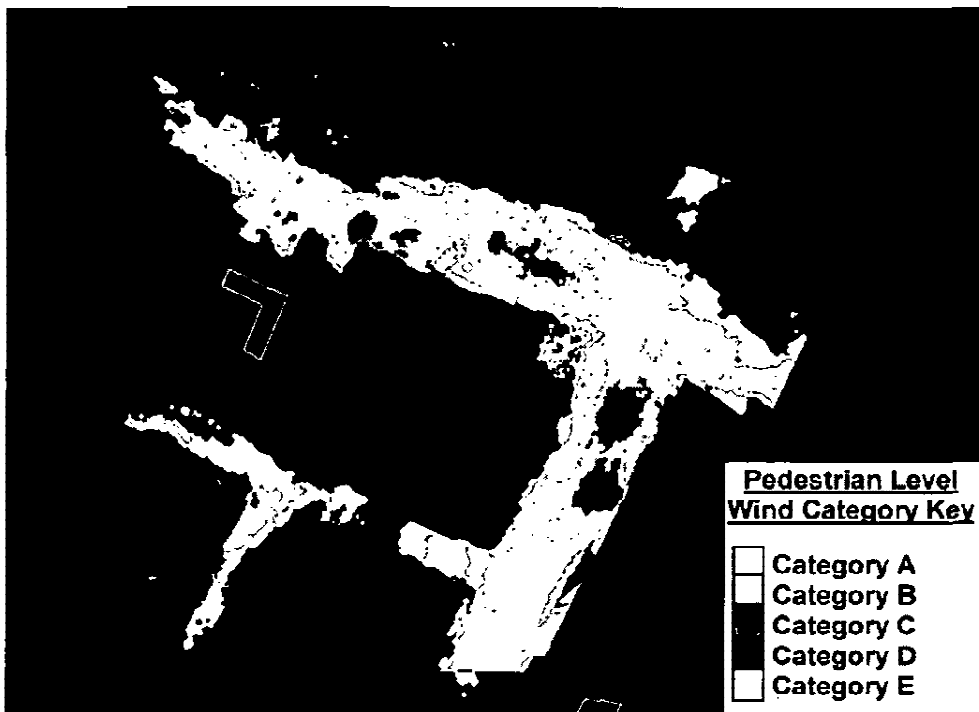


Figure 12 Wind categories in the vicinity of proposed development at 4-12 Elliott St, Auckland. (North is to the right of the figure.)



MT HOBSON GROUP

Town Planning & Resource Consent Solutions

ATTACHMENT SEVEN

INFRASTRUCTURE REPORT

Report



EXISTING INFRASTRUCTURE

ELLIOT TOWER
Paul Brown & Architects Ltd

CONFIDENTIAL

Revision: B - Resource Consent
Issued: 31 October 2013



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NDY QA SYSTEM

Revision No:	B	Authorisation By:	-
Revision Date:	31 October 2013		
Reason Description:	Resource Consent		
File Location:	W:\A923xx\A92320\003\H-124_Reports		
Filename:	rp131011a0003		
Client Name:	Paul Brown & Architects Ltd	Verification By:	-
Client Contact:	Andrew Smith		
Project Co-ordinator:	Shay Gordon		
Editor:	Shay Gordon		



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1. INTRODUCTION

1.1. Purpose

Norman Disney & Young Ltd have been engaged to prepare this report as part of the Resource Consent application for the proposed development.

While preliminary proposed connection points for the services have been noted on the attached GIS mark up in Appendix 3, the detailed design of these connection points and approval process for exact connection locations (with ACC and Watercare) will form part of the building consent application for the development at the appropriate time.

This report will address the impact the proposed development will have on the existing water supply, waste water and storm water infrastructure.

This report addresses:

1. The existing services within the site and any issues.
2. The existing street services.
3. The ability of the existing drainage and water services to handle the increased demand from the development.

This report is based on a 'desktop' study of council records together with limited site inspections.



2. PROJECT DESCRIPTION

The proposed development is intended to occupy 106-108 Albert Street.

The site has a total area of 4417m² and fronts onto Albert Street, Victoria Street West and Elliot Streets.

The proposed development is 58 storey tower comprised of the following:

- Basement 2-6 – car parking
- Basement 1 – retail and hotel BOH
- Level 1-2 – retail
- Level 3 – retail and hotel lobby/reception
- Level 4-5 – retail
- Level 6 – cinema
- Level 7 – ballroom and meeting room
- Level 8 – lobby, restaurant, function
- Level 9 – restaurants
- Level 10 – pool, gymnasium
- Level 11 – hotel spa
- Level 12 – administration
- Level 13-16 – apartments
- Level 17-28 – hotel rooms
- Level 29 – sky deck
- Level 30-45 – hotel rooms
- Level 46 – sky deck
- Level 47-48 – bar and restaurant
- Level 49-52 – plantrooms

Refer to Appendix 4 for elevations of the proposed building for reference.



3. EXISTING SITE

The existing site is currently mainly used for open car parking. Part of the site fronting Victoria Street has a reverse bungy jump facility.

Approximately 95% of the site is covered with an impervious layer of mainly tarmac. These areas drain to cesspits located around the carpark which are connected to the council stormwater system, this existing connection is not documented and will become redundant and will be removed when development takes place.

The car parking is divided into two levels. The upper level occupying about one third of the site is adjacent to Albert Street and approximately three meters lower than Albert Street. The larger lower level is adjacent to Elliot Street and approximately the same level as Elliot Street. Access to the site is from Elliot Street and there is an interconnecting ramp from lower to upper levels which is located adjacent to Victoria Street. All retaining walls to the site appear to be remains from previous developments.

Before its present usage, the site had a hotel on the larger lower level and retail units to the upper levels.





4. WASTEWATER

The Auckland City Public Drainage Map (GIS) shows that there is an $\varnothing 300$ waste water line on the northern boundary of the site with Victoria Street West, and an $\varnothing 225$ waste water line outside the site in Elliot Street that discharges into the $\varnothing 375$ waste water line that runs down Darby Street.

It has been assumed that it would be the most practical for the development to discharge directly to the SSMH at the intersection of Elliot Street and Darby Street. This would mean that the development would access the $\varnothing 375$ waste water line running down Darby Street directly via the SSMH and would make use of that existing SSMH.

The analysis of flows from the proposed development, and expected flows discharging into the system from Elliot Street to the junction of Queen Street and Victoria Street have been calculated. These are shown in Appendix 1 and summarised below.

Line	Pipe size	Grade	Capacity	Calculated Discharge
ND3896	225	1 in 100	47.6 l/s	12.00 l/s
ND3593	375	1 in 100	185 l/s	14.30 l/s
ND3596	450	1 in 20	423 l/s	304.30 l/s

The above shows that the lines to the Junction of Queen and Victoria Streets have sufficient capacity to take the proposed development. Councils GIS mapping is unclear as to where the flows go at the junction.

Refer to Appendix 3 for preliminary proposed waste water discharge connection point. The final connection point will be discussed and agreed with Watercare once Resource Consent has been granted and detailed design for the project has commenced.





5. STORMWATER

The site is currently predominantly impervious surfaces, drained by cesspits which are believed to connect into the storm water lines in Victoria Street West and Darby Streets. As previously stated the site was also in the past fully developed and with a hotel and retail and completely impervious.

Although the proposed development will fully develop the site, we have calculated that due to the longer run off flow paths (due to the height of the building), the peak flow rate from the development will be reduced/attenuated to approximately 70% of the existing peak flow rate to the storm water infrastructure system.

The proposed development will therefore ease the loading on the storm water system.

It has been assumed that it would be the most practical for the development to discharge directly to the SWMH at the intersection of Elliot Street and Darby Street. This would mean that the development would access the $\varnothing 450$ storm water line running down Darby Street directly via the SWMH and would make use of that existing SWMH.

Refer to Appendix 3 for preliminary proposed storm water discharge connection point. The final connection point will be discussed and agreed with Watercare once Resource Consent has been granted and detailed design for the project has commenced.





6. WATER SUPPLY

The Auckland City GIS shows water mains run along the frontages of the site along Albert Street, Victoria Street West and Elliot Streets being $\varnothing 150$, $\varnothing 200$ and $\varnothing 175$ respectively. There is also an $\varnothing 375$ and an $\varnothing 150$ water main on the opposite side of Victoria Street.

The GIS indicates that the site has an existing 100mm supply from Elliot Street and a 100 and a 75mm supply from Albert Street. These water supplies if they are still insitu will be removed and capped to Watercare requirements.

The daily pressures are in the range of 450 to 550kpa. This means that pumping will be required for both the domestic water supply and the fire protection water supply to serve the upper levels of the building.

We calculate that the peak demand for domestic purposes for the development will be 10.20 l/s. It is proposed that the cold water system will comprise break tanks and pumps which will reduce this peak flow demand from the mains. Tests have shown that the town mains can adequately supply 10.20 l/s and there will therefore be adequate capacity to serve the building for domestic purposes.

The building will have a full sprinkler system. Two independent town main supplies are available for fire fighting systems, but a single supply with onsite water storage may be used depending on the fire engineering approach adopted. The fire fighting systems strategy will be discussed and agreed with the NZ Fire Service during the design process prior to being submitted for approval at building consent. Any issues with the water supply infrastructure that may arise due to available pressure will be mitigated by onsite pumping and water storage (if required).

We understand that the New Zealand Fire Service has preliminarily categorised the development as requiring a FW3 water supply classification under the Fire Service Code of Practice for Fire Fighting Water Supplies. This classification requires a minimum fire fighting water supply of 12.5 l/s within 135m radius of the development with an additional 12.5 l/s within 270m radius. The required flow has to be achieved using a maximum of two hydrants operating simultaneously.

There are over 40 hydrants within 135m and numerous more beyond. Pressure flow tests indicate that the criteria can be met.

Refer to Appendix 3 for preliminary proposed water supply connection point. The final connection point will be discussed and agreed with Watercare once Resource Consent has been granted and detailed design for the project has commenced.



7. CONCLUSION

The local wastewater system has sufficient capacity to serve the proposed development.

Peak storm water flows to the council's system would be reduced by the proposed development.

Water supplies appear sufficient to serve the proposed development for both domestic and fire fighting purposes.





8. APPENDIX 1

8.1. Waste Water Calculations

Taking flows as given in Metrowater Wastewater Design Manual 1999.

Line ND3896:

Proposed Development 106-108 Albert Street

Apartments (8 two bed/28 studio) – 36 units

Design population of 2.4 persons per high-rise dwelling unit from clause 2.2.1. Table 3.3 gives domestic sewage high rise 180 l/p/d = 0.0021 l/s/p

ADWF Hotel/Residential = $36 \times 2.4 \times 180 \div 1000 = 15.55 \text{ m}^3/\text{day}$

or $= 36 \times 2.4 \times 0.0021 = 0.18 \text{ l/s}$

Hotel Rooms – 266 units

Table 3.3 gives hotel domestic sewage as 300 l/b/d = 0.0035 l/s/p

ADWF Hotel/Residential = $266 \times 300 \div 1000 = 79.8 \text{ m}^3/\text{day} = 0.92 \text{ l/s}$

Retail – 11,173m²

Section 2.2.2 of Wastewater Design Manual gives 1 person per 25m² for large retail in CBD and Table 3.3 gives flow of 80l/p/day or 0.00093l/s/p for day working in shops.

ADWF Retail = $(11,173 \div 25) \times 80 \times 1000 = 35.75 \text{ m}^3/\text{day}$

or $= (11,173 \div 25) \times 0.00093 = 0.42 \text{ l/s}$

Cinema – 904 seats

Take population 1 person per seat = 904 people.

Wastewater Design Manual gives a flow of 12 l/p/d or 0.00014 l/s/p for visitors to theatres.

ADWF = $12 \times 904 \times 1000 = 10.85 \text{ m}^3/\text{day}$

or $= 904 \times 0.00014 = 0.13 \text{ l/s}$

Total ADWF for Proposed Development

= Residential/hotel flow + Retail + Cinema.

= $15.55 \text{ m}^3/\text{d} + 79.80 \text{ m}^3/\text{d} + 35.75 \text{ m}^3/\text{d} + 10.85 \text{ m}^3/\text{d} = 141.95 \text{ m}^3/\text{day}$

or $0.18 \text{ l/s} + 0.92 \text{ l/s} + 0.42 \text{ l/s} + 0.13 \text{ l/s} = 1.65 \text{ l/s}$

Because flows of residential and commercial peaks are unlikely to coincide, appendix in design manual gives a reduction factor of 0.56. Taking a general peaking factor of 2.5. The Peak Dry Weather Flow becomes:

PDWF = $(0.92 + 0.42) \times 2.5 + (0.42 + 0.13) \times 0.56 \times 2.5 = 3.45 \text{ l/s}$

Take PWWF as PDWF x 2 = $3.45 \times 2 = 6.90 \text{ l/s}$

Total load for line = 6.90 l/s

Line ND3896 is 225mm diameter with an assumed grade of 1 in 100. From Hydraulics Research Paper No. 4, the line has capacity of 47.6 l/s.

The proposed flow represents $(6.9 \div 47.6) \times 100\% = 25\%$ of the lines capacity.



Line ND3593:

Atrium on Elliot Shopping Centre - 2970m² Retail

Taking retail population as 1 person per 25m² and wastewater flow of 0.00093 l/s/p

Total dry weather average flow (ADWF) = $(2970 \div 25) \times 0.00093 = 0.112$ l/s

Crown Plaza Hotel - 238 rooms

Take occupancy as 70% rooms 2 person 30% 1 person.

Population = $0.7 \times 238 \times 2 + 0.3 \times 238 = 405$ people

Total dry weather average flow (ADWF) = 1.42 l/s

Peak dry weather flow (PDWF) for both allowing for timing differences = $1.42 \times 2.5 + 0.56 \times 0.112 \times 2.5 = 3.7$ l/s.

Peak wet weather flow for both = $3.70 \times 2 = 7.40$ l/s.

Total PWWF Line ND3593 = Load on ND3896 + 7.40 l/s

$$= 6.90 + 7.40 = \underline{\underline{14.30 \text{ l/s}}}$$

Line ND3593 is 375mm diameter with an assumed grade of 1 in 100. From Hydraulics Research Paper No. 4, the line has a capacity of 185 l/s.

The proposed flow represents $(19.4 \div 185) \times 100\% = 10.5\%$ of the lines capacity.

Line ND3596:

Line ND3593 and ND3619 both flow into ND3596. Assuming worst case that ND3619 is at capacity Line ND3619 is 375mm diameter with an assumed grade similar to contours of 0.025%. From Hydraulic Research Paper No.4 the line has a capacity of 290 l/s.

Total flow into line ND3596 (worst case) = $14.30 + 290 = \underline{\underline{304.30 \text{ l/s}}}$

Line ND3596 is 450mm Diameter with an assumed grade of 0.05 (as per surface contour) Hydraulic Research Paper No.4 gives the line a capacity of 423 l/s. The line therefore has adequate capacity.



9. APPENDIX 2

9.1. Water Supply Calculations

NZS 4404

NZS 4404 says that the design shall provide a domestic demand of 200 l/head/day with a peak of 5 times that amount.

Equivalent Population

Apartments from clause 2.2.1 = 2.4 persons per high rise dwelling unit

EP = 36 x 2.4 = 86.4 persons

Hotel = 2.0 persons hotel room (occupancy assumption is high as rooms are predominately studios).

EP = 266 x 2.0 = 532 persons

Water Supply Demand

Apartments = 86.4 x 200 = 17.28 m³/day = **0.20 l/s**

Hotel = 532 x 200 = 106.40 m³/day = **1.23 l/s**

Retail = 11,173 ÷ 25 = 447 people = (80% to waste 0.42 l/s ÷ 80%) = **0.53 l/s**

Cinema = 904 seats = 904 people = (80% to waste 0.13 l/s ÷ 80%) = **0.16 l/s**

Total average flow = 0.20 + 1.23 + 0.53 + 0.16 = 2.04 l/s

Total Probable Simultaneous Demand = 2.04 l/s x 5 = **10.20 l/s**



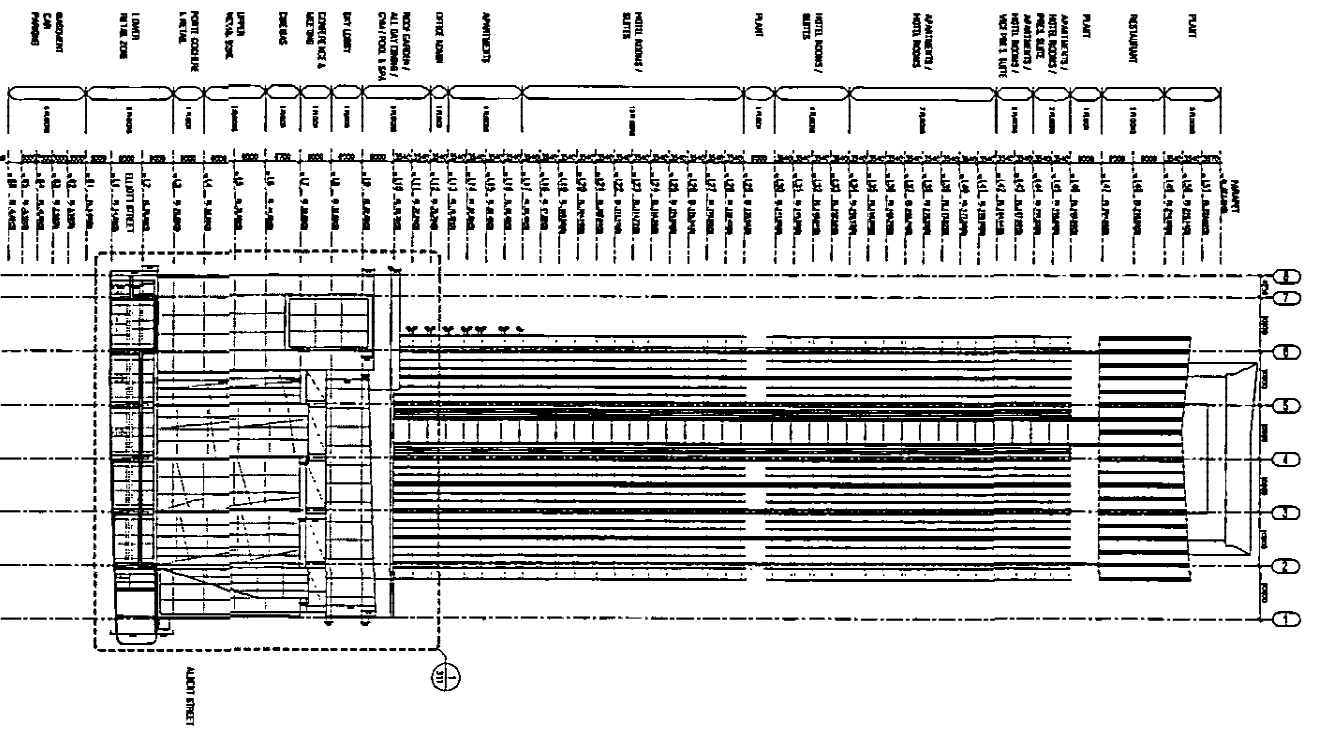
10. APPENDIX 3

10.1. GIS Mark Up – Preliminary Proposed Connection Locations

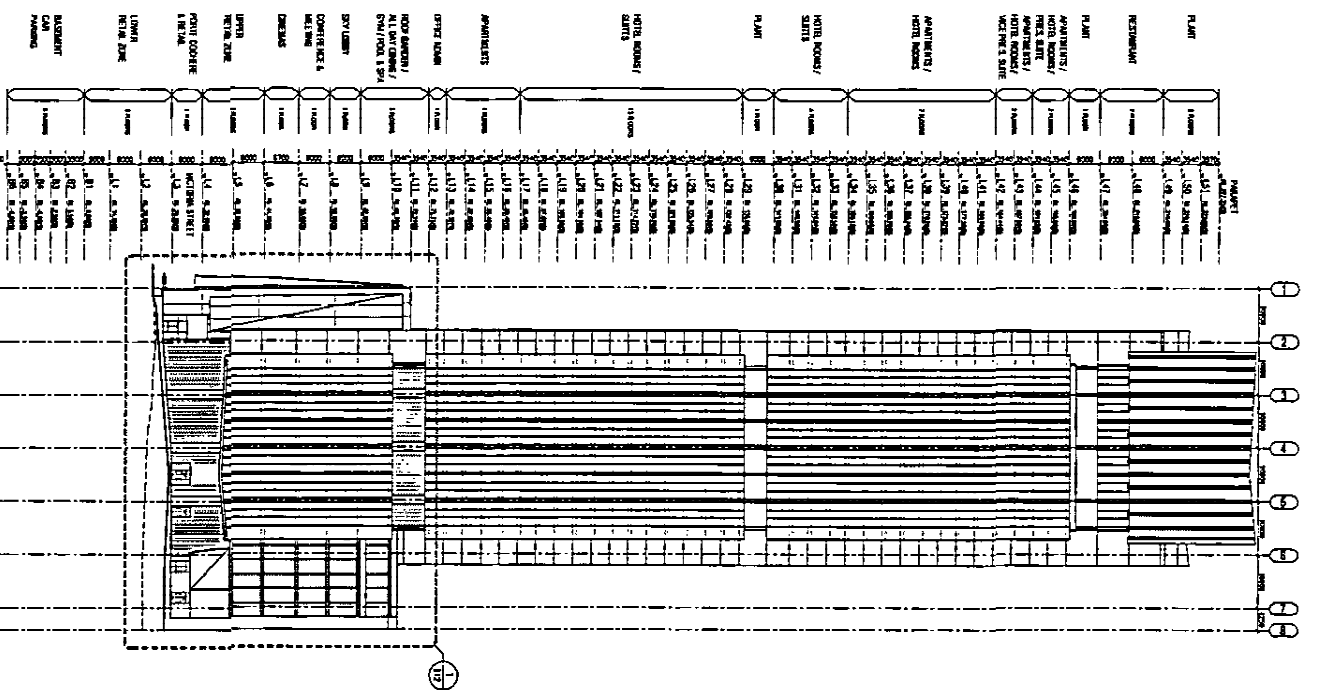


11. APPENDIX 4

11.1. Building Elevations



1 EAST ELEVATION - ELLIOTT STREET
1:500 @ N 171,000 @ A3



2 WEST ELEVATION - ALBERT STREET
1:500 @ N 171,000 @ A3

PAUL BROWN & ARCHITECTS
 100/101 QUEEN STREET, AUCKLAND
 PH: 09 308 6000 FAX: 09 308 6001
 www.pba.co.nz

ELLIOTT TOWER
 AUCKLAND CITY
 AUCKLAND

Project No: 436-RC-301

Scale: 1:500
 Date: 11/08/08

Author: [Name]
 Designer: [Name]
 Checker: [Name]
 Approver: [Name]

RESOURCE CONSENT

436-RC-301 F

The consent is granted for the proposed development in accordance with the Resource Management Act 1976 and the Resource Management Act Regulations 1978.

Consent Conditions:
 1. The consent is granted for the proposed development in accordance with the Resource Management Act 1976 and the Resource Management Act Regulations 1978.
 2. The consent is granted for the proposed development in accordance with the Resource Management Act 1976 and the Resource Management Act Regulations 1978.
 3. The consent is granted for the proposed development in accordance with the Resource Management Act 1976 and the Resource Management Act Regulations 1978.



MT HOBSON GROUP
Town Planning & Resource Consent Solutions

ATTACHMENT EIGHT

CONSTRUCTION COMMENT



Scarbro Construction Ltd

26th September 2013

Paul Brown Architects Ltd
PO Box 105092
Auckland City
Auckland
Attention: Paul Brown

Dear Sir,

Re: Elliot Tower, 106 – 108 Albert Street, Auckland.

We wish to advise that we have reviewed the following;

- Resource Consent conditions dated 25th September 2007
- Draft Traffic Management Plan by Multiplex Construction, Option 2 (rev 3)
- Moller Architects Resource Consent Application plans dated October 2006

We have also been provided with a copy of the Paul Brown Architects plans, information issue dated August 2013.

We confirm that the traffic management plan as referred to within the Resource Consent, specifically "Option 4" is still relevant and applicable to method by which the proposed new building would be constructed.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Garry Scarborough". The signature is fluid and cursive, written over a white background.

Garry Scarborough
General Manager

1 of 1



MT HOBSON GROUP
Town Planning & Resource Consent Solutions

ATTACHMENT NINE
CERTIFICATE OF TITLE

CERTIFICATE OF TITLE



MT HOBSON GROUP

Town Planning & Resource Consent Solutions

ATTACHMENT TEN

SUBMISSIONS

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Ph: 09 950 5108 Fax: 09 9205111 Mob: 027 241 3936

106-108 Albert Street, Elliot Tower Submissions

Submitter	Address	Reasons for submission	Matters on how concerns can be addressed
<p>1 Gary Hill- Director, Mt Olympus Properties Ltd.</p>	<p>Mt Olympus Properties Ltd C/o Elliot Street Hotel, Corner Wellesley and Elliot Streets, Auckland Central</p>	<p>As owners of the T & G Building and the Elliot Street Hotel, who have a vehicle and pedestrian entrance to their historic building and hotel entering and exiting on Lower Albert Street, the submitter has concerns with the inaccurate information supplied by the applicant, attempting to minimise the impact of additional traffic on this street. This is specifically as per the details in the Traffic Impact Assessment which the applicant submitted. The submitter has serious concerns with the safety of pedestrians and the traffic impacts of the proposal.</p>	<p>Firstly, Council should reject the proposed 481 carparks entering and existing via Lower Albert Street, and require the applicant to reconsider traffic flows to have the vehicle exists on Upper Albert Street. Council should also obtain a far more detailed Construction Traffic Management Plan, and impose stringent guidelines preventing Lower Albert Street from being closed.</p>
<p>2 Wai-Bun Chan Tai Yip Holding Limited (Late Submission)</p>	<p>2/5 Paunui Street St Heliers, Auckland</p>	<p>Concerns that construction will involve drilling down at least six levels, which may cause destructive impacts/ cracks to the shop front glass window, to the property AT 27-35 Victoria St West, directly opposite the subject site.</p>	<p>Council to provide assurance there will be no destructive impacts on the property, and suggestions to meeting with the developer regarding this matter.</p>
<p>3 Civic House Ltd</p>	<p>Corner Darby and Elliot Streets, City</p>	<p>Concerns that their building (The Darby Building) will be completely overshadowed by the proposed tower, and that the iconic status of the Sky Tower will decrease.</p>	<p>Limit the height of the development to the Sky Garden Level.</p>
<p>4 Compass Communications Ltd</p>	<p>162 Grafton Rd, Auckland</p>	<p>Main concerns with the height of the proposed tower, and materials used for its development which reflect radio waves, which will result in degrading their wireless services. Radiation exposure to occupants in the proposed development would exceed safe standards. The</p>	<p>Council should reduce the height of the building so it does not obstruct the LoS from Level 47/43 of the Sky Tower, where the maximum height should be limited to that of the surrounding buildings. Rotate the building so the narrow side faces the Sky</p>

			proposal does not achieve the objectives of the District Plan.	Tower. Undertake investigations to determine the effects of radiation on occupants, and impose conditions with consent. Council should also consider effects of the proposal on Network Utility Services infrastructure already deployed within the vicinity, and to deploy in the future.
5	SKYCITY Auckland Ltd	Federal House, 86 Federal Street, Auckland 1010	Supports tall buildings in the CBD but the location and height must be carefully considered. The Sky Tower is an iconic landmark of Auckland, and a telecommunication service centre, and its attributes will be adversely affected. The proposal will have adverse effects on the environment, and is contrary to objectives and policies of the Plan.	Council to decline consent, or grant it subject to reduction in height to the 'Sky Garden' level. Also, singular vehicle access and egress to and from the site at the southern corner of the site should be imposed, deleting pedestrian access to the proposed Podium level. The proposed building should be prohibited from being used for transmission of telecommunications.
6	M Johnston	PO Box 3903, Shortland Street, Auckland	Objects to the negative urban design impacts this proposed building will have on the city, at a site, street, neighbourhood and citywide scale.	Council to decline consent, or impose conditions to reduce the height by a quarter of the proposed height so it is consistent with other CBD Buildings, reduce parking to a total of 100 spaces, and remove portecochere.
7	Christopher Lane	7E Whitaker Place, Grafton	Concerns about the height and urban design consideration process, and inappropriate design/scale of the proposed structure.	Council to seriously reconsider the design and scale of the project and enforce a change of design.
8	Heart of the City (Incorporation)	PO Box 105331	Opposes the proposal being granted consent without a binding traffic management plan, and due to the detrimental effects construction of the tower would have on their member' existing businesses.	Council should not permit site access along Elliot Street, or grant consent without a strong compensation/mitigation component, or allow any construction site that expanded onto public space beyond the existing building envelope.
9	Smith & Caughey Ltd	253-261 Queen Street, Auckland	Overall in favour of the proposal however, opposes the concept traffic management plan due to the applicant proposing the use of Elliot St for truck	Council should not permit access for trucks to the tower construction site, to use Elliot

			access to the construction site. They have concerns that this will conflict with trucks accessing their loading dock during this period, causing further traffic, pedestrian and safety issues. Opposes the application as it will create significant inconveniences for his tenant at Albert St, in terms of noise, dust, road blockage, etc. He has concerns it will drive his tenant away and also reduce his property value as there would be too many apartments on the market.	Street between Wellesley Street and Darby Street. Council to decline consent.
10	Shaun Baishang Shen	18 Mardon Road, Hamilton		
11	Transit New Zealand	Transit NZ Auckland Office, PO Box 1459, Auckland	Transit supports the application in part, and is submitting as it would like to be included in the development of a construction traffic management plan, as it is one of its key functions to manage the effects of land use activities such as this. Concerns that the Phillips Fox Tower is highly likely to be affected by the proposal as it sits directly opposite the subject site, and Phillips Fox Tower has not provided written approval. Strongly opposes the proposal due to the height and it being totally out of character with other buildings in the city, and with Auckland's CBD. Opposes the height of the proposed building, and have concerns with the effects of the proposal on their investment in telecommunications infrastructure located on the Sky Tower. Concerns with the number of carparks proposed is excessive for the central city context, which cause traffic impacts, inconsistency with the District Plan objectives and policies, inconveniences the proposal will cause, the design of the building, negative impacts on amenity, the overpowering effects on the iconic Sky Tower, and the height of the building being dominant.	Council must require the applicant to consult with Transit's Operations Team when preparing a Construction Traffic Management Plan. Request Council provide them with copies of all documents directly related to the proposal. Council to decline consent.
12	Phillips Fox Tower	209 Queen Street, Auckland		
13	Peggy Haworth	1/29 Inkerman Street, Royal Oak, Auckland 1061		
14	Team Talk Ltd	84 Tory Street, Wellington		Request that Council is to ensure any development on the subject site is restricted to a height below Level 47 of the Sky Tower. Council to decline consent, or reduce the number of carparks as per the Plan, and reduce the number of proposed apartments, require a redesign, impose detailed conditions on traffic impacts, reduce the size of the proposed development.
15	Brian Rankin	35 Ridings Road, Remuera		
16	Colwall Property Investment Limited	16 Rifleman Tower, 120 Albert Street, Auckland	Supports the application in principle however has major concerns with a number of aspects during	Council should take into consideration the detailed matters outlined in the submission,

<p>17</p> <p>New Zealand Historic Places Trust- Pouhere Taonga</p>	<p>2 Durham Street East, Auckland</p>	<p>construction of the development, and ongoing traffic management of the site upon completion, as these will affect their tenants, as owners of the neighbouring Crowne Plaza Hotel, the Rifleman Office Tower, 728 bay carpark and the Atrium on Elliot shopping centre. Neither supports nor opposes the proposal due to the lack of archaeological assessment on the subject site and identification of effects on associated heritage values. They are aware of the high potential for pre 1900 historical archaeological evidence to be found on the subject site, where earthworks for the proposed development have potential to affect this unrecorded material. Hence, the proposal is likely to have adverse effects on heritage values of the site. Furthermore no consultation has taken place between the applicant and the NZHPT. Concerns with suitability of the site for residential purposes, in terms of hazardous environments, geotechnical stability and poor air quality. Also has concerns with ground contamination, site management, shading and outlook, noise and ventilation, stormwater, and the design and ventilation of carparks. Opposes the proposed development as it is contrary to the objectives and policies, overlays, development controls, parking and vehicle provisions, and Plan Change 2 of the District Plan. ARTA supports the proposal, however has concerns that the function of Albert Street may be reduced due to increased traffic from the development site, which could impact the bus network, and construction traffic may hinder bus services that use this route.</p>	<p>and enforce a ban on construction trucks through Elliot Street at all times, as the company feels Victoria Street is more appropriate for loading and deliveries, and will have less impact on the parties identified. Prior to further consideration of the proposal, Council should request an archaeological assessment of the site to be undertaken by a qualified archaeologist, after which the applicant is to circulate this information to the Trust before any hearing. If consent is granted, advice provided in the submission should be appended to ensure the applicant is aware of their obligations under the Historic Places Trust Act 1993. Requests that should Council grant consent, public health concerns should be included or addressed appropriately.</p>
<p>18</p> <p>Auckland Regional Public Health Service</p>	<p>Healthy Environments, Level 2 Building 15, Cornwall Complex, Greenlane Clinical Centre, Greenlane, Auckland</p>	<p>DLA Phillips Fox DLA Phillips Fox Tower, 209 Queen Street, Auckland</p>	<p>Council to decline consent, or impose conditions of consent necessary to avoid, remedy or mitigate likely adverse effects of the proposal. Council to approve consent, however ensure the bus services using Albert Street are not hindered in any way.</p>
<p>19</p> <p>DLA Phillips Fox</p>	<p>DLA Phillips Fox, 22nd Floor, DLA Phillips Fox Tower, 209 Queen Street, Auckland</p>	<p>DLA Phillips Fox Tower, 209 Queen Street, Auckland</p>	<p>Council to approve consent, however ensure the bus services using Albert Street are not hindered in any way.</p>
<p>20</p> <p>Auckland Regional Transport Authority</p>	<p>Level 3, 21 Pitt Street, Auckland</p>	<p>Level 3, 21 Pitt Street, Auckland</p>	<p>Council to approve consent, however ensure the bus services using Albert Street are not hindered in any way.</p>

21	Kiwi Property Holdings Limited C/- Ellis Gould Solicitors	Ellis Gould Solicitors, 31 st Floor, The ANZ Centre, 23-29 Albert Street, Auckland	Opposes the application in its entirety, as it is contrary to the purpose and principles of the Resource Management Act 1991, and the objectives, policies and criteria of the District Plan, and would generate significant adverse effects on their neighbouring properties, and the environment. The submitter also owns the Towers corner of Victoria and Queen Streets, and thus has concerns that the three and a half year construction period will adversely affect operation of the Towers. This would include traffic impacts, amenities and activities of occupiers and visitors, additional building maintenance costs and noise.	Council to decline consent, or if consent is granted, Council should impose conditions to address concerns as detailed by the submitter.
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COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



Search Copy


R. W. Muir
Registrar-General
of Land

Identifier 163636
Land Registration District North Auckland
Date Issued 24 February 2006

Prior References

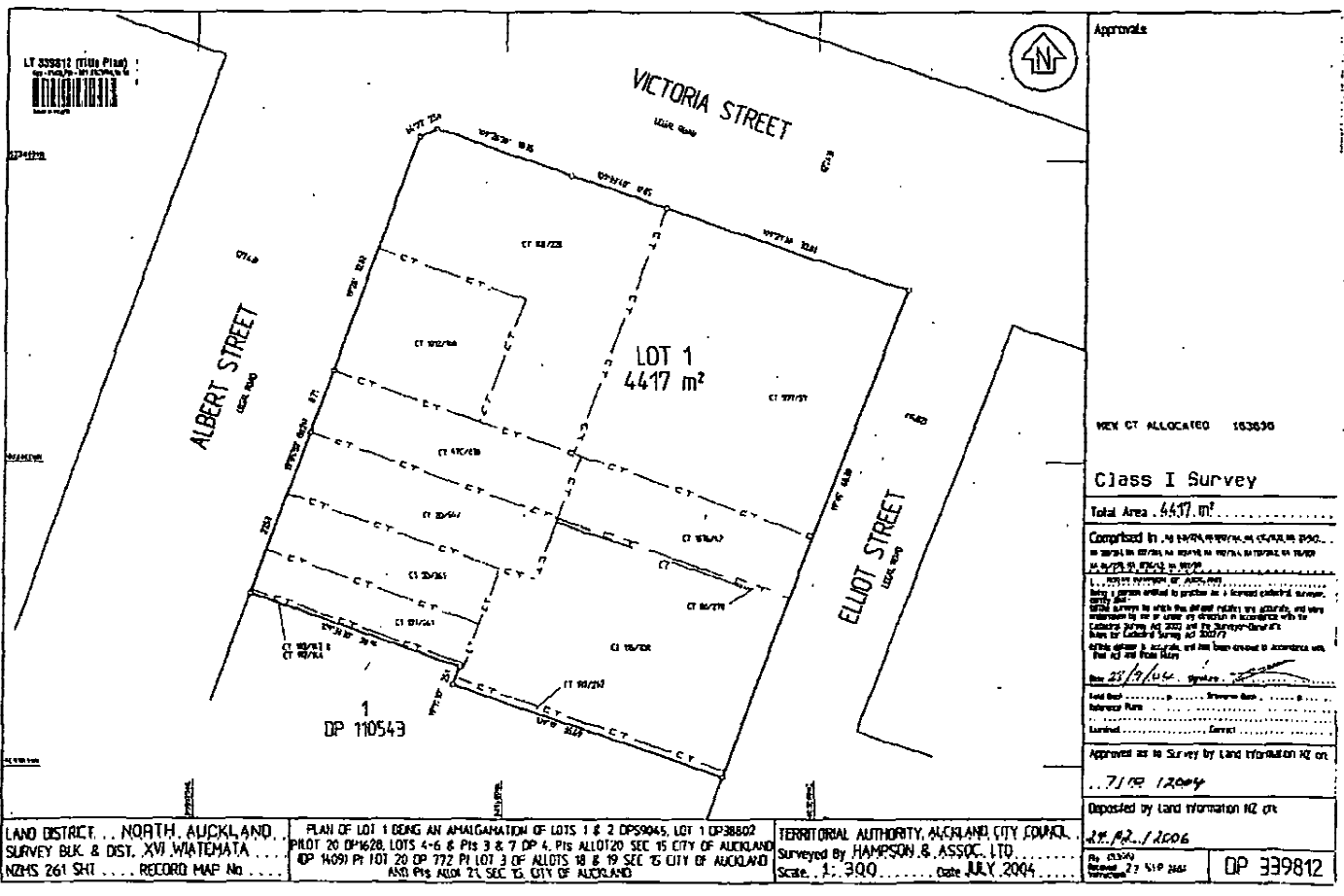
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NA 137/262	NA 14B/228	NA 1876/42
NA 192/143	NA 192/144	NA 2D/361
NA 2D/567	NA 47C/838	NA 597/59
NA 86/270		

Estate Fee Simple
Area 4417 square metres more or less
Legal Description Lot 1 Deposited Plan 339812

Proprietors
NDG Asia Pacific (NZ) Limited

Interests

Subject to Section 59 Land Act 1948 (Affects part formerly CTNA1876/42)
9038892.5 Mortgage to ASB Bank Limited - 18.5.2012 at 4:44 pm



Approvals

NEW CT ALLOCATED 163636

Class I Survey

Total Area . 6437.01^m²

Comprised in 14 separate parcels of certain size
as shown on this plan as approved by the Registrar-General
under the provisions of the Land Transfer Act 1952
and the Survey Act 1977
being a person entitled to practice as a licensed valuer, surveyor,
engineer or other person who is qualified, and who
is registered in the roll of surveyors in accordance with the
Land Transfer Act 1952 and the Survey Act 1977
of the Registrar-General, and has been created in accordance with
this plan and the Survey Act 1977

Date 25/7/2004

Surveyor Name
Licence No
Landed
Approved as to Survey by Land Information NZ on
.. 7/10 2004
Deposited by Land Information NZ on
.. 12/12/2006
By 03304
Plan No 27 519 2648

DP 339812

LAND DISTRICT . . . NORTH AUCKLAND
SURVEY BUK. & DIST. XVI WAITEMATA
NZHS 261 SH1 . . . RECORD MAP No . . .

PLAN OF LOT 1 BEING AN AMALGAMATION OF LOTS 1 & 2 DP59045, LOT 1 DP38802
PILOT 20 DP1628, LOTS 4-6 & Pts 3 & 7 DP 4, Pts ALLOT20 SEC 15 CITY OF AUCKLAND
DP 14091 Pt LOT 20 DP 772 Pt LOT 3 OF ALLOTS 18 & 19 SEC 15 CITY OF AUCKLAND
AND Pts A004 21 SEC 15 CITY OF AUCKLAND

TERRITORIAL AUTHORITY, AUCKLAND CITY COUNCIL
Surveyed by HAMPSON & ASSOC. LTD
Scale . . . 1 : 300 . . . Date JULY 2004



COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



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NA137/262	NA14B/228	NA1876/42
NA192/143	NA192/144	NA2D/361
NA2D/567	NA47C/838	NA597/59
NA86/270		

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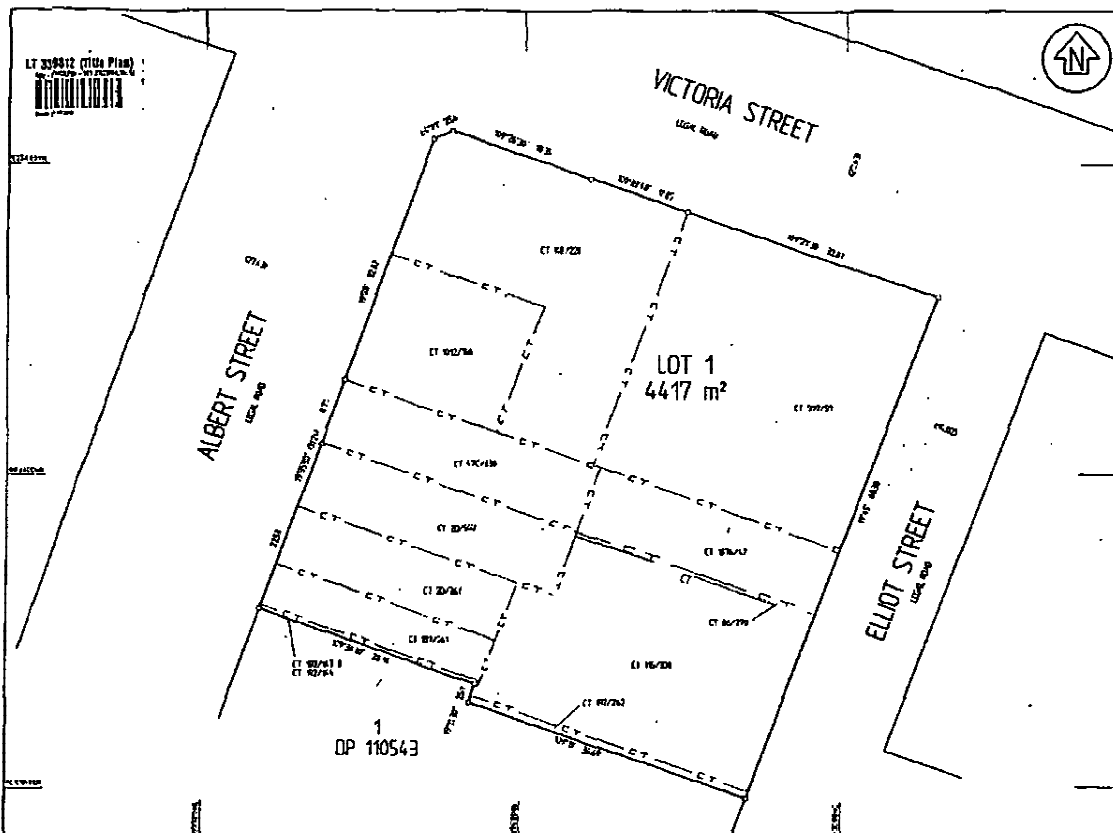
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Approvals

NEW CT ALLOCATED 103036

Class I Survey

Total Area 4417 m²

Comprised in 14 CTs

Being a person entitled to practice as a licensed cadastral surveyor, I have surveyed the above land in accordance with the provisions of the Land Information Act 2004 and the Survey Act 1980 and have deposited this plan with the Registrar of Land Information.

Date 27/07/2004

Approved as to Survey by Land Information NZ on 27/07/2004

Deposited by Land Information NZ on 27/07/2004

LAND DISTRICT... NORTH AUCKLAND
 SURVEY BUK. & DIST. XVI WAIKEMATA
 NZHS 261 SH1... RECORD MAP No...

PLAN OF LOT 1 BEING AN AMALGAMATION OF LOTS 1 & 2 DP59045, LOT 1 DP38502
 PILOT 20 DP1628, LOTS 4-6 & PIS 3 & 7 DP 4, PIS ALLOT20 SEC 15 CITY OF AUCKLAND
 (DP 1409) PI LOT 20 DP 772 PI LOT 3 OF ALLOTS 18 & 19 SEC 15 CITY OF AUCKLAND
 AND PIS ARIOT 21 SEC 15 CITY OF AUCKLAND

TERRITORIAL AUTHORITY, AUCKLAND CITY COUNCIL
 Surveyed by HAMPSON & ASSOC. LTD
 Scale 1:300 Date JULY 2004

27/07/2004
 DP 339812



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