

From: [REDACTED]
To: [Federal Street](#)
Subject: Comments on Federal Street Residences, Fast Track Application: RL Senojak & Others
Date: Sunday, 3 April 2022 11:39:28 am
Attachments: [REDACTED]

Hello

Please find below comments from RL Senojak owner of [REDACTED]
 As per letter I have forwarded the documents to our property manager OneCiti / Viaduct City Rentals, and requested they forward to the Tenant.
 Please advise if the following comment via email is acceptable and acknowledge receipt of the email.

Contact details	The Rana Senojak Family Trust	[REDACTED]
First Name	Rana	
Last Name	Senojak	
Postal Address	[REDACTED]	
Phone	[REDACTED]	
Email	[REDACTED]	
	I can receive emails and my email address is correct	
Comments	<p>We have no issue with the project, however we do have concerns about the following items and how these will be mitigated.</p> <p>Response from and discussion with the Developers will help</p>	
	<p>Please see comments and related document content below. These are provided to address the following:</p> <ul style="list-style-type: none"> • Potential impact on the Tenant • Risk of potential costs the 'Altitude' Body Corporate and/or Owners" may incur during and after the development 	
Legal cost	<p>There are several sections mentioning that affected parties (Altitude) should seek legal advice.</p> <p>As this is a cost directly related to the project (Federal Street Residences), we believe this should be at the cost of the Developer and the legal (and other) representative(s) should be selected by the Altitude Body Corporate. The costs should be scoped, quoted and agreed for each separate piece of advice. This will avoid scope creep in the advice.</p>	
Remedial and compliance costs	<p>There are several sections referring to items that may impact the code of compliance and building quality for Altitude apartments, for example:</p> <ul style="list-style-type: none"> • The removal and/or compromise of windows on the eastern wall • Depth of basement and related works impact on earthquake rating and wall stability during the works • Building damage <p>Who will pay the cost of fixing the problem</p> <ul style="list-style-type: none"> • Will there be before and after images so there is no dispute 	
Deep Earthworks	<p>Deep earthworks adjacent to the eastern wall - foundation impact</p> <ul style="list-style-type: none"> • Legal cost for consenting • Who will pay if there is any external / internal cracking or movement • Will our building insurance policy be impacted during the build, do we need to take out extra cover and who will pay for this? 	<p>4.1.3 Basement retaining wall</p> <p>The basement retention system is dependent on the nature of the material to be retained, the method and sequence of construction, the nature and extent of the adjacent building and foundation, the allowable lateral ground movement and associated settlement behind the wall, the ground water level conditions, and the magnitude of any vertical load to be supported by the wall.</p> <p>Based on the expected ground conditions, a significant proportion (50%) of the retained material will be within the Waitemata Group "bedrock" overlain by firm residual/weathered soils. This "bedrock" is typically self-supporting but will exhibit lateral forces if contained.</p> <p>A soldier pile wall (e.g. 800mm diameter bored piles at 1.6m spacing) temporarily retained by post tension anchors with shotcrete infill should provide a satisfactory method of ground retention. The anchors would be the removable type but would require consent to install under the roads and adjoining properties.</p> <p>5/4 The use of temporary anchors under Auckland Council roads and private properties</p> <p>Temporary anchors will likely need to be installed under Federal St, Kingdom Street and all properties backing on to the site. Proprietary temporary anchors are envisaged where most of the components can be withdrawn after use. The alternative of a top down propped wall construction would unlikely require resource consent.</p>

4.3 Excavation Conditions

The basement excavation (basically 30m by 50m by 15m deep) will require approximately 12,000m³ of clay/silt soil and 10,500m³ of weak rock to be excavated. A medium sized excavator with rippers should be satisfactory to remove these materials. If more competent rock or concretions are encountered a hydraulic breaker may be required.

4.4 Earthquake Classification

Confirmation of the agreed building importance level will be an important factor in the design, especially for determining the earthquake and wind loads to be assumed for design. At the time of preparing this desk study, it is understood, to be confirmed, that the building may be considered of importance level 2 with respect to NZS 1170.5:1.2 where buildings are required to be designed to resist earthquake shaking with an annual probability of exceedance of 1/500 (500-year return period). This is the ULS design seismic loading. Structures are expected to retain their integrity during the ULS earthquake and not collapse or endanger life. Furthermore, importance level 2 buildings should sustain little or no structural damage under a serviceability limit state (SLS) design load case. Which is based on an earthquake shaking with a 25-year return period.

Peak horizontal ground acceleration (PGA) have been calculated in accordance with MBIE/NZCS module 1(2016) using the following

For ULS

$$PDA = C_{a,0.002} R I g / 3$$

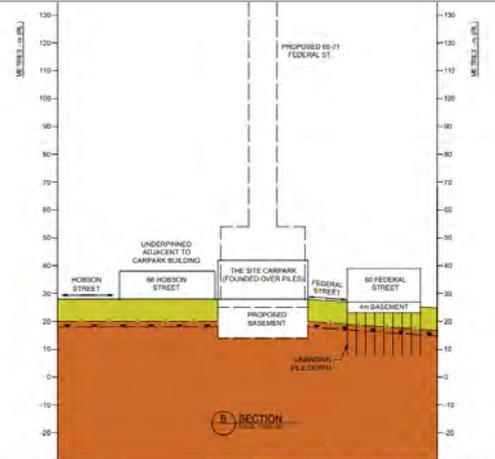
$$C_{a,0.002} = 0.15 \text{ for Auckland (NZTA bridge manual) (2016) Table 6.1}^1$$

$$R = 1.0 \text{ for 500-year return period (NZS1170.5)}^2$$

$$I = 1.33 \text{ for Class B - Rock}$$

$$PGA = 0.11g$$

The effective earthquake magnitude can be taken as 5.9



Altitude is not as deep - how will this be protected

Reference Building	Year	Basement level	Soil Profile		Height above ground	Basement depth	Foundation Detail			SLS	Importance level
			Bedrock depth	Bedrock depth			Building	Detail	Depth		
60-71 Hobson	1985	2.0m	12.0m	8.0m	12.0m	2.0m (pile cap)	Concrete pile	Grouted concrete tower	10.0m	4.0m (per floor)	1
77 Hobson	1985				2.0m	7.0m	Concrete pile	Grouted concrete tower	8.0m		1
87 Hobson	1988				3.0m		Concrete pile	Grouted concrete tower			1
89-90 Hobson	2008	3.0m	6.0m	1.0 (2.0m)	21.0m	8.0m	Grouted concrete pile	Grouted concrete tower	8.0m	8.0m (per floor)	1
90 Hobson	1985				2.0m		Grouted concrete pile	Grouted concrete tower			1
91 Hobson	1985				2.0m		Grouted concrete pile	Grouted concrete tower			1
Altitude	2002				2.0m		Concrete pile	Grouted concrete tower			1
66 Hobson (see note)	1987	2.0m	3.0m	3.0m (2.0m)	4.0m	2.0m	Concrete pile	Grouted concrete tower	2.0m	2.0m	1
80 Federal	1987	2.0m	2.0m	4.0m	11.0m	8.0m	Concrete frame	Grouted concrete tower	8.0m	8.0m (per floor)	1
88 Federal	1988	2.0m	2.0m	4.0m	11.0m	8.0m	Concrete frame	Grouted concrete tower	8.0m	8.0m (per floor)	1

Axial and uplift forces - query ongoing impact on Altitude given it has abutting walls

6 Conclusion

Based on the assessed data, the geotechnical conditions of the site are consistent with nearby multilevel buildings including the Sky Tower and casino. This will be verified with the pending preliminary site investigation of 4 boreholes within the existing car park building.

The pending investigation will aim to:

- Confirm the depth to bedrock and obtain samples of soil and rock for laboratory testing.
- Confirm the actual soil consistencies and rock strengths to be used for design.
- Allow confirming soil geotechnical properties for design.
- Confirm actual ground water regime at the site and in particular depth to regional ground water level and presence or absence of perched water.
- Assist assessment of foundation design and geotechnical effects.

The foundations will be required to withstand large axial and uplift forces from the wind loading. ECBF Waitemata Group 'bedrock' is a weak rock and has a finite capacity from load demands. As demonstrated by the Sky Tower foundation a group of piles on a structural raft may be required to support the demand actions. The load demand of this Federal Street structure is likely to be greater. Although the load demands are not known in detail, a single foundation per tower leg is unlikely to be practical. It is assessed that a structural raft and a group of grouted socketed piles, perhaps incorporating structural basement walls, within the more competent ECBF Waitemata Group 'bedrock' may be required to resist the demand loading.

Re Noise and Vibration levels

- The documents seem clear on level and duration
 - Any changes should be advised
- Cost concern
 - If vibrations impact the stability or quality of the Altitude building either during or after the construction how does the project plan to remediate this, for example:
 - cracks
 - broken windows
 - footings stability
 - wind movement of the project
 - Who will pay:
 - For the remediation
 - If there is any dispute

5.2 Settlement from mechanical displacement of the basement wall

Although tied back with anchors, there will be some displacement generated by the construction of the basement walls. A uniform horizontal displacement that corresponds to a 0.3% displacement versus excavation depth ratio is typically applied (CIRIA C760) which supersedes CIRIA C580). A typical displacement of 45mm at the surface is suggested using CIRIA C760 and this would be modelled for ground response.

Again, there appears a low risk of this effect being significant as most nearby buildings are piled with the exception of 60 and 66 Hobson Street.

Building damage will need to be assessed against the following Table 2 to assist Council Planners in appraising the Resource Consent application for the Federal Street project.

Table 2 Assessment of Building Damage

Category of Damage	Normal Degree of Severity	Description of Typical Damage (Building Damage Classification after Burkan (1995) and Mairatai (1996))	General Category (after Burkan-1995)
0	Negligible	Hairline cracks.	Aesthetic Damage
1	Very Slight	Fine cracks easily treated during normal redecoration. Perhaps isolated slight fracture in building. Cracks in exterior visible upon close inspection. Typical crack widths up to 1mm.	
2	Slight	Cracks easily filled. Redecoration probably required. Several slight fractures inside building. Exterior cracks visible, some repainting may be required for weather-tightness. Doors and windows may stick slightly. Typical crack widths up to 5mm.	Serviceability Damage
3	Moderate	Cracks may require cutting out and patching. Recurrent cracks can be masked by suitable linings. Brick pointing and possible replacement of a small amount of exterior brickwork may be required. Doors and windows sticking. Utility services may be interrupted. Weather tightness often impaired. Typical crack widths are 5mm to 15mm or several greater than 5mm.	
4	Severe	Extensive repair involving removal and replacement of walls, especially over door and windows required. Window and door frames distorted. Floor slopes noticeably. Walls lean or bulge noticeably. Some loss of bearing in beams. Utility services disrupted. Typical crack widths are 15mm to 25mm but also depend on the number of cracks.	Stability Damage
5	Very Severe	Major repair required involving partial or complete reconstruction. Beams lose bearing, walls lean badly and require shoring. Windows broken by distortion. Danger of instability. Typical crack widths are greater than 25mm but depend on the number of cracks.	

(Table 2 sourced from recent conditions set by Auckland Council.)

Survey monitoring (including pre-condition surveys) of all properties within significant ground movement influence distance to the excavations will be required. This will need to be detailed in a Monitoring and Contingency Plan for the Resource Consent.

Altitude Eastern Wall

- Windows
 - The upper level of the tower is 3.7m from the Altitude eastern wall / windows and does not comply with the 6m offset
 - The documents seem dismissive (7.7.e) of the fact that these windows provide light, sun and outlook in the bedrooms.
 - Whilst other apartments do not have the same windows they are designed so that light is provided via a panel in the living room and also a panel in the back bedroom which receives light from the open stairwell.
 - There is a risk that the eastern wall apartments will no longer comply with code and the Owners will be required to reconfigure the light provision in these apartments
 - This is a cost directly associated with the project
 - Note:
 - Direct impact on the people living in the apartments (Tenant)
 - Privacy
 - Light, sun and outlook
 - Rent and resale impact
- 7.7.f refers to moving the tower 7.4m south
 - Whilst consideration is given for the south property the same is not given for the western property (Altitude)
 - Moving the tower back 7.4m to the south would partially or totally mitigate the impact on the Altitude
 - This would also increase the level of privacy for the project residences and Altitude

Setback from podium

7.5 As noted, the tower does not comply with standard H8.8.24(1)(b) which requires a 6m setback from the podium edge and/or boundaries for buildings higher than 28m. Rather, the tower is to be set back:

(a) 3m from the podium on the Federal and Kingston Street frontages

(b) 6m on the western boundary (except for at the dogleg in the property boundary where the setback reduces to 3.7m)

(c) 13m from the southern boundary.

7.7 Taken as a whole, the proposal achieves these purposes²

(b) In this context, human-scaled street edge refers to the form of the podium. The 3m setback is sufficient to make a distinction between the podium and tower for that purpose as illustrated by the images. Human scale is also provided through the texture and modulation of the podium façade, the strong verandah canopy, and the fine-grained treatment of the street edge.

(c) It is preferable aesthetically that the setback is consistent on both street frontages so that both the podium and tower address the intersection symmetrically. The tower will make a positive contribution to streetscape of this area (see below).

(d) It is also preferable that the tower location on the podium be biased away from the property to the south (for outlook and sunlight), and to maximise separation from the Sky Tower (for views through the city centre and skyline).

(e) While the north-west corner of the tower is only 3.7m from the adjacent building, that part of the neighbouring building is the side wall with very small windows, the end apartments of that building otherwise having outlook over Kingston Street or the south.

(f) To comply with the 6m offset from the street frontage, the tower's narrow dimension would need to be reduced to 20.5m and it would be shifted 7.4m south on the podium. Neither measure would be beneficial in terms of streetscape, sunlight, or views for reasons set out above.

Which if any apartments will be affected by loss of the eastern windows.

- It is not immediately apparent which eastern wall apartments will lose the eastern wall windows due to the height of the adjoining podium wall
 - Is it the same as current or will it be higher?
 - From this image it looks like it will impact up to Level 11 of Altitude which is higher than current
 - How will water ingress be controlled, that is will the walls abut or will there be a gap



Figure 3: Concept image of the Proposed Development

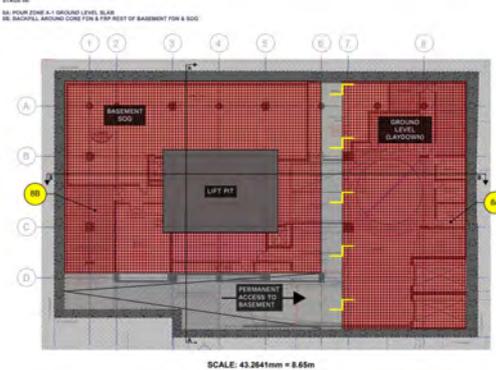
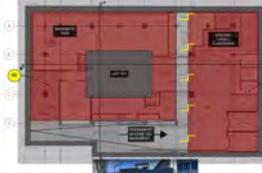
Vehicle ramp location

The project refers to enhancing the street scape and places the vehicle access to the basement on Kingston St next to Altitude.

No real issues with this except vehicle noise, however there is a left field potential solution which will allow for full use of the Kingston street frontage by the project and also allow for the extension of the underground market place

- (g) The vehicle ramp to the basement is in the western corner of the building on Kingston Street furthest from the intersection with Federal Street where the interruption of street frontage will be least disruptive. The vehicle crossing and entrance is 5.7m wide to provide waiting space for a vehicle at the top of the ramp. It is adjacent to the vehicle entrance to the neighbouring apartment building. As discussed above, the valet parking arrangement (which will require a degree of planning and deliberateness to access one's car) is likely to discourage incidental car use and most trips being on foot, public transport, or bicycle. Also as noted above, the proposal includes a separate bicycle garage with a dedicated entrance from Kingston Street
- 7.18 The benefits outlined above will be amplified because of the location at the intersection of the laneways area, and the current poor activation of this area.

Planned design

		 <p>Figure 3: Concept image of the Proposed Development</p>														
Planned design		 <p>STAGE 01: SA: FOUR ZONE A-1 GROUND LEVEL, BLAB SB: SIXTEEN, SEVEN, ZERO FOR A TOP REST OF BASEMENT F/W & SOG</p> <p>SCALE: 43,2641mm = 8.65m</p>														
Suggested left field option	<p>Change the vehicle ramp location to [REDACTED]</p> <p>About [REDACTED]</p> <ul style="list-style-type: none"> • The property is or was recently on the market • It has an extremely low earthquake rating and the building is in poor condition • There is an easement on this property which impacts height 	  														
Planned hours of work	These should consider residents comfort, including night shift workers who sleep during the day															
	Dust / cleaning of Altitude exterior during the works															
Loss of rent	<ul style="list-style-type: none"> • Potential loss / reduction of rent, arising during the construction period, due to noise <ul style="list-style-type: none"> ◦ It is estimated that rents decrease by 10% during a neighbouring construction ◦ Given this project will run for 36 months A rough calculation indicates a potential \$1.4m loss • This may not impact all Owners, however for those it does, how does the project propose to compensate 	<table border="1"> <tr> <td>200</td> <td>Apartments</td> </tr> <tr> <td>\$ 450</td> <td>Estimated average rent per week</td> </tr> <tr> <td>\$ 90,000</td> <td>Total rent per week for the building</td> </tr> <tr> <td>36</td> <td>Duration in months</td> </tr> <tr> <td>156</td> <td>Duration in weeks</td> </tr> <tr> <td>\$ 14,040,000</td> <td>Total rent for duration</td> </tr> <tr> <td>\$ 1,404,000</td> <td>10% loss of rent for the duration</td> </tr> </table>	200	Apartments	\$ 450	Estimated average rent per week	\$ 90,000	Total rent per week for the building	36	Duration in months	156	Duration in weeks	\$ 14,040,000	Total rent for duration	\$ 1,404,000	10% loss of rent for the duration
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\$ 1,404,000	10% loss of rent for the duration															
Ongoing access	<p>Lifetime approved access to the eastern and back walls for maintenance</p> <ul style="list-style-type: none"> • This will be necessary so that Altitude can maintain the walls to an acceptable quality • This is an outlook of the project 															

Many thanks for your consideration and I am happy to discuss further if needed.

Rana

Rana Senojak

[REDACTED]