

Certification Assessment Instrument and Guidelines

Certification Instrument

- **Full compliance with BCA 96 will ensure passing 19 for Section 1**
- **Do not need 100 to pass**

Certification Assessment Instrument and Guidelines

SECTION 1 – SAFETY (25 POINTS)

- **Residential Fire Sprinkler System**
- **Not required to pass Section 1**
- **Concessions available with Hostels and
9c Ageing in Place under the BCA 1996**

Certification Assessment Instrument and Guidelines

1b Fire Compartmentation / Separation

Nursing Homes

- BCA “Type of construction” – Example Type “C”
- Floor area $>2000\text{m}^2$ = Fire Walls FRL 90/90/90
- Floor area $>1000\text{m}^2$ = Fire Separation FRL 60/60/60
- FRL = Fire Resistance Level

Certification Assessment Instrument and Guidelines

1b Fire Compartmentation / Separation

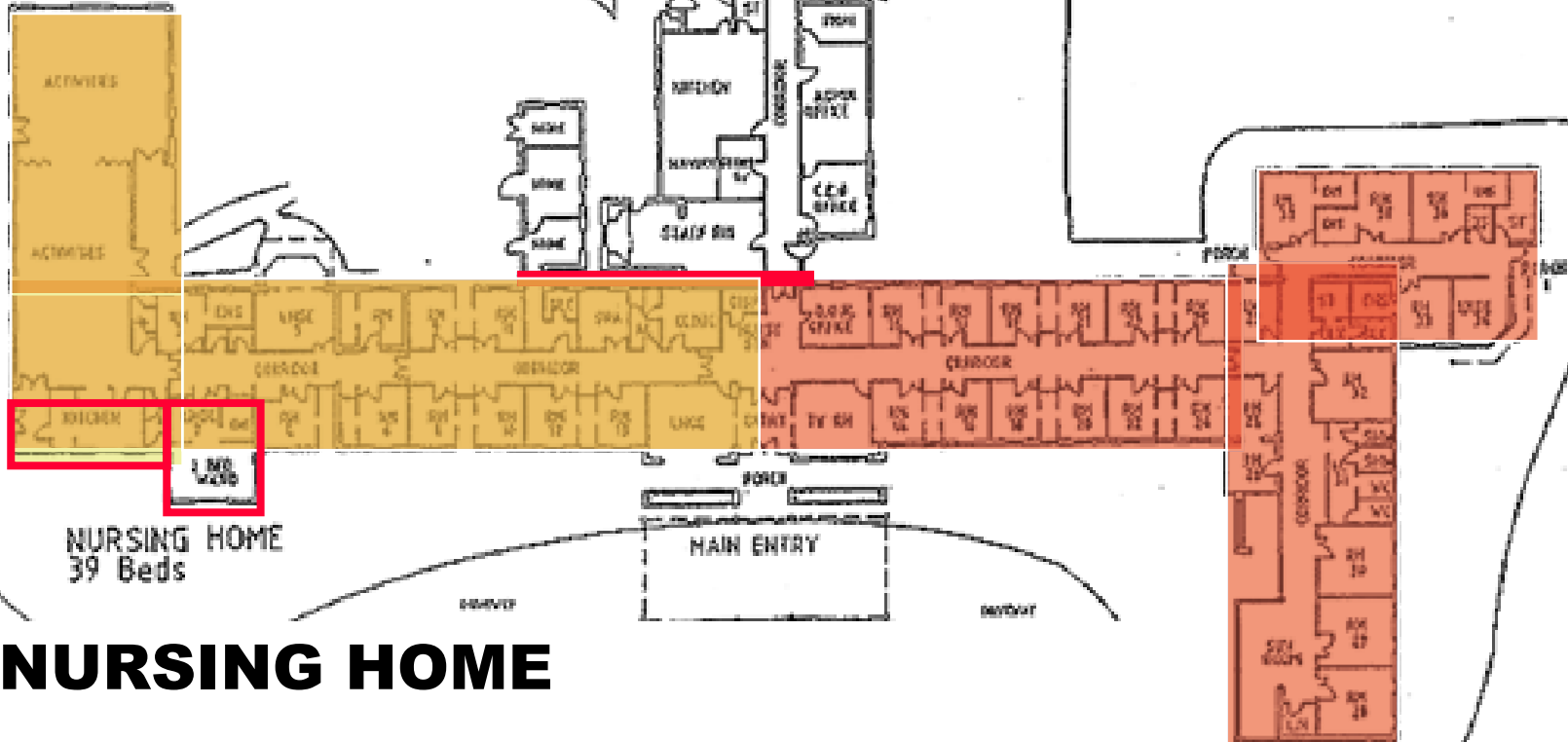
Nursing Homes (cont.)

- Kitchen floor areas $>30\text{m}^2$ = fire separate
- Laundries = fire separate

Fire wall 2000m²

Fire rated walls at 1000m²

Fire separate the kitchen
and laundry



NURSING HOME

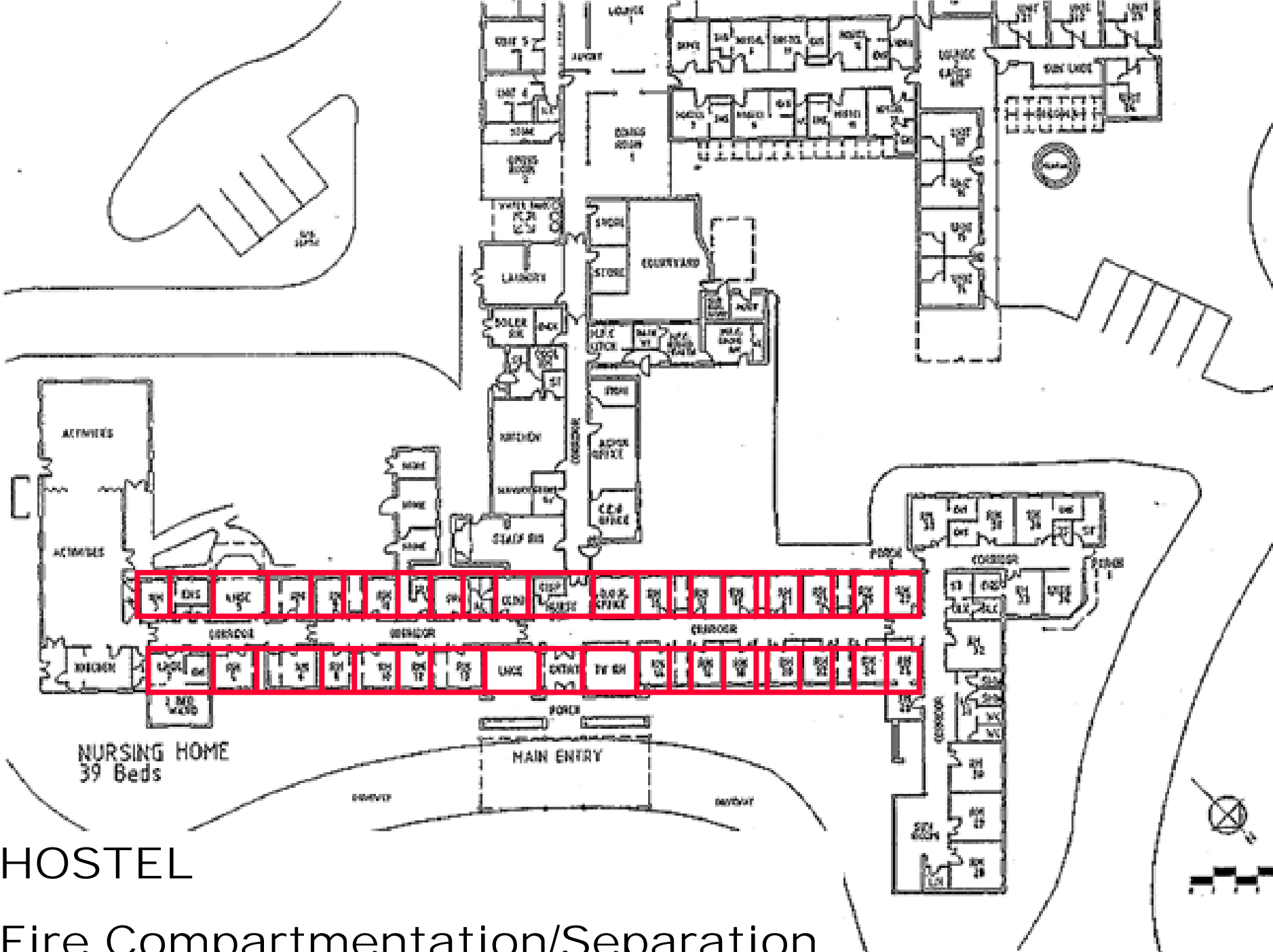
Fire Compartmentation/Separation

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1b Fire Compartmentation / Separation

Hostels (no fire Sprinklers Installed)

- **BCA “Type of construction” – Example Type “C”**
- **Each resident room is required to be enclosed with an FRL of 60/60/60**



HOSTEL

Fire Compartmentation/Separation

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1b Fire Compartmentation / Separation

9c Ageing in Place

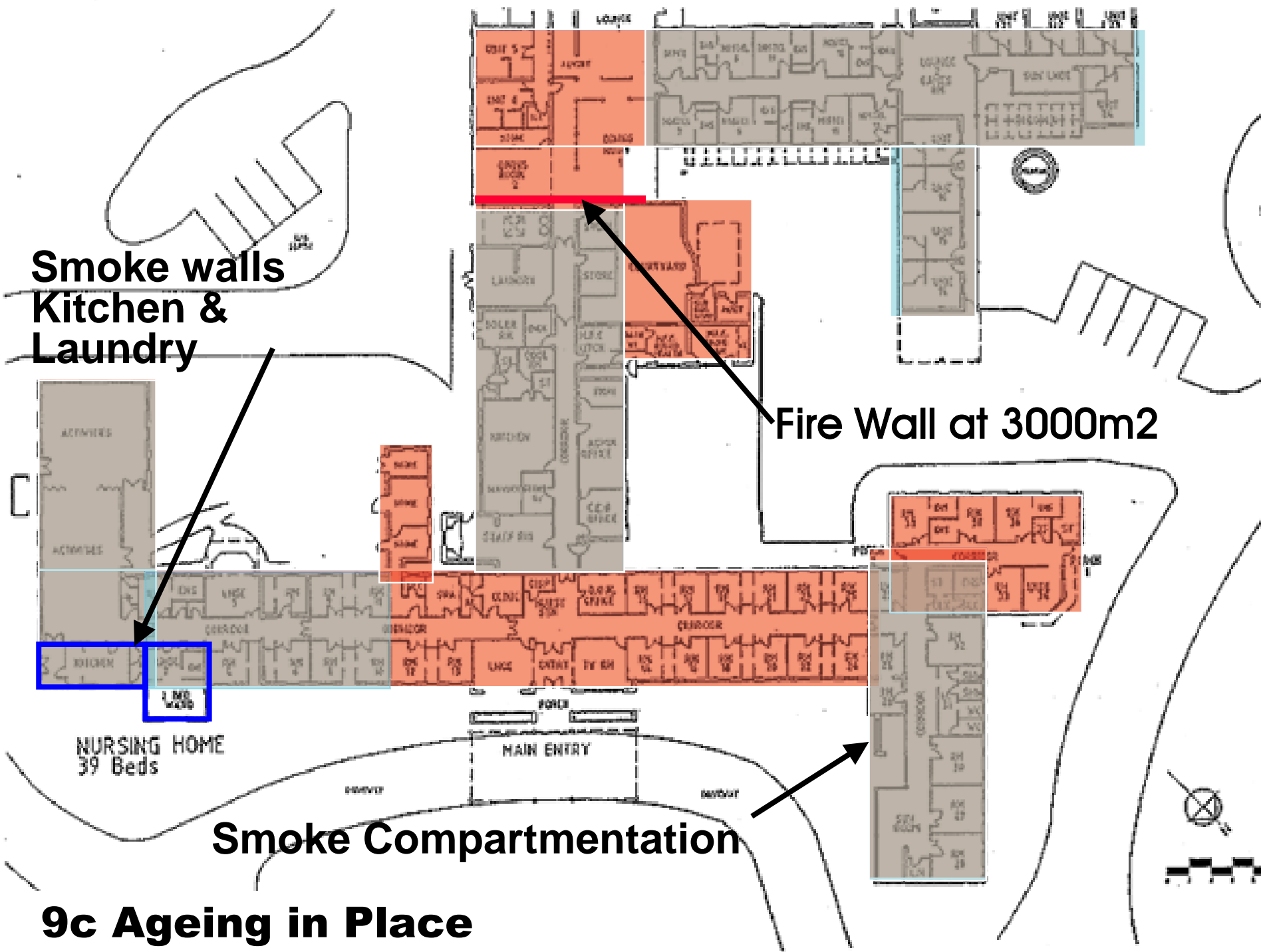
- BCA “Type of construction” – Example Type “C”
- Floor area $>3000\text{m}^2$ = Fire Walls FRL 90/90/90
- Floor area $>500\text{m}^2$ = Smoke Separation only
- Kitchen $<30\text{m}^2$ and Laundry = Smoke separated only

**Smoke walls
Kitchen &
Laundry**

Fire Wall at 3000m²

Smoke Compartmentation

9c Ageing in Place



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1b Fire Compartmentation / Separation

- **60/60/60 = Structural adequacy / integrity / insulation**
- **Materials or prototype construction to achieve fire ratings**
 - **Single skin masonry**
 - **Gyprock, Boral and CSR fire board tested method**

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1b Fire Compartmentation / Separation

Integrity

- Fire Doors across corridors and they close properly
- Fire rated walls go to underside of ceiling with correct fire rating or to underside of roof covering
- Seals around penetrations through fire rated walls

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1b Fire Compartmentation / Separation

Tagged

- **Fire doors are appropriately tagged with correct rating depending on BCA Type of construction**
- **Hostel 35mm thick solid core doors with self-closers**

Non-fire rated
wall and no
self-closer on
door

SECTION 1 (CONT.)

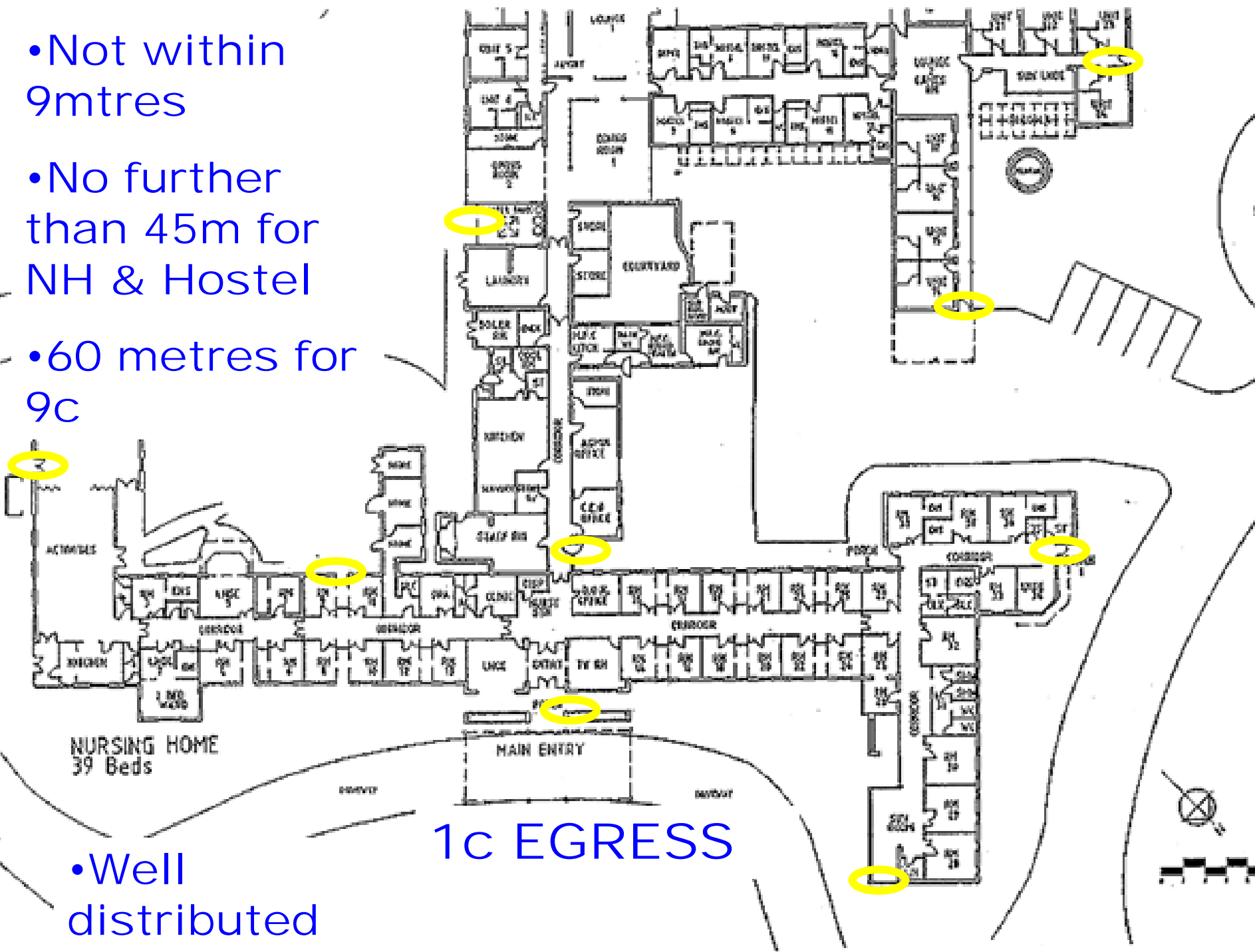


Laundry to be
fire separated

- Not within 9mtres

- No further than 45m for NH & Hostel

- 60 metres for 9c



- Well distributed

1c EGRESS

A detailed floor plan of a nursing home building. The plan shows various rooms including a kitchen, dining area, activity rooms, a central corridor, and a main entry. Several green dots are placed throughout the building, representing smoke detectors. Yellow circles are drawn around specific locations: the main entry, several junctions of corridors, and a room in the activity area. The text 'NURSING HOME 39 Beds' is located at the bottom left of the plan.

- Exit signage

- Over smoke, fire and exit doors

- Junction of corridors

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1C Egress

Travel Distances

Nursing Home

- **No Point on floor >12 metres from a point of choice**
- **No more than 30 metres**

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1C Egress (cont.)

Travel Distances

Hostel

- **No more than 6 metres from resident's door to a point of choice if more than 20 metres to an exit**
- **Other room, no more than 20 metres to point of choice**

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1C Egress (cont.)

Travel Distances

9c Ageing in Place

- **No Point on floor >20 metres from a point of choice**
- **No more than 40 metres**

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1C Egress

Widths

- Worst Case
- Full points for 1.8 metres



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1C Egress

Secure Area

- Specific area or whole of building
- Compatible with egress
- May not be an exit door



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1C Egress

Blockages

- Equipment stored in corridors
- Day and time of Assessment



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1C Egress

Discharge

- Enclosed courtyard
- Unmade and uneven exit paths



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1C Egress

Storage Beneath Stairs

- Fire isolated
- Compromises egress from upper storey

Door Swing and Hardware – Three common problems

Bolts
and
Latches



Exit door swings inwards
and security screen

Curtains
blocking access



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1d Smoke Compartmentation / Separation

Nursing Homes

- Floor area $>500\text{m}^2$

Hostels

- Length of corridor $> 40\text{m}$

9c Ageing in Place

- Floor area $>500\text{m}^2$



400 mm Smoke
reservoir above doors



Smoke separation 500m² in
Nursing Homes & 9c

40 m Length of
corridor in Hostel



NURSING HOME
39 Beds

MAIN ENTRY

Smoke Compartmentation/Separation

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1e Fire Fighting Equipment

- Fire hydrant and Hose required where floor area $>500\text{m}^2$
- Hose reels to be within 4 metres of an exit or adjacent to an internal hydrant
- Cover floor area within 36 metres
- Not pass through fire or smoke doors
- Fire Hose Reel not required in 9c

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1e Fire Fighting Equipment

- **Fire extinguisher 1.5 metres for electrical switch boards (Dry Chemical)**
- **Nurses station, kitchen offices, laundry etc**

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1f Alarm, Detection & Evacuation Systems

- **Early Warning and Intercommunication System = full points**
- **Smoke detectors in Residents' rooms, corridors**
- **Heat Detectors in Kitchen, Laundry and areas where smoke detector may register a false alarm**
- **Connected to Fire Brigade**



Heat



Smoke



Smoke



Magnetic Hold open devices



EWIS

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1f Alarm, Detection & Evacuation Systems

- **Break Glass alarms – no part of floor >30m**
- **Regular Maintenance**

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1g Summoning Assistance and Evacuation

- **Public address system to assist in evacuation**
- **Not required in addition to EWIS**
- **Nurse call identifies room and bed in multi-bed room**
- **Easily accessible**



Inappropriate nurse Call System

Height of Nurse Call Button



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1g Summoning Assistance and Evacuation

- **Other Alarms – additional points area**
 - **Electronic paging system**
 - **Personal monitoring devices**
 - **Dementia, bed wetting, bed sensor etc**
- **More than two alarms connected to a central monitoring system**