

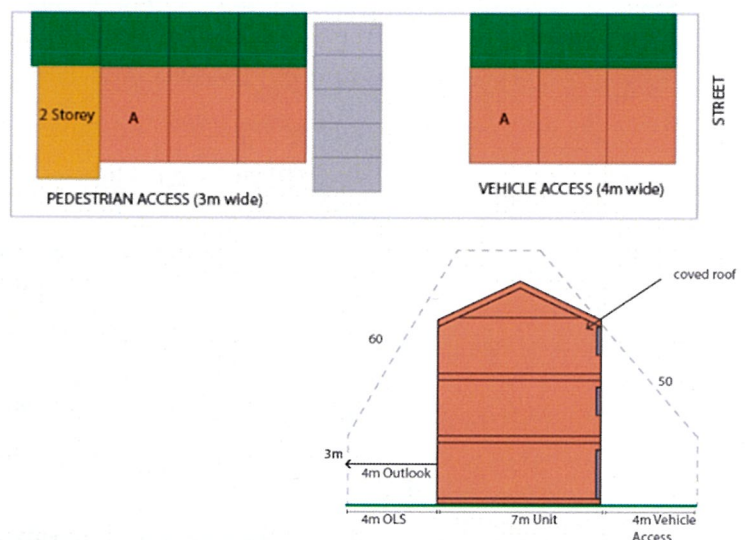
## SUMMARY STATEMENT

1. My name is **David Anthony Hattam**. I am employed by the Christchurch City Council (the **Council**) in the position of Senior Urban Designer.
2. I have prepared evidence on behalf of the Council on residential development including evidence in relation to the Sunlight Access Qualifying Matter (**SAQM**).
3. My evidence relates to the form, function and appearance of medium- and high-density development. I consider that good urban design is a fundamental component of a well-functioning environment and is anticipated by the District Plan.
4. The Council has undertaken a study of the quality of urban outcomes achieved under the current zoning, in which I was involved, that has informed the notified Plan Change 14 (**PC14**) provisions. Because of this monitoring work, we have good evidence of how well the operative District Plan (**Plan**) is working.
5. For this summary, I am focussing on three main themes:
  - (a) Building Envelopes (including SAQM and also the HRZ);
  - (b) Two rules where agreement was not reached at conferencing (Fencing and Building length); and
  - (c) Assessment matters.
6. I otherwise confirm that I maintain my position as per my statement of evidence for the reasons explained in that evidence as well as my rebuttal evidence.

### Sunlight Access QM

7. Due to its latitude, good access to sunlight is especially important in Christchurch, which is colder than other tier 1 cities and has lower sun angles which means overshadowing can be more of a problem.
8. Under MDRS rules, units in Christchurch could receive between 20% and 30% fewer winter solar hours than Auckland. Depending on orientation, the difference is around 20 minutes of sun per day, at a time of year when the duration of sunshine is usually less than two hours, or an increase in the number of days where no sun is received.

9. The aim of the SAQM was to improve sunlight access in Christchurch to a level where it was more consistent with cities in the upper north island.
10. The work I carried out on the SAQM (Section 32 Report (Part 2) Appendix 34) includes two strands. The first considers the impact on sunlight access for neighbouring sites. The second demonstrates the effects on capacity for a range of site types in the city.
11. These indicate that reducing the angle and height of recession planes, as notified in PC14, would ensure increased levels of sunlight access, in particular for the most affected east west sites. In exchange there would be a small reduction in the theoretical capacity of a typical development site of about 5%.



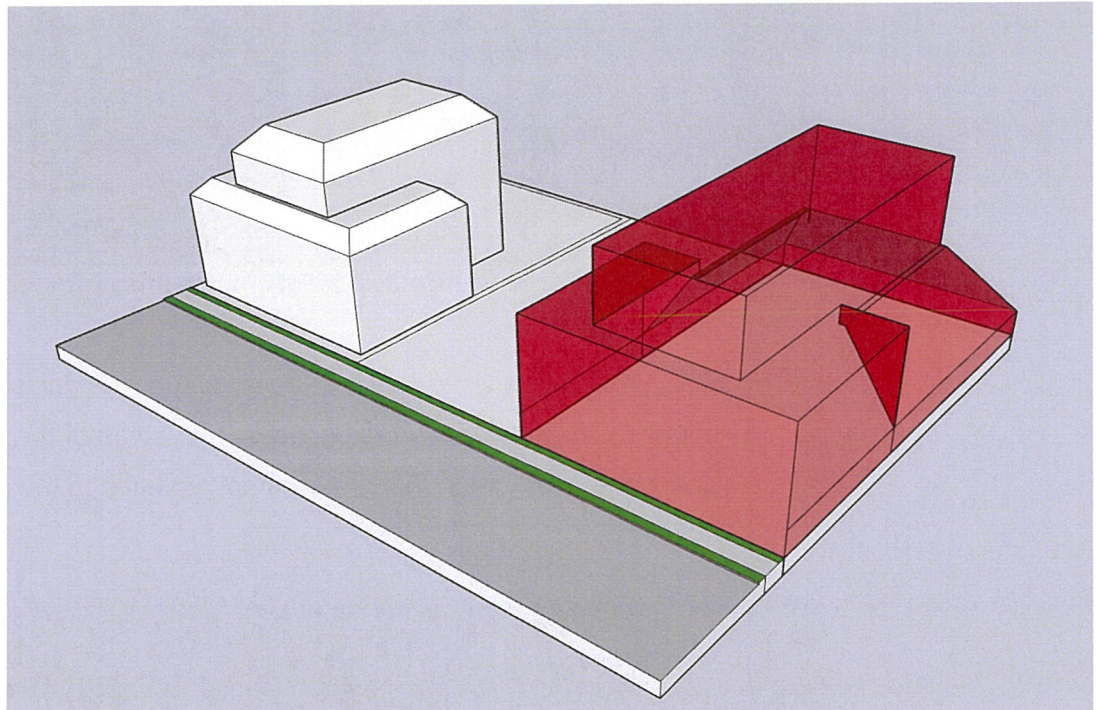
**Figure 1: Example of modelled site layout using notified recession planes (plan and section)**

12. This relatively small reduction is simply because the height in relation to boundary rule is one of many rules that might limit the site capacity.

### **HRZ Development Envelope**

13. The Council has notified a set of rules which creates a development envelope that relies on both recession planes and setbacks for built form above a certain height. An important part of this approach is to manage the length of buildings and ensure there are gaps between them.
14. The development envelope allows for a road wall at the front of the site, where recession planes do not apply for four storeys, with the aim of allowing for near boundary to boundary development at the street front. This is because the street is able to absorb the impacts more easily, notably

privacy and shading; and also to allow some typologies which are seen as desirable, in particular European style perimeter block development.



**Figure 2: Building envelope formed by Height in Relation to Boundary and height rules (red) and a possible building shape.**

15. I modelled these typologies in Appendices B and C of my statement of evidence. These showed that the proposed approach has a somewhat higher capacity than a more typical envelope based on MDRS recession planes. This is because extra capacity is created by not applying recession planes above 12m, in combination with the side exceptions to Height in relation to boundary.

### **Fencing**

16. In my rebuttal evidence I have discussed the issue raised by submitters in relation to the proposed fencing rule which allows for fencing of 50% of the site above 1m. As discussed in my rebuttal evidence, fencing is significant in that it often determines the quality of street interface, and the need for it is often drive by site layout. It should be seen as a component of the site layout, rather than in isolation.
17. We often see the use of transparent fencing as a way to ensure street engagement, but this does not resolve the cause, which is usually outdoor living space located next to the street.



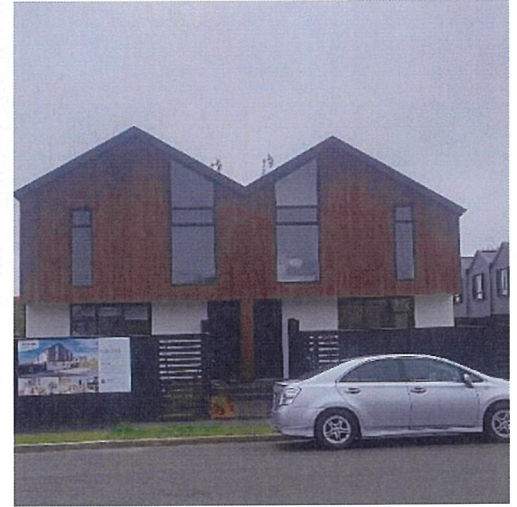
**Figure 3: Use of post-occupancy screening or fencing**

18. The aim of the revised rule is to direct site layout decisions to resolve this conflict. The rule sets an expectation that some of the frontage is public and some is private. This is a common solution in the city which is largely successful.



**Figure 4: Open frontages with fencing at the side create engaging frontages**

19. For larger developments, especially south of the street, different solutions might be needed but the principle is the same that there should be some kind of public interface, beyond transparent fencing, and that this public interface is separate to private living space.



**Figure 5: Examples of North facing housing with at least somewhat engaging frontage:  
 Top and Left: Upper floor balconies with clear entrances;  
 Right: Separate front doors with some transparent fencing.**

### **Continuous Length of Building**

20. An important part of managing sunlight access in the HRZ is to limit the continuous length of buildings. In the MRZ there is a similar concern from unusually long buildings close to internal boundaries. These long buildings tend to concentrate their effects on neighbouring sites. Large numbers of windows overlook neighbouring sites which affects privacy; relatively tall and long buildings can create a sense of enclosure due to the visual bulk of buildings and such buildings can appear monotonous; A lack of gaps between buildings reduces opportunities for sun access as well as views of sky and trees.

21. Some of these issues can be addressed by design. For instance, visual bulk can be moderated by variations in the roofline, modulation and materiality. For a multi-unit complex, including a maximum building length would act as a trigger for assessment of these matters in the case of modest breaches, whilst indicating that for longer sites, a break in the building may be appropriate.



**Above: A long building with variations in roofline, building line and materials**

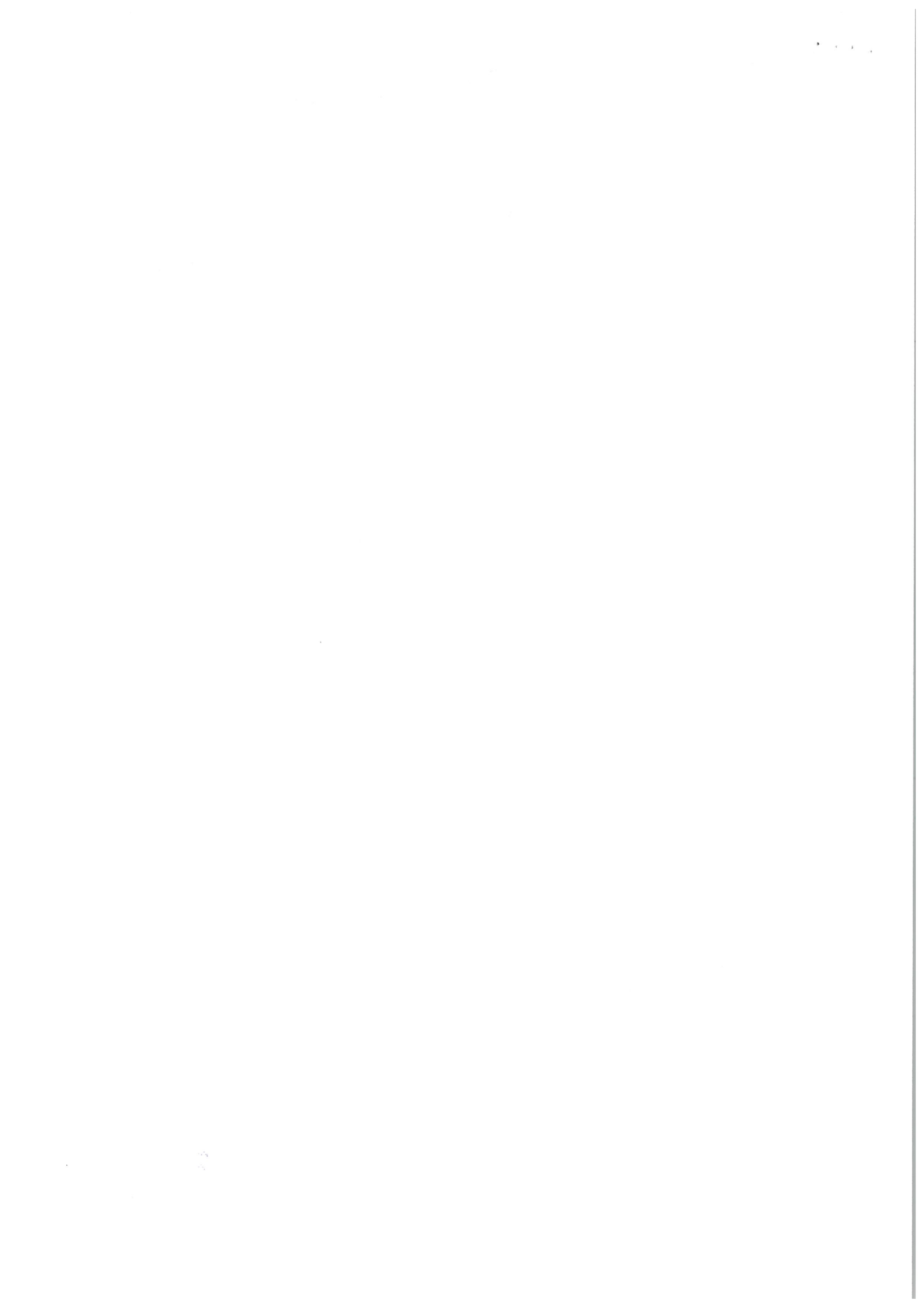
#### **Assessment matters**

22. In my rebuttal evidence, I have discussed assessment matters for retirement villages. There is an error in my evidence where I have recommended the removal of rule 14.15.9 a (viii) which is concerned with environmental sustainability in retirement villages. This was an attempt to simplify the rule. On reflection, I do not think this necessary.
23. The other matters I comment on are the Residential Design Principles. PC14 is based on the outcomes of monitoring processes in various zones in the city. This monitoring has demonstrated there are good results in the RMD zone, where the residential design principles apply, more so than in other zones such as Residential Central City which has a different set of assessment matters, with a lot less detail.
24. I consider that the existing assessment matters have therefore been proven to be successful, so I do not support the request to change these. In particular, in my experience in assessing consents, it is useful that the

principles include detailed guidance. It provides clarity to developers and experts on the range of matters to consider and it helps with consistency.

**Date: 25 October 2023**

**David Anthony Hattam**





Some Examples of Site Layout Changes

7 Grove Road

Initially Proposed



Consented



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 PWA 202/1056  
 Approved Resource Consent Document  
 15/08/2023 Lang Arundel

435 Cashel Street

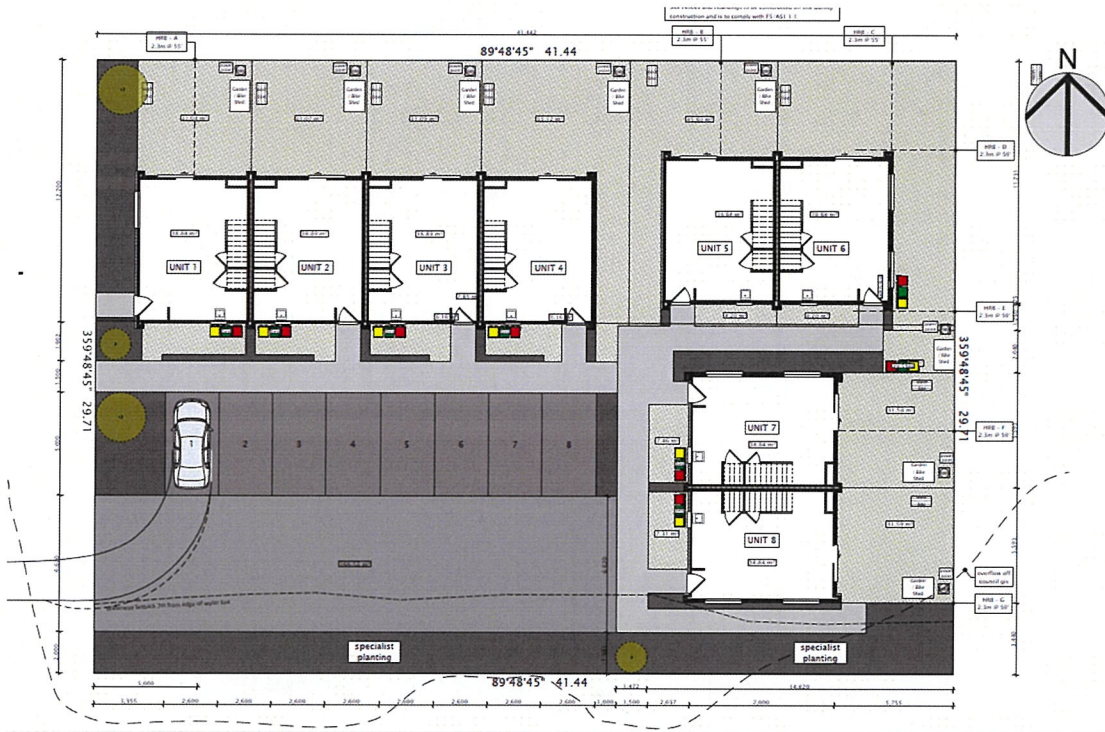
Proposed





552 Madras Street

Proposed



Consented

