

Parklands Library – Detailed Engineering Evaluation BU 2334-001 EQ2 Qualitative Report

Prepared for Christchurch City Council (Client)

By Beca Carter Hollings & Ferner Ltd (Beca)

14 June 2012

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Revision History

| Revision N° | Prepared By | Description | Date |
|-------------|-----------------|-------------|--------------|
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Document Acceptance

| Action | Name | Signed | Date |
|--------------|-----------------------------------|---|--------------|
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Parklands Library

BU 2334-001 EQ2

Detailed Engineering Evaluation Qualitative Report – SUMMARY Version 1

Address

46 Queenspark Drive, Parklands



Background

This is a summary of the Qualitative report for the building structure, and is based on the document 'Guidance on Detailed Engineering Evaluation of Earthquake Affected Non-residential Buildings in Canterbury – Part 2 Evaluation Procedure' (draft) issued by the Engineering Advisory Group (EAG) on 19 July 2011.

Parklands Library, located at 46 Queenspark Drive, is a single storey steel portal, timber truss and timber wall structure with a floor area of approximately 420m². A refurbishment and extension of the pre-existing North Brighton Baptist Church, designed in 1978, was carried out in 2004 using mostly existing structural elements to form the library structure on the site today.

Key Damage Observed

Visual inspections on 30 January 2012 and 17 May 2012 indicate the building has suffered minor structural damage. The key damage observed includes:

- Separation at construction joint between existing and new slabs.
- Separation between external concrete apron and building.
- Cracking / splitting of external slanted columns at the base on eastern side of building.
- Cracking of timber lintel beam on western side of building.
- Minor cracking of GIB board lining throughout.
- Minor damage to ceiling tiles and lining.
- Minor cracking to floor tiles potentially due to differential settlement.

Critical Structural Weaknesses

The only Critical Structural Weakness (CSW) identified is the Site Characteristics due to widespread liquefaction observed on site and in the immediate surroundings of the building. At the time of this report no geotechnical information was available.

Indicative Building Strength (from IEP and CSW assessment)

The building has been assessed to have a seismic capacity in the order of 55% of the New Building Standard (NBS) in its undamaged state and 44% NBS in its current, damaged state. This is estimated using the NZSEE Initial Evaluation Procedure (IEP) and classifies the building as Potentially Earthquake Risk and a Seismic Grade C. Note, the IEP is a qualitative assessment only and takes into account CSW's identified, the age of the building, assumptions around seismic parameters such as ductility and the damage observed on site.

Recommendations

It is recommended that:

- In accordance with CCC guidance/policy document 'Guidance for Engineers' dated 10 May 2012, no restrictions are required to the occupancy of the building.
- A verticality and level survey is carried out to determine the extent of settlement of the building for insurance purposes.
- A quantitative analysis in conjunction with intrusive investigations of the structural system is carried to better approximate the %NBS estimate.
- A geotechnical investigation of the site is may be useful to determine the likely site characteristics and may support the quantitative analysis.
- Temporary propping of damaged timber lintel beam and slanted posts is employed until at least a quantitative assessment is undertaken.

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1 Background

Beca Carter Hollings & Ferner Ltd (Beca) has been engaged by the Christchurch City Council (CCC) to undertake a qualitative Detailed Engineering Evaluation (DEE) of the Parklands Library building located at 46 Queenspark Drive, Parklands.

This report is a Qualitative Assessment of the building structure, and is based on the document 'Guidance on Detailed Engineering Evaluation of Earthquake Affected Non-residential Buildings in Canterbury – Part 2 Evaluation Procedure' (draft) issued by the Engineering Advisory Group (EAG) on 19 July 2011 earthquake.

A qualitative assessment involves inspections of the building, a desktop review of existing structural and geotechnical information, including existing drawings and calculations, if available and an assessment of the level of seismic capacity against current code using the Initial Evaluation Procedure (IEP).

The purpose of the assessment is to determine the likely building performance and damage patterns, to identify any potential Critical Structural Weaknesses or collapse hazards, and to make an initial assessment of the likely building strength in terms of percentage of New Building Standard (%NBS).

At the time of this report, no intrusive site investigation, detailed analysis, or modelling of the building structure has been carried out. No structural drawings were available for this qualitative assessment however a full set of architectural drawings were available and these have been considered in our evaluation of the building. The building description below is based on a review of the drawings and our visual inspections.

The format and content of this report follows a template provided by CCC, which is based on the EAG document.

2 Compliance

This section contains a brief summary of the requirements of the various statutes and authorities that control activities in relation to buildings in Christchurch at present.

2.1 Canterbury Earthquake Recovery Authority (CERA)

CERA was established on 28 March 2011 to take control of the recovery of Christchurch using powers established by the Canterbury Earthquake Recovery Act enacted on 18 April 2011. This act gives the Chief Executive Officer of CERA wide powers in relation to building safety, demolition and repair. Two relevant sections are:

Section 38 – Works

This section outlines a process in which the chief executive can give notice that a building is to be demolished and if the owner does not carry out the demolition, the chief executive can commission the demolition and recover the costs from the owner or by placing a charge on the owners' land.

Section 51 – Requiring Structural Survey

This section enables the chief executive to require a building owner, insurer or mortgagee carry out a full structural survey before the building is re-occupied.

We understand that CERA will require a detailed engineering evaluation to be carried out for all buildings (other than those exempt from the Earthquake Prone Building definition in the Building Act). It is understood that CERA is adopting the Detailed Engineering Evaluation Procedure document (draft) issued by the Engineering Advisory Group on 19 July 2011, which sets out a methodology for both qualitative and quantitative assessments. We understand this report will be used in response to CERA Section 51.

The qualitative assessment includes a thorough visual inspection of the building coupled with a desktop review of available documentation such as drawings, specifications and IEP's. The quantitative assessment involves analytical calculation of the building's strength and may require non-destructive or destructive material testing, geotechnical testing and intrusive investigation.

It is anticipated that factors determining the extent of evaluation and strengthening level required will include:

- The importance level and occupancy of the building
- The placard status that was assigned during the state of emergency following the 22 February 2011 earthquake
- The age and structural type of the building
- Consideration of any Critical Structural Weaknesses
- The extent of any earthquake damage

2.2 Building Act

Several sections of the Building Act are relevant when considering structural requirements:

Section 112 – Alterations

This section requires that an existing building complies with the relevant sections of the Building Code to at least the extent that it did prior to any alteration. This effectively means that a building cannot be weakened as a result of an alteration (including partial demolition).

Section 115 – Change of Use

This section requires that the territorial authority (in this case Christchurch City Council (CCC)) be satisfied that the building with a new use complies with the relevant sections of the Building Code 'as near as is reasonably practicable'. Regarding seismic capacity 'as near as reasonably practicable' has previously been interpreted by CCC as achieving a minimum of 67%NBS however where practical achieving 100%NBS is desirable. The New Zealand Society for Earthquake Engineering (NZSEE) recommend a minimum of 67%NBS.

Section 121 – Dangerous Buildings

The definition of dangerous building in the Act was extended by the Canterbury Earthquake (Building Act) Order 2010, and it now defines a building as dangerous if:

- In the ordinary course of events (excluding the occurrence of an earthquake), the building is likely to cause injury or death or damage to other property; or
- In the event of fire, injury or death to any persons in the building or on other property is likely because of fire hazard or the occupancy of the building; or
- There is a risk that the building could collapse or otherwise cause injury or death as a result of earthquake shaking that is less than a 'moderate earthquake' (refer to Section 122 below); or
- There is a risk that that other property could collapse or otherwise cause injury or death; or

- A territorial authority has not been able to undertake an inspection to determine whether the building is dangerous.

Section 122 – Earthquake Prone Buildings

This section defines a building as earthquake prone if its ultimate capacity would be exceeded in a 'moderate earthquake' and it would be likely to collapse causing injury or death, or damage to other property. A moderate earthquake is defined by the building regulations as one that would generate ground shaking 33% of the shaking used to design an equivalent new building.

Section 124 – Powers of Territorial Authorities

This section gives the territorial authority the power to require strengthening work within specified timeframes or to close and prevent occupancy to any building defined as dangerous or earthquake prone.

Section 131 – Earthquake Prone Building Policy

This section requires the territorial authority to adopt a specific policy for earthquake prone, dangerous and insanitary buildings.

2.3 Christchurch City Council Policy

Christchurch City Council adopted their Earthquake Prone, Dangerous and Insanitary Building Policy in 2006. This policy was amended immediately following the Darfield Earthquake of the 4th September 2010.

The 2010 amendment includes the following:

- A process for identifying, categorising and prioritising Earthquake Prone Buildings, commencing on 1 July 2012;
- A strengthening target level of 67% of a new building for buildings that are Earthquake Prone;
- A timeframe of 15-30 years for Earthquake Prone Buildings to be strengthened; and,
- Repair works for buildings damaged by earthquakes will be required to comply with the above.

The council has stated their willingness to consider retrofit proposals on a case by case basis, considering the economic impact of such a retrofit.

It is understood that any building with a capacity of less than 33%NBS (including consideration of Critical Structural Weaknesses) will need to be strengthened to a target of 67%NBS of new building standard as recommended by the Policy.

If strengthening works are undertaken, a building consent will be required. A requirement of the consent will require upgrade of the building to comply 'as near as is reasonably practicable' with:

- The accessibility requirements of the Building Code.
- The fire requirements of the Building Code. This is likely to require a fire report to be submitted with the building consent application.

2.4 Building Code

The building code outlines performance standards for buildings and the Building Act requires that all new buildings comply with this code. Compliance Documents published by The Department of Building and Housing can be used to demonstrate compliance with the Building Code.

On 19 May 2011, Compliance Document B1: Structure was amended to include increased seismic design requirements for Canterbury as follows:

- Hazard Factor increased from 0.22 to 0.3 (36% increase in the basic seismic design load)
- Serviceability Return Period Factor increased from 0.25 to 0.33 (80% increase in the serviceability design loads when combined with the Hazard Factor increase)

The increase in the above factors has resulted in a reduction in the level of compliance of an existing building relative to a new building despite the capacity of the existing building not changing.

3 Earthquake Resistance Standards

For this assessment, the building's Ultimate Limit State earthquake resistance is compared with the current New Zealand Building Code requirements for a new building constructed on the site. This is expressed as a percentage of new building standard (%NBS). The new building standard load requirements have been determined in accordance with the current earthquake loading standard (NZS 1170.5:2004 Structural design actions - Earthquake actions - New Zealand).

No consideration has been given at this stage to checking the level of compliance against the increased Serviceability Limit State requirements.

The likely ultimate capacity of this building has been derived in accordance with the New Zealand Society for Earthquake Engineering (NZSEE) guidelines 'Assessment and Improvement of the Structural Performance of Buildings in Earthquakes' (AISPBE), 2006. These guidelines provide an Initial Evaluation Procedure that assesses a building's capacity based on a comparison of loading codes from when the building was designed and currently. It is a quick high-level procedure that can be used when undertaking a Qualitative analysis of a building. The guidelines also provide guidance on calculating a modified Ultimate Limit State capacity of the building which is much more accurate and can be used when undertaking a Quantitative analysis.

The New Zealand Society for Earthquake Engineering has proposed a way for classifying earthquake risk for existing buildings in terms of %NBS and this is shown in Figure 3.1 below.

| Description | Grade | Risk | %NBS | Existing Building Structural Performance | Improvement of Structural Performance | |
|------------------------|--------|----------|-------------|---|---|---|
| | | | | | Legal Requirement | NZSEE Recommendation |
| Low Risk Building | A or B | Low | Above 67 | Acceptable (improvement may be desirable) | The Building Act sets no required level of structural improvement (unless change in use) This is for each TA to decide. Improvement is not limited to 34%NBS. | 100%NBS desirable. Improvement should achieve at least 67%NBS |
| Moderate Risk Building | B or C | Moderate | 34 to 66 | Acceptable legally. Improvement recommended | | Not recommended. Acceptable only in exceptional circumstances |
| High Risk Building | D or E | High | 33 or lower | Unacceptable (Improvement | Unacceptable | Unacceptable |

Figure 3.1: NZSEE Risk Classifications Extracted from table 2.2 of the NZSEE 2006 AISPBE Guidelines

Table 3.1 below compares the percentage NBS to the relative risk of the building failing in a seismic event with a 10% risk of exceedance in 50 years (i.e. on average 0.2% in any year). It is noted that the current seismic risk in Christchurch results in a 6% risk of exceedance in the next year.

Table 3.1: %NBS compared to relative risk of failure

| Building Grade | Percentage of New Building Standard (%NBS) | Approx. Risk Relative to a New Building |
|----------------|--|---|
| A+ | >100 | <1 |
| A | 80-100 | 1-2 times |
| B | 67-80 | 2-5 times |
| C | 33-67 | 5-10 times |
| D | 20-33 | 10-25 times |
| E | <20 | >25 times |

4 Building Description

4.1 General

Summary information about the building is given in the following table.

Table 4.1: Building Summary Information

| Item | Details | Comment |
|---------------------------------|---|--|
| Building name | Parklands Library | |
| Street Address | 46 Queenspark Drive, Parklands | |
| Age | Original building ~ 34 years old Refurbishment ~ 8 years old | Original design dated 1978 Refurb. design dated 2004 |
| Description | Single storey library facility | |
| Building Footprint / Floor Area | Approx. 420 m ² internally | Excluding roof canopies |
| No. of storeys / basements | 1 storey / no basement | |
| Occupancy / use | Library and café (currently occupied) | Importance Level 2 structure |
| Construction | Steel, timber, Gib braced | |
| Gravity Load resisting system | Timber roof trusses spanning between lined, timber framed walls. Steel portal frames located in end bays spanning the transverse direction. | No structural drawings available. Architectural drawings only |
| Lateral load resisting system | Gib braced primary system in both directions. Steel portal frame in transverse direction for refurbished section only. Roof bracing between trusses noted on drawings | No structural drawings available. Architectural drawings only. Open area where has roof bracing assumed to form a diaphragm between steel portals. |
| Foundation system | Combination of existing and new foundations. Reinforced concrete slab on grade with foundation beams beneath load bearing walls. | No structural drawings available. Architectural drawings only. Connections between existing and refurbished foundations unknown. |

| Item | Details | Comment |
|--------------------------|---|---|
| Stair system | N.A. | |
| Other notable features | External timber inclined canopy roof supports. | |
| External works | Asphalt pavement, carparking | |
| Construction information | Architectural drawings | 'For Tender' drawings only |
| Likely design standard | Original: NZS 4203:1976 Refurb: NZS4203:1992 or NZS1170.5: 2004 | NZS4203:1992 or NZS1170.5: 2004 for refurbishment (transition time between codes) |
| Heritage status | No heritage status | |
| Other | - | |

4.2 Structural 'Hot-spots'

- Differential settlement / lateral separation between existing and new slab at construction joints.
- End connections of slanted timber columns near entrance.
- Connections between walls and roof diaphragm in ceiling.
- Timber lintel beam at rear entrance existing crack.

5 Site Investigations

5.1 Previous Assessments

A Level 2 rapid assessment was undertaken on 30 January 2012. The placard status of the building prior to and following this inspection was deemed to be Green G2. This is the only previous assessment available for this building and is included in Appendix D.

5.2 Level 4 Damage Inspection

Visual inspections as part of the level 4 damage assessments were undertaken on 30 January 2012 and 17 May 2012.

6 Damage Assessment

6.1 Damage Summary

The table below provides a summary of damage observed during our inspection, together with a qualitative indication of likely reparability (E = Easy, M = Moderate, D = Difficult). Refer to Appendix A for photographs of the observed damage and the recommended repair options.

Table 6.1: Damage Summary

| Damage type | Unknown | Minor | Moderate | Major | Comment | Reparability |
|--------------------------------|---------|-------|----------|-------|---|--------------|
| settlement of foundations | ✓ | | | | Likely general settlement of area. Some differential settlement noted. Level of floors to be surveyed. | |
| tilt of building | ✓ | | | | None seen but survey required to confirm. | |
| liquefaction | | | | ✓ | Extensive liquefaction in surrounding neighbourhood. Potential damage to slab on grade construction | M |
| settlement of external ground | | | ✓ | | Extensive settlement to street and adjacent car park. Likely ponding and drainage problems. Paving disruption. | D |
| lateral spread / ground cracks | ✓ | | | | TBC by geotechnical investigation / survey | |
| frame | ✓ | | | | No damage observed during limited inspection | |
| concrete walls | | | | | N.A. | |
| cracking to concrete floors | ✓ | | | | None observed due to carpet/tiles. Intrusive investigation required to confirm. Raises in slab level and tile cracking suggest potential for slabs to be cracked. | |
| bracing | ✓ | | | | Roof bracing concealed by ceiling. Wall frame bracing not noted on drawings but no significant Gib braceline cracks observed. Further investigation would be required to assess roof bracing condition. | |
| precast flooring seating | | | | | N.A. | |
| stairs | | | | | N.A. | |
| cladding /envelope | | ✓ | | | Likely loss of weather-tightness in some areas. Some windows no longer operate. | E |
| internal fit out | | ✓ | | | Cracked plasterboard partitions / ceilings Popping of floor tiles in café area Cracking of floor tiles in staff facilities Braceline system condition may need further investigation. | E |
| building services | ✓ | | | | No inspection of services | |
| adjacent buildings | | | | | NA – no adjacent buildings | |
| other | | | ✓ | | External inclined timber braces supporting roof canopies – bowed and connections damaged | M |

6.2 Surrounding Buildings

6.3 Residual Displacements and General Observations

Some indication of settlement and displacements was observed during visual inspections however a survey will be required to confirm any displacement or settlement potentially described as damage related to recent Canterbury earthquake events under insurance entitlement.

6.4 Implication of Damage

The structure has suffered minor structural damage based on our limited visual inspections. This will have reduced the lateral load resisting capacity of the structure however we believe it has not been significantly diminished as a result of the Canterbury earthquake events.

7 Generic Issues

This section refers to Appendix A of the EAG document. The following items have been identified as possible generic issues present in the structure:

- Refurbishment – potential for difference in stiffness between lateral load resisting systems used in the original structure and the later refurbishment. This is due to different materials and construction methods used and potentially result in differential movement or unexpected concentrations of load.

8 Critical Structural Weaknesses

The Critical Structural Weakness identified for this building is the Site Characteristics due to widespread liquefaction observed on site and in the immediate surrounding area of the building. Note, at the time of this report no geotechnical information was made available.

9 Geotechnical Consideration

At the time of this report no geotechnical information was available. We believe there may be geotechnical investigation undertaken at the time of the refurbishment however any report it was not identified and hence not considered as part of this report.

10 Survey

No level or verticality surveys have been carried out to determine any differential settlement or displacement of the building. We recommend that a survey be undertaken to confirm any settlement or tilt of the building not able to be seen during our visual inspections as this may be a significant insurance entitlement.

11 Initial Capacity Assessment

11.1 %NBS Assessment

The building has had its seismic capacity assessed using the Initial Evaluation Procedure based on the information available. The building's seismic capacity is found to be in the order of 55% NBS in its undamaged state and 44% NBS in its damaged, post-earthquake state, as shown below in Table 11.1. This is based on a qualitative assessment only and takes into account the critical structural weakness identified, the damage observed and the information available at the time of the report. The building is therefore classified as Potentially Earthquake Risk and Seismic Grade C. These capacities are subject to confirmation by a quantitative analysis which is more detailed. The post-damage capacity is assessed based on a damage ratio of 20% due to the Canterbury earthquake events. Refer Appendix C – CERA DEE Summary Data for the damage ratio assessment and post damage % NBS estimate.

Table 11.1: Indicative Building Capacities

| System | Direction | Seismic Performance in %NBS | Notes |
|------------------------------|--------------|--|--|
| Gib braced line | Longitudinal | Undamaged: 55% NBS Damaged: 44% NBS | NZSEE Initial Evaluation Procedure. IL 2, Z=0.3. |
| Gib braced line/portal frame | Transverse | Undamaged: 55% NBS Damaged: 44% NBS | NZSEE Initial Evaluation Procedure. IL 2, Z=0.3. |

11.2 Seismic Parameters

The seismic design parameters based on current design requirements from NZS1170:2004 and the NZBC clause B1 for this building are:

- Site soil class: D – NZS 1170.5:2004, Clause 3.1.3, Soft Soil
- Site hazard factor, $Z = 0.3$ – NZBC, Clause B1 Structure, Amendment 11 effective from 19 May 2011
- Return period factor $R_u = 1$ – NZS 1170.5:2004, Table 3.5, Importance level 2 structure with a 50 year design life.
- Near fault factor $N(T,D) = 1$ – NZS 1170.5:2004, Clause 3.1.6, Distance more than 20 km from fault line.

11.3 Expected Structural Ductility Factor

An assumed, structural ductility factor of 3.0 has been used for this building. This is based on timber wall construction lined with modern Gib braced line. Note, due to the original building being post 1976 construction, ductility does not alter the IEP % NBS estimate.

11.4 Discussion of results

The Parklands Library Building has been assessed as having a seismic capacity in the order of 55% NBS in its undamaged state and 44% NBS in its damaged state based on the NZSEE IEP qualitative assessment. This classifies the building as Potentially Earthquake Risk and a Seismic Grade C. Some assumptions have been made such as the site characteristic CSW and the structure being designed to NZS 4203:1976 rather than NZS4203:1992 or NZS1170.5: 2004 due to no evidence showing strengthening to the latest code during the 2004 refurbishment.

12 Initial Conclusions

- The building has been assessed to have a seismic capacity in the order of 55% NBS (undamaged) and 44% NBS (damaged) and is therefore classified as Potentially Earthquake Risk.
- Critical Structural Weaknesses have been identified and considered in this assessment.

13 Recommendations

13.1 Occupancy

In accordance with CCC guidance/policy document 'Guidance for Engineers' dated 10 May 2012, no restrictions are required to the occupancy of the building.

13.2 Further Investigations, Survey or Geotechnical Work

It is recommended that:

- A verticality and level survey is carried out to determine the extent of settlement of the building for insurance purposes.
- A quantitative analysis in conjunction with intrusive investigations of the structural system is carried to better approximate the %NBS estimate.
- A geotechnical investigation of the site may be useful to determine the likely site characteristics and may support the quantitative analysis, if not already undertaken in previous site investigations.
- Geotechnical investigations may be carried to determine the ground conditions on the site

13.3 Suggested Repairs

- Remove and reinstate or repair using approved Gib solutions guidelines the timber lined walls where Gib brace line has been damaged or cracked.
- Temporary propping of damaged timber lintel beam and slanted posts is employed until at least a quantitative assessment is undertaken.
- Undertake recommended repairs to damaged areas as identified in Appendix A.

14 Design Features Report

The suggested repairs are intended to reinstate the existing structural system hence no additional load paths are expected as a result of the suggested remedial work.

15 Limitations

The following limitations apply to this engagement:

- Beca and its employees and agents are not able to give any warranty or guarantee that all defects, damage, conditions or qualities have been identified.
- Inspections are primarily limited to visible structural components. Appropriate locations for invasive inspection, if required, will be based on damage patterns observed in visible elements, and review of the construction drawings and structural system. As such, there will be concealed structural elements that will not be directly inspected.
- The inspections are limited to building structural components only.
- Inspection of building services, pipework, pavement, and fire safety systems is excluded from the scope of this report.
- Inspection of the glazing system, linings, carpets, claddings, finishes, suspended ceilings, partitions, tenant fit-out, or the general water tightness envelope is excluded from the scope of this report.
- The preliminary assessment of the lateral load capacity of the building is limited by the completeness and accuracy of the drawings provided. Assumptions have been made in respect of the geotechnical conditions at the site and any aspects or material properties not clear on the drawings. Where these assumptions are considered material to the outcome further investigations may be recommended. It is noted the assessment has not been exhaustive, our analysis and calculations have focused on representative areas only to determine the level of provision made. At this stage we have not undertaken any checks of the gravity system, wind load capacity, or foundations.
- The information in this report provides a snapshot of building damage at the time the detailed inspection was carried out. Additional inspections required as a result of significant aftershocks are outside the scope of this work.

This report is of defined scope and is for reliance by CCC only, and only for this commission. Beca should be consulted where any question regarding the interpretation or completeness of our inspection or reporting arises.

Appendix A

Photographs

Damage Location Plan

Note - this is not a comprehensive list of all damage observed but an overview of typical damage seen during visual inspections



Photo 1



Observed Damage: Splitting at base of inclined timber columns

Recommended Repair: Remove and reinstate damaged member (typical)

Photo 2



Observed Damage: flexural crack in timber beam

Recommended Repair: remove and reinstate damaged member

Photo 3



Observed Damage: Liquefaction in adjacent parking area

Photo 4



Observed Damage: Minor cracking to base of foundation slab potentially due to lateral spread or other ground movement such as liquefaction

Recommended Repair: Grout injection concrete cracks on site.

Photo 5



Observed Damage: Cracked floor tiles in places, potentially due to differential settlement along slab construction joint due to earthquake events causing liquefaction.

Photo 6



Observed Damage: Cracked floor tiles in places, potentially due to differential settlement along slab construction joint due to earthquake events causing liquefaction.

Recommended Repair: Replace all cracked floor tiles.

Photo 7



Observed Damage: Crack in Gib brace line near original church timber portal connection with wall.

Recommended Repair: Remove and reinstate lining or plaster over cracks using approved Gib brace line repair plaster.

Photo 8



Observed Damage: Cosmetic cracking around steel beam supports

Recommended Repair: Remove and reinstate lining or plaster over cracks using approved Gib brace line repair plaster.

Photo 9



Observed Damage: Buckling of slanted columns

Recommended Repair: Remove and reinstate, typical or temporarily prop until at least a quantitative assessment has been carried

Photo 10



Observed Damage: Cracking of slanted timber columns

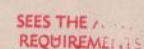
Recommended Repair: Remove and reinstate, typical or temporarily prop until at least a quantitative assessment has been carried out

Appendix B

Existing Drawings

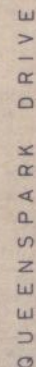
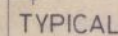
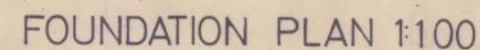
| | |
|------------------|----------------|
| DRAWN 65 P.M. | TRACED 65 P.M. |
| CHECKED <i>R</i> | DATE JULY 78 |

[illegible]



PLEASE NOTE STORM W-
DRAINAGE REQUIREMENTS
ATTACHED TO PLANS.

PLUMBER! Please note requirements
attached to plan.



D.P. 37980
LOT 5

DISTANCE

HORIZONTAL SCALE 1/800 VERTICAL SCALE 1/400

Prior to pouring **ANY** concrete
Prior to laying **ANY** Floor
Prior to fixing **ANY** wall or ceiling lining.
On completion of the Building
provision must be made to allow
the building Inspector access.

1. All work to comply with the County Building
Ev-Laws

2. 24 hours' notice to be given to the
County Building Inspector prior to
pouring any concrete

M. Anderson
Building Inspector

27 9-74



SET: 2

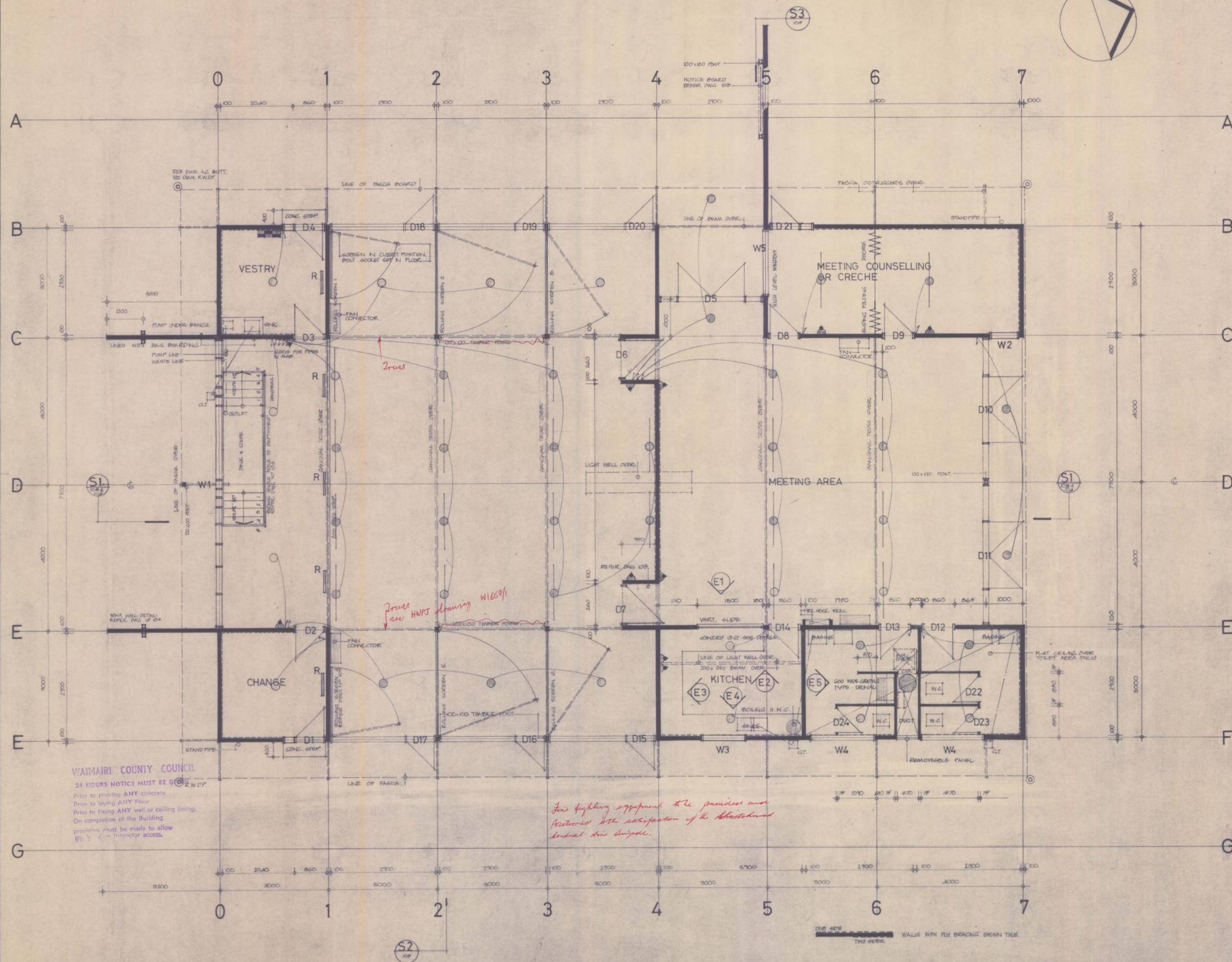
SCALES 1:200 1:50 1:20
CONTRACTOR SHALL VERIFY ALL DIMENSIONS
BEFORE STARTING WORK

CONTENTS
SITE PLAN
FOUNDATION PLAN & DETAILS
DRAINAGE

PROJECT
NORTH BRIGHTON
BAPTIST CHURCH

DRAWING REFERENCE
JOB N° 534

100



| DISTRIBUTION | | | | | | |
|--------------|------|----|------|------|--------|--|
| REVISION | DATE | BY | CHKD | APPD | OFFICE | |
| ORIGINAL | | | | | | |

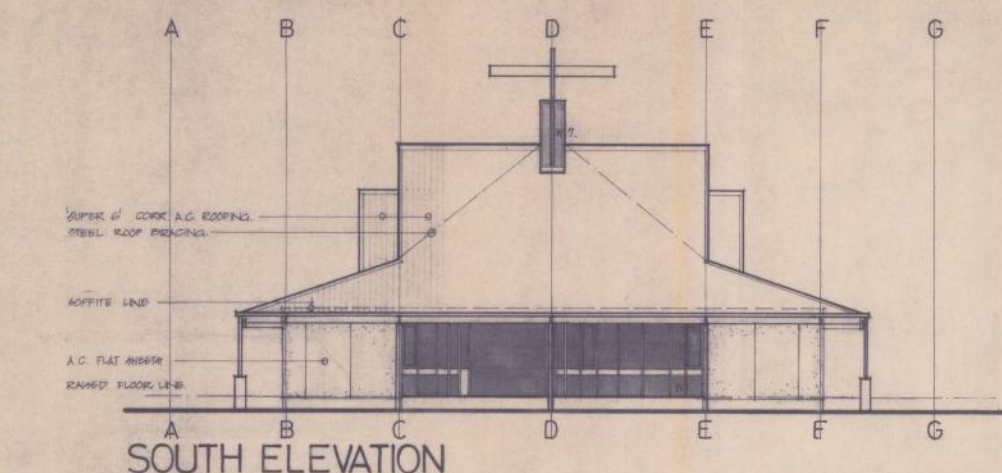
REVISIONS & NOTES

SCALES 1:100
 CONTRACTOR SHALL VERIFY ALL DIMENSIONS
 BEFORE STARTING WORK

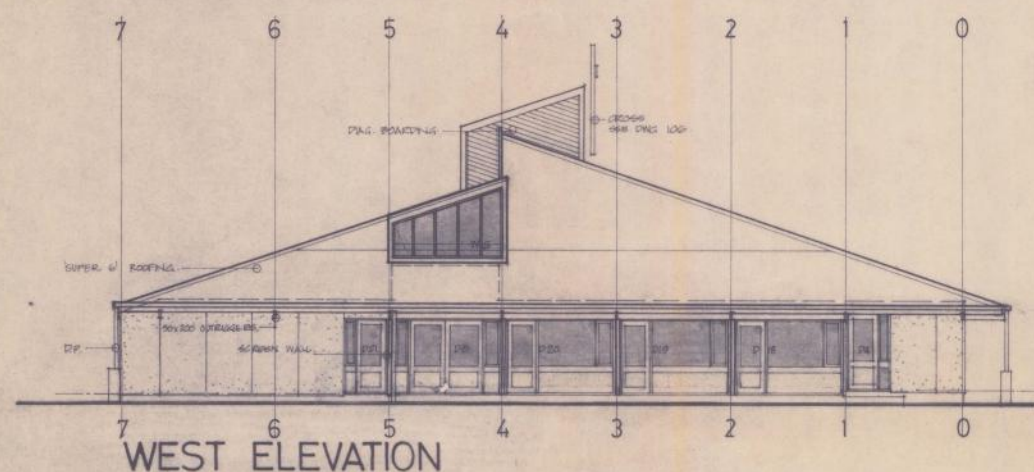
CONTENTS
 ELEVATIONS
 FRAMING PLAN
 ROOF PLAN

PROJECT
**NORTH BRIGHTON
 BAPTIST CHURCH**

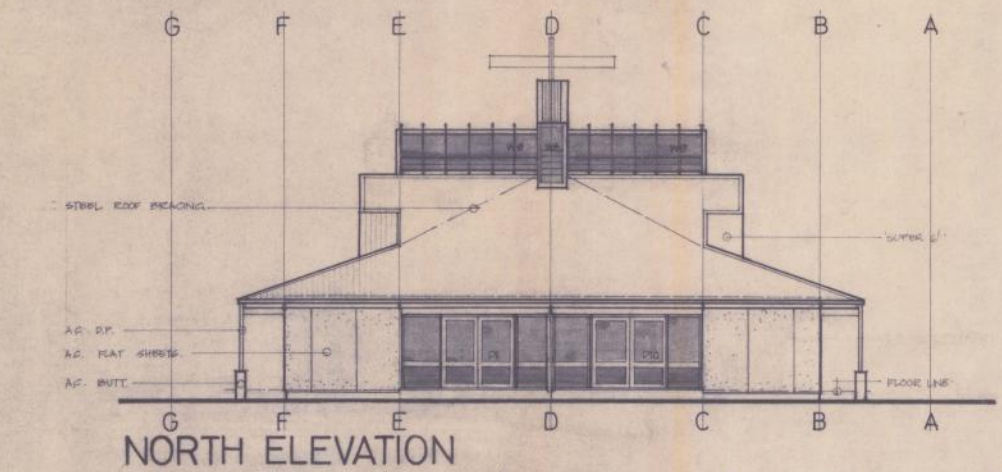
DRAWING REFERENCE
 JOB No 534 102



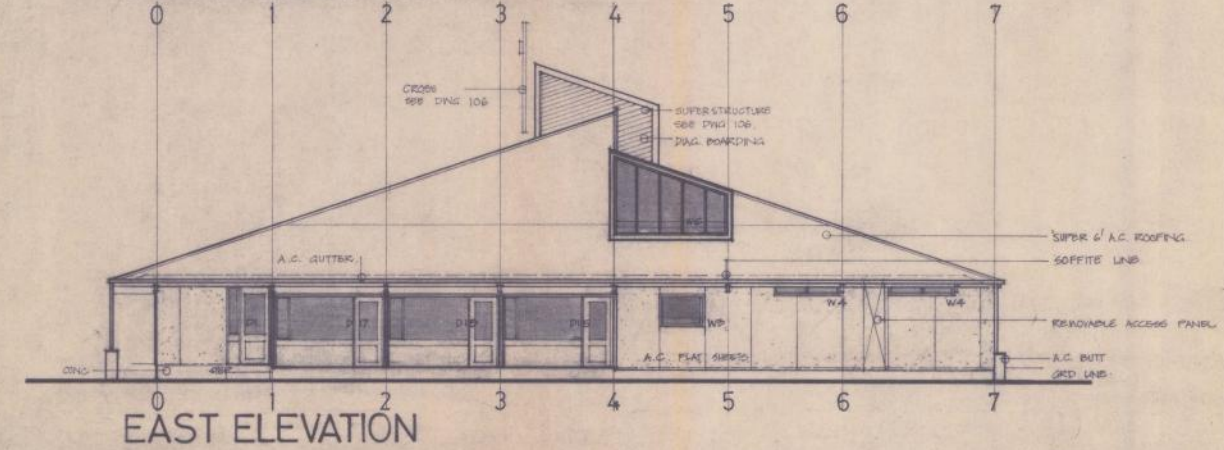
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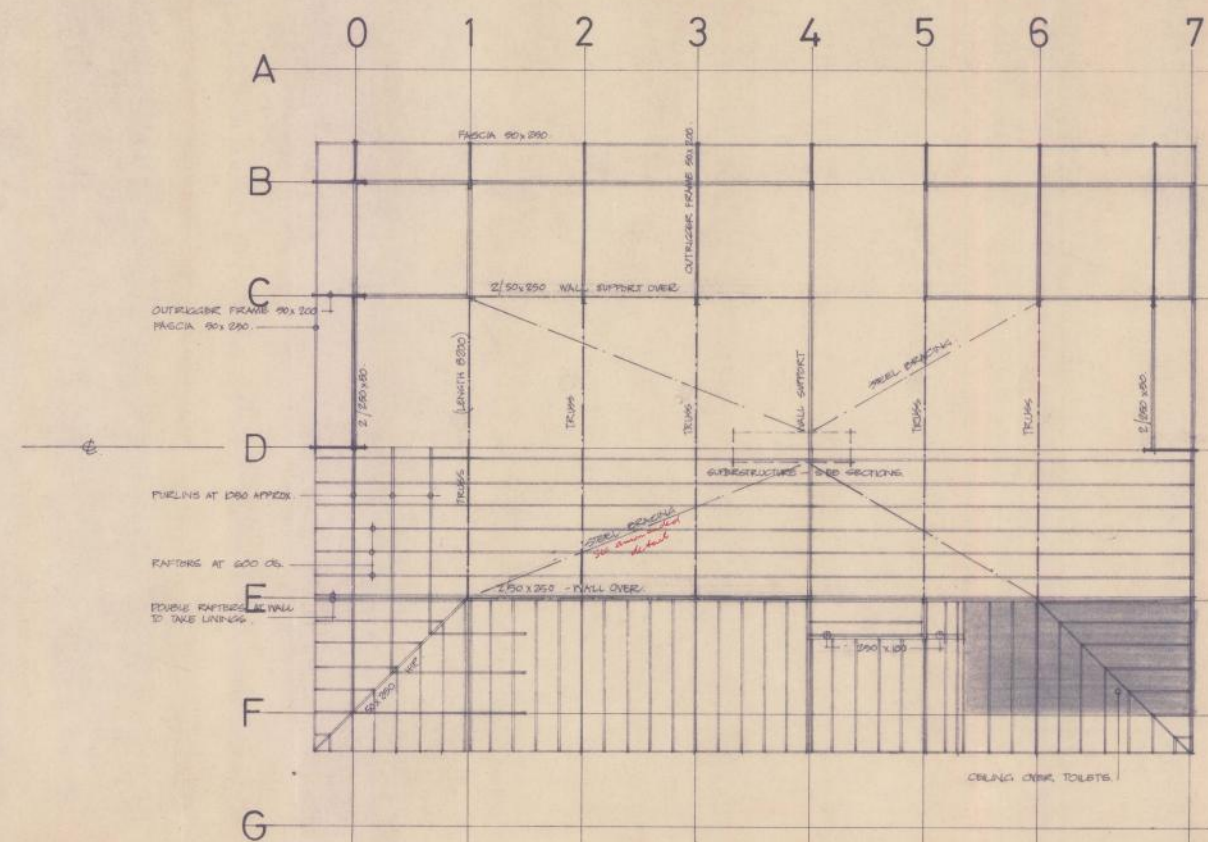
WEST ELEVATION



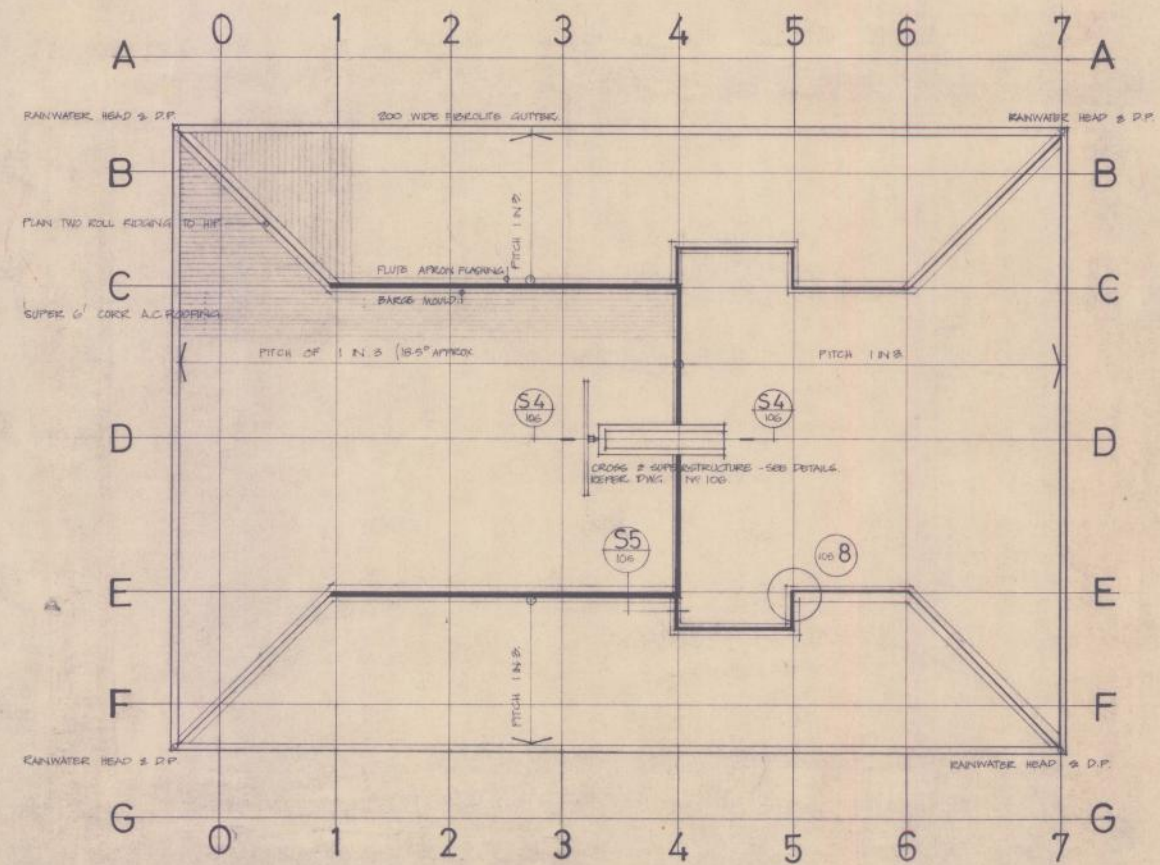
NORTH ELEVATION



EAST ELEVATION



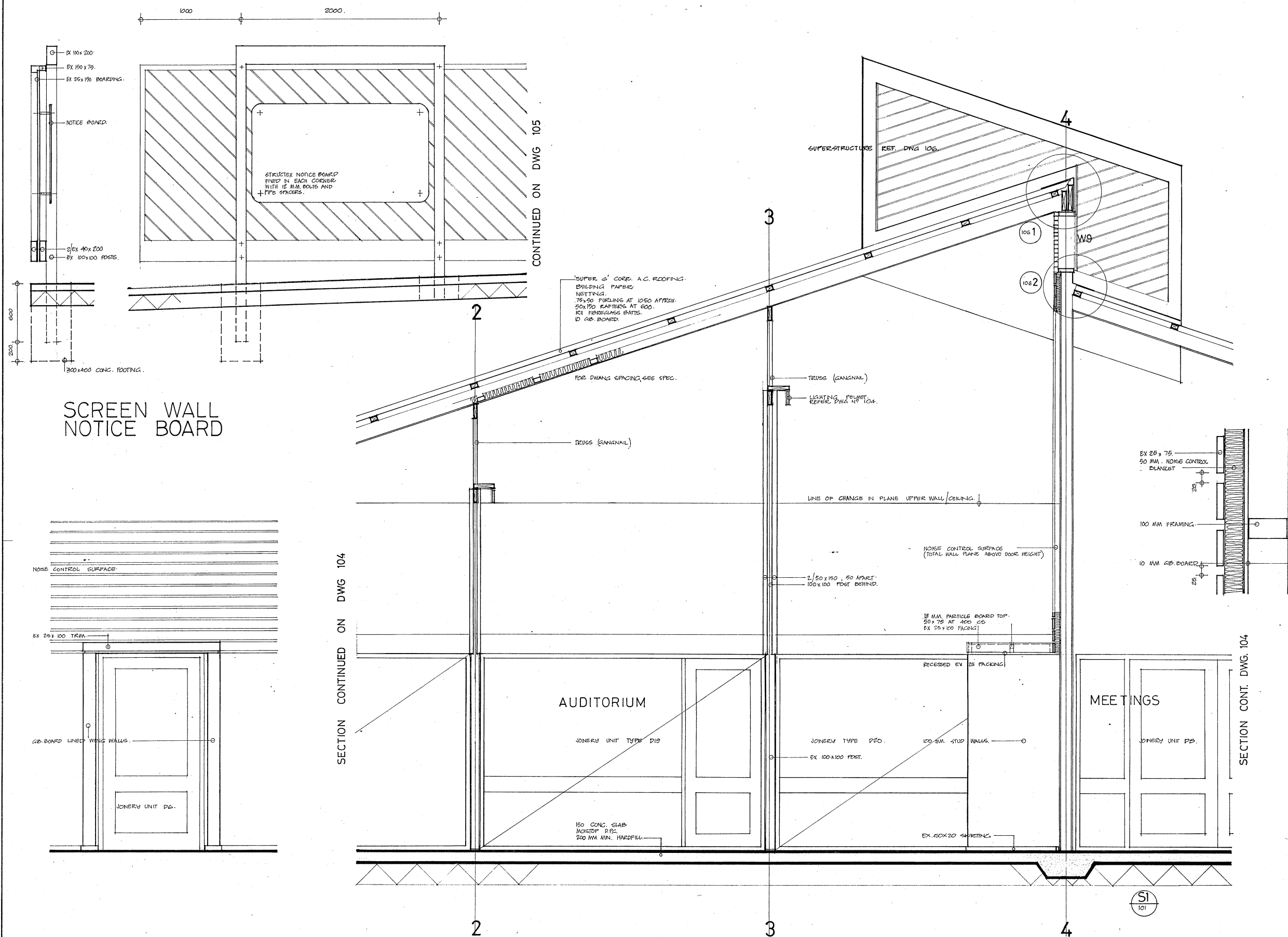
FRAMING PLAN 1:100



ROOF PLAN 1:100

[illegible][illegible]

103



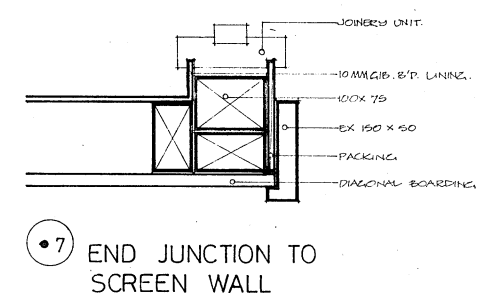
ENTRANCE DOORS
AUDITORIUM

SECTION AUDITORIUM

Blank lined paper with horizontal ruling lines.

DRAWING REFERENCE

JOB N°. 534 105



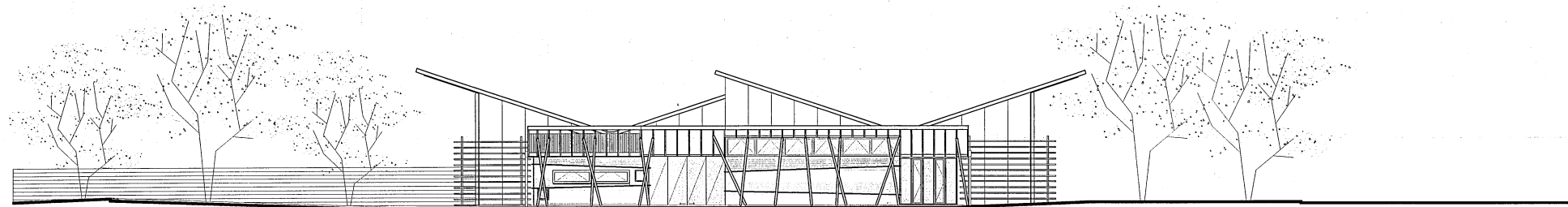
SECTION THROUGH
SIDE LIGHT

END JUNCTION TO
SCREEN WALL

CONTINUED ON DWG. 103



SECTION



PARKLANDS LIBRARY

PROPOSED BUILDING CONVERSION
CONTRACT 04/05-62

ARCHITECTURAL

| | |
|-------------------------------------|--------|
| Roof / Ground Floor Demolition Plan | WD01-1 |
| Ground floor Plan | WD01-2 |
| Reflected Ceiling Plan | WD01-3 |
| Roof Plan | WD01-4 |
| Bracing Plan | WD01-5 |
| Elevations - sheet one | WD02-1 |
| Elevations - sheet two | WD02-2 |
| Sections A | WD03-1 |
| Section B / C | WD03-2 |
| Section D | WD03-3 |
| Internal Elevation | WD04-1 |
| Internal Elevation | WD04-2 |
| Door & Window Schedule | WD05-1 |
| Joinery | WD05-2 |
| Joinery | WD05-3 |
| Joinery | WD05-4 |
| Details | WD06-1 |
| Details | WD06-2 |
| Details | WD06-3 |
| Details | WD06-4 |
| Details | WD06-5 |
| Plumbing and Drainage Plan | WD07-1 |
| Water Supply Plan | WD07-2 |

STRUCTURAL

| | |
|--------------------|-----|
| Structural Details | S01 |
| Structural Details | S02 |
| Structural Details | S03 |

LANDSCAPING

| | |
|---------------------------|-----|
| Planting Plan and details | L01 |
| Details | L02 |

ELECTRICAL

| | |
|----------------------|-----|
| Legends and Controls | E01 |
| Power Layout | E02 |
| Lighting Layout | E03 |

MECHANICAL

| | |
|-------------|-----|
| HVAC Layout | M01 |
|-------------|-----|

CIVIL / ROADING

| | |
|------------------------|-----|
| Plan and Cross Section | R01 |
|------------------------|-----|

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ARCHITECT:
CITY SOLUTIONS

STRUCTURAL ENGINEER:
CITY SOLUTIONS

LANDSCAPE ARCHITECT:
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CIVIL / ROADING:
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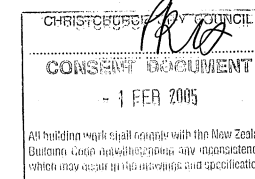
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POWELL FENWICK

MECHANICAL ENGINEER:
POWELL FENWICK

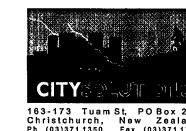
FIRE ENGINEER:
POWELL FENWICK

PROJECT MANAGEMENT:
CITY SOLUTIONS

QUANTITY SURVEYOR:
SHIPSTON DAVIES



FILE COPY



path - s:\data\project\structural\0100

AutoCAD 2000

30

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Original size

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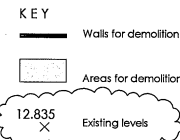
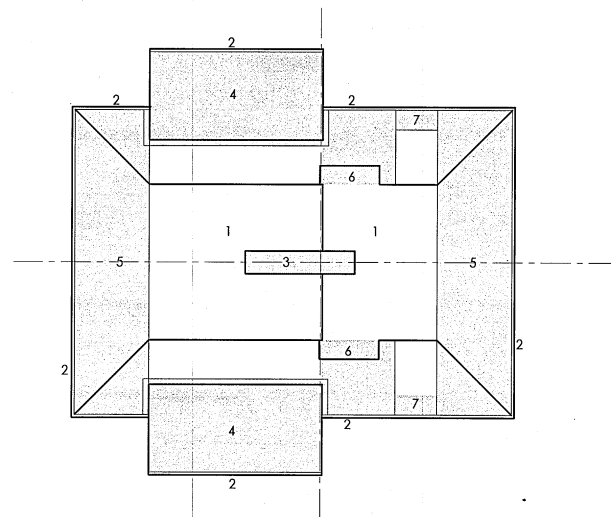
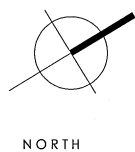
1:200

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ROOF DEMOLITION PLAN

1:200



DEMOLITION NOTES

Generally all materials noted below for demolition are to be on-sold for re-use or recycling wherever possible. Tenders are to submit with their tender proposals for environmentally efficient material disposal for evaluation - refer demolition specification.

ROOFING DEMOLITION NOTES

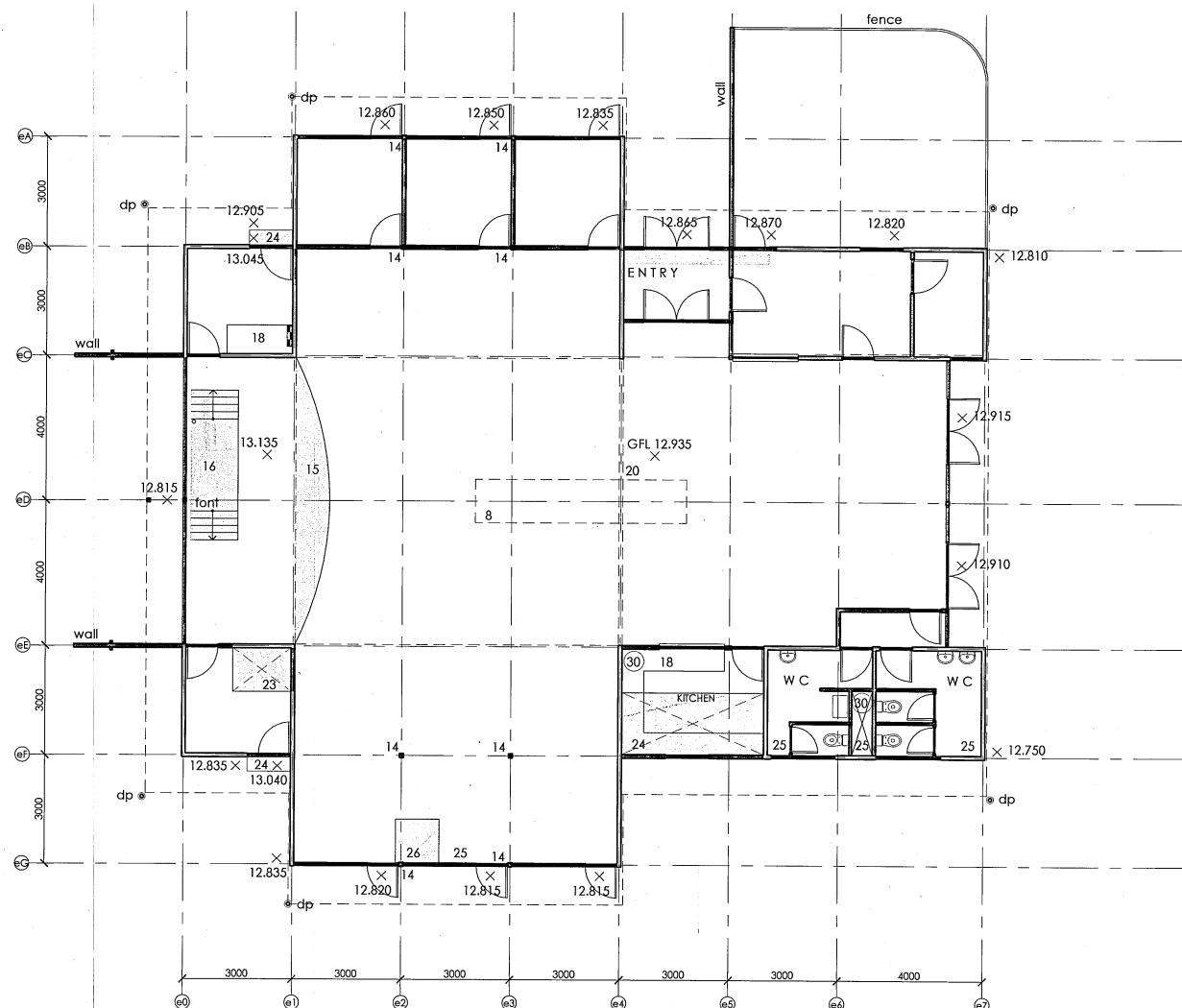
- Generally - remove all roofing, underlay and netting to entire building
- Generally - remove all flashings, spouting and downpipes.
- Remove all wall framing for lightwell upstand / downstand back to adjoining roof level.
- Remove all roof framing and ceiling for additions between grids eA-eB and eF-eG. Remove internal gutter and framing, and allow to cut back adjacent wall framing on grids e1 and e4 to new roof slope.
- Remove all roof framing and ceiling between grids eD-e1 and e6-e7
- Remove all roof and wall framing linings and topights between grids e4 and e5 over entry and kitchen
- Remove roofing and framing from eaves overhang back to wall line - refer construction drawings for cut back detail.

EXTERIOR DEMOLITION NOTES - GENERAL

- Remove all existing exterior Asbestos sheet wall cladding and building paper. All work to comply with OSH standards.
- Remove downpipes and protective concrete casings.
- Remove all existing asbestos sheet soffit linings
- Remove all existing barge boards and flashings
- Remove all existing windows and doors intact for resale.
- Break up and remove all existing concrete patios / paths adjoining building. Refer civil drawings for extent.
- Remove all internal fencing on site
- Remove existing cross and central ridge lightwell including walls and roof framing
- Remove all existing electrical fittings and wiring
- Site works and bulk excavation - refer to Civil drawings

INTERIOR DEMOLITION NOTES

- Generally - remove all floor coverings, and prepare appropriately for new carpet, linoleum and tiled areas.
 - Generally - remove all doors, windows, sashes and hatches.
 - Remove internal partition walls where indicated.
 - Remove internal structural columns once new structure in position.
 - Remove curved timber front to stage.
 - Remove lid to tank and clean out, for filling and concreting in main contract works.
 - Generally - remove curtains / drapes and tracks (each window)
 - Remove existing fixed joinery units.
 - Generally - remove lighting pelmets to all truss bottom chords. Remove truss stiffeners grids e2 and e3.
 - Remove high wall on grid e4 back to truss at low roof apex. Remove diagonal braces from each face.
 - Generally - reuse existing gib ceiling lining wherever possible. Note - to be covered predominantly by new acoustic slot absorbers between grids eC and eE
 - Generally - Gib wall linings at low levels to Coms. Meeting, Workshop and Grid e4 walls may be reused where not replaced for bracing / fire rating. Remaining walls have substantial modifications and require existing wall linings stripped off for relining.
 - Allow to break out floor slab for new ramp. (Refer to drawings for making good)
 - Allow to break out floor slab for new exterior paving. (Refer to drawings for making good)
 - Allow to break out floor slab for new sewer connections beneath floor to new toilets.
 - Allow to break out floor slab for new recessed paraplegic shower. Note fall in surrounding toilet will be formed in floor levelling compound.
- SERVICES DEMOLITION NOTES**
- Generally - remove all powerpoint, lights, heaters, switchboard, stove and miscellaneous electrical fittings.
 - Generally - remove all wiring from walls, ceiling and floors. Use floor wiring as draw wires for new circuits.
 - Generally - remove all plumbing fittings (3No WHB, 3No WC, 1No urinal, 2No sinks).
 - Remove hot water cylinders (2No). Note floor trench for future filling in this area.
 - Generally - remove all redundant pipework from building interior and cap at demarcation point.
 - Retain existing hose stand pipes.



GROUND FLOOR DEMOLITION PLAN

1:100

Notes:

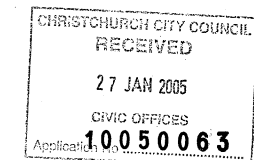
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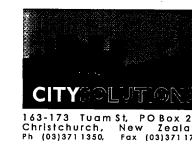
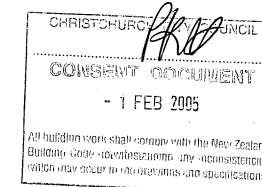
Use dimensions only - do not scale from drawings.

Drawings are to be read in conjunction with all other drawings and specifications pertaining to this contract.

Any discrepancies are to be referred to the Architect for clarification.



| | | | |
|---|---------------|----|----------|
| A | Construction | CS | 21/01/05 |
| 2 | Tender | CS | 08/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |



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PROPOSED BUILDING CONVERSION

| | | |
|-------------|----------------|-----------|
| designed | Crispin Schurr | July 2004 |
| drawn | CS | July 2004 |
| disg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | |

ROOF DEMOLITION PLAN

GROUND FLOOR DEMOLITION

| | | |
|----------|----------|------|
| scale | 1:100 | rev. |
| contract | 04/05-02 | A |
| sheet | WD 01-1 | |

25943 / 01

path: s:\dwg\parks\parks\parks.dwg

AutoCAD 2000

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Original size mm

15



NORTH

Notes:

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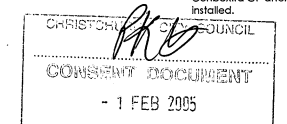
Drawings are to be read in conjunction with all other drawings and specifications pertaining to this contract.

Any discrepancies are to be referred to the Architect for clarification.

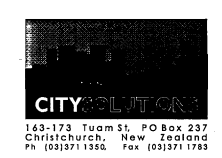
KEY

- 100 Elia wall hung WC
- 101 Elia WC suite
- 102 Lyra wall hung WHB
- 103 door 101 - refer schedule
- 104 window 102 - refer schedule
- 105 refer section A sheet 10
- 106 grid A
- Wall - type / lining / finish
- Wall type
- TF Timber framed stud wall
- TS Timber shapping
- Wall lining
- GB gibraltar board
- VB Vela board (9mm)
- P 9mm plywood panels
- C 0.40 ZRX corrugate wall cladding
- Wall finish
- U Unchanged
- TI Wall tiles
- S Shain
- PS Paint system - refer. spec.
- PP Pre-finished
- Floor finish
- CA Carpet Art
- O Carpet
- L Linoleum
- T Tiles
- M Advance Star tread matwell

Note:
All chases for M&E to be filled with Fosroc Combestra GF after M&E fittings being installed.



| | | | |
|---|---------------|----|----------|
| A | Construction | CS | 21/01/05 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/08/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |



PARKLANDS LIBRARY PROPOSED BUILDING CONVERSION

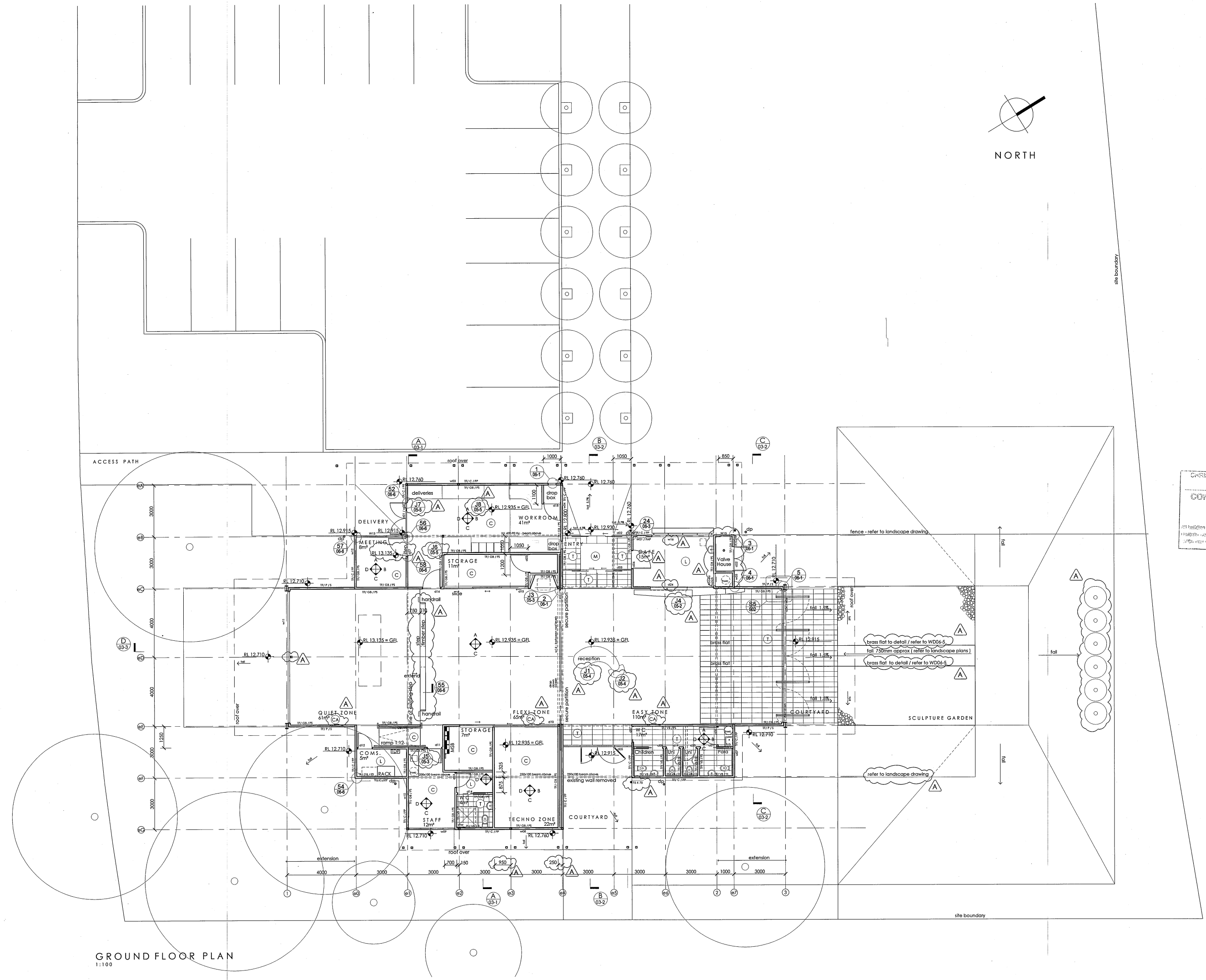
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| designed | Crispin Schurr | Sept 2004 |
| drawn | Stajana Radivojevic | Sept 2004 |
| disg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | / / |

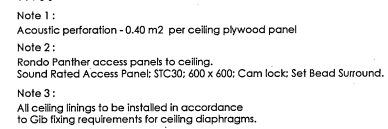
GROUND FLOOR PLAN

| | | |
|----------|----------|------|
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| contract | 04/05-02 | A |
| sheet | WD 01-2 | |

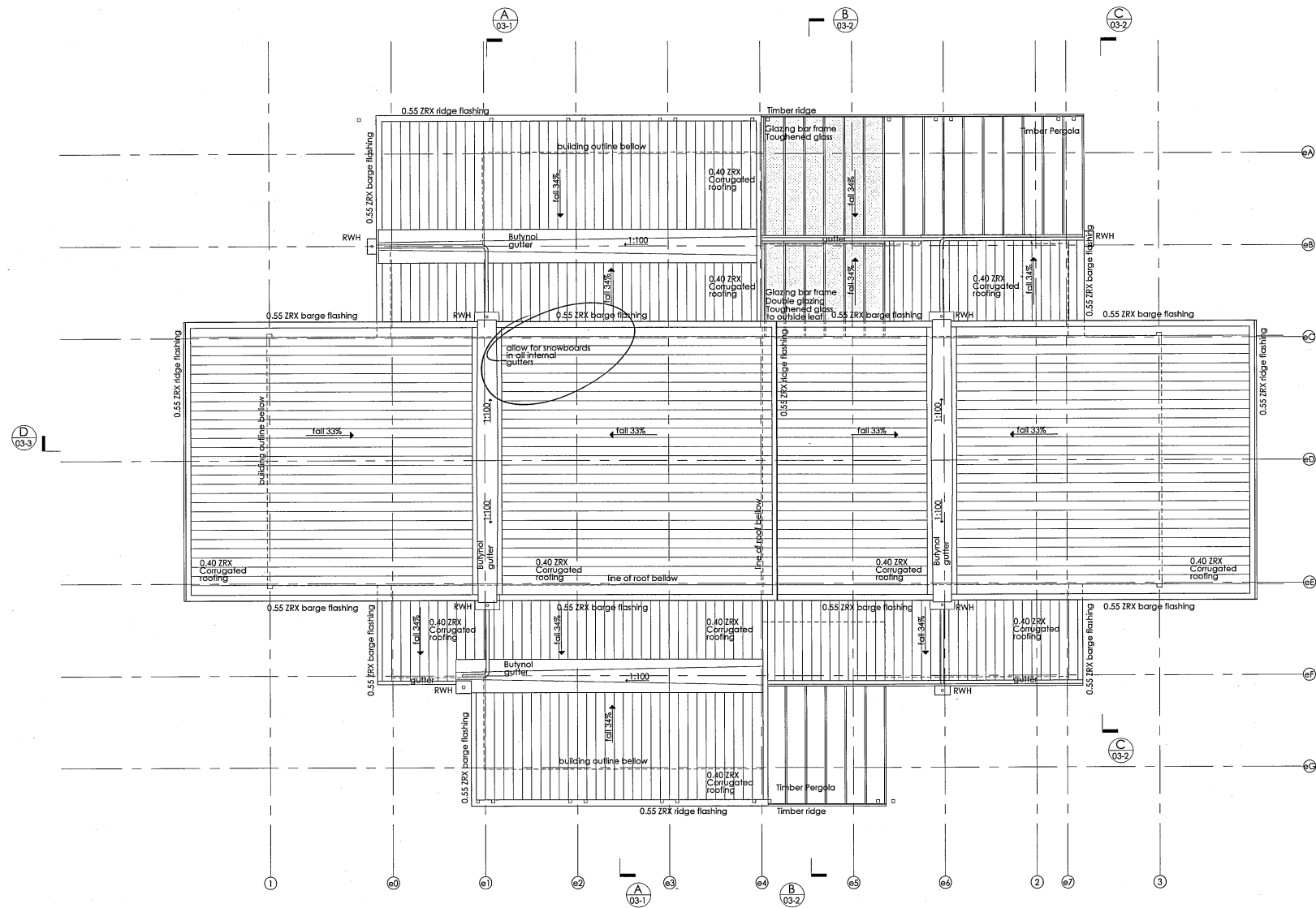
25943 / 01

GROUND FLOOR PLAN 1:100





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2 5 9 4 3 / 0 1

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Original size

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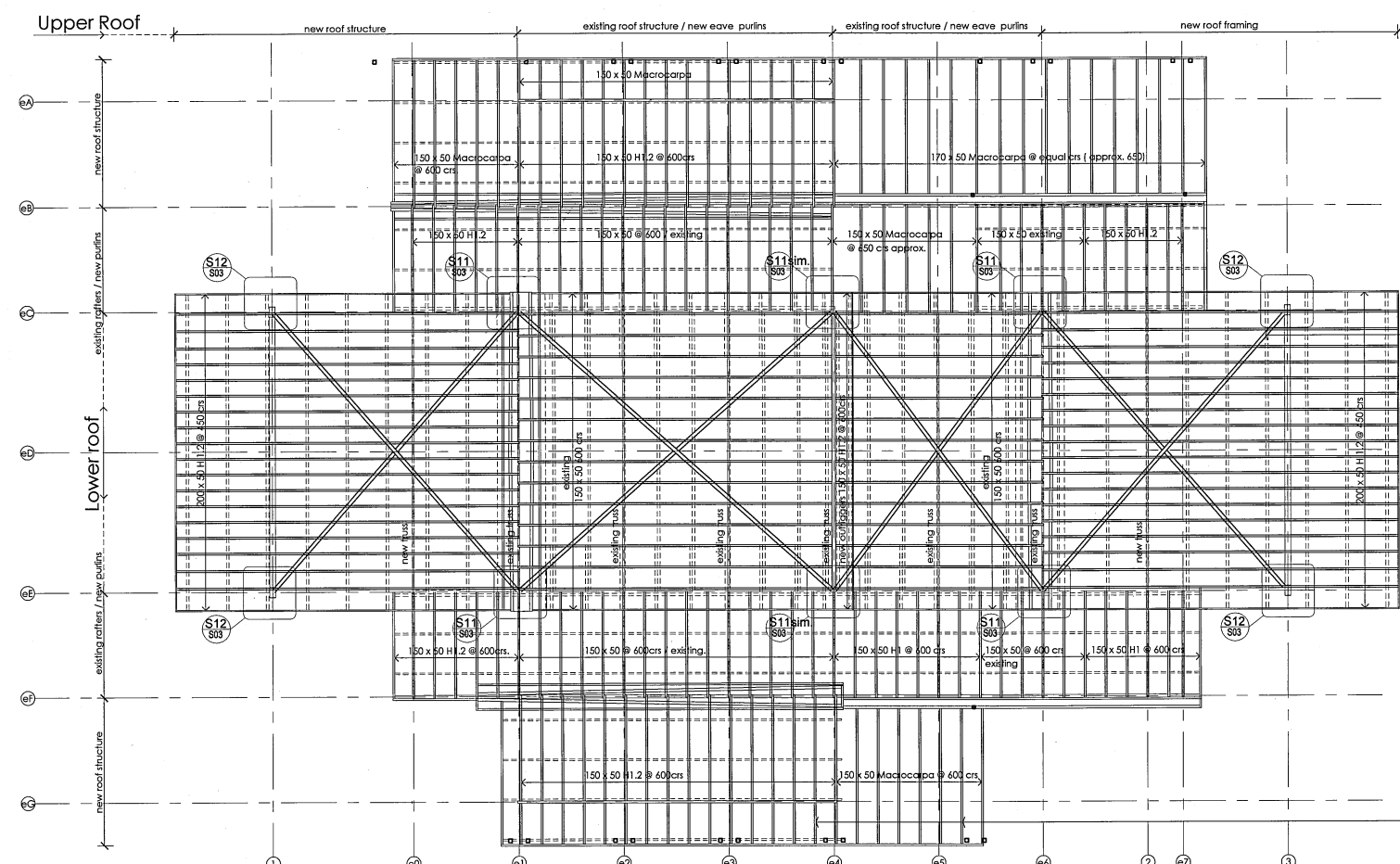
2

3



WALL BRACING PLAN
1:100

- note 1. Standard 13 mm Gib plasterboard to one side (internal).
- note 2. 10mm Gib Braceline with 6KN floor plate connections to one side only (internal).
- note 3. Standard 10mm Villaboard both faces.
- note 4. 10mm Gib Braceline with 6 KN floor plate connection one side (internal) / 9mm plywood to the other (external).
- note 5. Standard 10mm Gib Aqualine to one side with diagonal brace (internal).
- note 6. Standard 9mm Villaboard to one side with diagonal brace (internal).



ROOF FRAMING PLAN
1:100
Rafters annotated.

100 x 3 mm galv MS flat cross braces
notched flush into purlins and nailed to
detail.

DA heart Macorcarpa to all exposed timber
rafters.

Notes:

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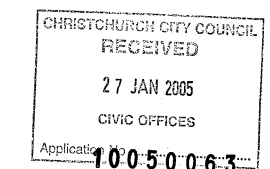
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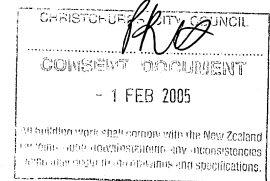
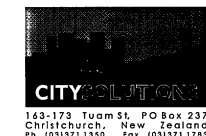
Any discrepancies are to be referred to the Architect for clarification.

Note:

Length of braces changed in revision 2.



| | | | |
|---|---------------|----|----------|
| A | Construction | CS | 21/01/05 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | | by date |



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|------------|---------------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Stajana Radivojevic | Sept 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |

approved / /

BRACING PLAN

| | | | |
|----------|----------|------|---|
| scale | 1:100 | rev. | A |
| contract | 04/05-02 | | |
| sheet | WD 01-5 | | |

25943 / 01

path: s:\studies\structural\0100

AutoCAD 2000

Notes:

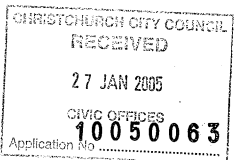
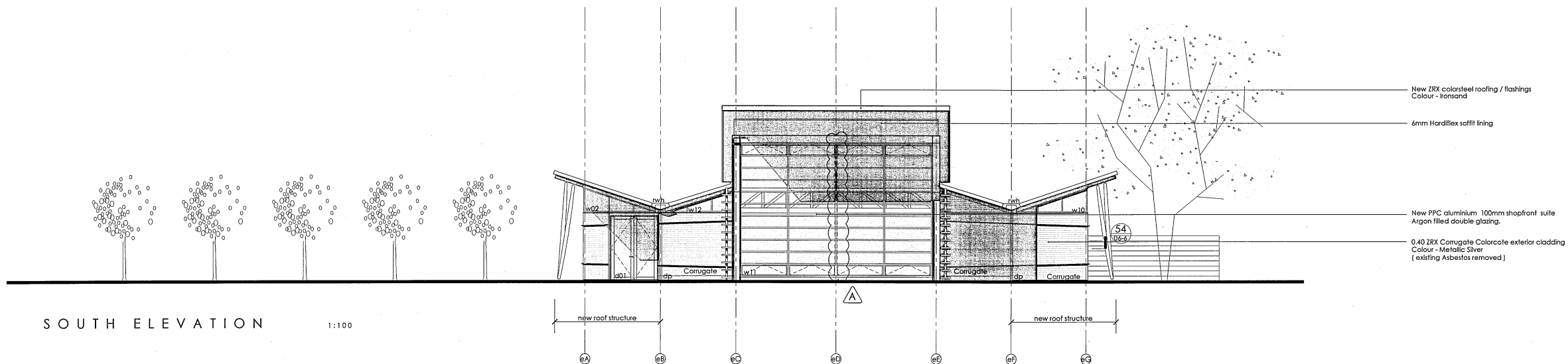
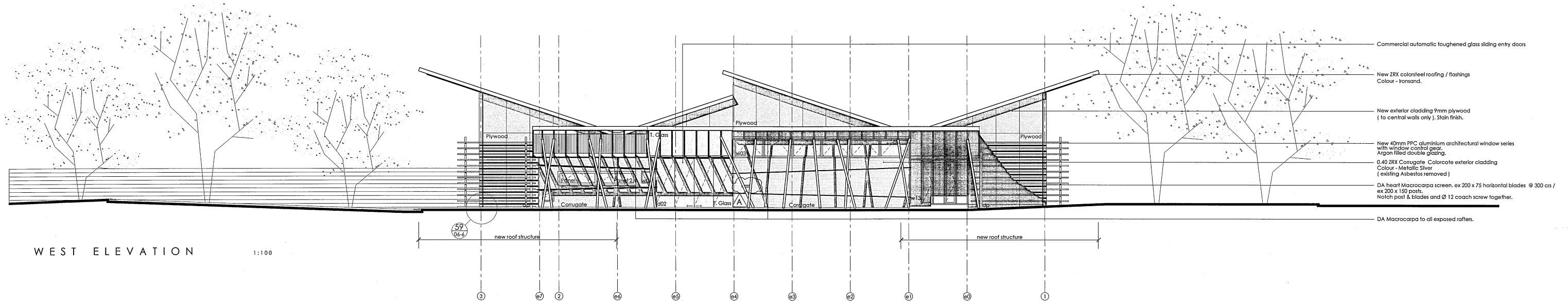
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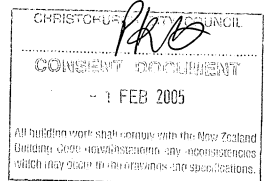
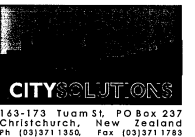
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| 2 | Tender | CS | 08/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
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| designed | Crispin Schurr | Aug 2004 |
| drawn | Stadjana Radivojevic | Aug 2004 |
| dsg. check | CS | Jan 05 |
| dwg. check | CS | Jan 05 |
| indexed | | |
| approved | | // |

ELEVATIONS

| | | |
|----------|----------|------|
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| contract | 04/05-02 | A |
| sheet | WD 02-1 | |

2 5 9 4 3 / 0 1

Notes:

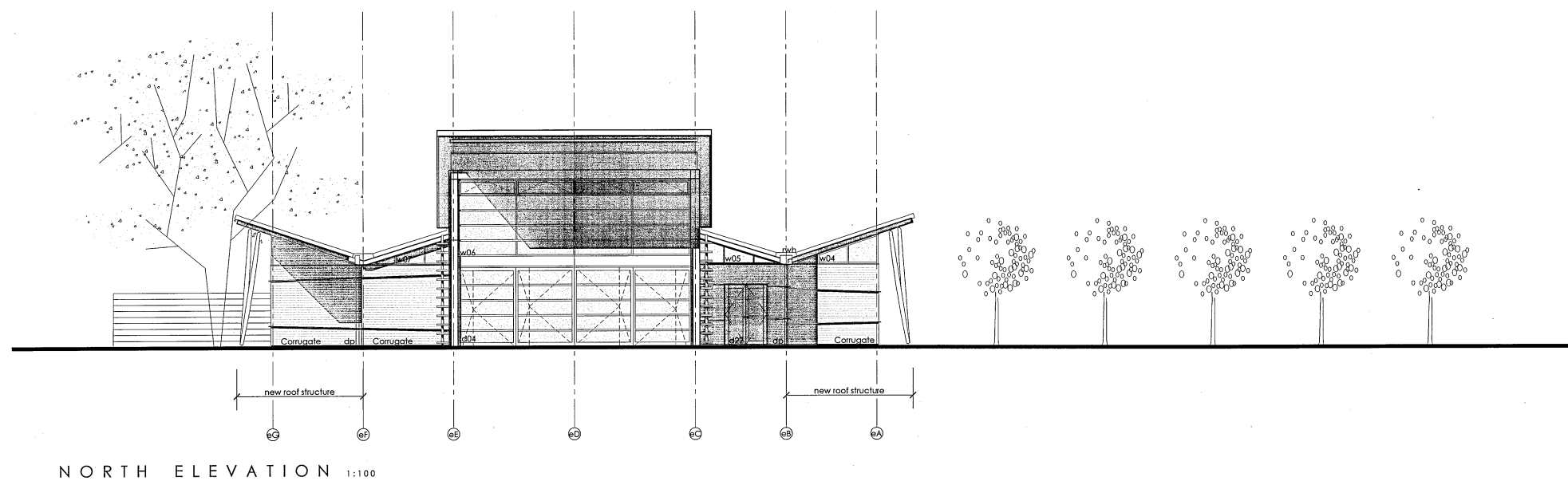
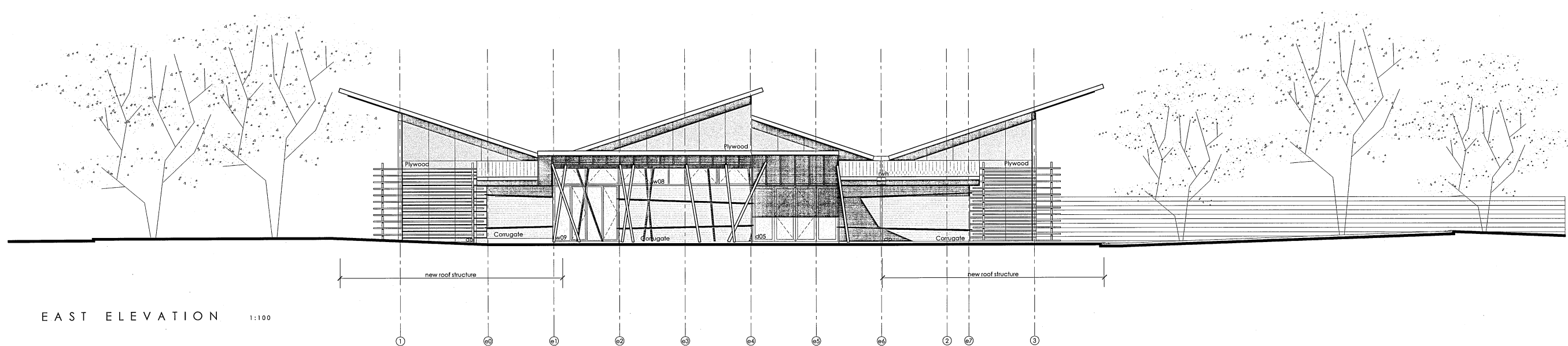
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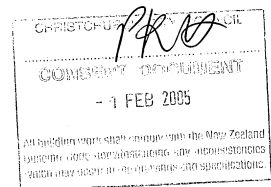
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| A | Construction | CS | 21/01/05 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/08/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |



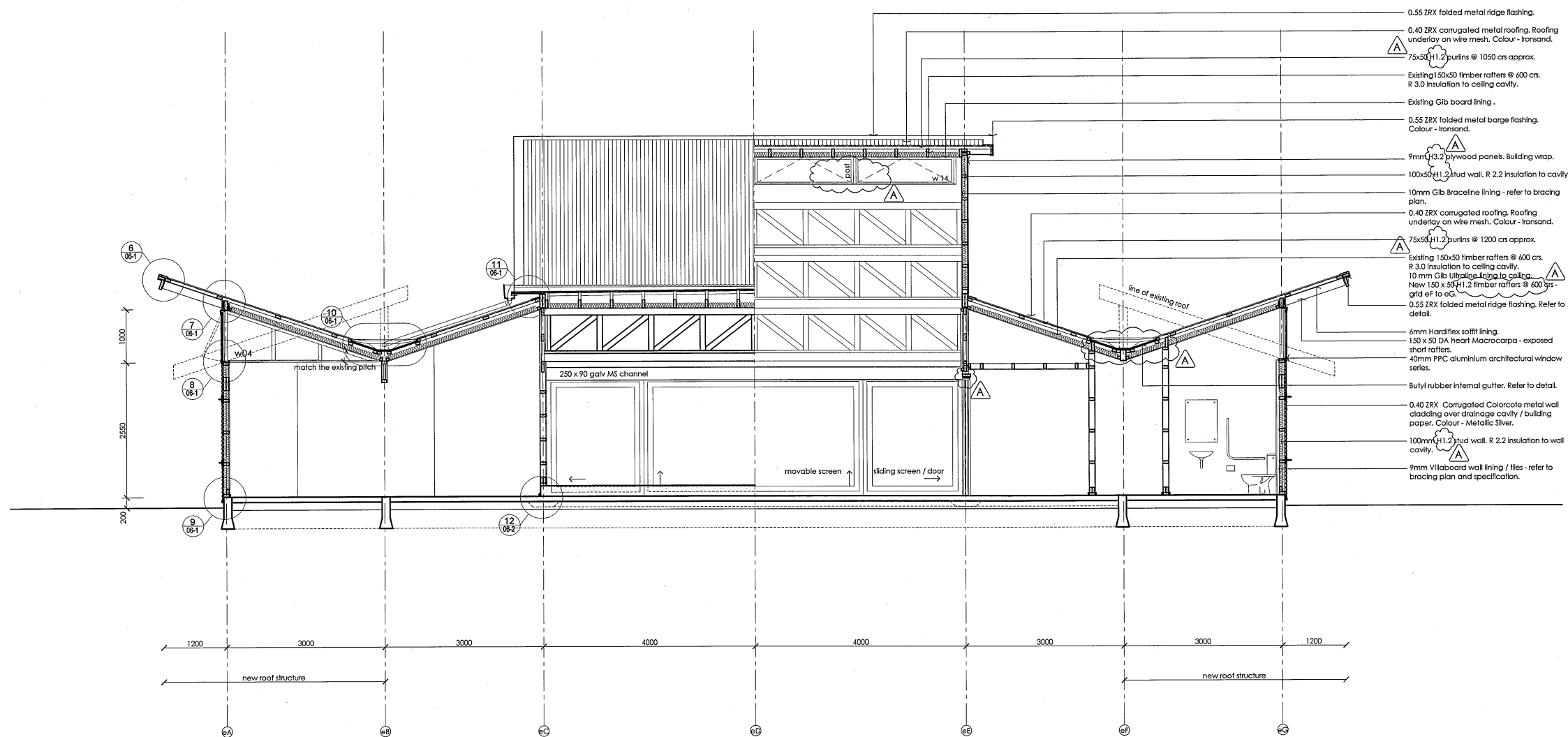
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|------------|----------------------|----------|
| designed | Crispin Schurr | Aug 2004 |
| drawn | Sladjana Radivojevic | Aug 2004 |
| dsg. check | CS | Jan 05 |
| dvg. check | CS | Jan 05 |
| indexed | | |

approved _____

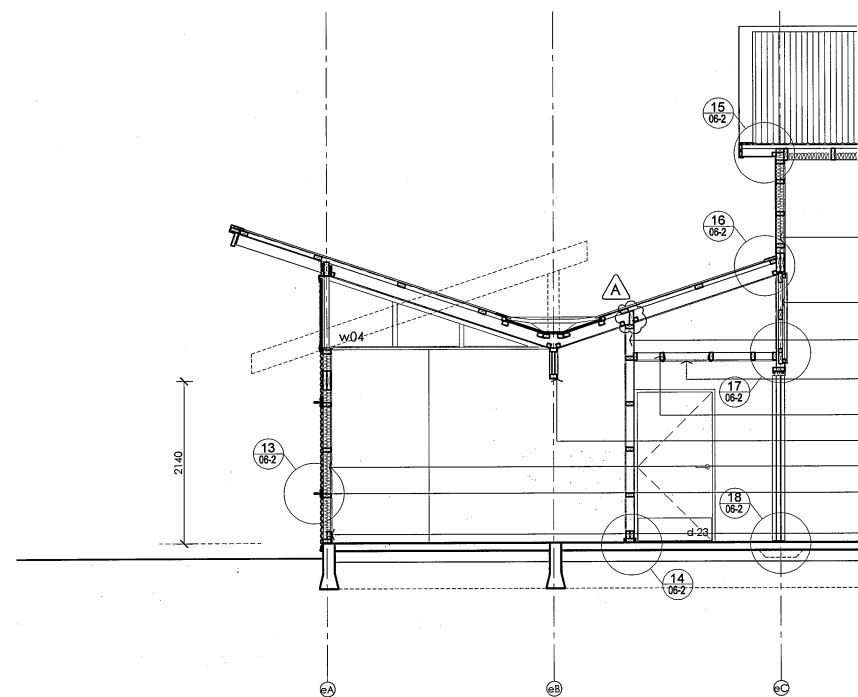
ELEVATIONS

| | | |
|----------|----------|------|
| scale | 1:100 | rev. |
| contract | 04/05-02 | A |
| sheet | WD 02-2 | |



- 0.55 ZRX folded metal ridge flashing.
- 0.40 ZRX corrugated metal roofing. Roofing underlay on wire mesh. Colour - tansand.
- 75x50 H1.2 purlins @ 1050 cns approx.
- Existing 150x50 timber rafters @ 600 cns.
- Existing 3.0 insulation to ceiling cavity.
- Existing Gib board lining.
- 0.55 ZRX folded metal barge flashing. Colour - tansand.
- 9mm H3.2 plywood panels. Building wrap.
- 100x50 H1.2 stud wall. R 2.2 insulation to cavity.
- 10mm Gib Braceline lining - refer to bracing plan.
- 0.40 ZRX corrugated roofing. Roofing underlay on wire mesh. Colour - tansand.
- 75x50 H1.2 purlins @ 1200 cns approx.
- Existing 150x50 timber rafters @ 600 cns.
- 10 mm Gib Ultra-pipe lining to ceiling.
- New 150 x 50 H1.2 timber rafters @ 600 cns - grid eF to eG.
- 0.55 ZRX folded metal ridge flashing. Refer to detail.
- 6mm Hardiflex soffit lining.
- 150 x 50 DA heart Macrocarpa - exposed short rafters.
- 40mm PPC aluminium architectural window series.
- Butyl rubber internal gutter. Refer to detail.
- 0.40 ZRX Corrugated Colorcoat metal wall cladding over drainage cavity / building paper. Colour - Metallic Silver.
- 100mm H1.2 stud wall. R 2.2 insulation to wall cavity.
- 9mm Villaboard wall lining / tiles - refer to bracing plan and specification.

SECTION A 1:50
Note: section line staggered.



- 100mm H1.2 stud wall. R 2.2 insulation to cavity. 9mm plywood panels facade cladding over building paper. 10 mm Gib brace-line interior lining - refer to bracing plan.
- Existing timber truss.
- 100mm H1.2 stud wall. 10 mm Gib board lining - refer to bracing plan.
- Rondo Panther access panel. Refer to WD01-3.
- 100 x 50 H1.2 ceiling joists @ 600cns.
- HJ 400 - 90 Hy beam.
- 100mm H1.2 stud wall. R 2.2 insulation to cavity.
- 0.40 ZRX corrugated metal cladding over drainage cavity / building paper. Colour - Metallic Silver.
- 13mm Gib plasterboard interior lining - refer to bracing plan.
- note: corrugated cladding split into areas via ZRX flashings. Refer to detail.

Notes:

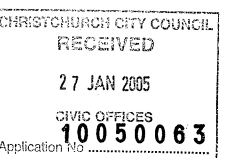
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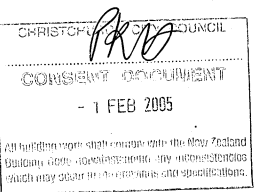
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| | | | |
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| A | Construction | CS | 21/01/05 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |



PARKLANDS LIBRARY
PROPOSED BUILDING CONVERSION

| | | |
|------------|----------------------|----------|
| designed | Crispin Schurr | Aug 2004 |
| drawn | Sladjana Radivojevic | Aug 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | / / |

SECTION A

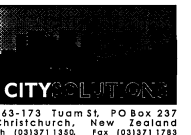
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|----------|----------|------|
| scale | 1:50 | rev. |
| contract | 04/05-02 | A |
| sheet | WD 03-1 | |

SECTION B 1:50

CROSS SECTION BETWEEN e6 - e7 1:50

SECTION C 1:50

| | | | |
|---|---------------|----|----------|
| A | Construction | CS | 21/01/05 |
| 2 | Tender | CS | 06/10/04 |
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| 0 | Client review | CS | 23/08/04 |
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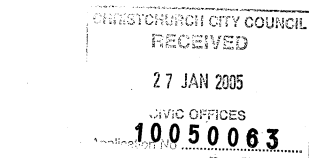
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| | | |
|------------|----------------------|----------|
| designed | Crispin Schurr | Aug 2004 |
| drown | Sladjana Radivojevic | Aug 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |

SECTION B & C

scale 1:50
contract
sheet WD 03-2

2 5 9 4 3 / 0 1

 new concrete

| | | | |
|---|---------------|----|---------|
| A | Construction | CS | 21/01/0 |
| 3 | Tender | CS | 11/10/0 |
| 2 | Tender | CS | 06/10/0 |
| 1 | Schedule | CS | 20/09/0 |
| 0 | Client review | CS | 23/08/0 |
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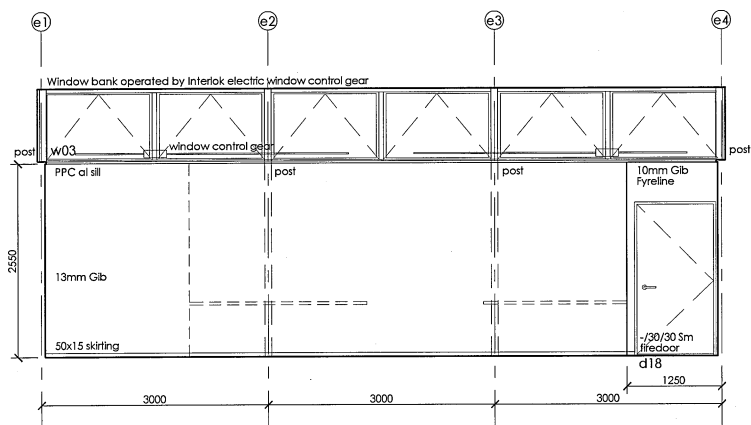
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|------------|----------------------|----------|
| designed | Crispin Schurr | Aug 2004 |
| drawn | Sladjana Radivojevic | Aug 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |

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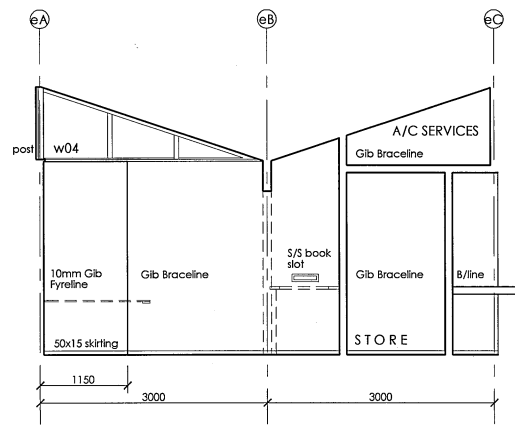
SECTION D

| | |
|----------|----------|
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| contract | 04/05-62 |
| sheet | WD 03-3 |

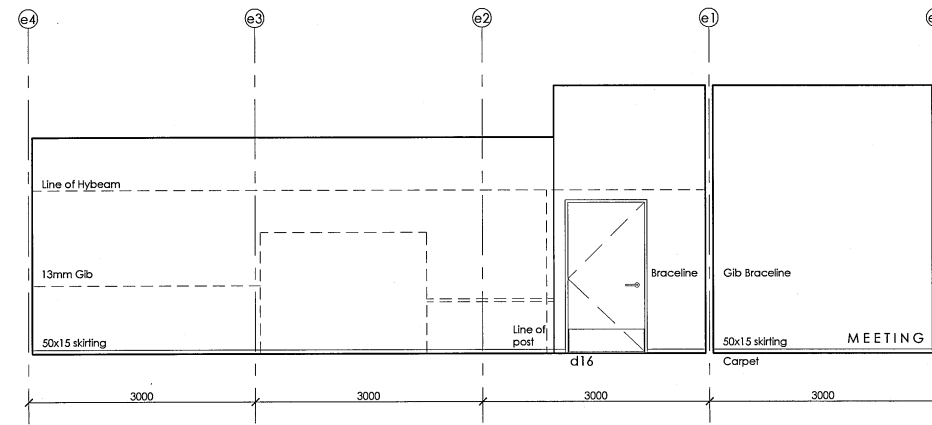
2 5 9 4 3 / 0 1



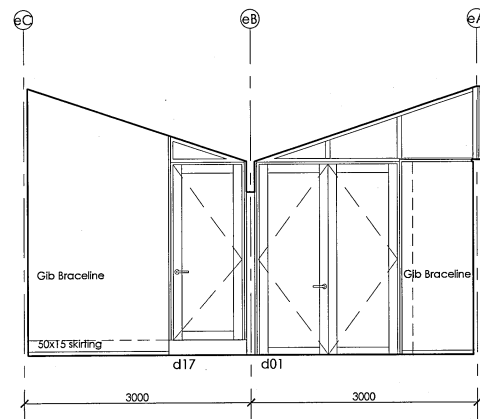
ELEVATION A
WORKROOM 1:50



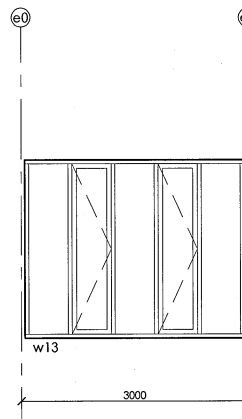
ELEVATION B



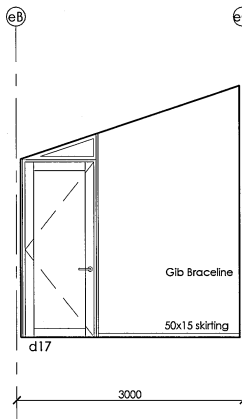
ELEVATION C



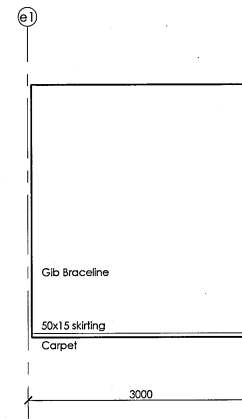
ELEVATION D
WORKROOM 1:50



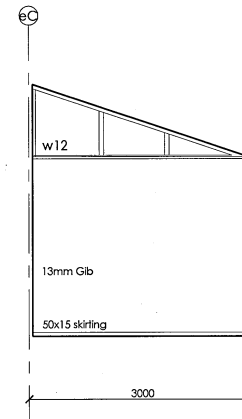
ELEVATION A
MEETING 1:50



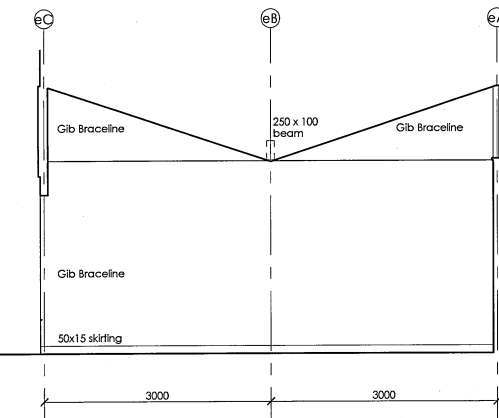
ELEVATION B



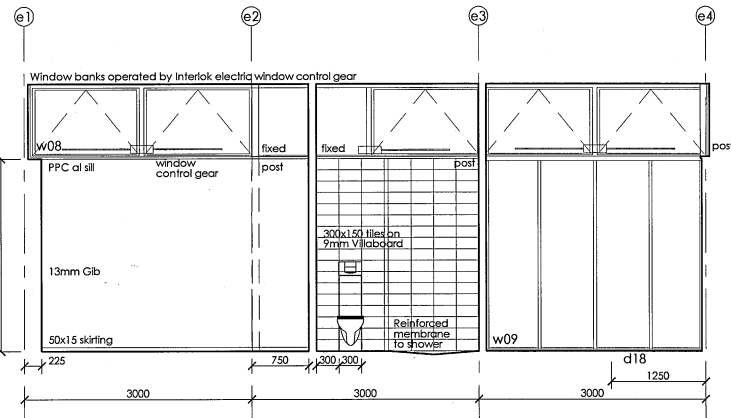
ELEVATION C



ELEVATION D

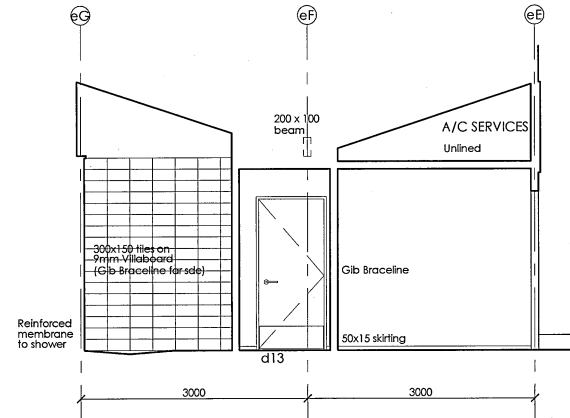


ELEVATION B (D handed, sim)
TECHNOZONE 1:50

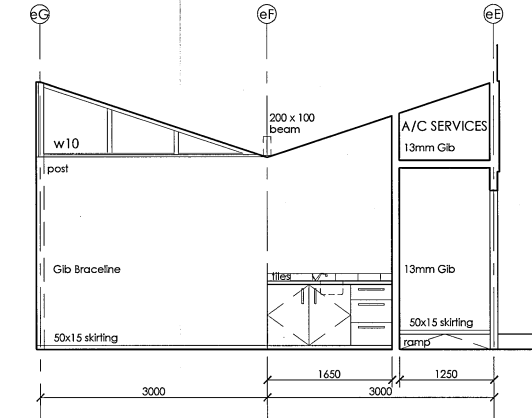


ELEVATION C

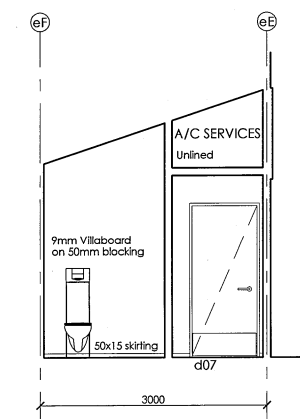
WC/SHOWER STAFF



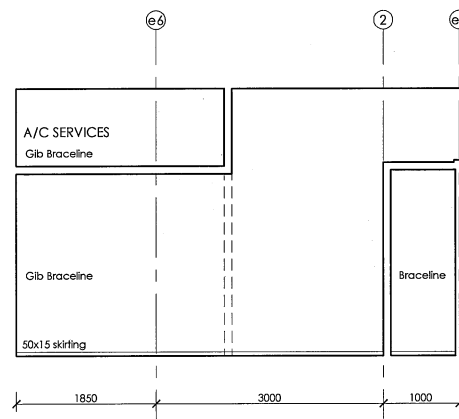
ELEVATION D
WC/SHOWER 1:50



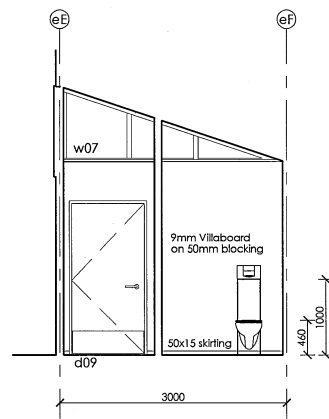
ELEVATION D
STAFF ROOM 1:50



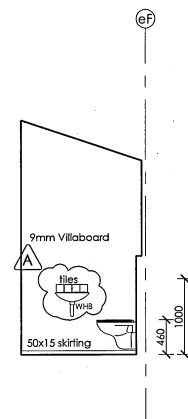
ELEVATION D
PUBLIC WC 1:50



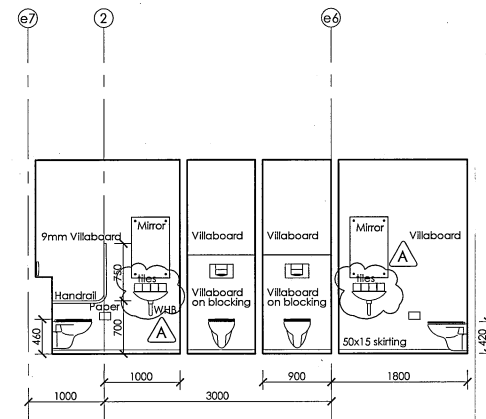
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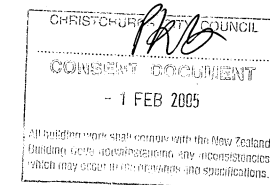
ELEVATION B



ELEVATION B



ELEVATION C



Notes:

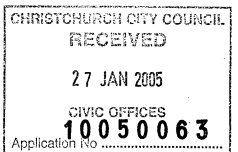
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| designed | Crispin Schurr | Aug 2004 |
| drawn | Crispin Schurr | Aug 2004 |
| dsg. check | CS | Jan 05 |
| dwg. check | CS | Jan 05 |
| indexed | | |

approved

INTERNAL ELEVATIONS

| | | |
|----------|----------|------|
| scale | 1:50 | rev. |
| contract | 04/05-02 | |
| sheet | WD 04-1 | |

path: s:\data\pgh\architectural\0100

AutoCAD 2000

300

200

150

100

50

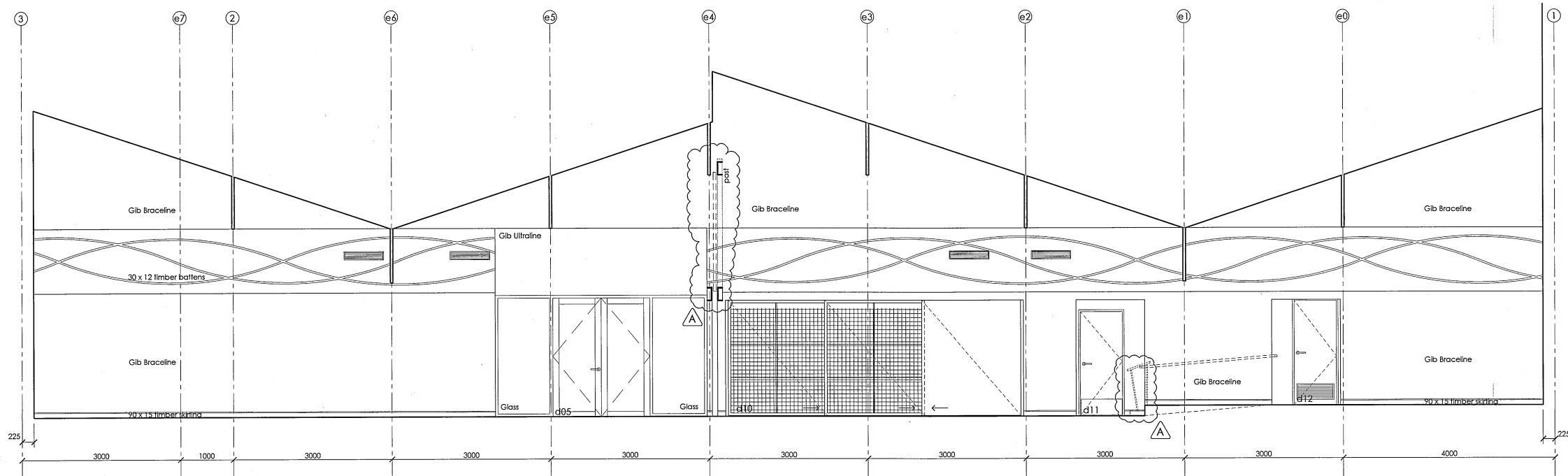
30

10

0

mm

Original size



ELEVATION C

LIBRARY

1:50

Notes:

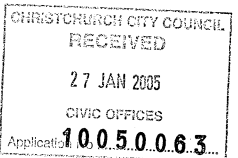
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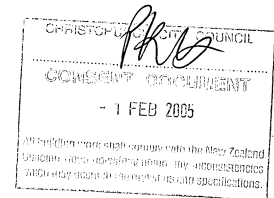
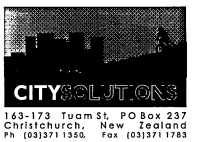
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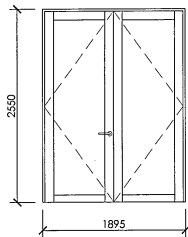
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|------------|----------------|----------|
| designed | Crispin Schurr | Aug 2004 |
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| dsg. check | CS | Jan 05 |
| dwg. check | CS | Jan 05 |
| indexed | | |

approved / /

INTERNAL ELEVATIONS

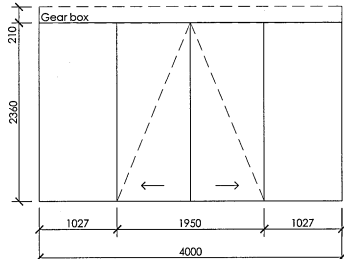
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| contract | 04/05-02 | A |
| sheet | WD 04-2 | |

25943 / 01



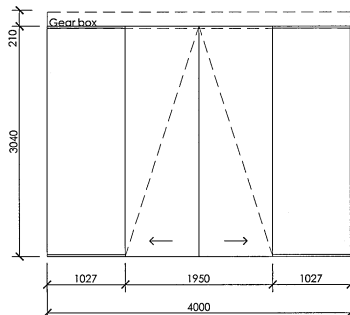
d01

PPC aluminium Magnum door in 50mm aluminium frame. 6/12/6 argon filled double glazing. 6mm toughened glass stat.



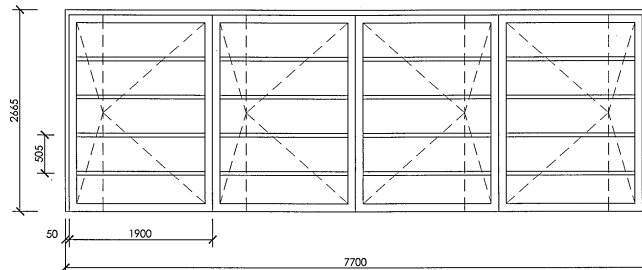
d02

Frameless commercial Horizon automatic sliding door / 12 mm toughened glass



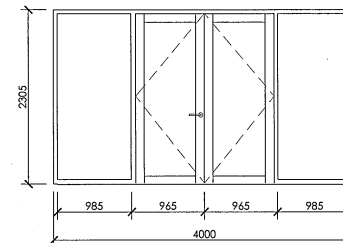
d03

Frameless commercial Horizon automatic sliding door / 12 mm toughened glass



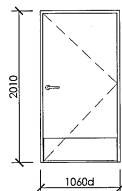
d04

PPC aluminium Magnum door 6/12/6 argon filled double glazing. 6mm toughened glass stat.



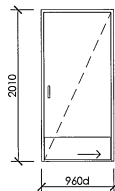
d05

PPC aluminium Magnum door frame to 100mm PPC aluminium shopfront suite. 6/12/6 argon filled double glazing. 6mm toughened glass stat.



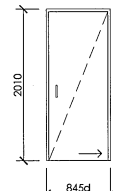
d06 / d09 handed

Internal paint grade solid core timber door.



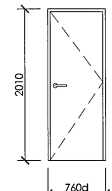
d07 / d14 handed / d21 handed

Internal paint grade solid core timber door. Undercut d14 50mm.



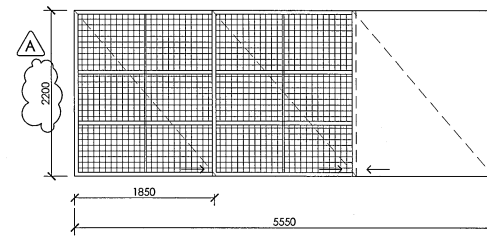
d08

Internal paint grade solid core timber door.



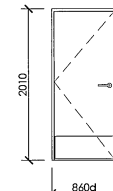
d19 / d20

Internal paint grade solid core timber door.



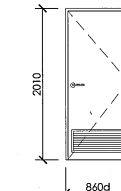
d10

Henderson sliding door system. 1 No timber framed 9mm ply clad door / polystyrene core. 2 No. M5 EA frame / mesh infill door leafs.



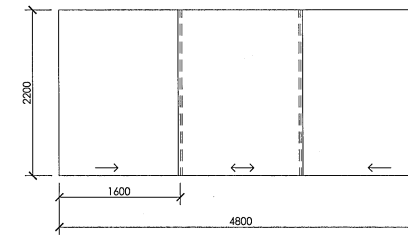
d11 / d13

Internal paint grade solid core timber door.



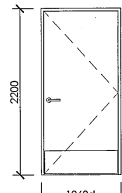
d12

Internal paint grade solid core timber door. Louvre 700w x 300h



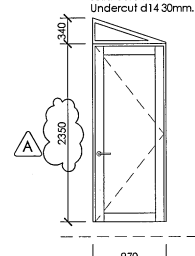
d15

Henderson sliding door system. 3 No timber framed 9mm ply clad door / polystyrene core.



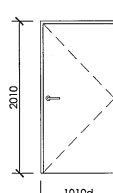
d16

Internal paint grade solid core timber door.



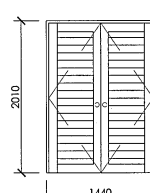
d17

Magnum PPC aluminium door in 50mm frame. PPC aluminium jamb liners. PPC aluminium infill panels.



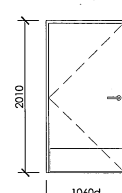
d18

Internal paint grade solid core timber door. FRR 7/30/30 mm



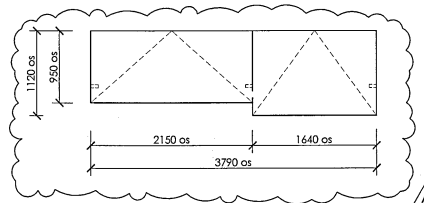
d22

Magnum PPC aluminium door in 50mm frame. PPC aluminium jamb liners. PPC aluminium infill panels.



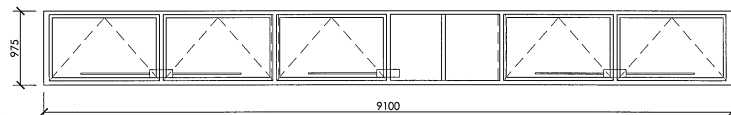
d23

Internal paint grade solid core timber door.



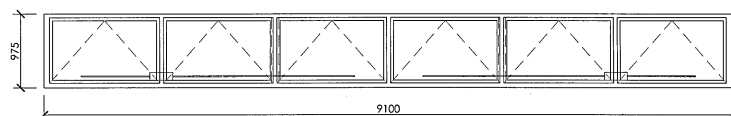
d24

2 No Internal paint grade timber framed 9mm ply clad / polystyrene core door. Lock system - 3 No Hafele flush furniture bolts P.No. 253.00.332 with ss socket to match.



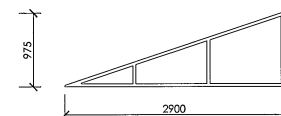
w08

40mm PPC aluminium Architectural window series 6/12/6 argon filled double glazing.



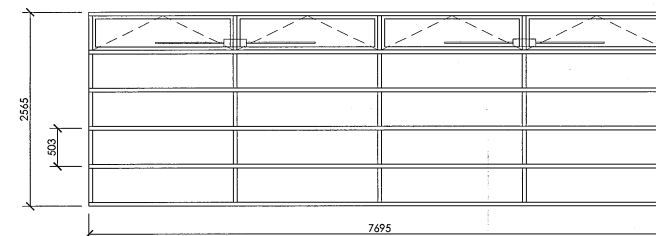
w03

40mm PPC aluminium Architectural window series 6/12/6 argon filled double glazing.



w05 / w07 handed / w12 handed

40mm PPC aluminium Architectural window series 6/12/6 argon filled double glazing.



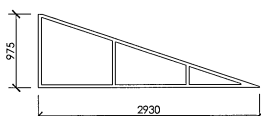
w06

PPC aluminium 100mm shopfront suite 6/12/6 argon filled double glazing.



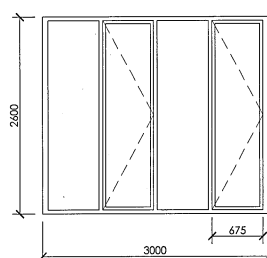
w01

40mm PPC aluminium Architectural window series 6/12/6 argon filled double glazing.



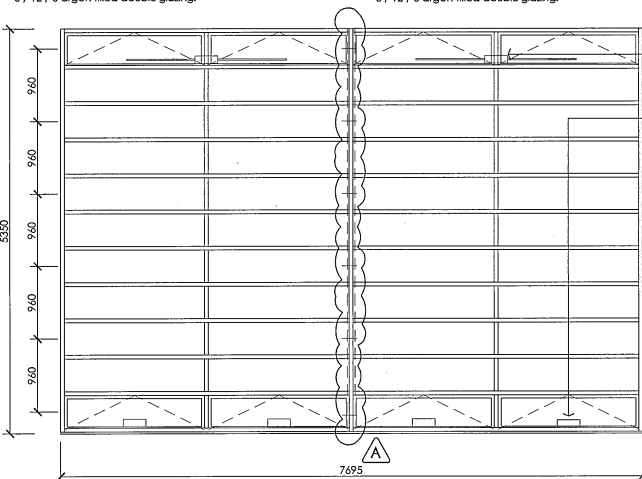
w02 / w04 handed / w10 handed

40mm PPC aluminium Architectural window series 6/12/6 argon filled double glazing.



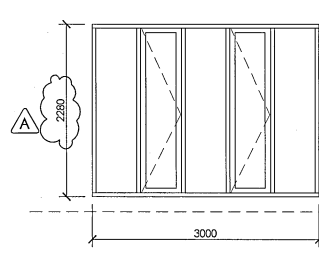
w09

PPC aluminium 100mm shopfront suite 6/12/6 argon filled double glazing.



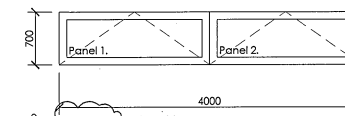
w11

PPC aluminium 100mm shopfront suite 6/12/6 argon filled double glazing.



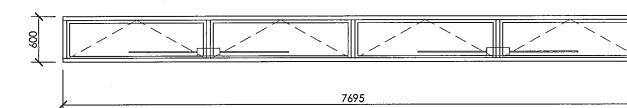
w13

PPC aluminium 100mm shopfront suite 6/12/6 argon filled double glazing.



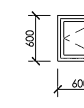
w16 shutter

PPC aluminium 100mm shopfront suite on hinges to frame & shaft (2 per panel) to hold open. 6/12/6 argon filled double glazing. 4 No automotive gas strut (paraboot)



w14

40mm PPC aluminium Architectural window series 6/12/6 argon filled double glazing.



w15

40mm PPC aluminium Architectural window series Georgian wire glass. Triangular lock to fire service approval.

Notes:

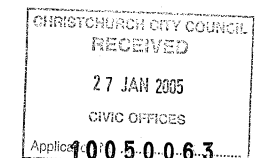
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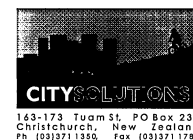
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| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |

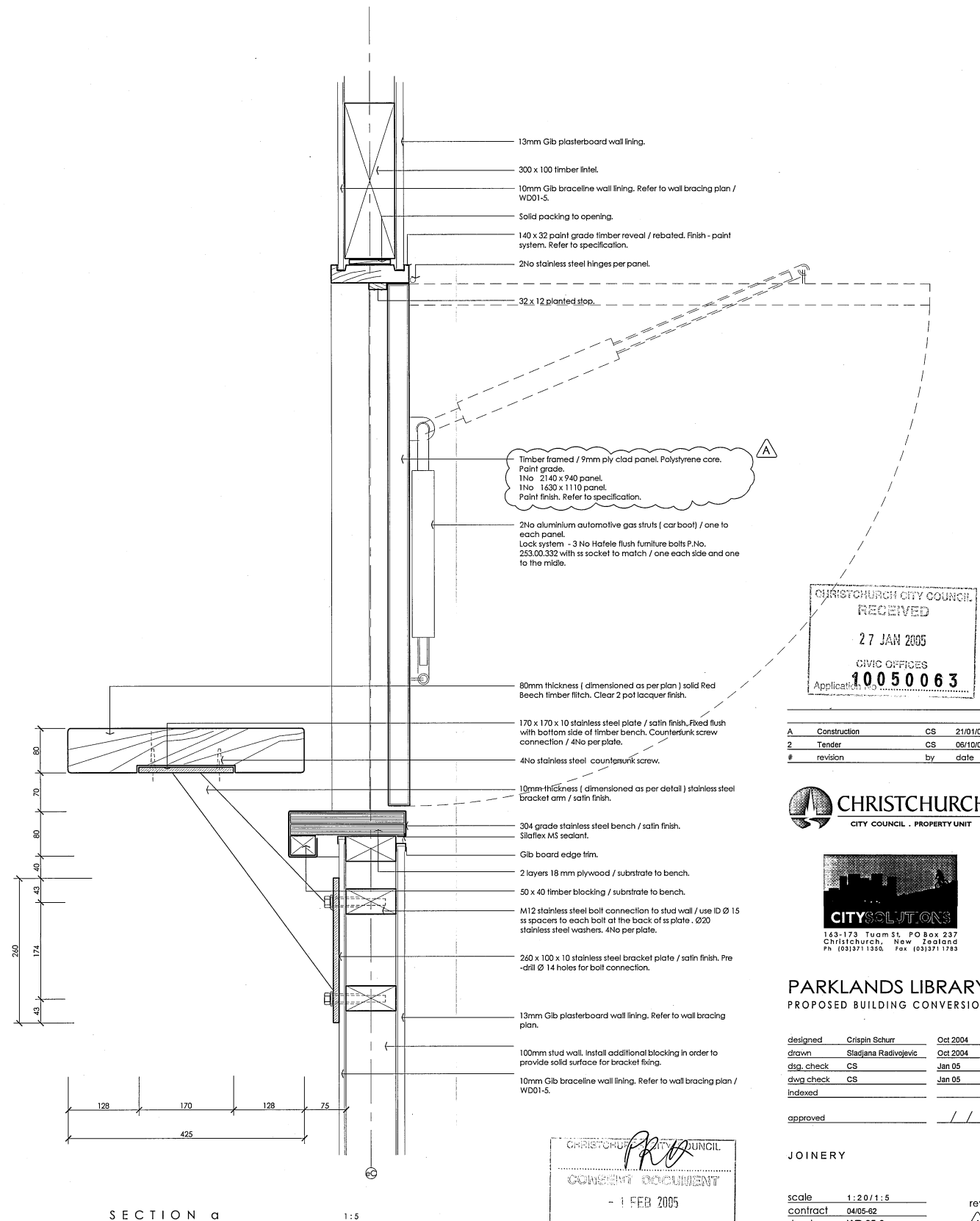
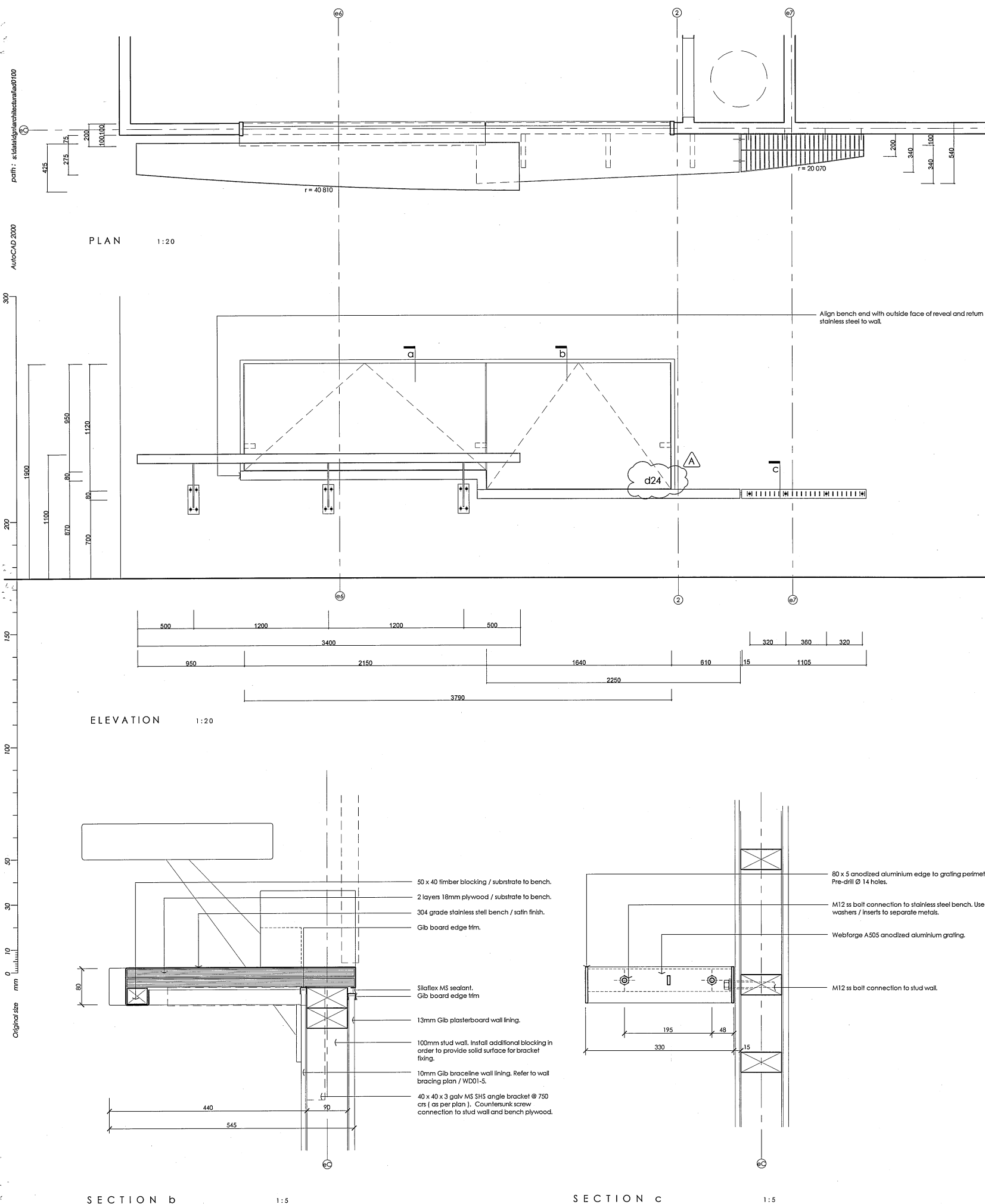


PARKLANDS LIBRARY PROPOSED BUILDING CONVERSION

| | | |
|------------|------------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Stadana Radiovic | Sept 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | |

DOOR & WINDOW SCHEDULE

| | | |
|----------|----------|------|
| scale | 1:50 | rev. |
| contract | 04/05-02 | A |
| sheet | WD 05-1 | |



Notes:
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CHRISTCHURCH CITY COUNCIL
 RECEIVED
 27 JAN 2005
 CIVIC OFFICES
 Application No. 10050063

| | | | |
|---|--------------|----|----------|
| A | Construction | CS | 21/01/05 |
| 2 | Tender | CS | 06/10/04 |
| # | revision | by | date |

CHRISTCHURCH
 CITY COUNCIL - PROPERTY UNIT

CITYSOLUTIONS
 163-173 Tuam St. PO Box 237
 Christchurch, New Zealand
 Ph (03) 371 1350 Fax (03) 371 1783

PARKLANDS LIBRARY
 PROPOSED BUILDING CONVERSION

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|------------|---------------------|----------|
| designed | Crispin Schurr | Oct 2004 |
| drawn | Stajana Radivojevic | Oct 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | |

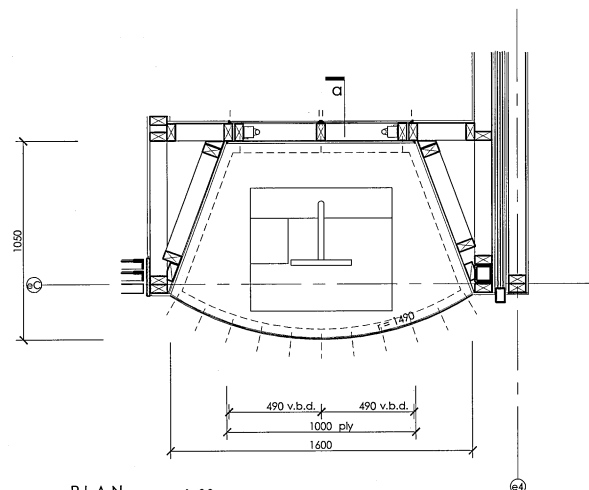
JOINERY

| | | |
|----------|----------|------|
| scale | 1:20/1:5 | rev. |
| contract | 04/05-02 | |
| sheet | WD 05-2 | |

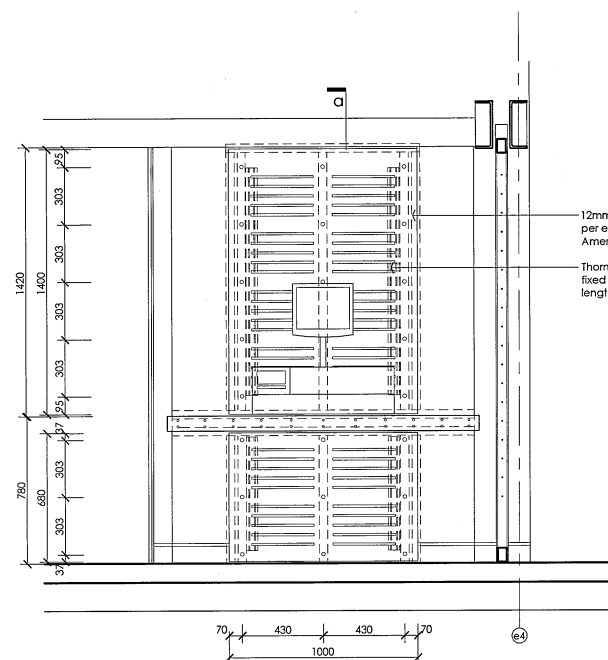
CHRISTCHURCH CITY COUNCIL
 CONSENT DOCUMENT
 - 1 FEB 2005
 This document must be read in conjunction with the New Zealand Resource Management Act 1991 and the Resource Management Act 1991 Regulations 1992. It is a condition of consent that the applicant must comply with the conditions of consent and the specifications.

1/4 01/2 CAFE SERVERY BENCH / LEANER

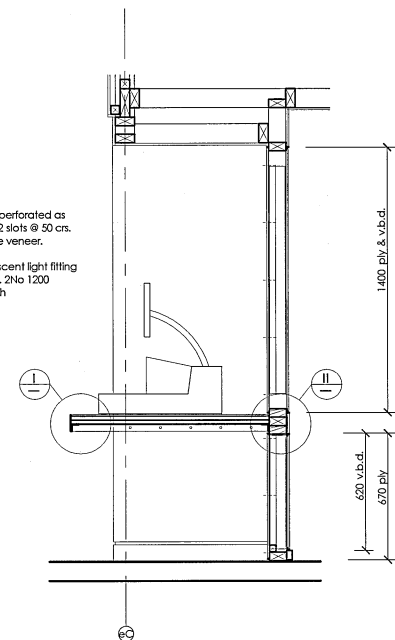
25943 / 01



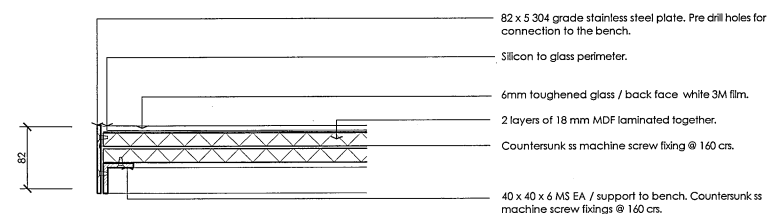
PLAN 1:20
ply - Perforated plywood panel dimension
v.b.d. - Villa board Removable Panel Dimension



ELEVATION 1:20

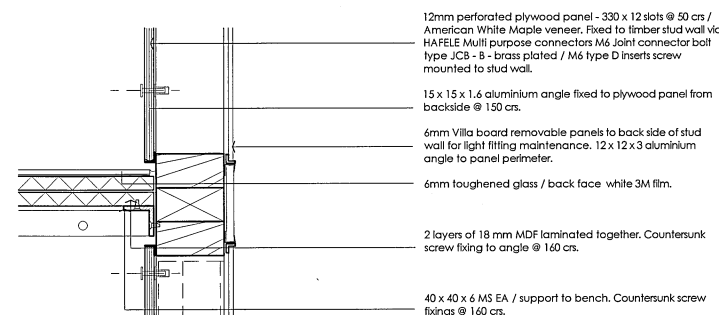


SECTION 1:20
ply - Perforated plywood panel dimension
v.b.d. - Villa board Removable Panel Dimension



DETAIL I

1:5



DETAIL II

1:5

Note:
Paint system finish as per specification to all stud wall visible framework and backside of removable Villa board panels.

13 SELF ISSUES DESK

Notes:

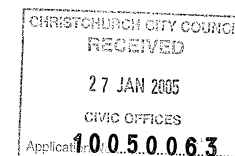
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| # | revision | by | date |



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PROPOSED BUILDING CONVERSION

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| designed | Crispin Schurr | Oct 2004 |
| drawn | Silvana Radivojevic | Oct 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
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| approved | | // |

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| | | |
|----------|------------|------|
| scale | 1:20 / 1:5 | rev. |
| contract | 0405-02 | A |
| sheet | WD 05-3 | |

25943 / 01

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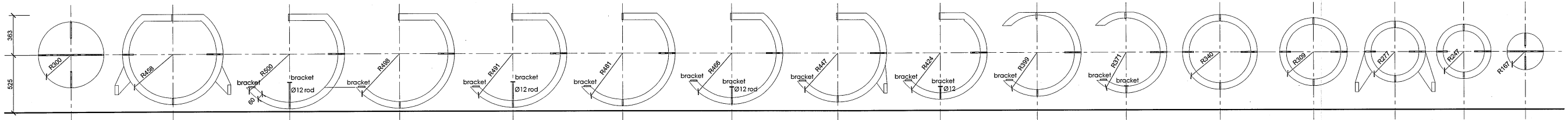
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mm

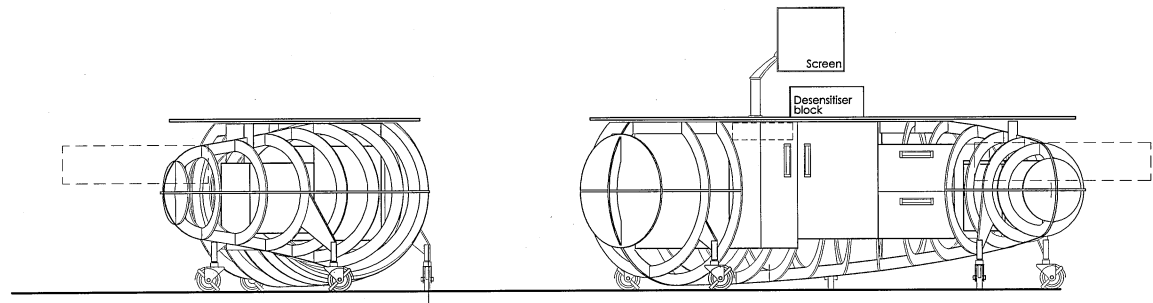
Original size



CSP RIB PROFILES

1:20

Architect to supply 1:1 templates for cutting
All profiles formed in 6mm mild steel flat
Profiles can be weld jointed at base and top to reduce sheet wastage
Setout profiles on sheet as series within one another to minimise wastage
75x50mm bracket attachment to u/side of cupboard rebated flush - fix via 4No c/sunk screws each

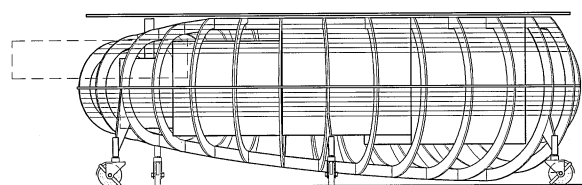


CSP SIDE ELEVATION

1:20

CSP REAR ELEVATION

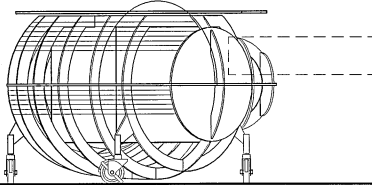
1:20



CSP FRONT ELEVATION

1:20

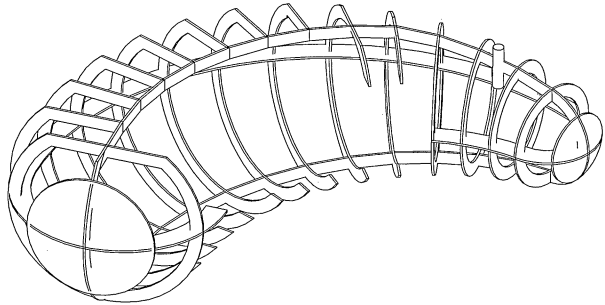
16No Ransan Ø3 tensioned stainless steel wire @ 25 c/s vertically
Run longitudinally through Ø4mm holes full length of front face
Individually tension each with Ransan swage Terminal and tensioner



CSP SIDE ELEVATION

1:20

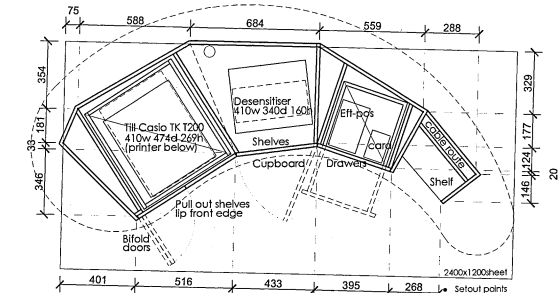
5No Rex CHS 125 rubber stem castor superwheel - dual brake.
Cylindrical insert to SHS for wheel fixing.



CSP FRAME AXONOMETRIC

(n.f.s.)

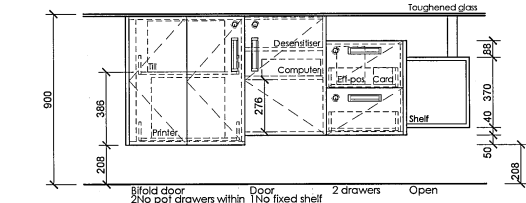
Structure only - refer to details for bracket connections
All joints neat fillet weld all round
Finish - polyester powder coat metallic grey - gunmetal



CUPBOARD SETOUT

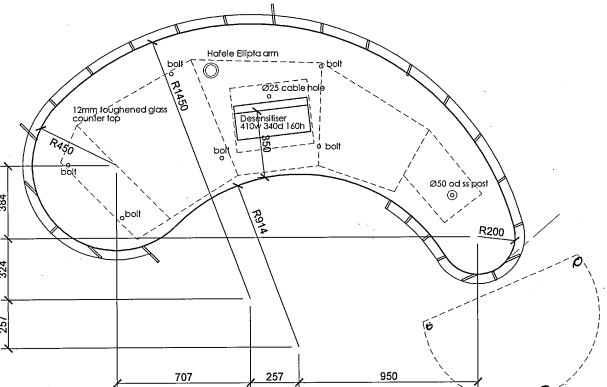
1:20

Carcase / doors / drawer fronts 17mm maple ply - clash edges 2mm solid maple
Drawers / shelves 12mm maple ply - clash edges 2mm solid maple
Handles Hettich 9995412 silver anodised aluminium recessed pulls 143x334
Drawer runners Hafele 43KTS soft roller to suit
Doors fixed on flush overlay hinges
Locks to each Hafele Rondell Inlaid Flap Lock with pin cylinder / master keyed
Allow for misc ventilation holes to be advised



CUPBOARD TRUE ELEVATION

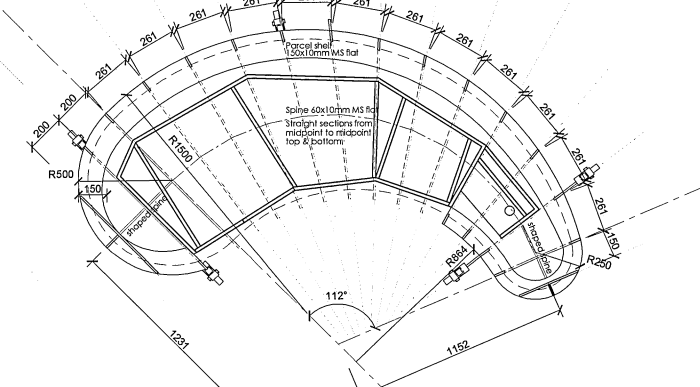
1:20



WORK SURFACE

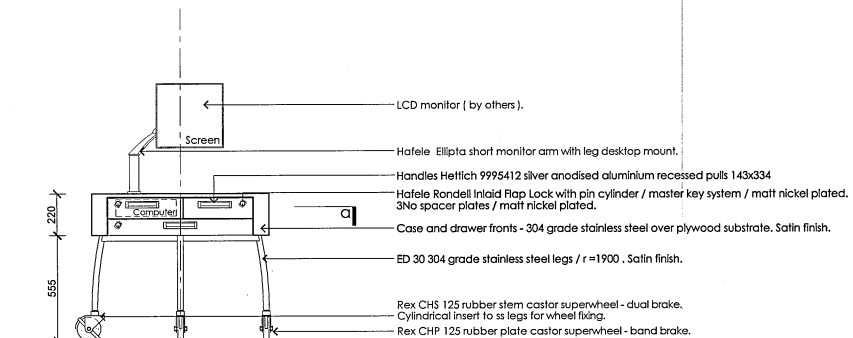
1:20

12mm toughened Asahi Green counter top
Back face baked white enamel finish
Ø 10mm countersunk stainless steel bolt fixing setout to be provided by specialist subcontractor
In agreement with Architect - smoke eye heads
Provide neoprene washers / spacers to all connections

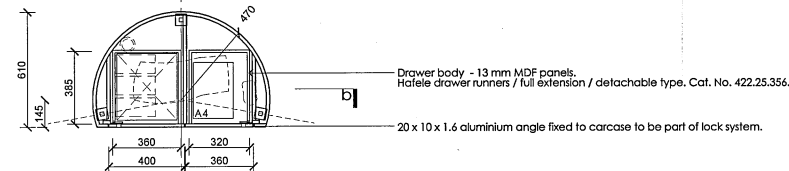


FRAME SETOUT

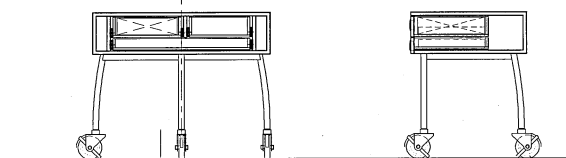
MS frame to be assembled and polyester powdercoated
Dark metallic silver



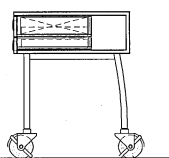
ELEVATION



SECTION a



SECTION b



SECTION c



MEMBERSHIP POD

1:20

Hafele Ellipta short monitor arm with leg desktop mount
SF 318W x 89H x 353D (Dell Optiplex SX2700)
To be installed with SF PC with trackball keyboard and LCD monitor (by others)

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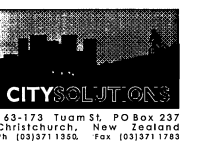
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| | | | |
|---|--------------|----|----------|
| A | Construction | CS | 21/01/05 |
| 3 | Tender | CS | 11/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| # | revision | by | date |



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|------------|----------------|----------|
| designed | Crispin Schurr | Oct 2004 |
| drawn | Crispin Schurr | Oct 2004 |
| dsg. check | CS | Jan 05 |
| dwg. check | CS | Jan 05 |
| indexed | | |

approved

JOINERY

| | | |
|----------|----------|------|
| scale | 1:20 | rev. |
| contract | 04/05-02 | |
| sheet | WD 05-4 | |

25943 / 01

CHRISTCHURCH CITY COUNCIL
 PRO
 CONSENT DOCUMENT
 - 1 FEB 2005
 All applications must comply with the New Zealand
 Resource Management Act 1991 and the Resource Management
 Act 1991 Regulations 1992.

path: c:\design\architectural\0100

AutoCAD 2000

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200

100

50

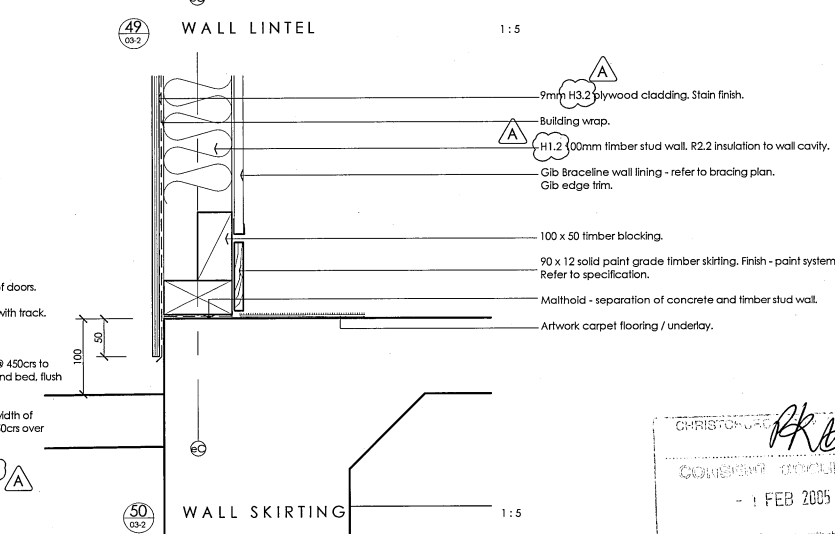
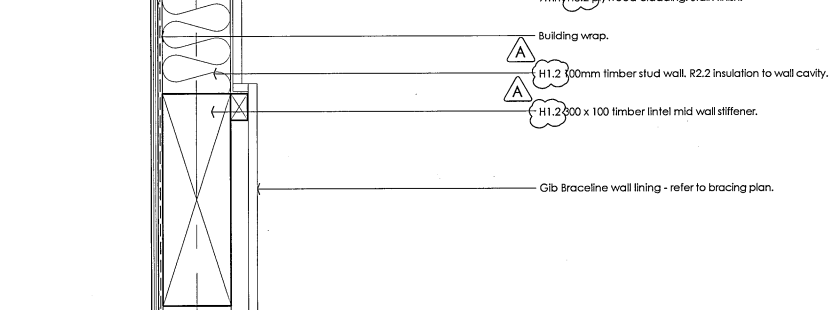
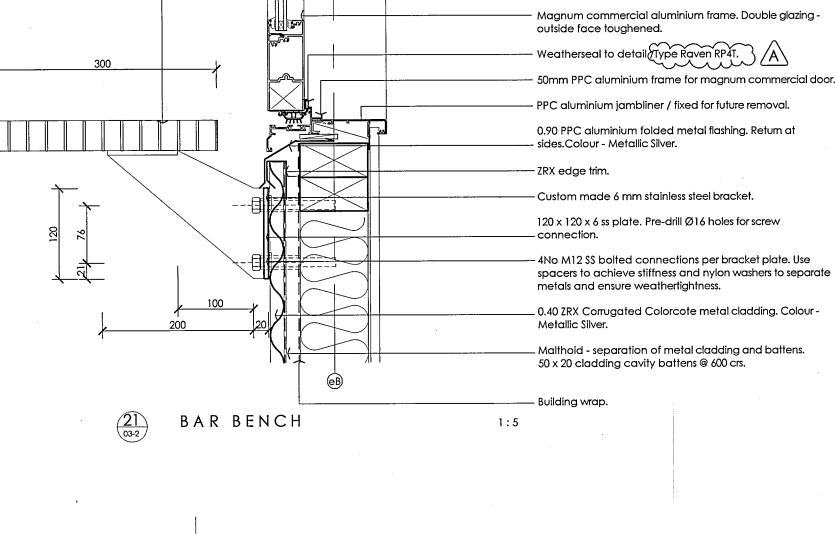
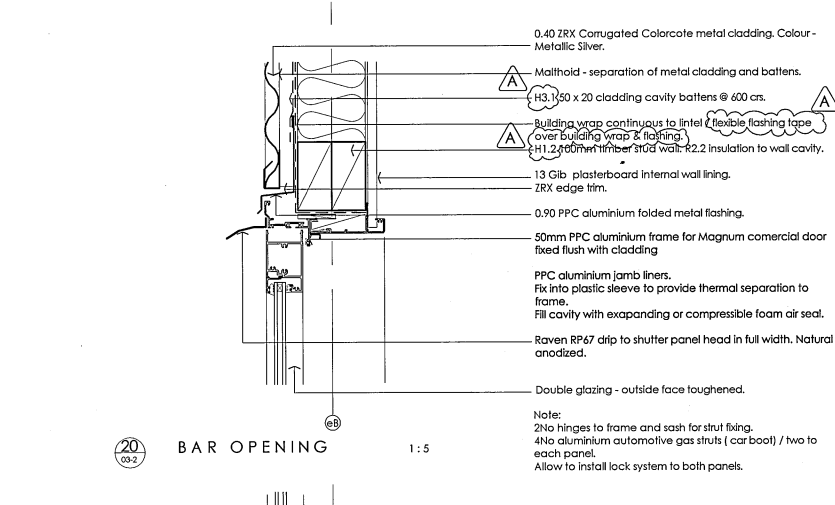
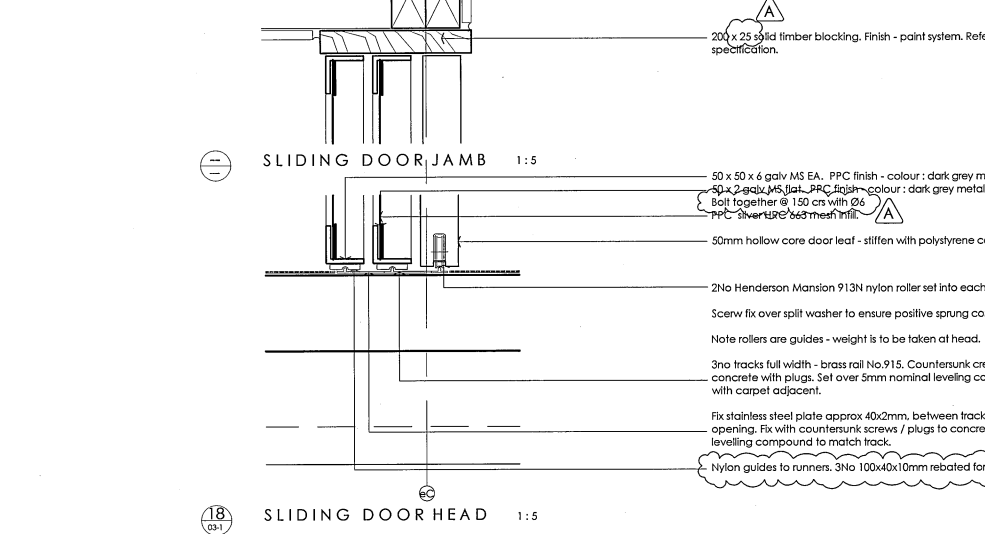
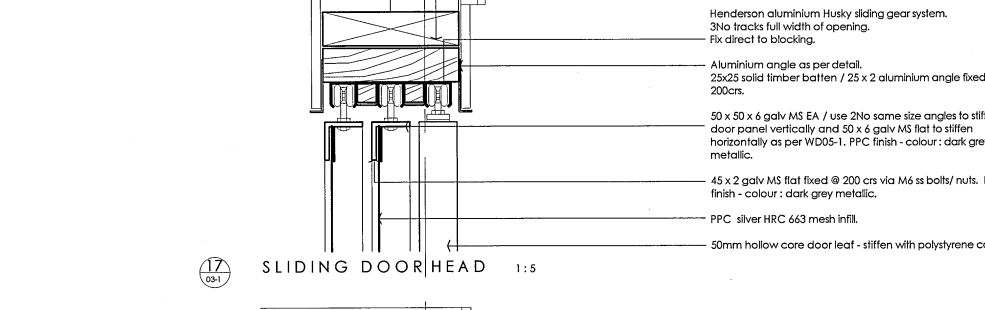
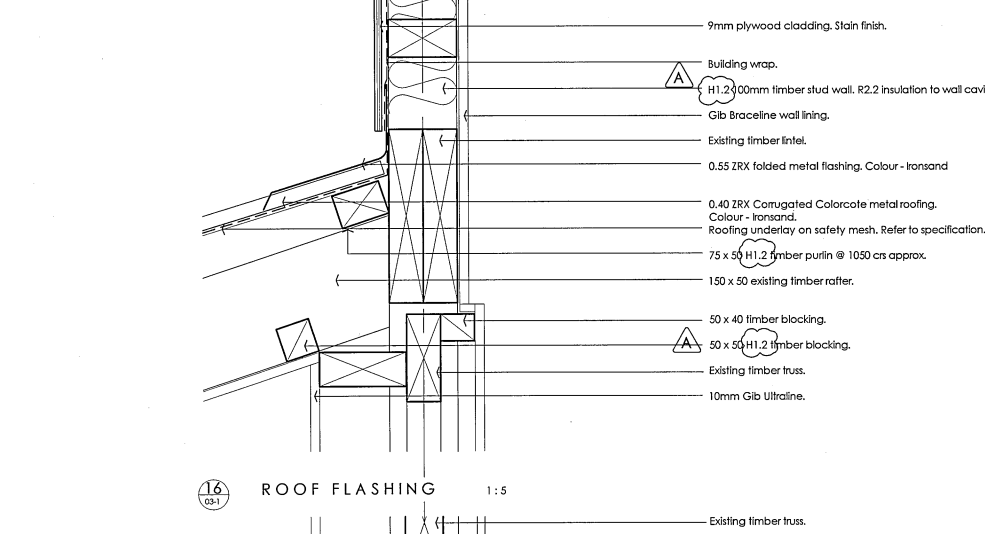
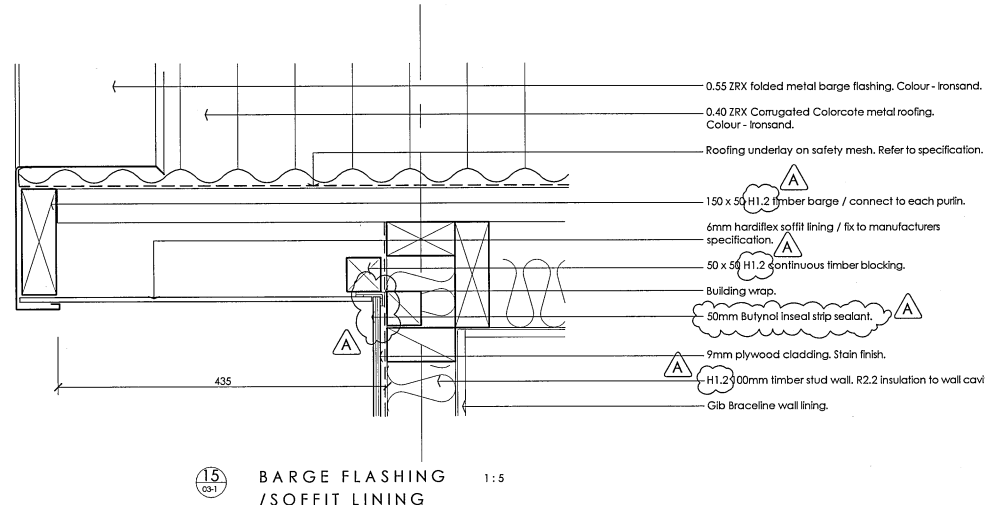
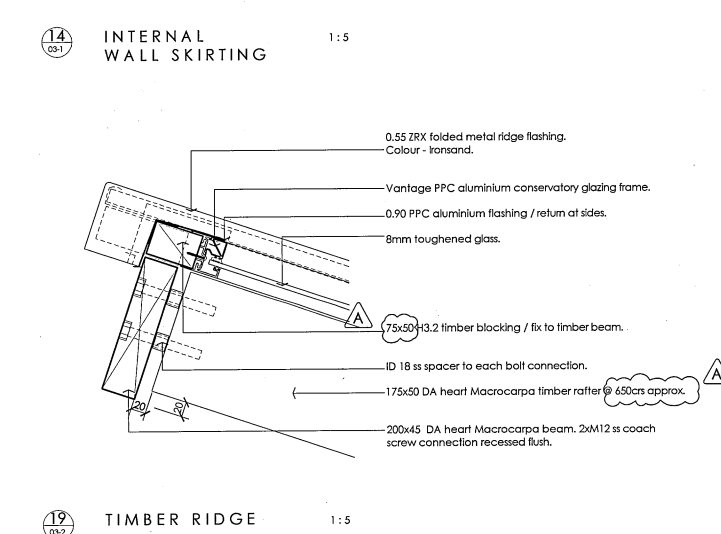
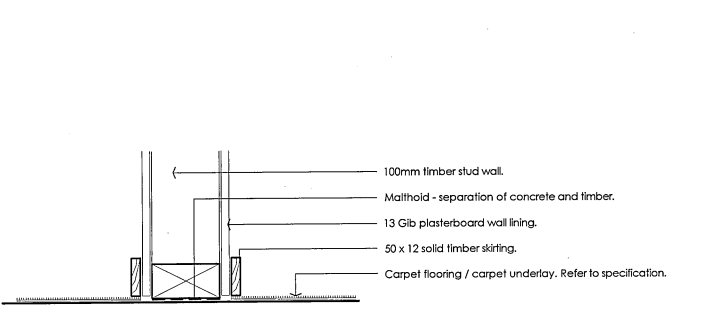
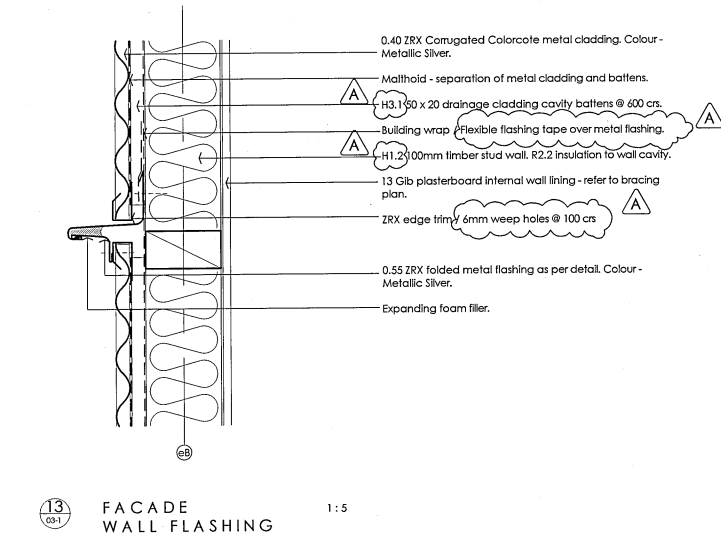
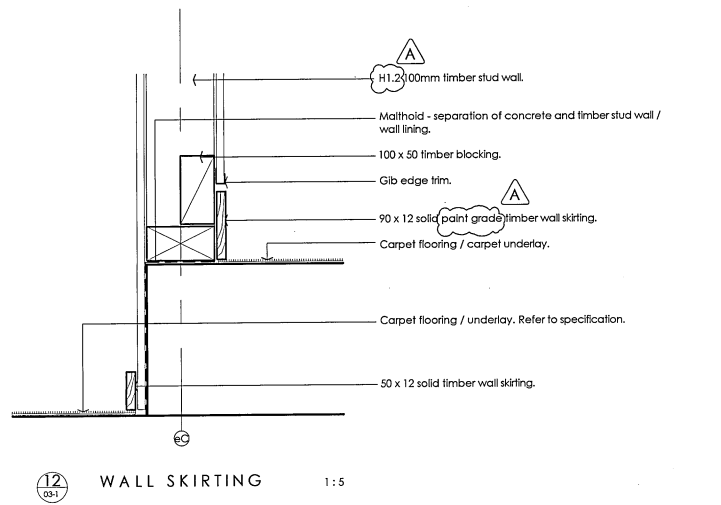
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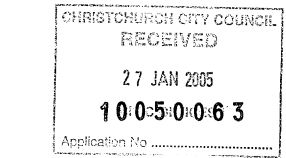
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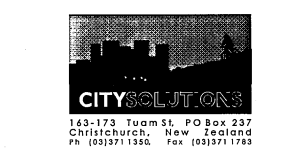
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|---|---------------|----|----------|
| A | Construction | CS | 24/01/05 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |



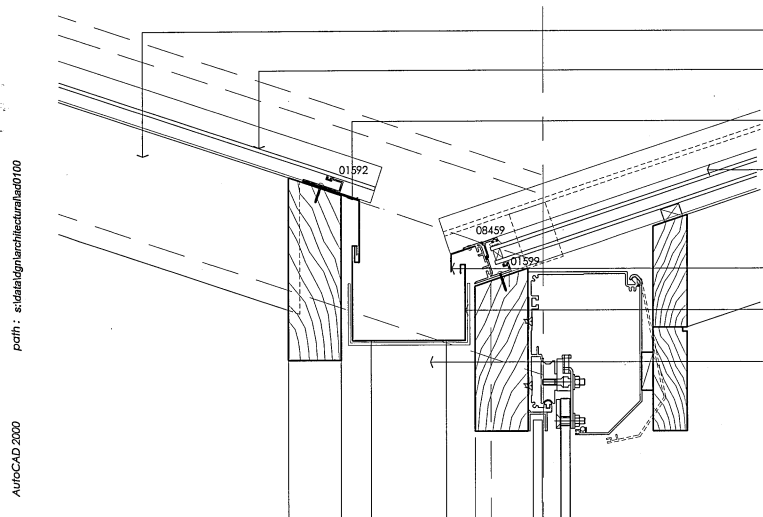
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PROPOSED BUILDING CONVERSION

| | | |
|------------|---------------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Stajana Radivojevic | Sept 2004 |
| dsg. check | CS | Jan 05 |
| dwg. check | CS | Jan 05 |
| indexed | | |
| approved | | |

DETAILS

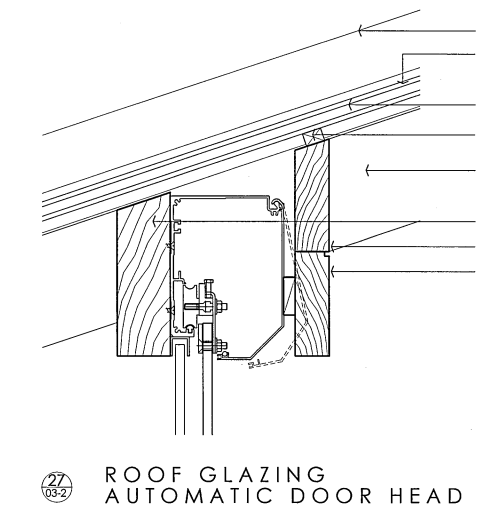
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| scale | 1:5 | rev. | A |
| contract | 04/05/02 | | |
| sheet | WD 06-2 | | |

25943 / 01



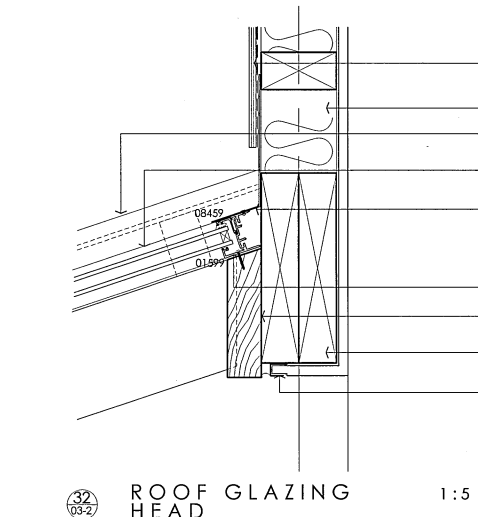
22
03-2

ENTRY DOOR HEAD 1:5



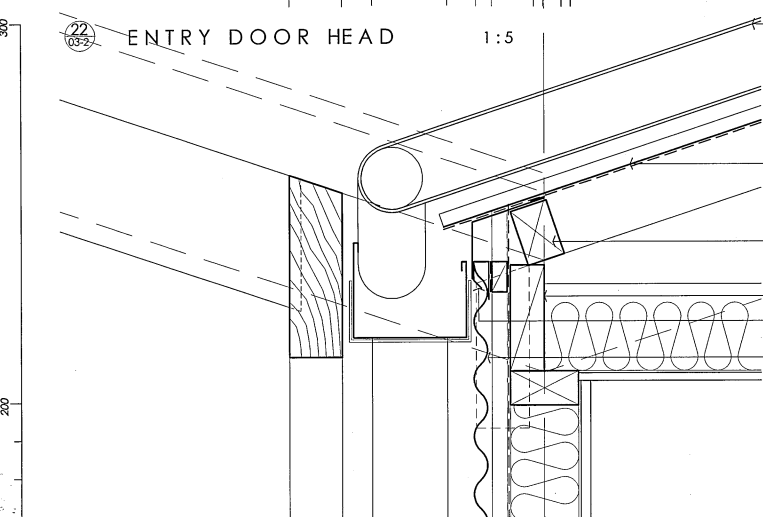
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03-2

ROOF GLAZING AUTOMATIC DOOR HEAD 1:5



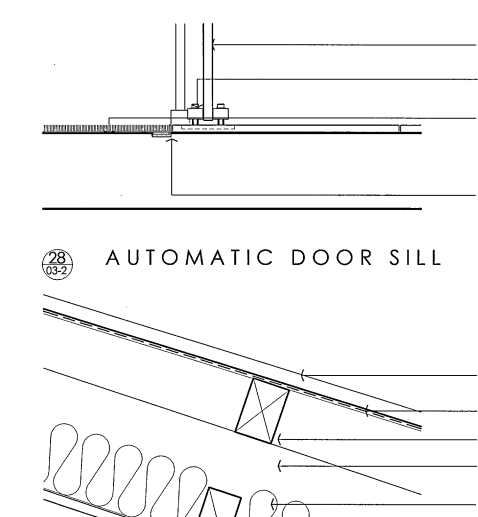
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03-2

ROOF GLAZING HEAD 1:5



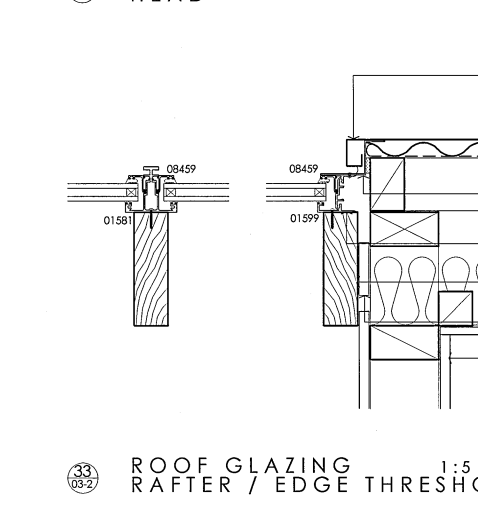
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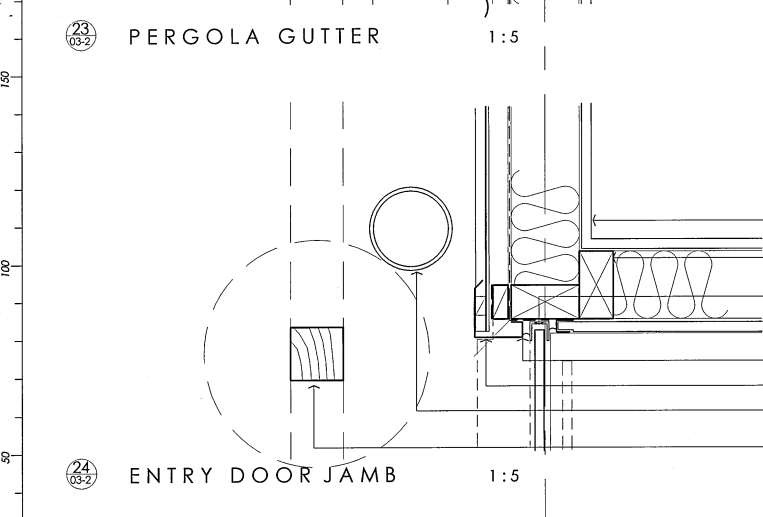
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AUTOMATIC DOOR SILL 1:5



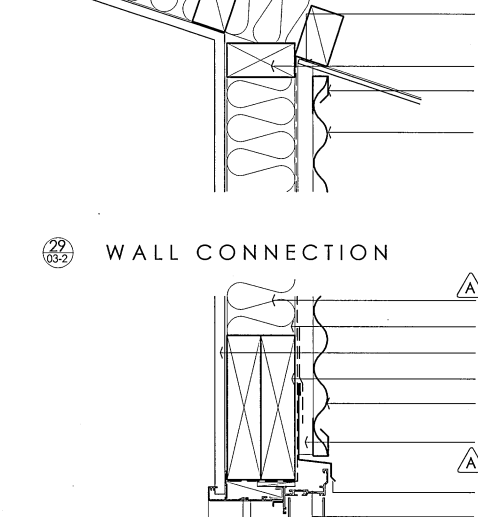
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03-2

ROOF GLAZING RAFTER / EDGE THRESHOLD 1:5



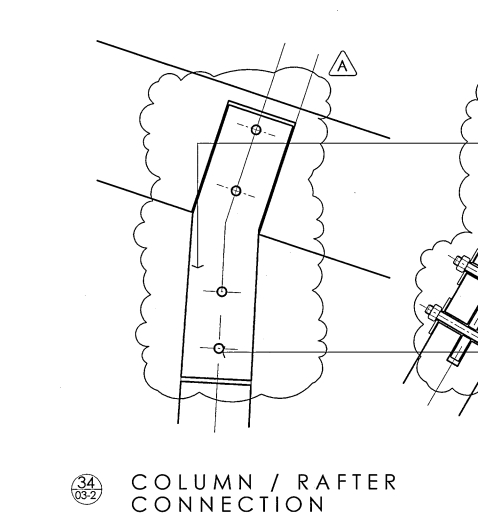
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ENTRY DOOR JAMB 1:5



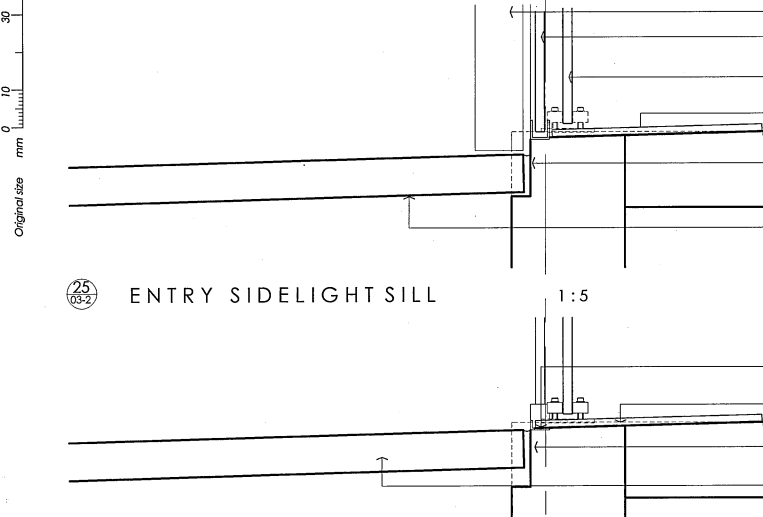
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WALL CONNECTION 1:5



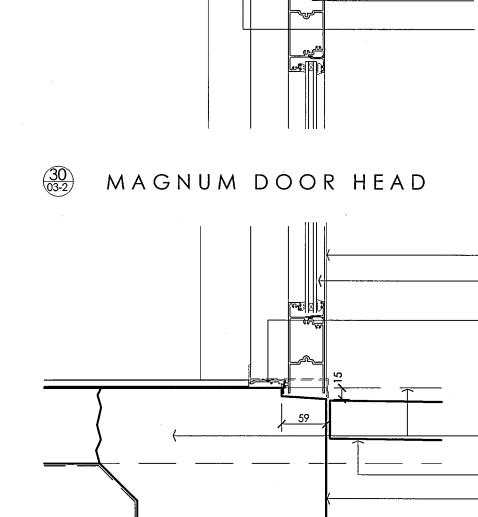
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03-2

COLUMN / RAFTER CONNECTION 1:5



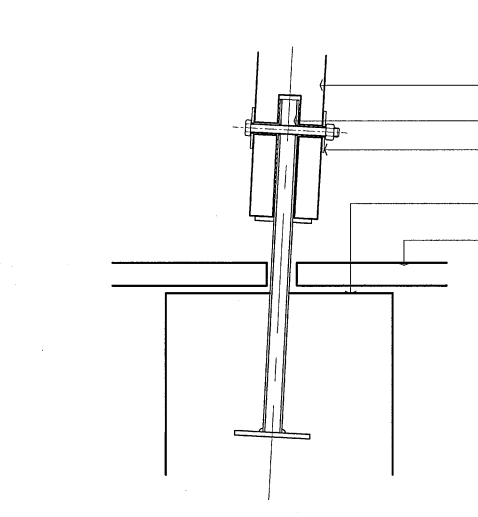
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03-2

ENTRY SIDELIGHT SILL 1:5



30
03-2

MAGNUM DOOR HEAD 1:5



35
03-2

COLUMN / FOOTING CONNECTION 1:5



26
03-2

ENTRY DOOR SILL 1:5



31
03-2

MAGNUM DOOR SILL 1:5

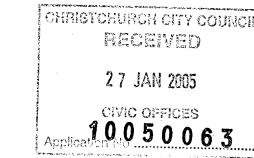
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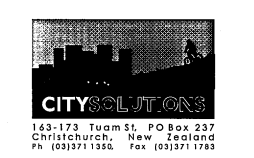
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| 1 | Schedule | CS | 20/09/04 |
| # | revision | by | date |



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| designed | Crispin Schurr | Sept 2004 |
| drawn | Crispin Schurr | Sept 2004 |
| dsq check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |

approved _____

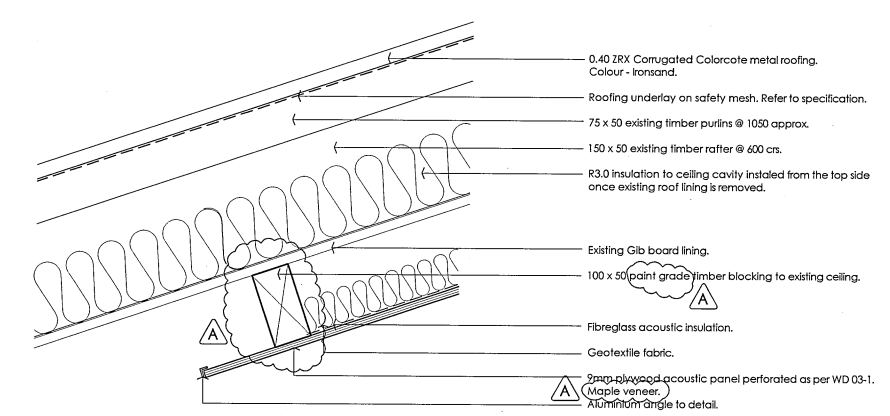
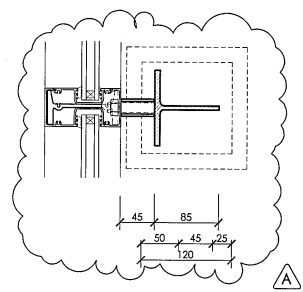
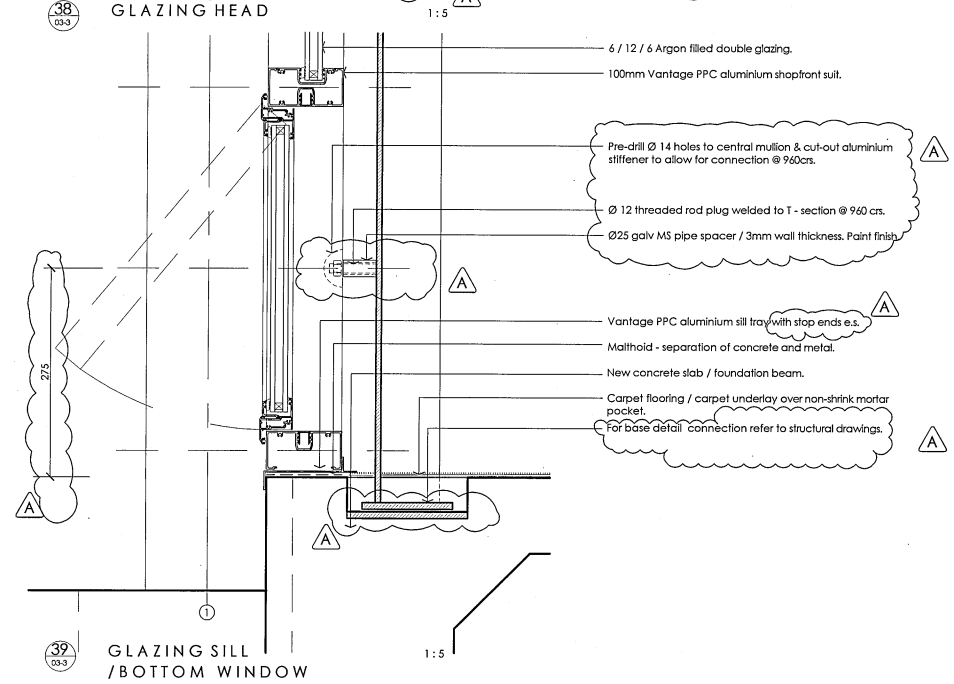
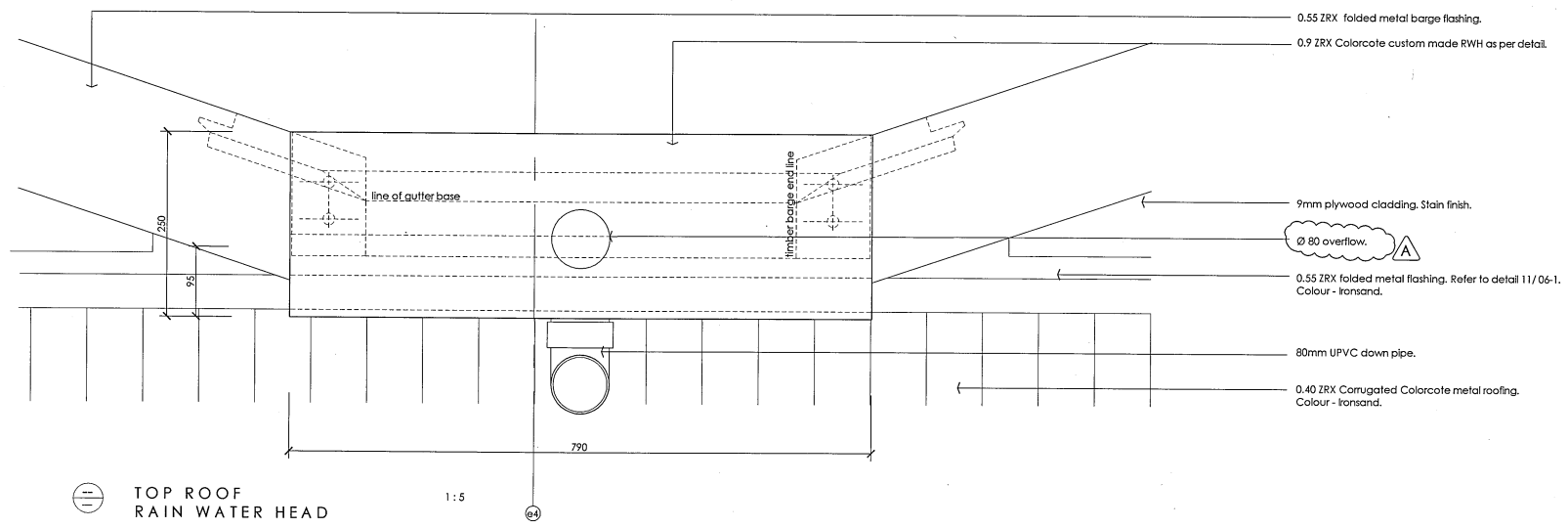
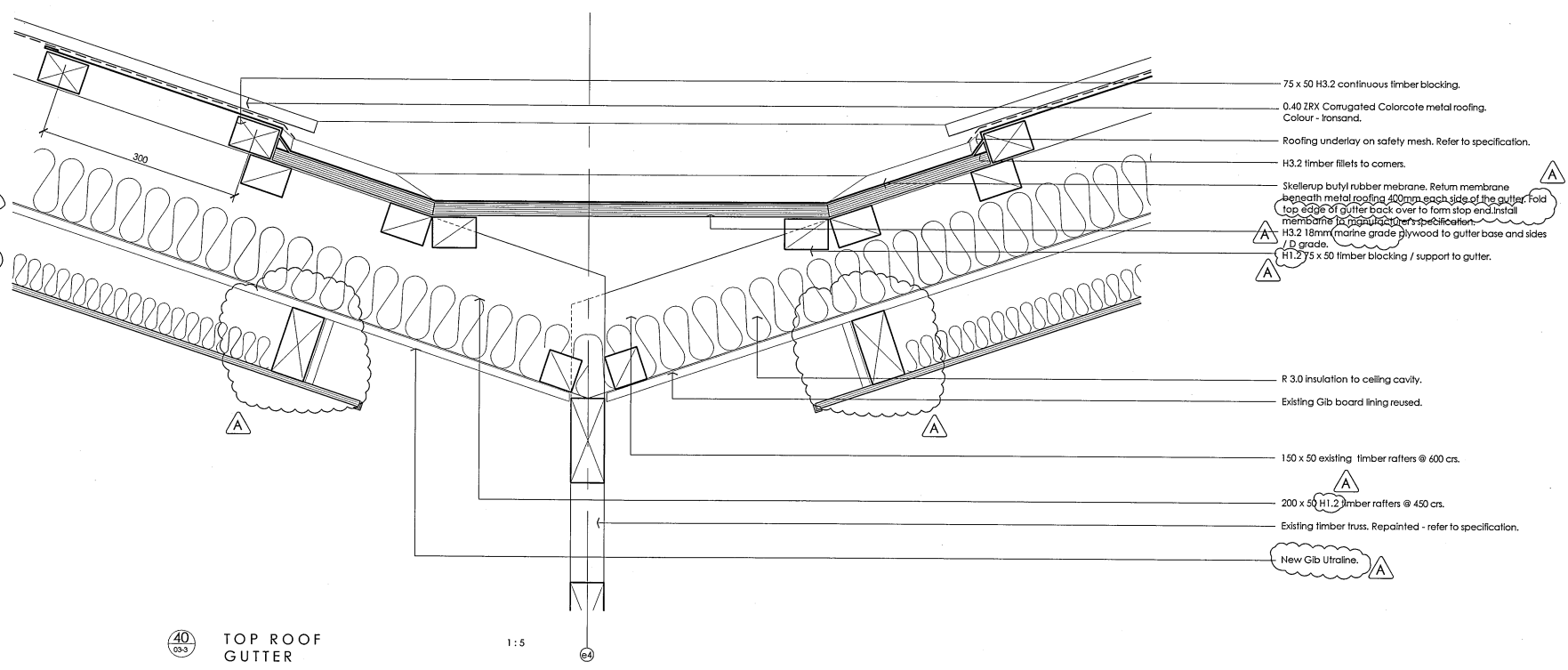
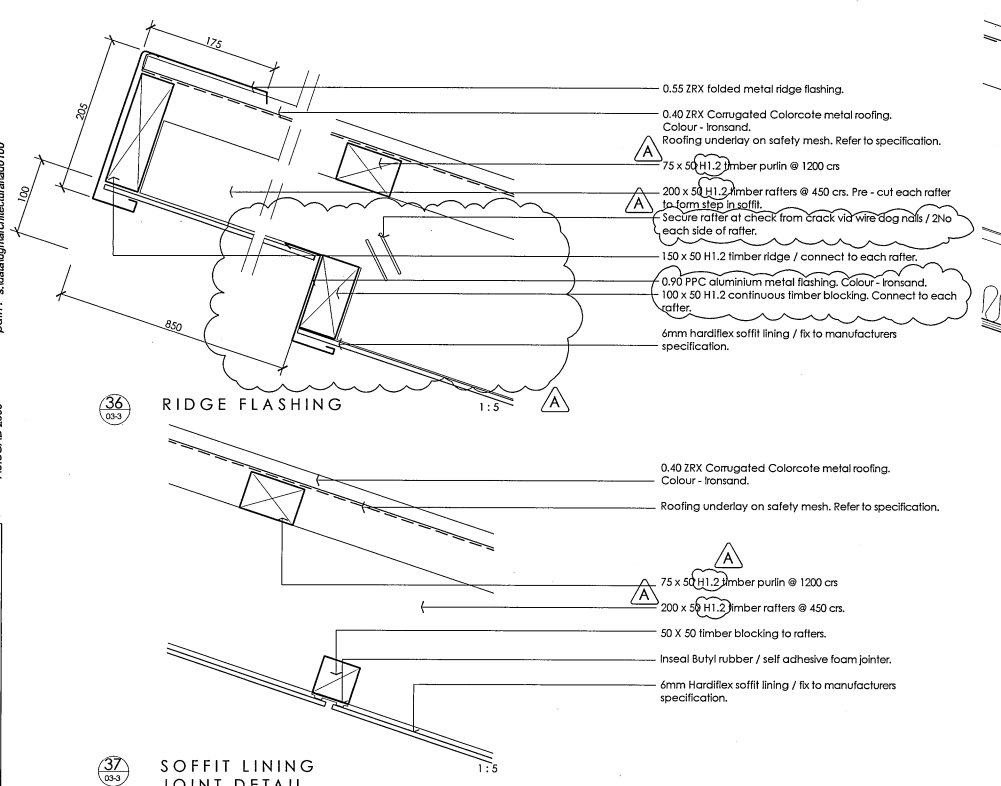
DETAILS
SHEET 3

| | | |
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| contract | 04/05-02 | A |
| sheet | WD 06-3 | |

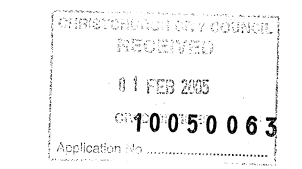
25943 / 01

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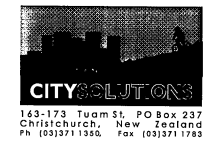
300
200
150
100
50
30
10
0
Original size mm



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| | | | |
|---|---------------|----|----------|
| A | Construction | CS | 28/01/05 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |



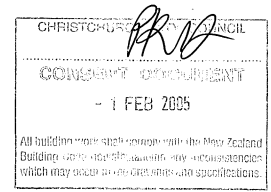
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| | | |
|------------|---------------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Stadana Radivojevic | Sept 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | |

DETAILS

| | | | |
|----------|---------|------|--|
| scale | 1 : 5 | rev. | |
| contract | 0405-62 | | |
| sheet | WD 06-4 | | |

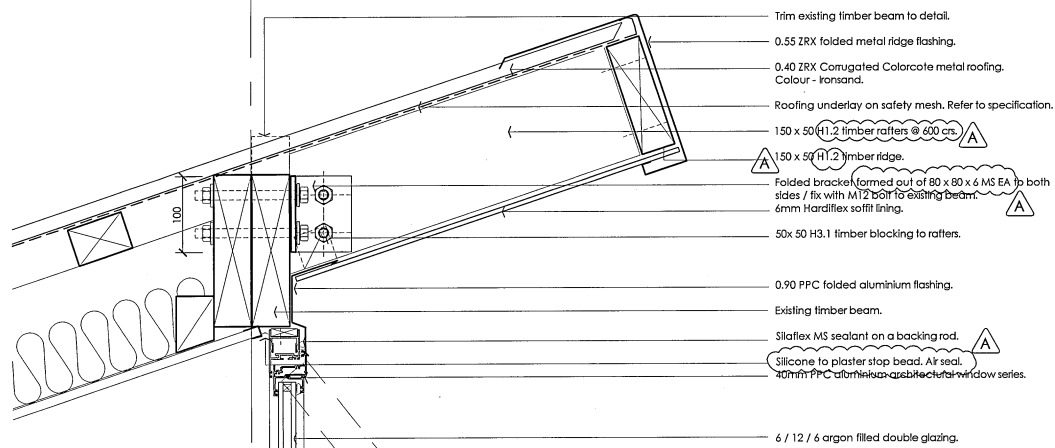
25943 / 01



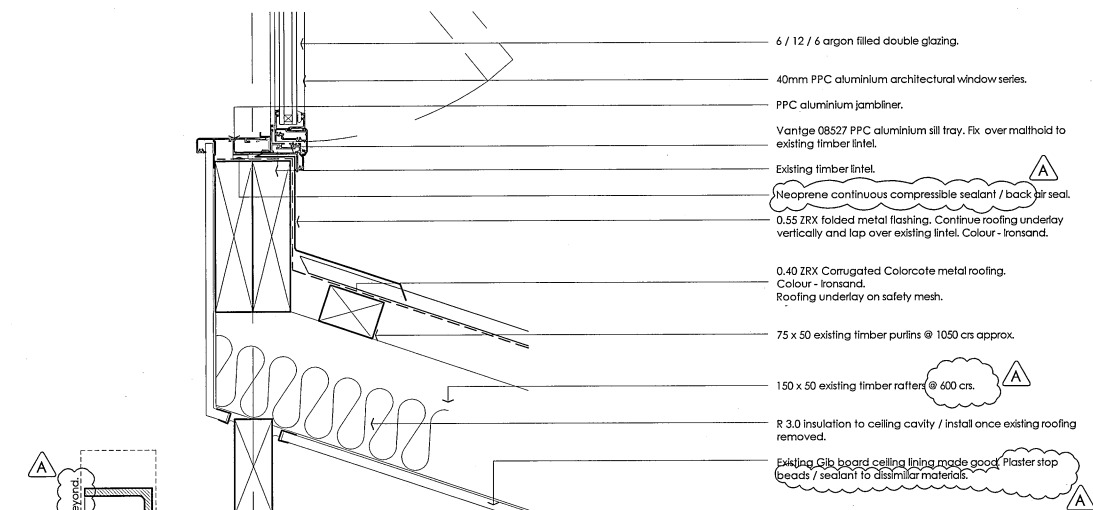
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AUSCAD 2000

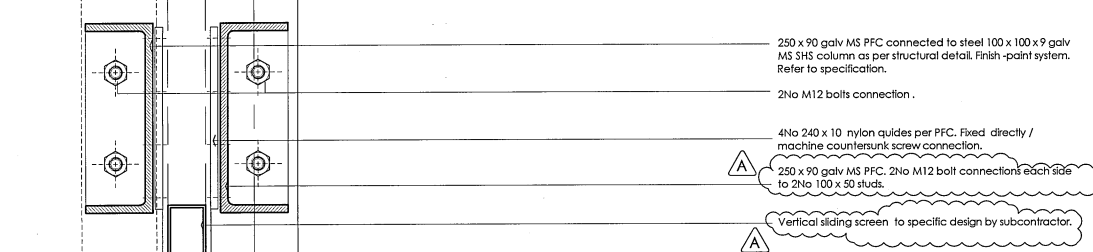
Original size mm 1:1
300
200
150
100
50
30
10
0



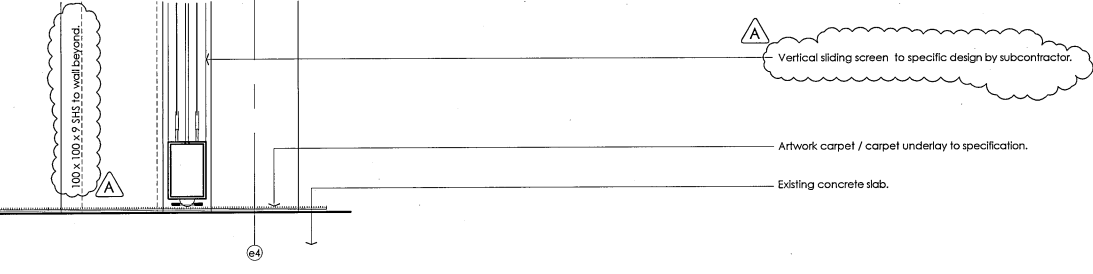
42 RIDGE / SOFFIT WINDOW HEAD DETAIL 1:5



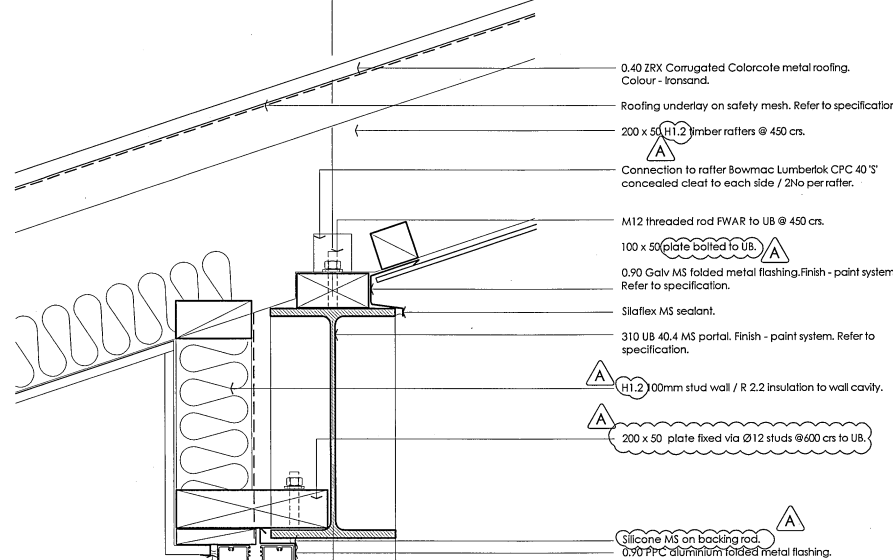
43 ROOF FLASHING WINDOW SILL DETAIL 1:5



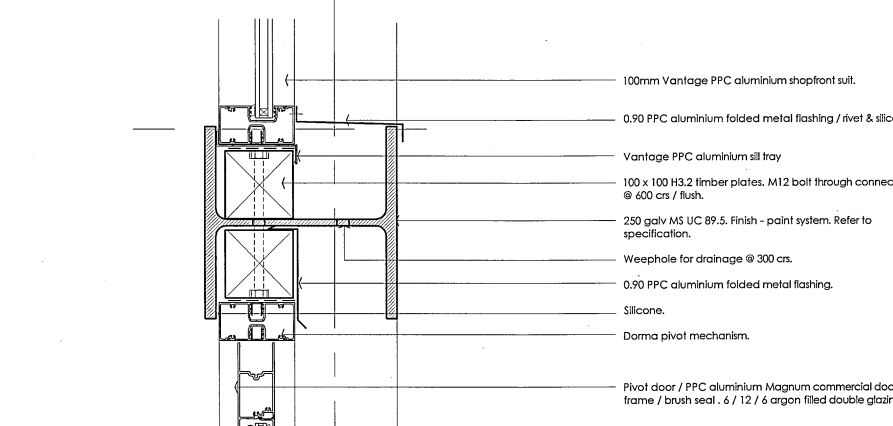
44 MOVABLE PANEL SUPPORT GUIDE 1:5



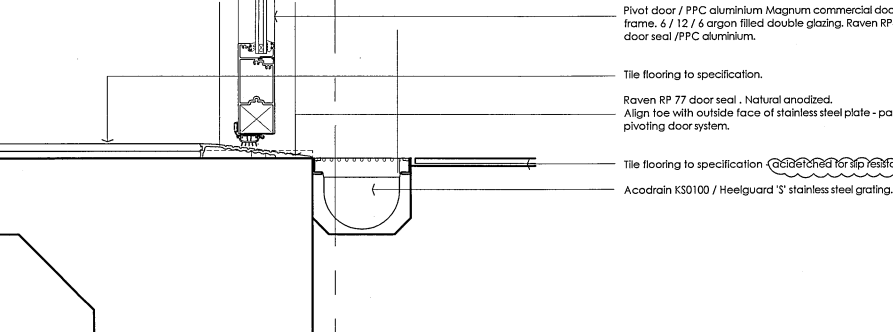
45 MOVABLE PANEL BASE DETAIL 1:5



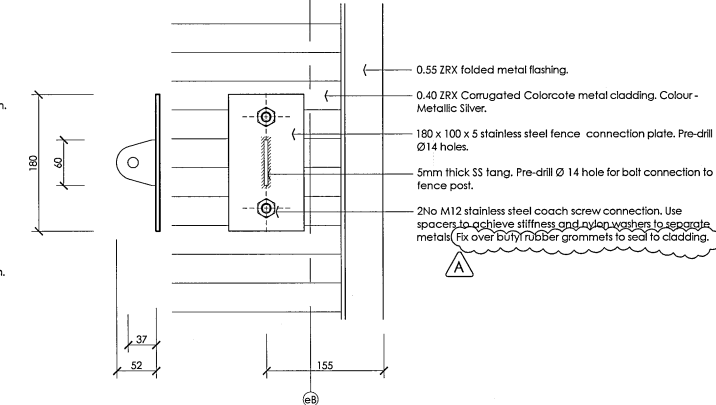
46 STEEL PORTAL 1:5



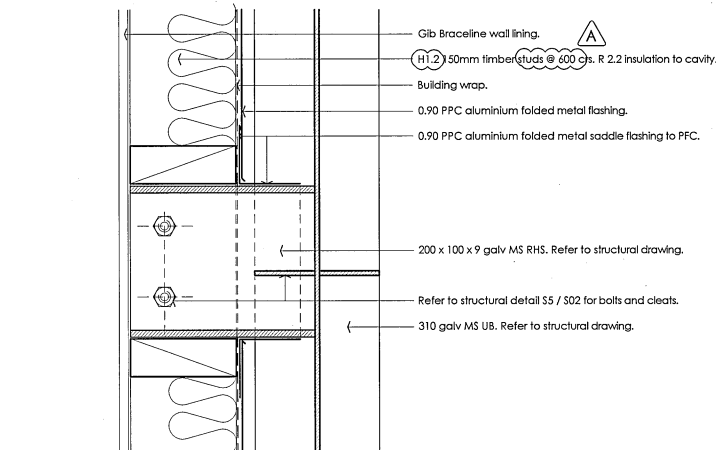
47 STEEL BRACING / DOOR HEAD 1:5



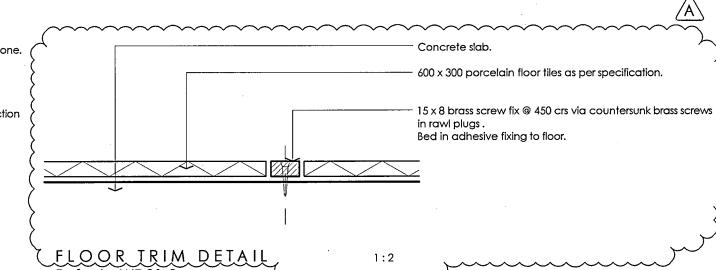
48 ACO DRAIN / DOOR SILL 1:5



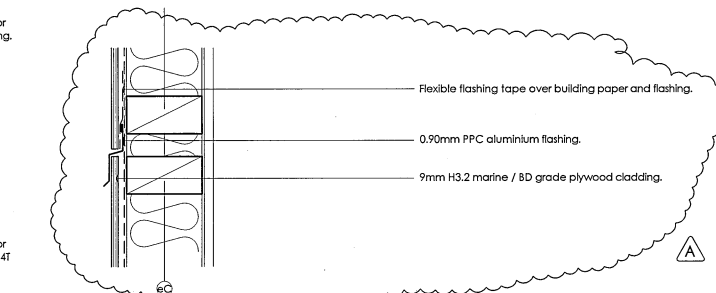
SECTION a Refer to detail 3 / WD06-1



SECTION b Refer to detail 5 / WD06-1



FLOOR TRIM DETAIL Refer to WD01-2



51 PLYWOOD CLADDING HORIZONTAL JOINT 1:5

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| | | | |
|---|---------------|----|----------|
| A | Construction | CS | 26/01/04 |
| 3 | Tender | CS | 11/10/04 |
| 2 | Tender | CS | 08/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |

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Christchurch, New Zealand
Ph (03)371 1355 Fax (03)371 1793

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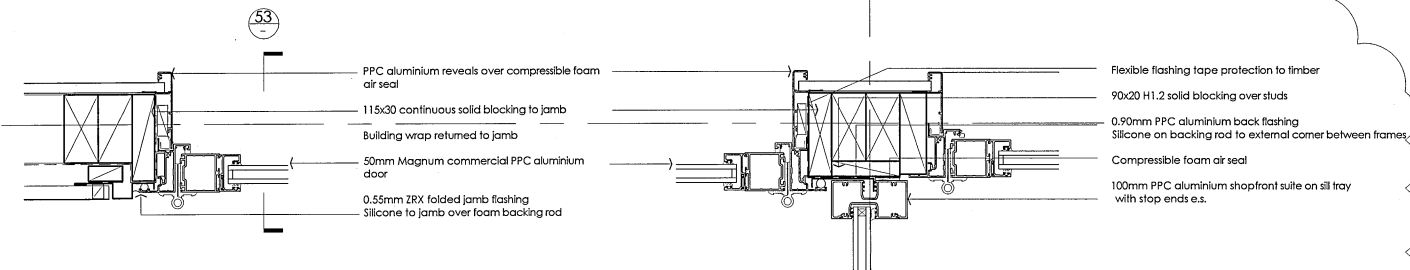
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|------------|---------------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Stajana Radivojevic | Sept 2004 |
| dsg. check | CS | Jan 05 |
| dwa check | CS | Jan 05 |
| indexed | | |
| approved | | // |

DETAILS

| | | |
|----------|----------|------|
| scale | 1 : 5 | rev. |
| contract | 04/05/02 | A |
| sheet | WD 06-5 | |

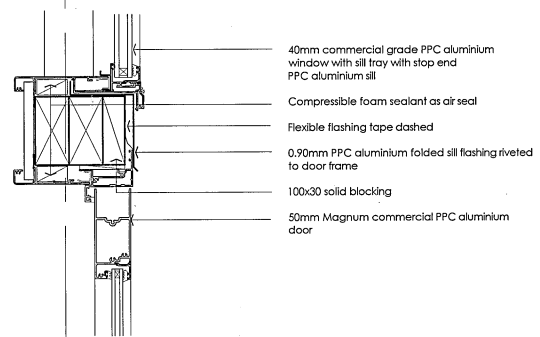
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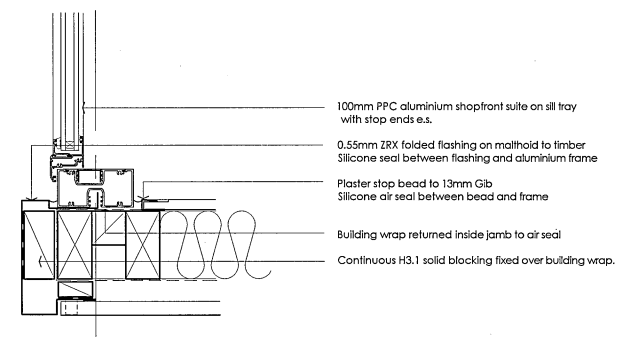


52 MAGNUM DOOR JAMB TYPICAL 1:5

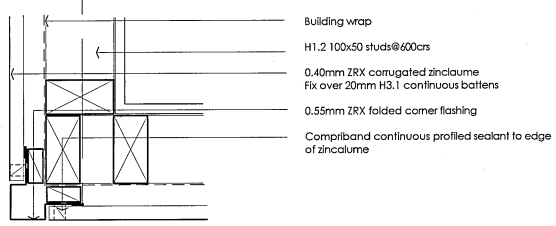
56 MAGNUM DOORS / SHOPFRONT JUNCTION 1:5



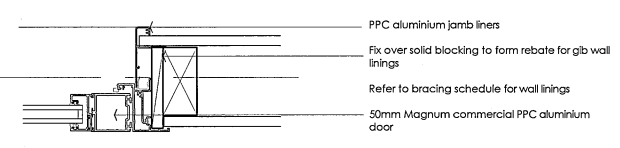
53 MAGNUM DOOR HEAD WINDOW SILL 1:5



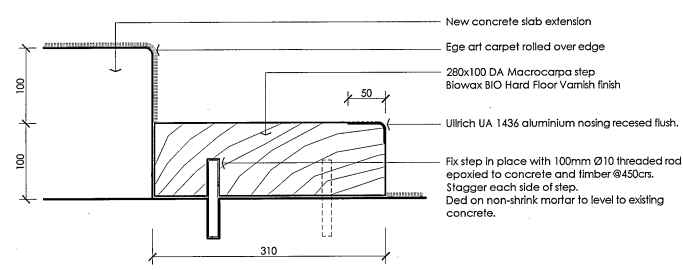
57 SHOPFRONT SUITE / WING WALL FLASHING 1:5



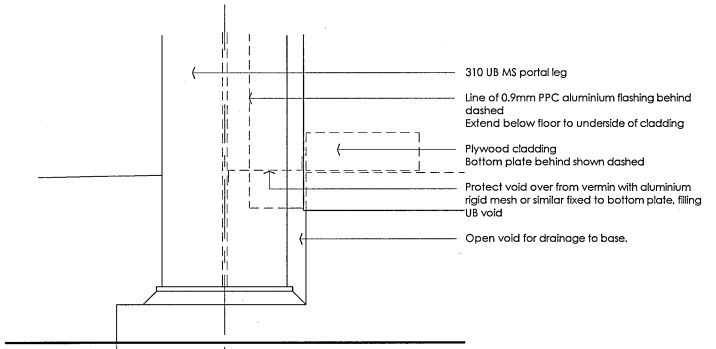
54 CORRUGATED CLADDING TYPICAL EXTERNAL CORNER 1:5



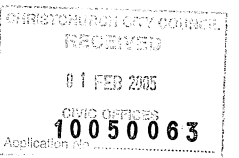
58 MAGNUM DOOR INTERNAL JAMB 1:5



55 TIMBER STEP 1:5



59 PORTAL ELEVATION FLASHING DETAIL 1:5



| | | | |
|----------|--------------------|----|----------|
| 11/10/04 | | | |
| A | Construction issue | CS | 21/01/05 |
| # | revision | by | date |



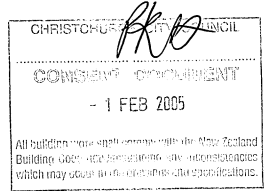
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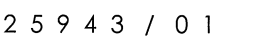
| | | |
|------------|----------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Crispin Schurr | Jan 05 |
| dsg. check | CS | Jan 05 |
| dwg. check | CS | Jan 05 |
| indexed | | |
| approved | | |

DETAILS

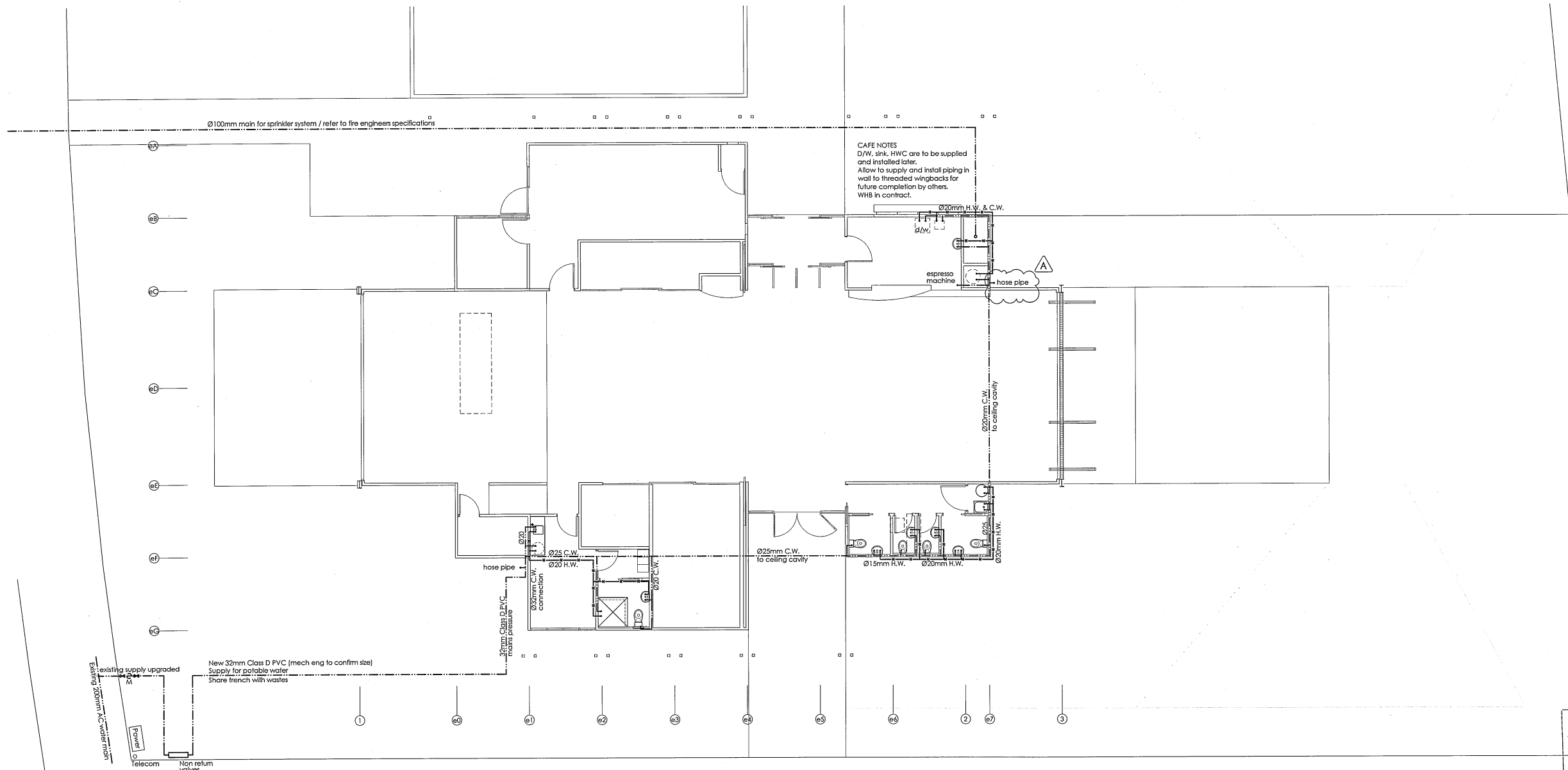
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|----------|----------|------|
| scale | 1:5 | rev. |
| contract | 04/05-02 | A |
| sheet | WD 08-6 | |

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2 5 9 4 3 / 0 1



WATER SUPPLY 1:100

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Any discrepancies are to be referred to the Architect for clarification.

KEY

- Elia wall hung WC
- Elia WC suite
- Lyra wall hung WHB
- refer section A sheet 10
- grid A

| | |
|--------------------|-------|
| SEWER | ----- |
| WATER (cold mains) | ----- |
| STORMWATER | ----- |
| ORION | ----- |
| TELECOM | ----- |
| GAS (TELECOM) | ----- |
| WATER (HOT) | ----- |
| CONDENSATE | ----- |

FINAL CONNECTION SIZES

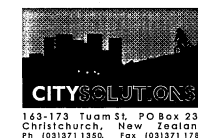
- Ø15 Shower
- Ø15 WC
- Ø15 WHB (HW & CW)
- Ø15 Espresso Machine
- Ø15 Hose pipe
- Ø20 Dishwasher
- Ø20 Sink
- Ø20 Cleaners Tub
- Ø20 Urinal (no cistern)
- Ø20 HWC
- Ø20 Hose pipe

Note:

Condensate drains to discharge to plant boxes at GF level / in copper.



| | | | |
|---|---------------|----|----------|
| A | Construction | CS | 21/01/04 |
| 3 | Tender | CS | 11/10/04 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |

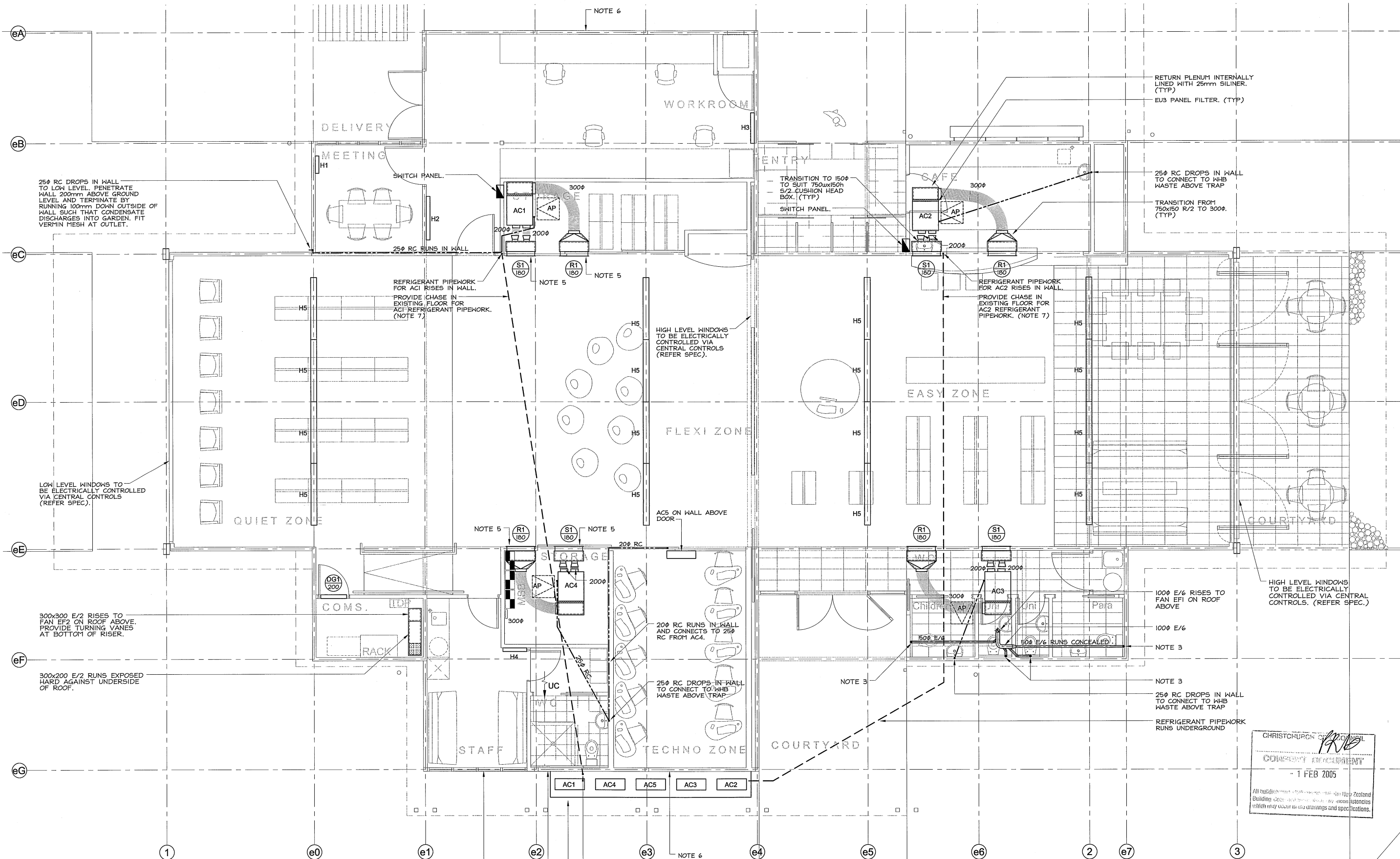


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| | | |
|------------|----------------|----------|
| designed | Crispin Schurr | Aug 2004 |
| drawn | Crispin Schurr | Aug 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | // |

WATER SUPPLY PLAN

| | | |
|----------|---------|------|
| scale | 1:100 | rev. |
| contract | 0405-62 | A |
| sheet | WD 07-2 | |



NOTES

- ALL H5 TYPE HEATERS ARE TO BE FIXED TO THE UNDERSIDE OF EXISTING TRUSSES. WIRING TO BE RUN CONCEALED ABOVE HEATERS
- ACCESS PANELS ARE TO BE 600x600 HINGED PANELS.
- 40 ϕ PVC RISES IN WALL FROM TOILET FLUSH PIPE. TRANSITION TO 50 ϕ IN CEILING.
- TOILET EXTRACT SYSTEM IS A PROPRIETARY ODOUR-VAC SYSTEM. REFER TO SPEC.
- CO-ORDINATE DIFFUSER MOUNTING HEIGHT TO AVOID EXISTING STRUCTURAL MEMBERS.
- HIGH LEVEL WINDOWS ELECTRICALLY CONTROLLED VIA LOCAL WALL SWITCH. CONFIRM EXACT NUMBER AND LOCATION OF ACTUATORS PRIOR TO INSTALLATION.
- PIPEWORK IS TO RUN ABOVE REINFORCING MESH IN SLAB. ADVISE STRUCTURAL ENGINEER IMMEDIATELY IF THIS REQUIREMENT CANNOT BE MET.

| ISSUE | DATE | AMENDMENT | CHECKED |
|-------|----------|--------------|---------|
| A | 07/10/04 | TENDER ISSUE | |

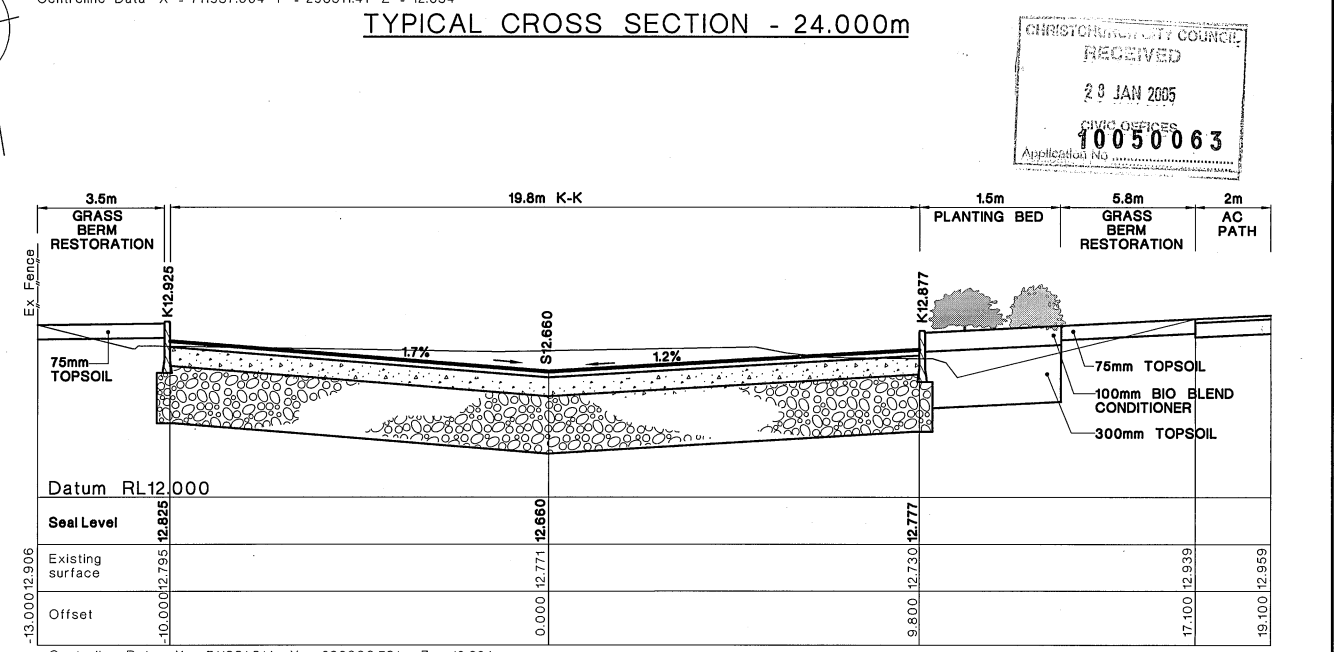
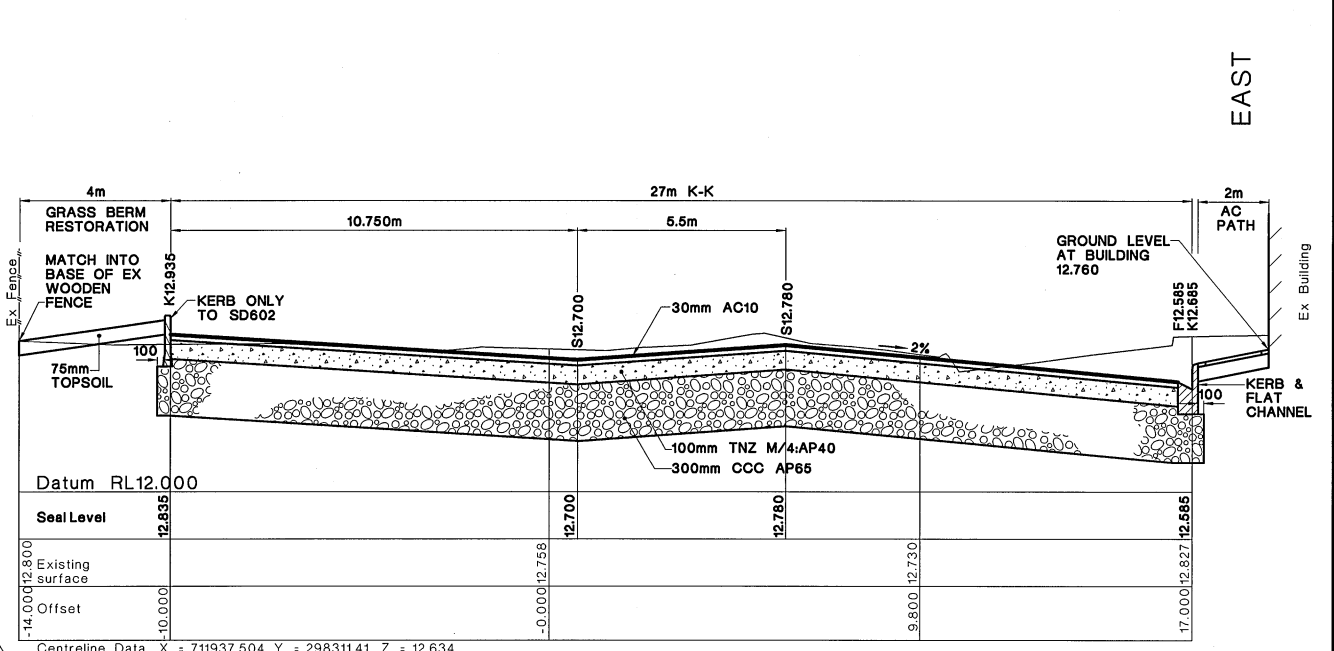
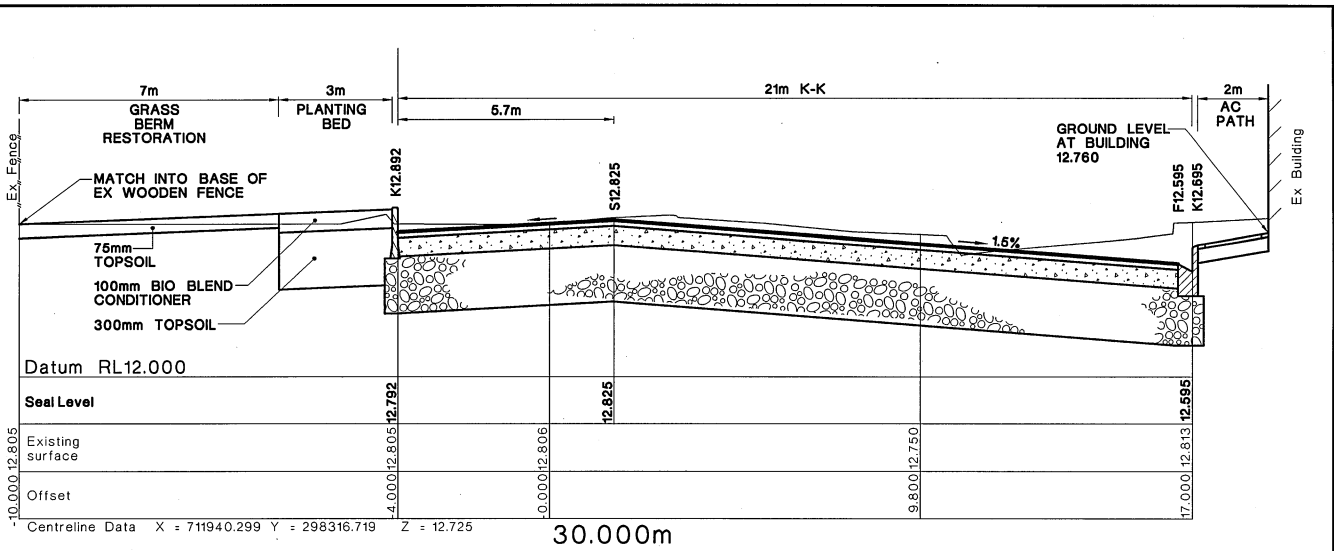
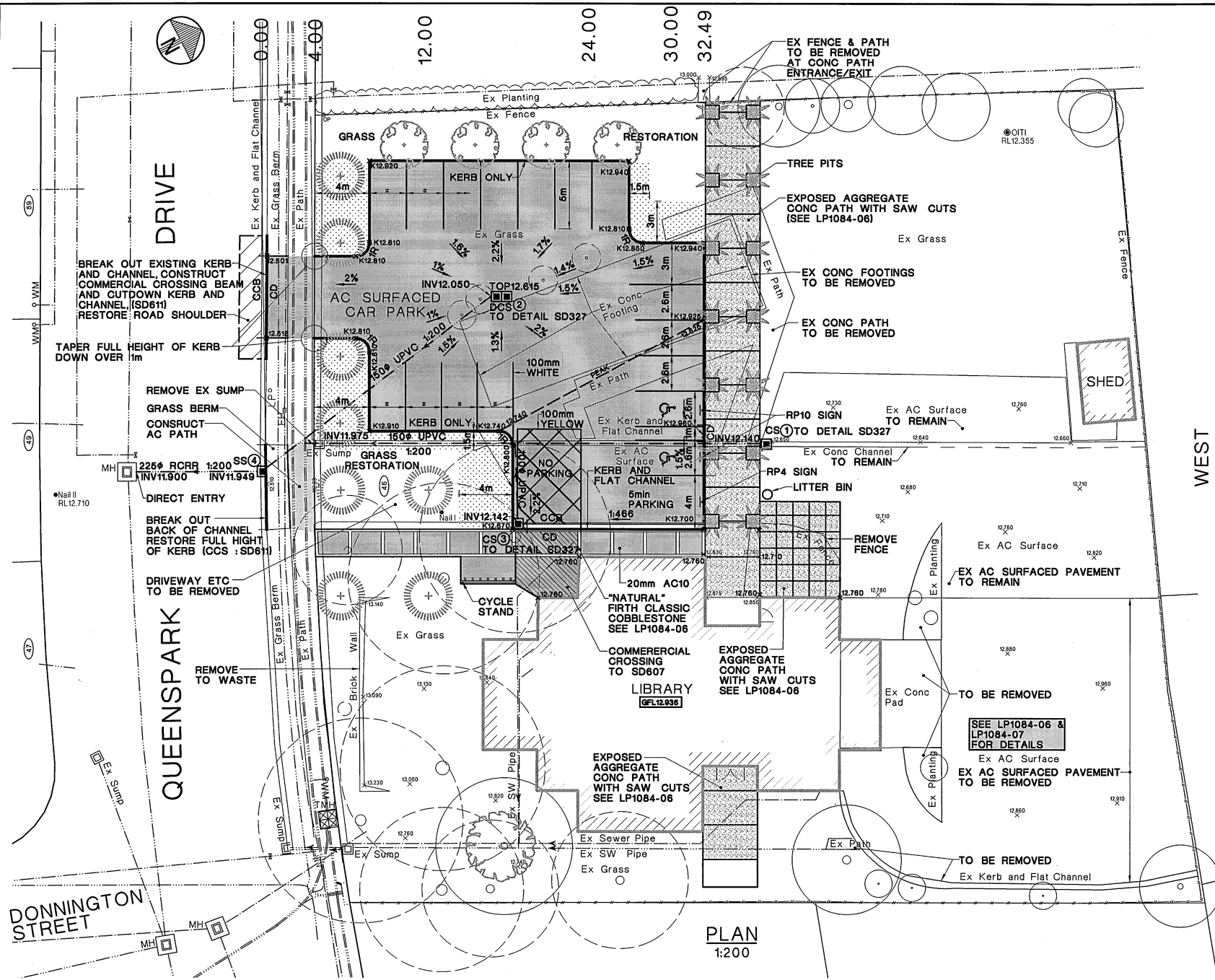
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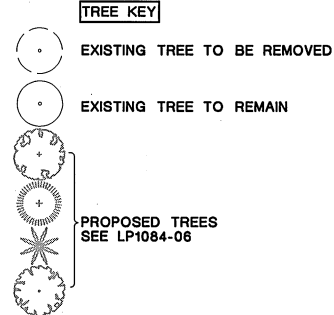
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MECHANICAL SERVICES HVAC LAYOUT

| CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE | | | |
|---|---------|-------------------|------------|
| SCALES: | 1:50 | DESIGNED DRAWN | WFW MAL |
| SET | JOB NO. | CHECKED | 09/04 |
| | 040071 | SHEET NO. | M1 |
| | | OF SHEETS | A |
| THIS DRAWING IS COPYRIGHT © | | | |
| DATE PRINTED: 07 DEC 2004 | | | |



- NOTES**
- REFER TO CSS FOR STANDARD DETAILS AND SPECIFICATIONS.
 - THE CONTRACTOR IS TO CHECK ALL SERVICES AND CROSS-LINES WITH THE APPROPRIATE AUTHORITIES. SEE THE SPECIFICATION.
 - ALL VEHICLE CROSSINGS ARE TO BE 4.1m MINIMUM WIDTH.
 - CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE.
 - LANDSCAPE PLANTING. SEE LP1084-06 & LP1084-07
 - SUMPS DRAINING ASPHALT SURFACE AREAS TO HAVE SUBMERGED OUTLETS AS PER BUILDING CODE DETAIL E1/AS1 3.6.2 TYPE2.



SURVEY CONTROL

| | NORTHING | EASTING | RL |
|---------|------------|------------|--------|
| NAIL I | 711891.396 | 298349.642 | 12.705 |
| NAIL II | 711866.983 | 298335.273 | 12.708 |
| OIT I | 711941.060 | 298344.260 | 12.356 |

SERVICES LEGEND

| | |
|---------------|-----|
| SEWER | --- |
| WATER | --- |
| STORMWATER | --- |
| ORION | --- |
| TELECOM | --- |
| GAS (TELECOM) | --- |

CITYSOLUTIONS

| DATUM | C.D.B. | NAME | SIGNED | DATE |
|-------------|-----------------|------------|-------------|----------|
| BENCH MK. | BM1571 RL12.956 | M.Dowdell | M.D. | 09/04 |
| SURVEY FB | | DESIGNER | C.Nordstrom | 09/04 |
| SURVEY LB | | DRAWN | A.Genev | 09/04 |
| CONSTR. EB | | DRW. CHECK | M.Duggan | 30/09/04 |
| CONSTR. LB | | | | |
| DESIGN FILE | | | | |

APPROVED

DATE 30/09/04

CHRISTCHURCH
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PLAN AND CROSS SECTIONS

| CONTRACT NUMBER | | ORIGINAL SHEET SIZE | | SCALES | |
|-----------------|--|---------------------|--|--------|--|
| 04/05-62 | | A1 | | 1:200 | |
| FILE REFERENCE | | | | 1:100 | |
| 254/25829 | | | | 1:20 | |
| DRAWING NUMBER | | SHEET | | | |
| RD1814 | | R01 | | OF 1 | |

46 Queenspark Drive
Change of Use

2005 10050063

AMENDED PLANS



NORTH

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KEY

- 100 Elia wall hung WC
- 101 Elia WC suite
- 102 Lyra wall hung WHB
- 103 door 101 - refer schedule
- 104 window 102 - refer schedule
- 105 refer section A sheet 10
- 106 grid A
- 107 Wall - type / lining / finish
- 108 Wall type
- 109 TF Timber framed stud wall
- 110 TS Timber strapping
- 111 Wall lining
- 112 GS gibraltar board
- 113 VB Villa board (9mm)
- 114 P 9mm plywood panels
- 115 C 0.40 ZRX corrugate wall cladding
- 116 AQ Gls Aqualine
- 117 Wall finish
- 118 U Unchanged
- 119 TI Wall tiles
- 120 S Stain
- 121 PS Paint system - refer spec.
- 122 PP Pre-finished
- 123 Floor finish
- 124 CA Carpet Art
- 125 C Carpet
- 126 L Linoleum
- 127 T Tiles
- 128 M Advance Star tread matwell

Note:
All chases for M&E to be filled with Forac
Conbextra GP after M&E fittings being installed.

CHRISTCHURCH CITY COUNCIL
CONSENT DOCUMENT
- 8 JUN 2005
All building work shall comply with the consented documents.

FILE COPY

CHRISTCHURCH CITY COUNCIL
RECEIVED
- 7 JUN 2005
10050063

| | | | |
|---|--------------|----|----------|
| B | Cafe fitout | CS | 24/05/05 |
| A | Construction | CS | 21/01/05 |
| # | revision | by | date |

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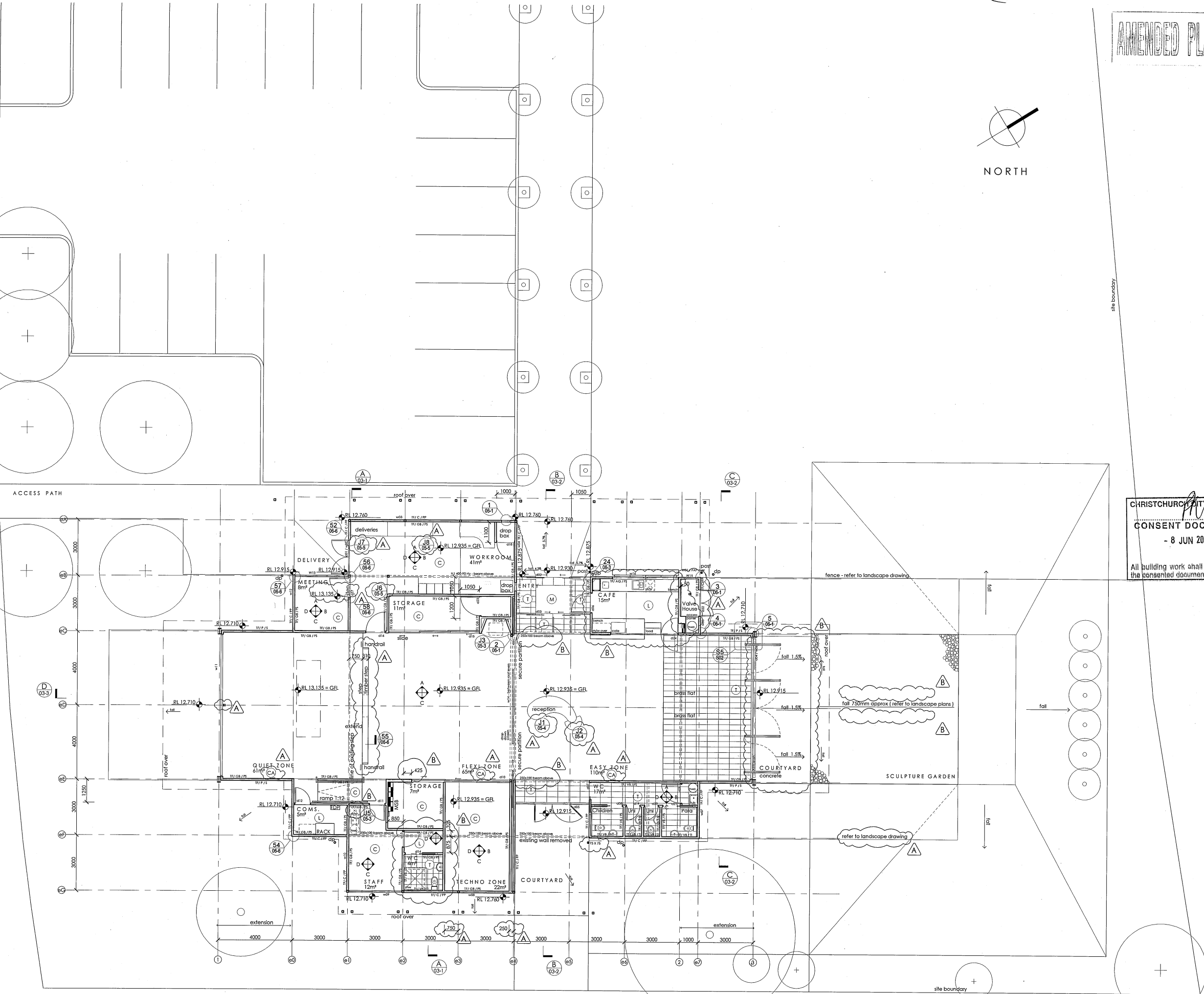
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|------------|----------------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Sladjana Radivojevic | Sept 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |

approved

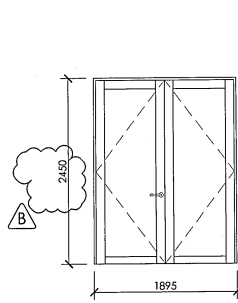
**GROUND FLOOR
PLAN**

| | | |
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| scale | 1:100 | rev. |
| contract | 04/05-02 | B |
| sheet | WD 01-2 | |

25943 / 01

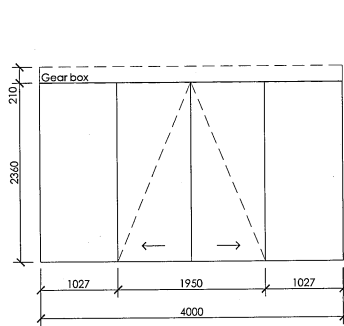


GROUND FLOOR PLAN
1:100



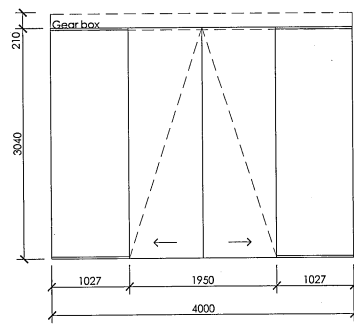
d01

PPC aluminium Magnum door in 50mm aluminium frame, 6/12/6 argon filled double glazing, 6mm toughened glass stat.



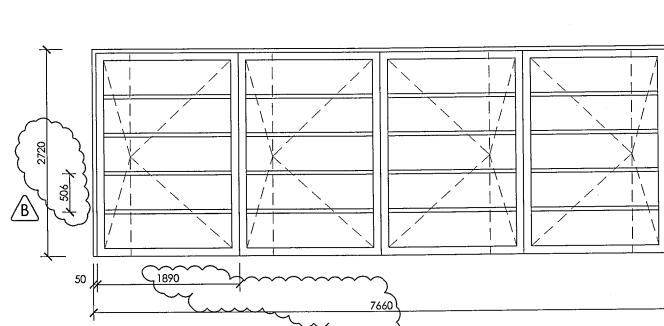
d02

Frameless commercial Horizon automatic sliding door, 12mm toughened glass.



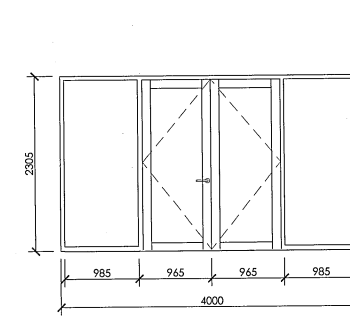
d03

Frameless commercial Horizon automatic sliding door, 12mm toughened glass.



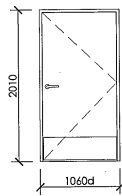
d04

PPC aluminium Magnum door, 6/12/6 argon filled double glazing, 6mm toughened glass stat.



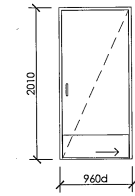
d05

PPC aluminium Magnum door frame to 100mm PPC aluminium shopfront suite, 6/12/6 argon filled double glazing, 6mm toughened glass stat.



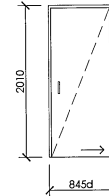
d06 / d09 handed

Internal paint grade solid core timber door.



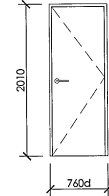
d07 / d14 handed / d21 handed

Internal paint grade solid core timber door, undercut d14 30mm.



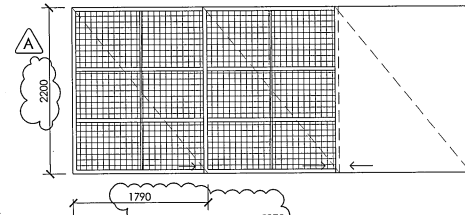
d08

Internal paint grade solid core timber door.



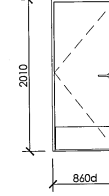
d19 / d20

Internal paint grade solid core timber door.



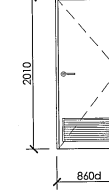
d10

Henderson sliding door system, 1No Timber framed 9mm ply clad door / polystyrene core, 2No MS EA frame / mesh infill door leafs.



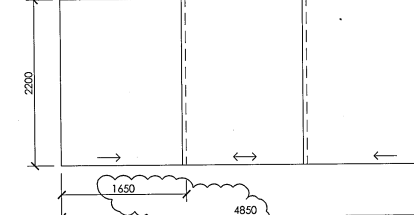
d11 / d13

Internal paint grade solid core timber door.



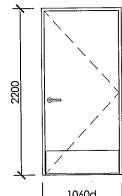
d12

Internal paint grade solid core timber door, Louvre 700w x 300h.



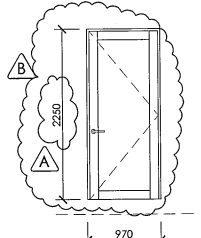
d15

Henderson sliding door system, 3No Timber framed 9mm ply clad door / polystyrene core.



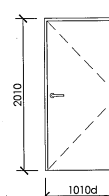
d16

Internal paint grade solid core timber door.



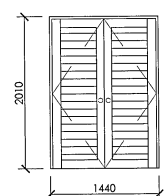
d17

Magnum PPC aluminium door in 50mm frame, PPC aluminium jamb liners.



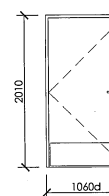
d18

Internal paint grade solid core timber door, RFR-750/30 mm.



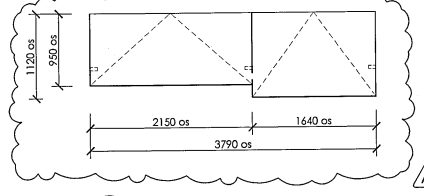
d22

Magnum PPC aluminium door in 50mm frame, PPC aluminium jamb liners, PPC aluminium infill panels.



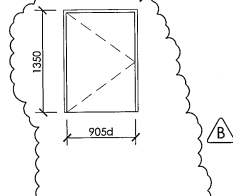
d23

Internal paint grade solid core timber door.



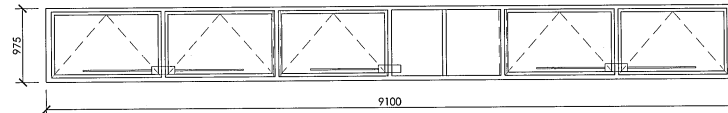
d24

2No Internal paint grade timber framed 9mm ply clad / polystyrene core door, Lock system - 3No Hafele flush furniture bolts P.No. 253.00.332 with ss socket to match.



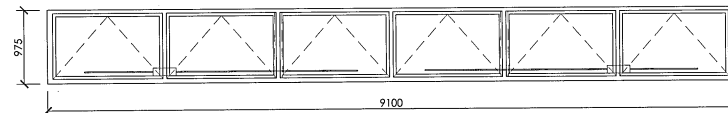
d25

Internal paint grade solid core timber door.



w08

40mm PPC aluminium Architectural window series, 6/12/6 argon filled double glazing.



w03

40mm PPC aluminium Architectural window series, 6/12/6 argon filled double glazing.



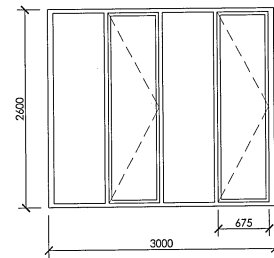
w02 / w04 handed / w10 handed

40mm PPC aluminium Architectural window series, 6/12/6 argon filled double glazing.



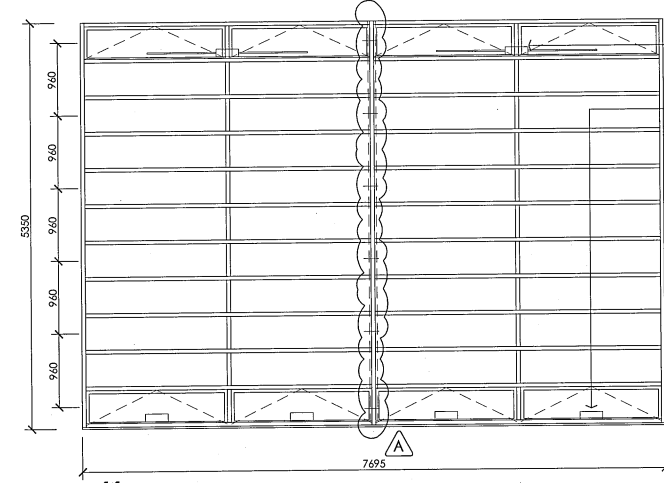
w01

40mm PPC aluminium Architectural window series, 6/12/6 argon filled double glazing.



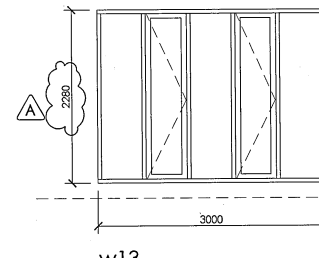
w09

PPC aluminium 100mm shopfront suite, 6/12/6 argon filled double glazing.



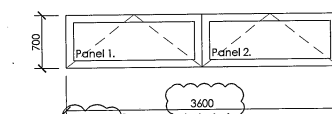
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PPC aluminium 100mm shopfront suite, 6/12/6 argon filled double glazing.



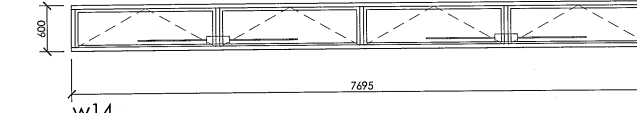
w13

PPC aluminium 100mm shopfront suite, 6/12/6 argon filled double glazing.



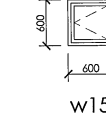
w16 shutter

PPC aluminium 100mm shopfront suite, on hinges to frame & back (2 separate) to hold open, 6/12/6 argon filled double glazing, 4No automotive gas strut (per boot).



w14

40mm PPC aluminium Architectural window series, 6/12/6 argon filled double glazing.



w15

40mm PPC aluminium Architectural window series, Georgian wire glass, Triangular lock to fire service approval.

AMENDED PLANS

Notes:

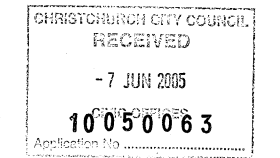
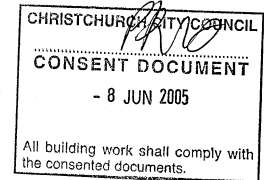
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| | | | |
|---|---------------|----|----------|
| B | Construction | SR | 09/03/05 |
| A | Construction | CS | 21/01/05 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |

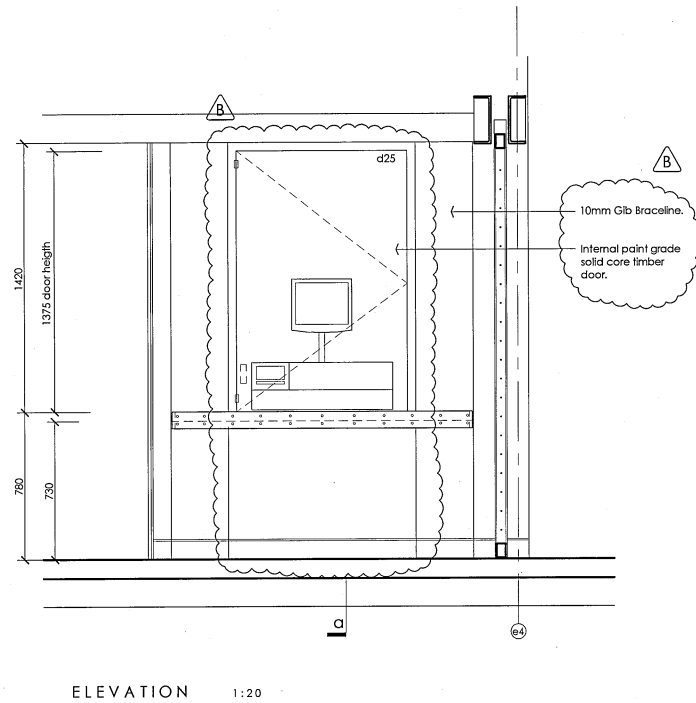
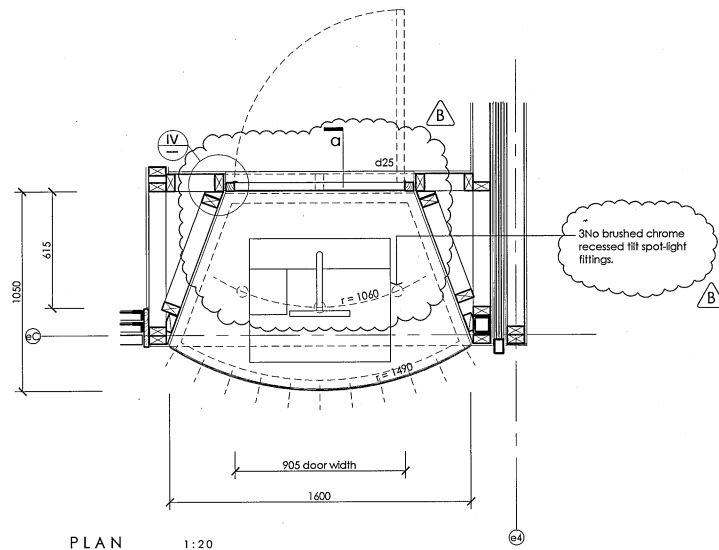


PARKLANDS LIBRARY PROPOSED BUILDING CONVERSION

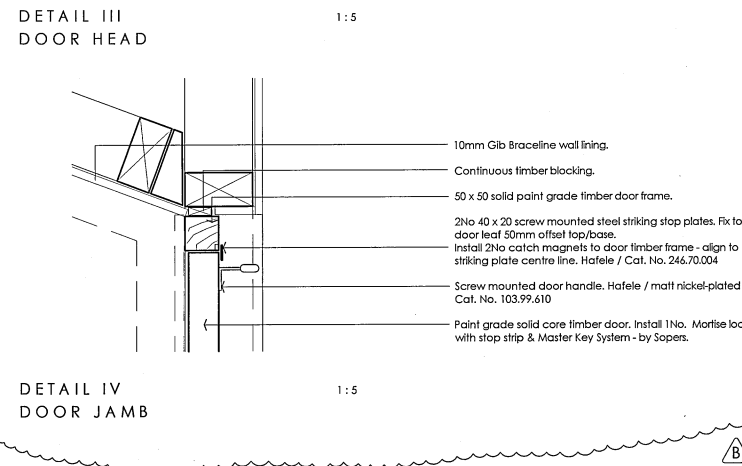
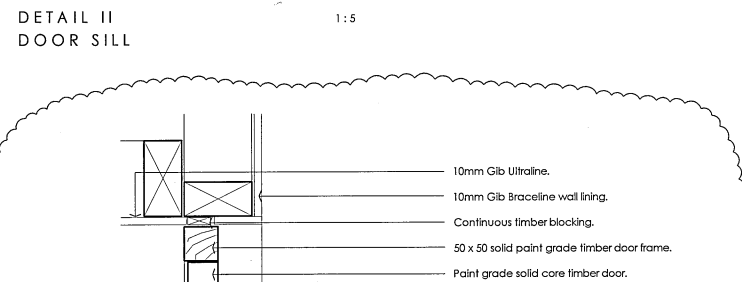
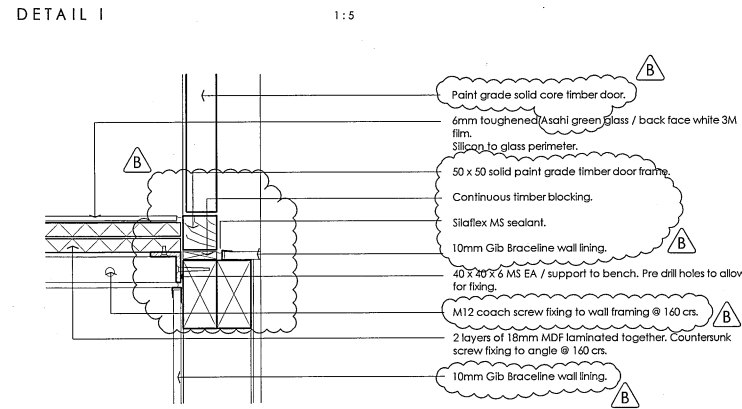
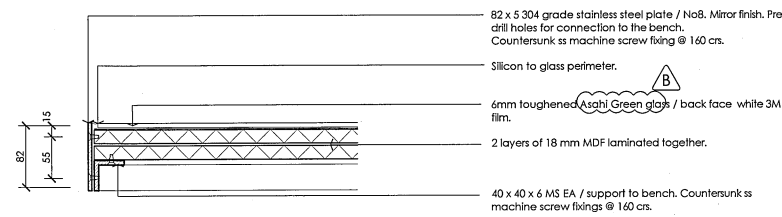
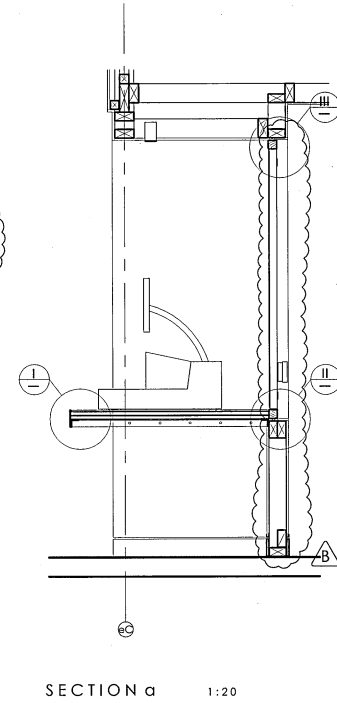
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| designed | Crispin Schurr | Sept 2004 |
| drawn | Sladana Radivojevic | Sept 2004 |
| disc. check | CS | Jan 05 |
| dwg. check | CS | March 05 |
| indexed | | |
| approved | | |

DOOR & WINDOW SCHEDULE

| | | |
|----------|----------|------|
| scale | 1:50 | rev. |
| contract | 04/05-02 | B |
| sheet | WD 05-1 | |



SELF ISSUES DESK



AMENDED PLANS

Notes:

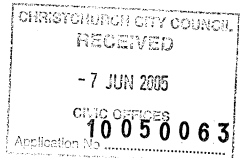
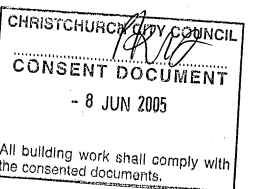
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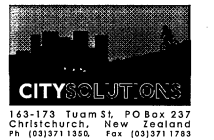
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| A | Construction | CS | 21/01/05 |
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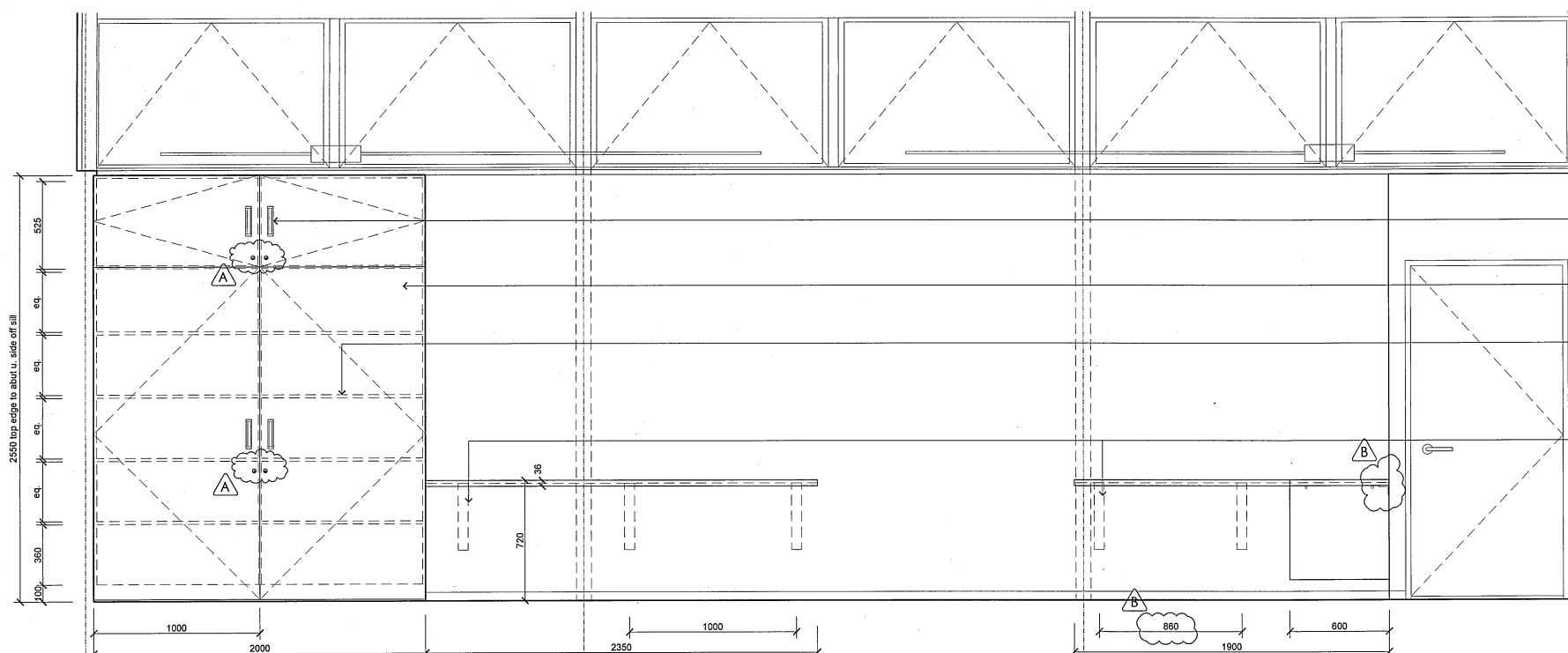
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| designed | Crispin Schurr | Oct 2004 |
| drawn | Sladjana Redivojevic | Oct 2004 |
| diag. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | |

JOINERY

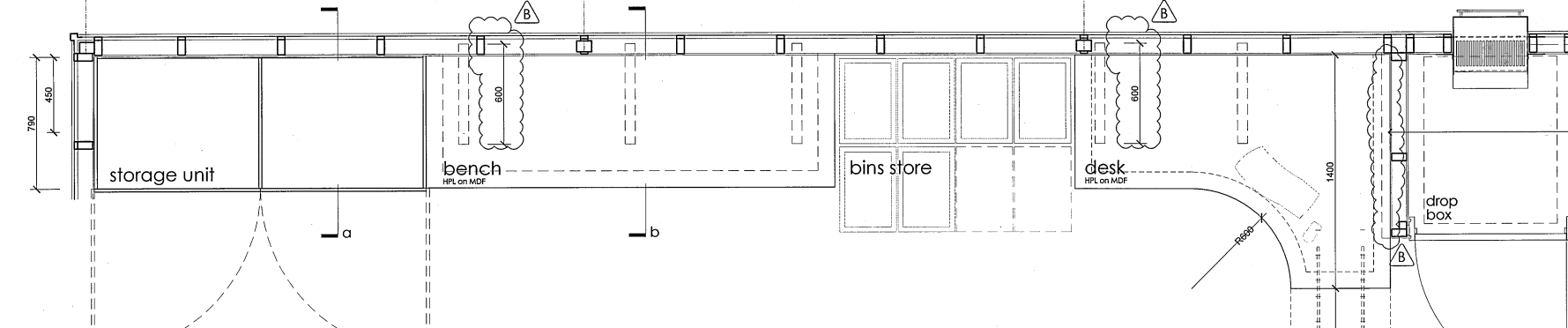
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| sheet | WD 05-3 | |

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Original size



ELEVATION 1:20

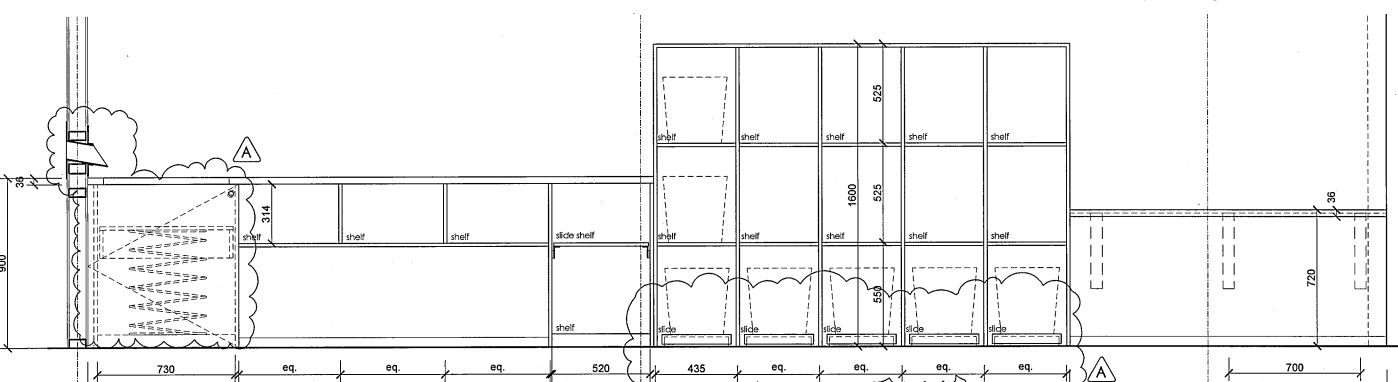


WORKROOM BENCH 1:20

Formica high pressure laminate work surface on MDF.
18mm MDF / 18mm MDF thickening to bench perimeter.

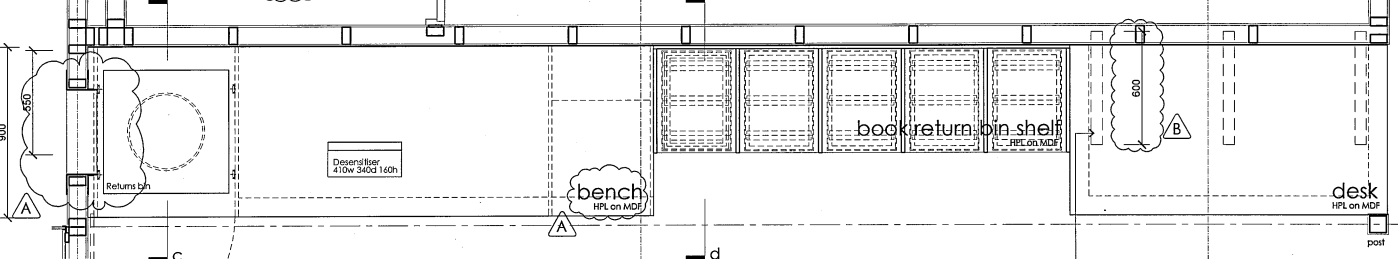
WORKROOM DESK 1:20

Formica high pressure laminate work surface on MDF.
18mm MDF / 18mm MDF thickening to desk perimeter.
400 x 600 extension to desk / Formica HPL on MDF / as piano hinge in full length.
2No Ø14 / 500mm in length 304 L grade stainless steel rod - support to the desk extension.
5No per rod 304 L grade ss round brackets fixed to underside of desk @ 150 cts to create sliding track.



ELEVATION 1:20

2No side mounted Hafele Precision Ball-Bearing Slide to Bench sliding shelf.
Model Accuride 2007/24kg Keyboard / Pencil Drawer Slide. Cat. No. 422.14.611



WORKROOM BENCH 1:20

Desensitiser supplied by others.
Formica high pressure laminate work surface / front / shelf on MDF substrate.
18mm MDF thickening to desk perimeter.
4No HAFELE sliding drawer system to return bin / fixed vertically.
1No stainless steel springs to underside of return bin.

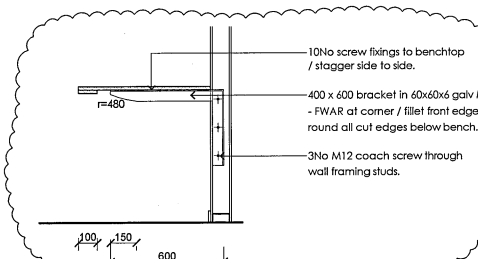
Handles Hettich 9995412 silver anodised aluminium recessed pulls 143x334
4No to cpbd.

Formica high pressure laminate on 18mm MDF to cupboard body and fronts.

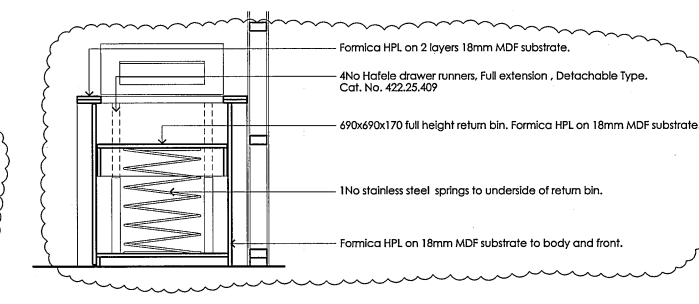
8No adjustable internal shelves / Formica high pressure laminate surface.
4No fixed shelves / Formica high pressure laminate surface.
For adj. shelf support use Hafele nickel-plated shelf supports /
Cat. No. 282.38.708 / 4No. per unit - pre-drill Ø5mm holes to case sides @ 125 cts.

10No screw fixings to benchtop (per bracket) / stagger side to side.
400 x 600 bracket in 60x60x6 galv MS angle - FWAR at corner / fillet front edge and round all cut edges below bench.
3No M12 coach screw through wall framing studs.

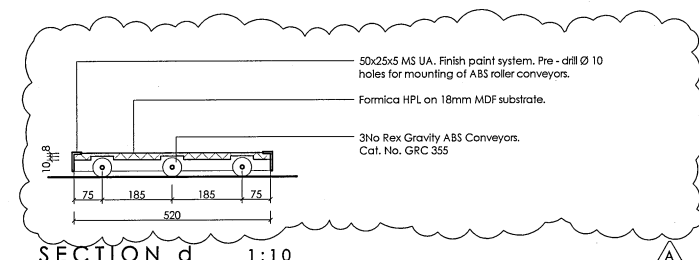
60x60x6 galv MS angle bracket fixed to wall framing via 6No M12 coach screws.
20No screw fixings to benchtop / stagger side to side.



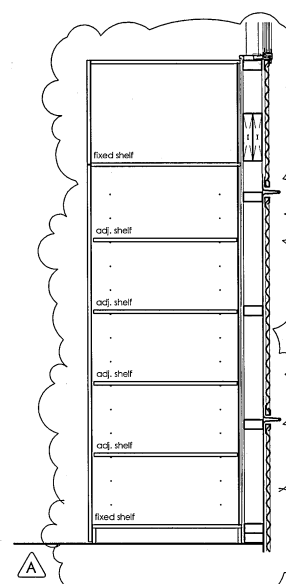
SECTION b 1:20



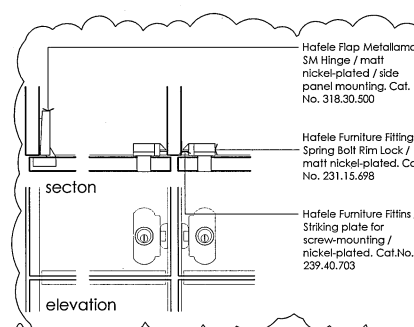
SECTION c 1:20



SECTION d 1:10



SECTION a 1:20



CUPBOARD LOCK DETAIL 1:5

Hafele Flap Metalamat
SM Hinge / matt
nickel-plated / side
panel mounting. Cat.
No. 318.30.500

Hafele Furniture Fittings /
Spring Bolt Rim Lock /
matt nickel-plated. Cat.
No. 231.15.698

Hafele Furniture Fitts /
Sinking plate for
screw-mounting /
nickel-plated. Cat.No.
239.40.703

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AMENDED PLANS

CHRISTCHURCH CITY COUNCIL
RECEIVED
- 8 JUN 2005
All building work shall comply with the consented documents.

CHRISTCHURCH CITY COUNCIL
RECEIVED
- 7 JUN 2005
Application No. 10050063

| | | | |
|---|---------------|----|----------|
| B | Construction | SR | 12/04/05 |
| A | Construction | CS | 21/01/05 |
| 3 | Tender | CS | 26/10/04 |
| 0 | Client review | CS | |
| # | revision | by | date |

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143-173 Tuam St. PO Box 237
Christchurch, New Zealand
Ph (03) 371 1350 Fax (03) 371 1753

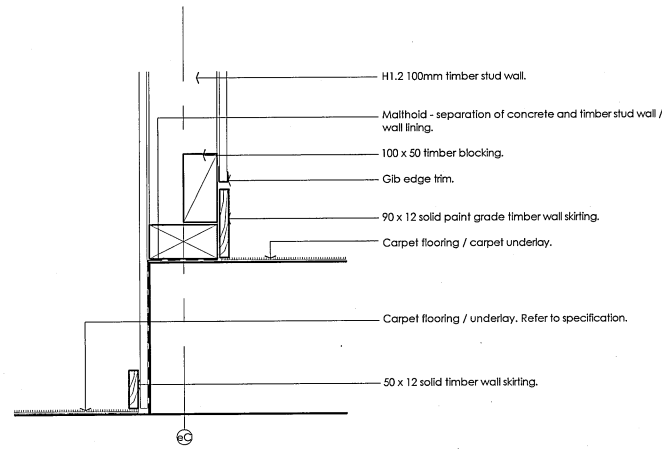
PARKLANDS LIBRARY
PROPOSED BUILDING CONVERSION

| | | |
|-------------|----------------------|----------|
| designed | Crispin Schurr | Oct 2004 |
| drawn | Sladjana Radivojevic | Oct 2004 |
| disg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| Indexed | | |
| approved | | |

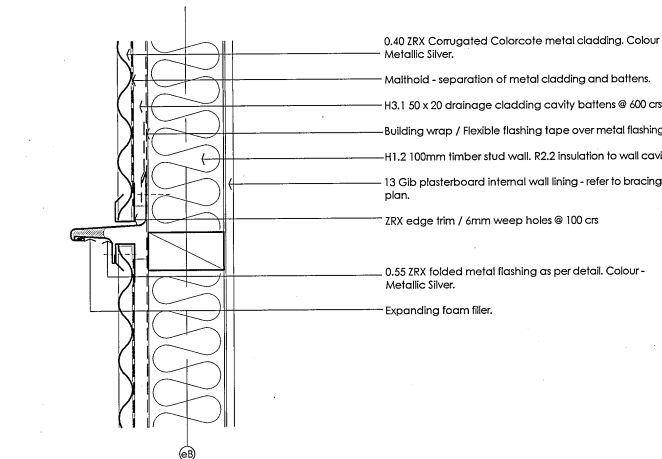
JOINERY

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| contract | 04/05-02 | | |
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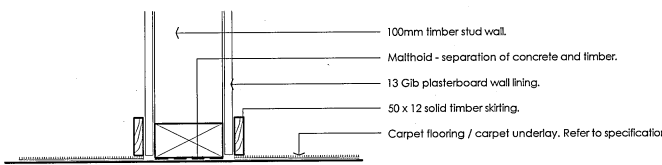
25943 / 01



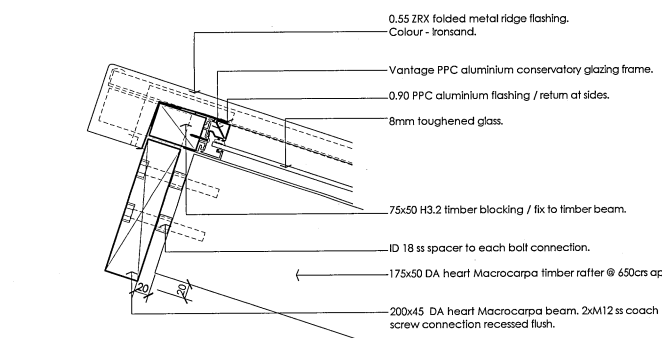
12 WALL SKIRTING 1:5



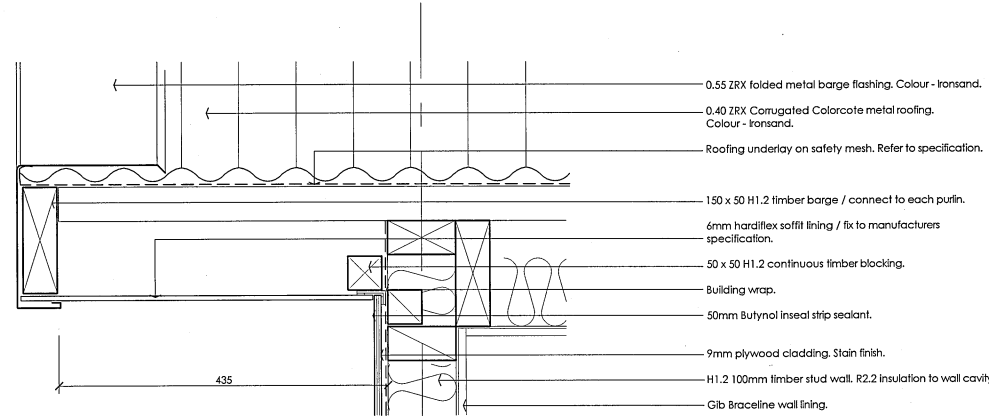
13 FACADE WALL FLASHING 1:5



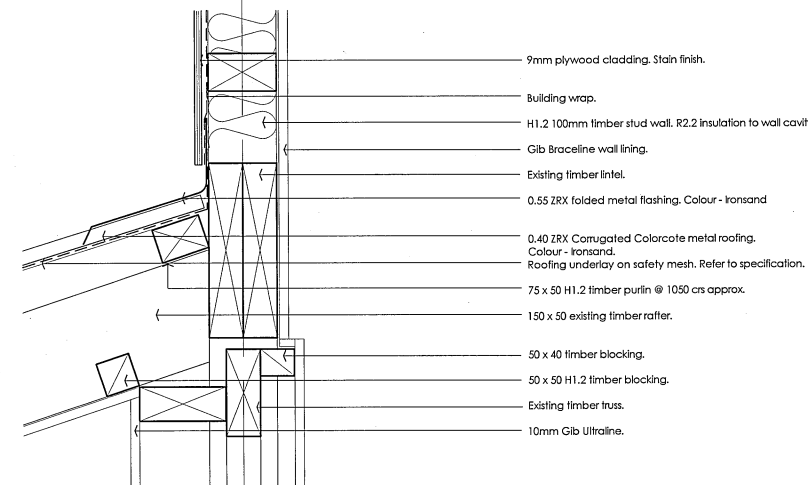
14 INTERNAL WALL SKIRTING 1:5



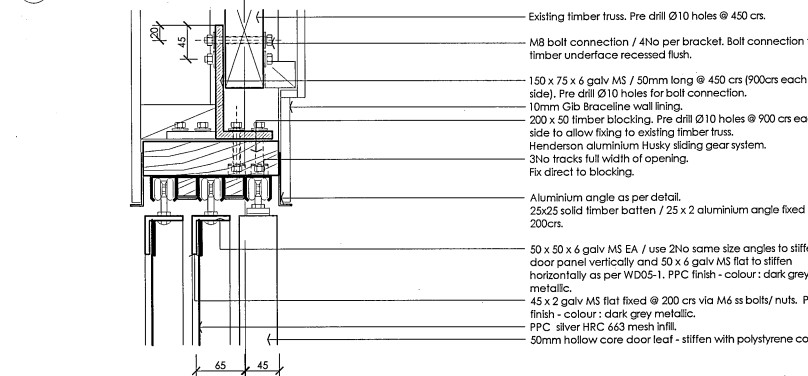
19 TIMBER RIDGE 1:5



15 BARGE FLASHING / SOFFIT LINING 1:5



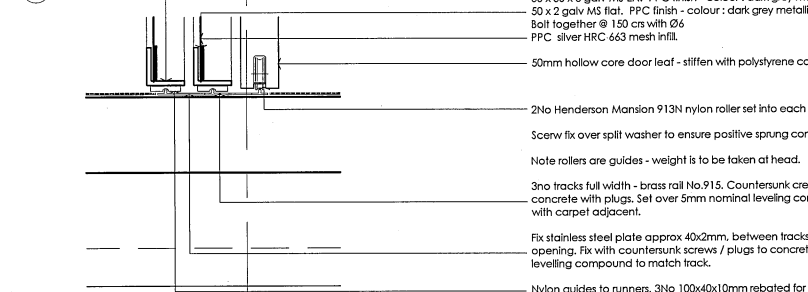
16 ROOF FLASHING 1:5



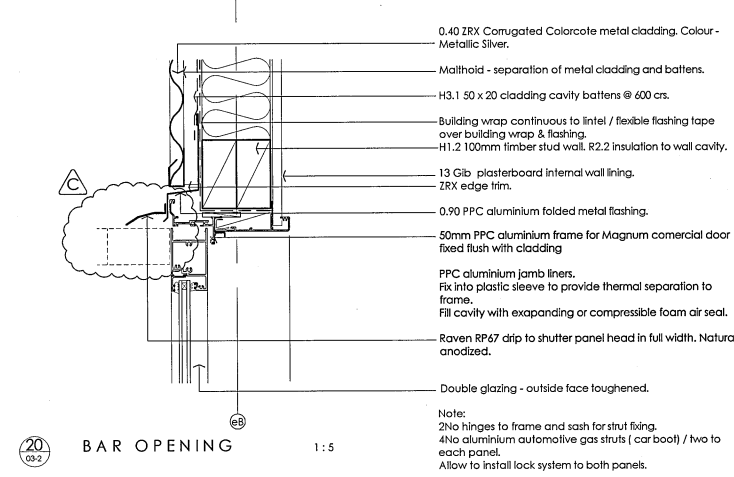
17 SLIDING DOOR HEAD 1:5



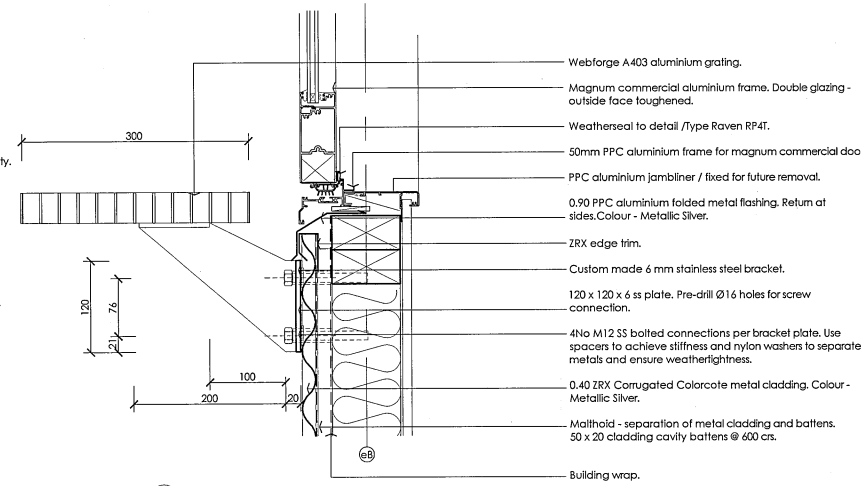
17 SLIDING DOOR JAMB 1:5



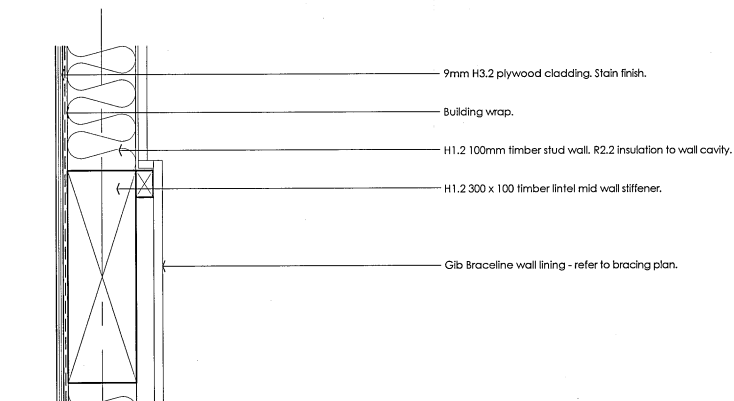
18 SLIDING DOOR HEAD 1:5



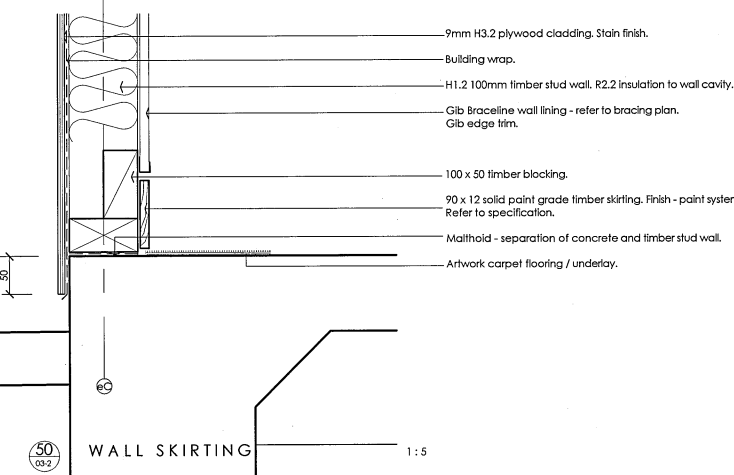
20 BAR OPENING 1:5



21 BAR BENCH 1:5



49 WALL LINTEL 1:5



50 WALL SKIRTING 1:5

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AMENDED PLANS

CHRISTCHURCH CITY COUNCIL
CONSENT DOCUMENT
- 8 JUN 2005

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CHRISTCHURCH CITY COUNCIL
RECEIVED
- 7 JUN 2005
10.05.0063
Application No.

| | | | |
|---|---------------|----|----------|
| C | Construction | CS | 23/02/01 |
| B | Construction | CS | 07/02/01 |
| A | Construction | CS | 24/01/05 |
| 2 | Tender | CS | 08/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |

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Christchurch, New Zealand
Ph (03) 371 1555, Fax (03) 371 1753

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|-------------|---------------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Stadana Radivojevic | Sept 2004 |
| diag. check | CS | Jan 05 |
| dwn check | CS | Jan 05 |
| indexed | | |
| approved | | |

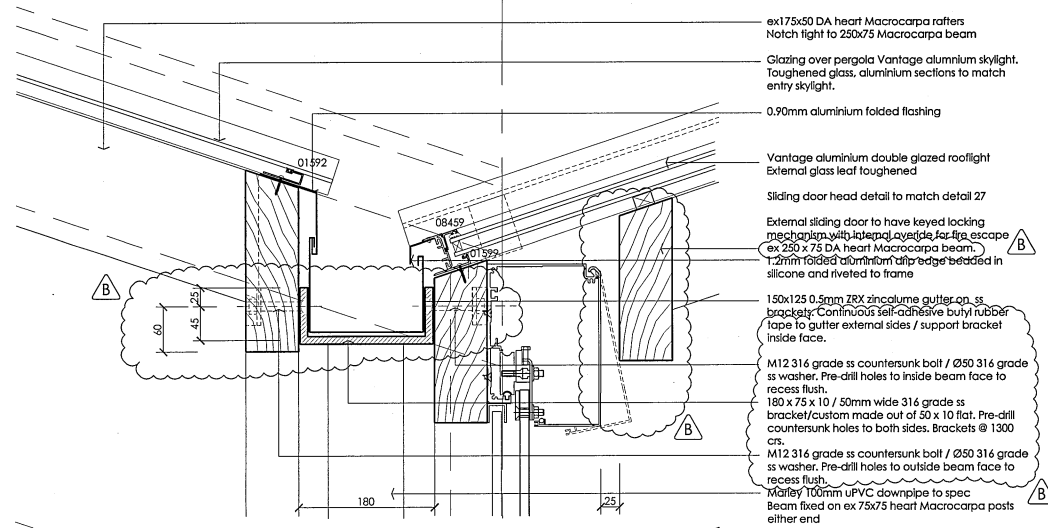
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| contract | 04/05-02 | |
| sheet | WD 06-2 | |

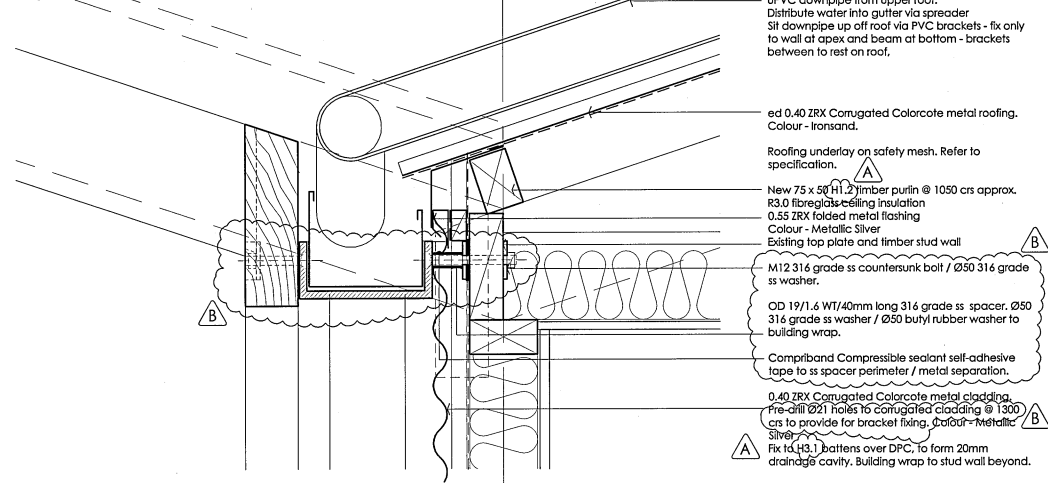
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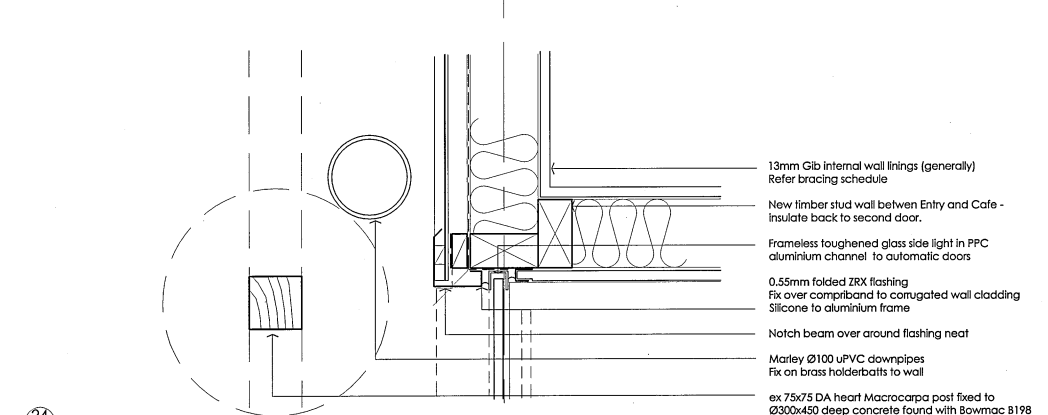
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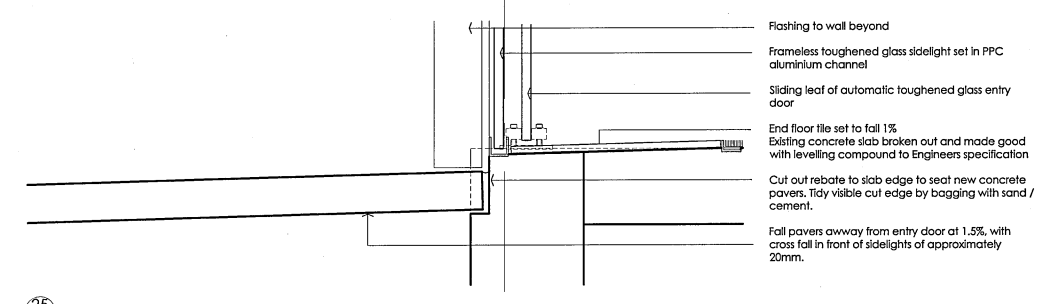
22 ENTRY DOOR HEAD 1:5



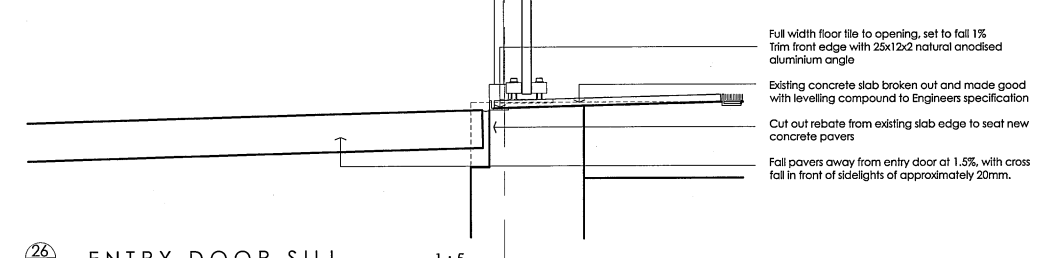
23 PERGOLA GUTTER 1:5



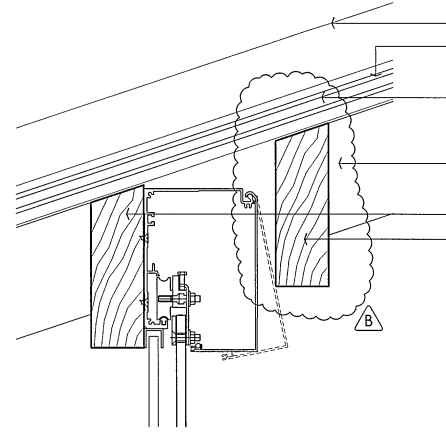
24 ENTRY DOOR JAMB 1:5



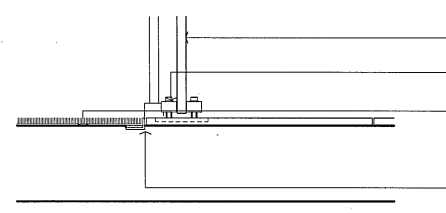
25 ENTRY SIDELIGHT SILL 1:5



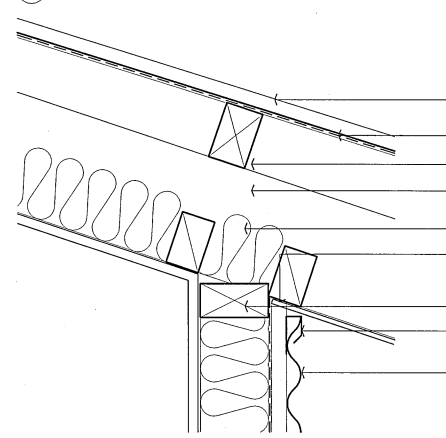
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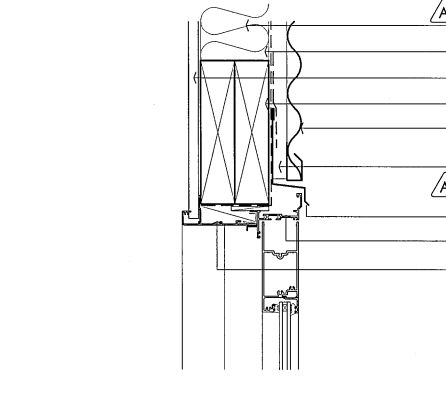
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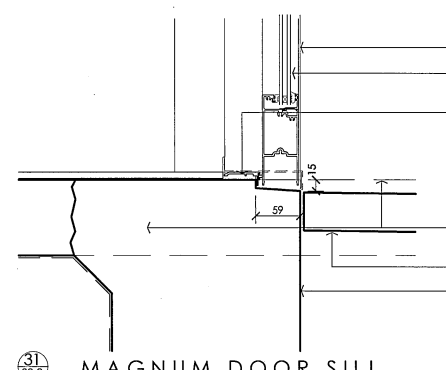
28 AUTOMATIC DOOR SILL 1:5



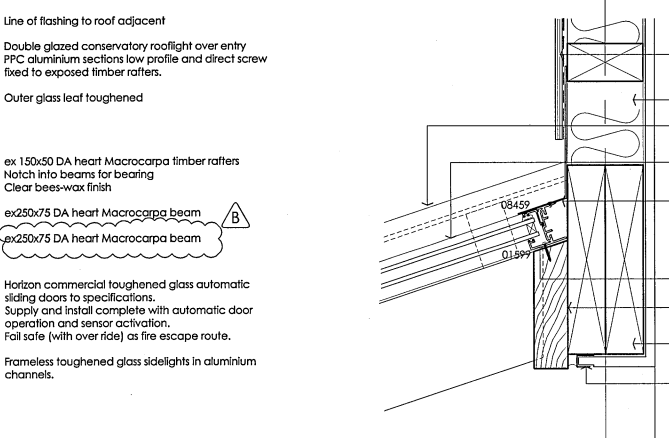
29 WALL CONNECTION 1:5



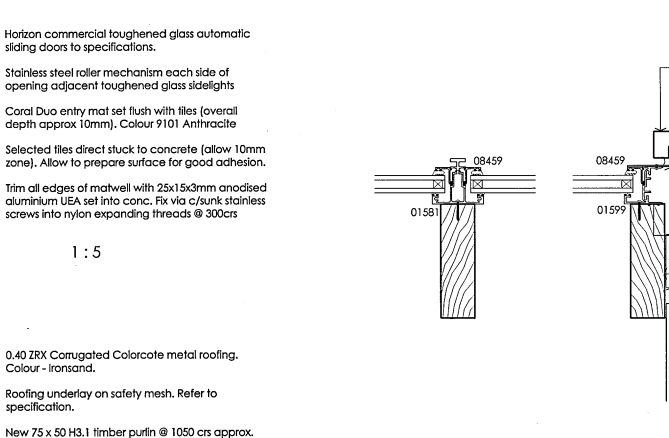
30 MAGNUM DOOR HEAD 1:5



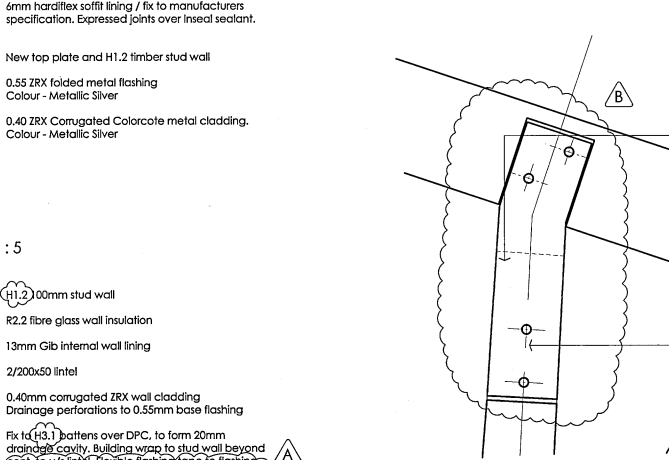
31 MAGNUM DOOR SILL 1:5



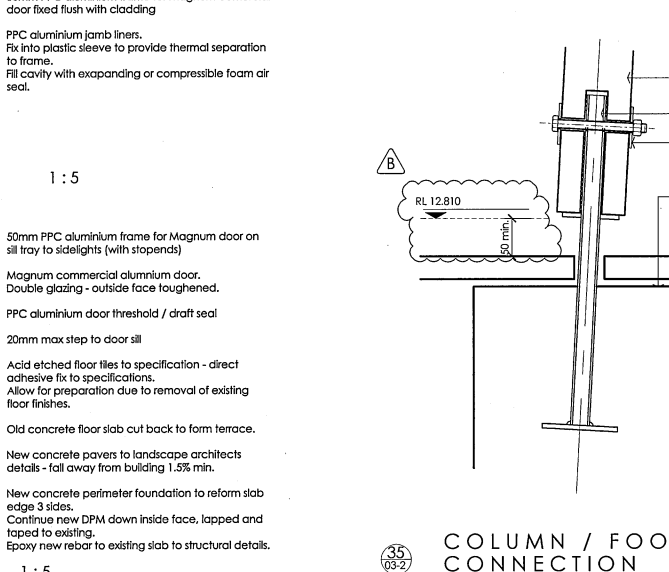
32 ROOF GLAZING HEAD 1:5



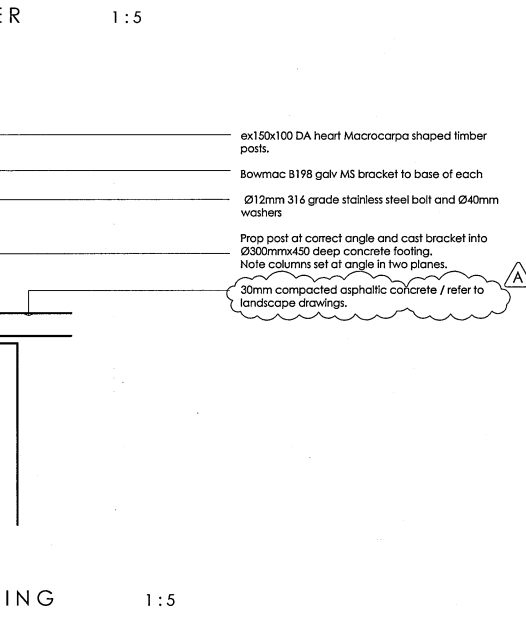
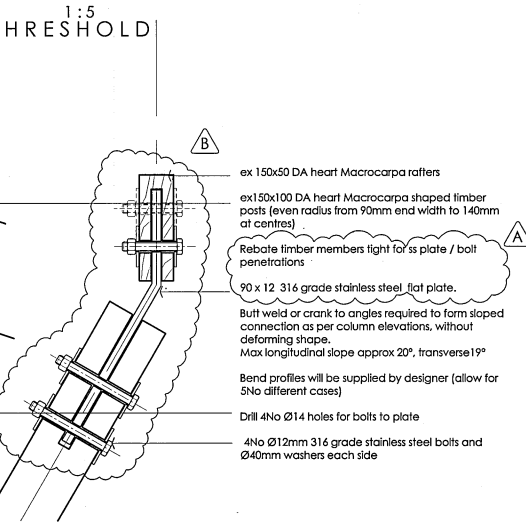
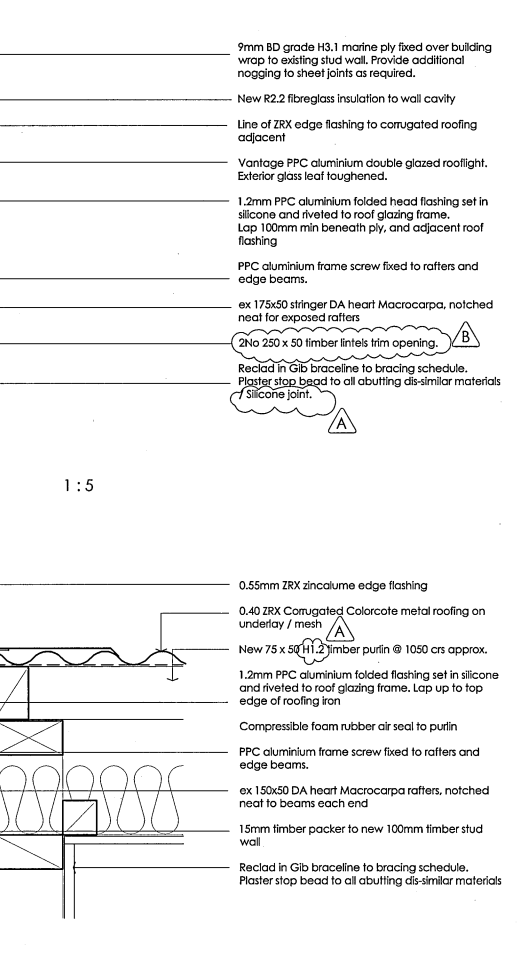
33 ROOF GLAZING RAFTER / EDGE THRESHOLD 1:5



34 COLUMN / RAFTER CONNECTION 1:5



35 COLUMN / FOOTING CONNECTION 1:5



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AMENDED PLANS

CHRISTCHURCH CITY COUNCIL
CONSENT DOCUMENT
- 8 JUN 2005
All building work shall comply with the consented documents.

CHRISTCHURCH CITY COUNCIL
RECEIVED
- 7 JUN 2005
CITY OFFICES
10 05 0 063

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Christchurch, New Zealand
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PROPOSED BUILDING CONVERSION

| | | |
|------------|----------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Crispin Schurr | Sept 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | |

DETAILS
SHEET 3

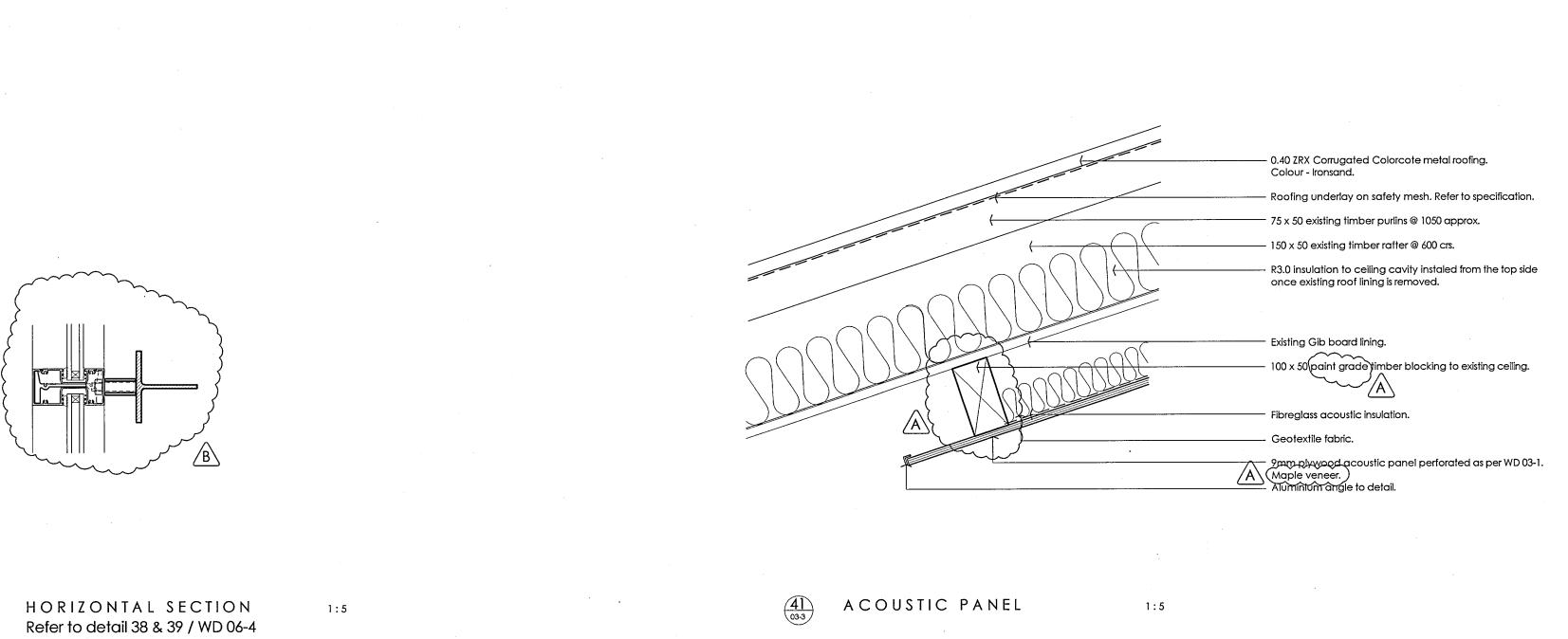
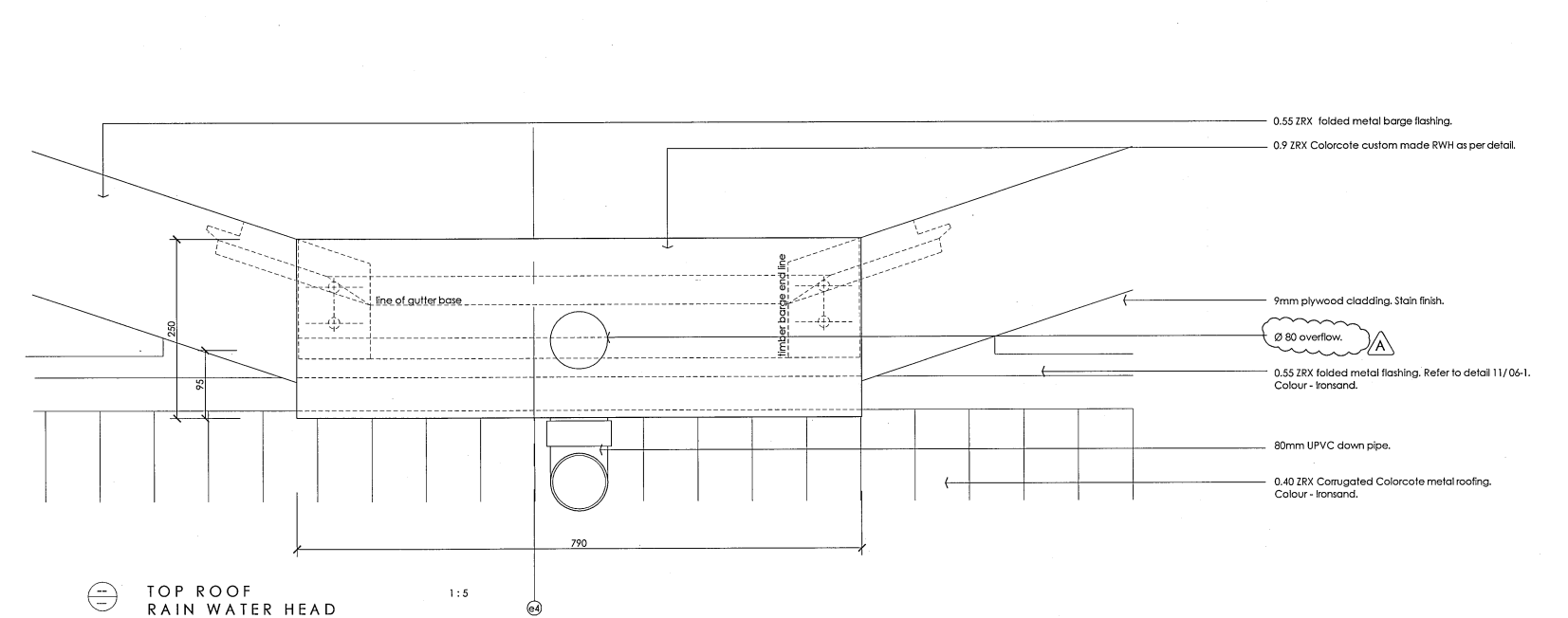
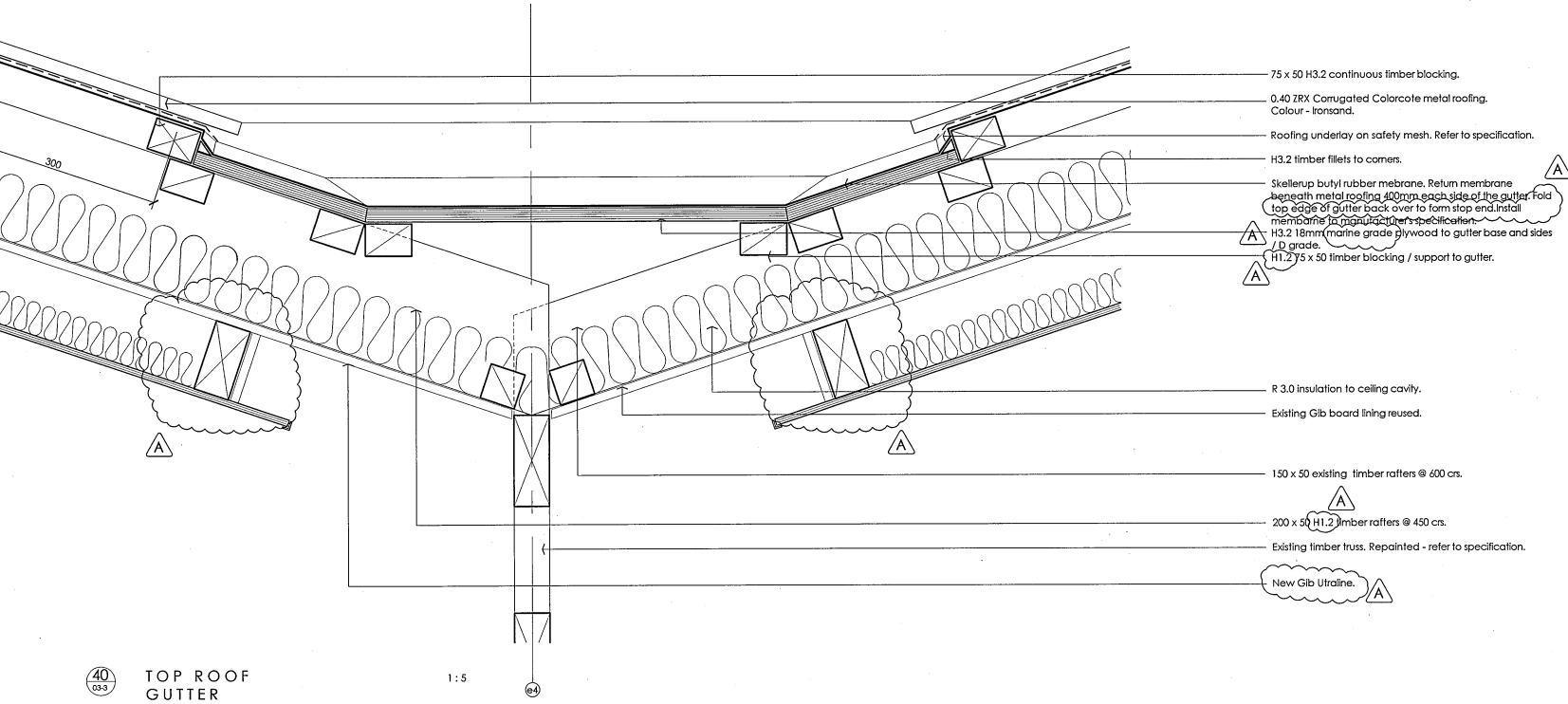
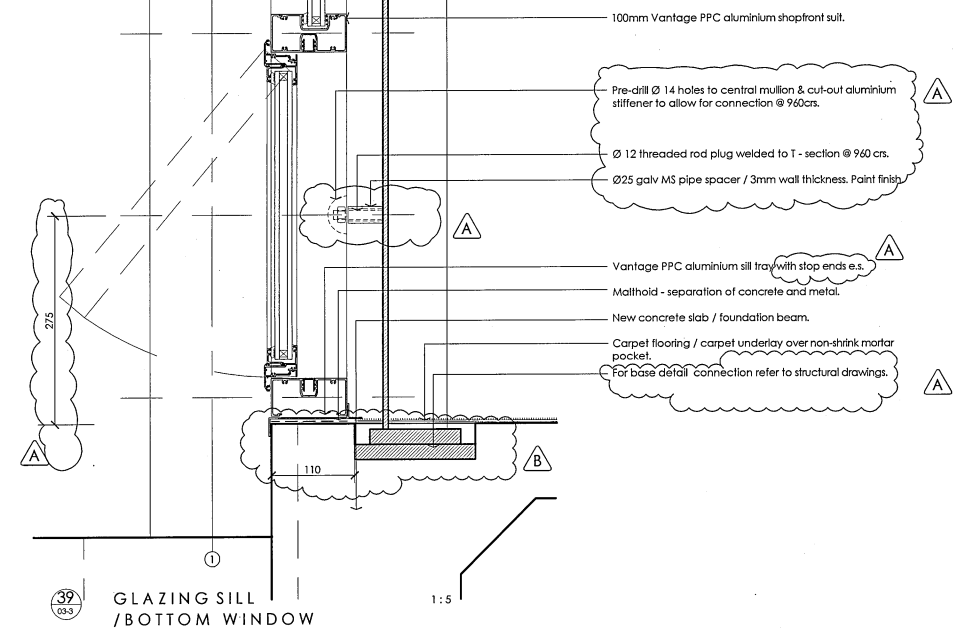
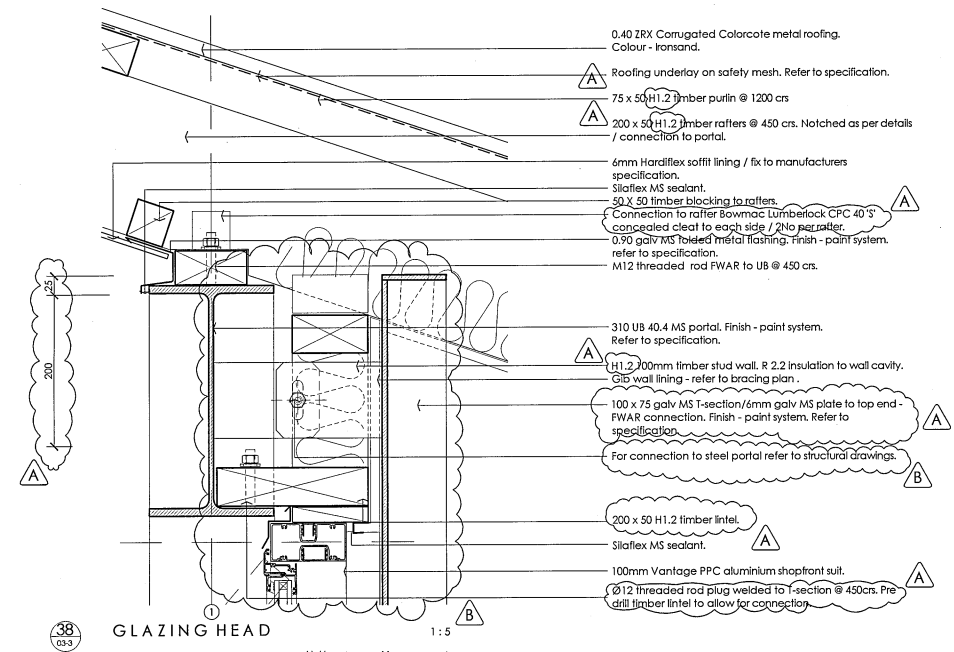
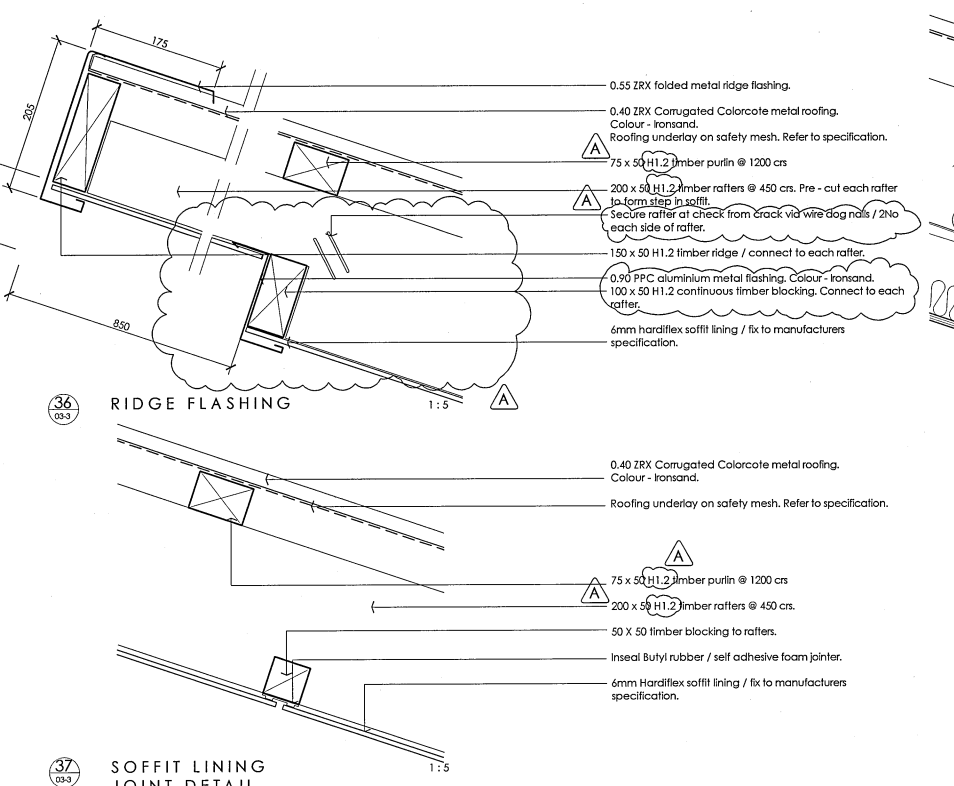
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| scale | 1:5 | rev. |
| contract | 04/05-02 | A |
| sheet | WD 06-3 | |

2 5 9 4 3 / 0 1

path : s:\atlas\architectural\0100

AutoCAD 2000

300
200
150
100
50
30
10
0
mm
Original size



HORIZONTAL SECTION 1:5
Refer to detail 38 & 39 / WD 06-4

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AMENDED PLANS

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CONSENT DOCUMENT
- 8 JUN 2005
All building work shall comply with the consented documents.

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| | | | |
|---|---------------|----|----------|
| B | Construction | CS | 07/02/04 |
| A | Construction | CS | 28/01/05 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |

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Christchurch, New Zealand
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| | | |
|------------|----------------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Sladjana Radivojevic | Sept 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | |

DETAILS

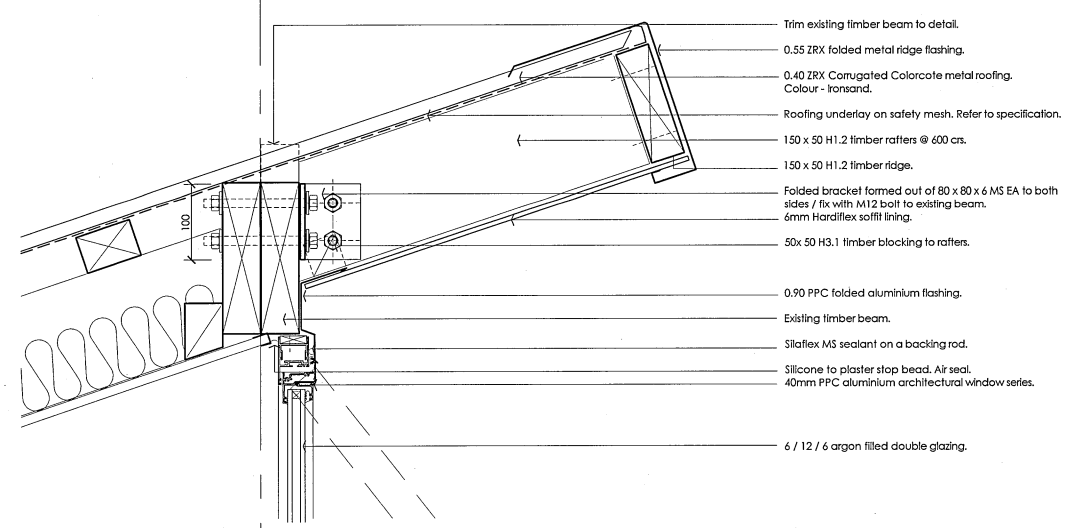
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| contract | 04/05-02 | |
| sheet | WD 06-4 | B |

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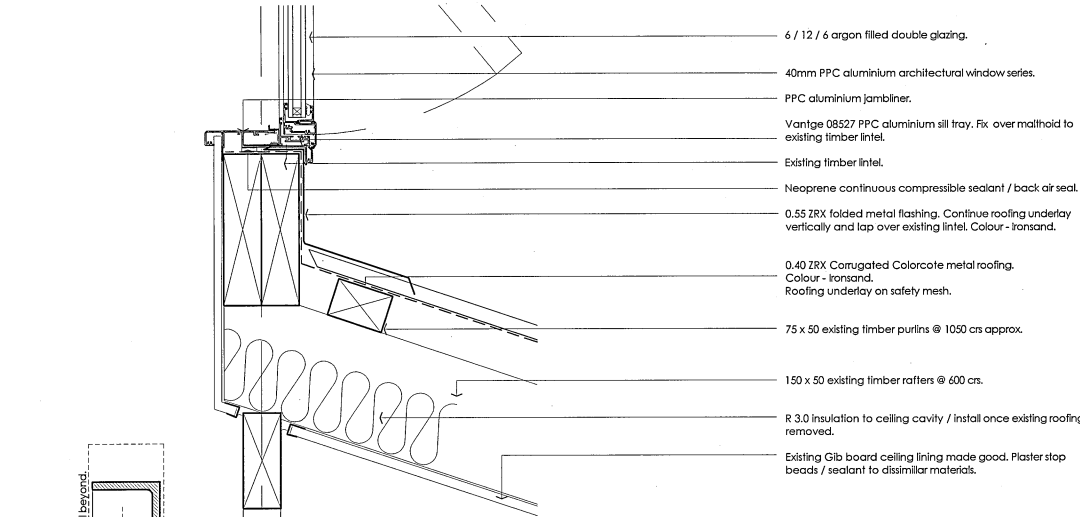
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AutoCAD 2000

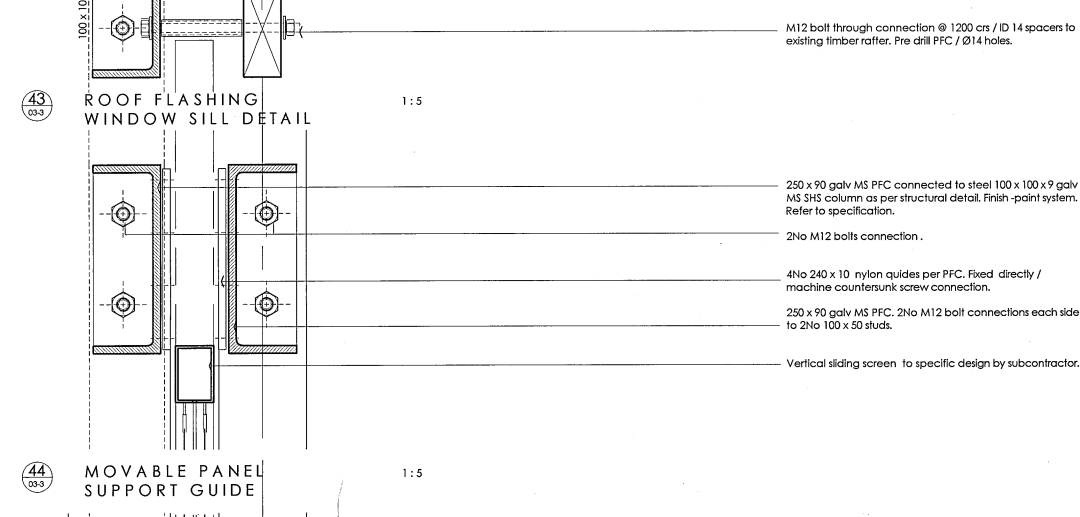
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mm
Original size



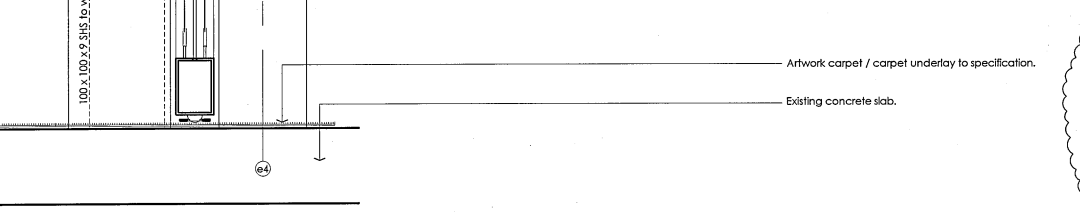
42
03-3
RIDGE / SOFFIT
WINDOW HEAD DETAIL



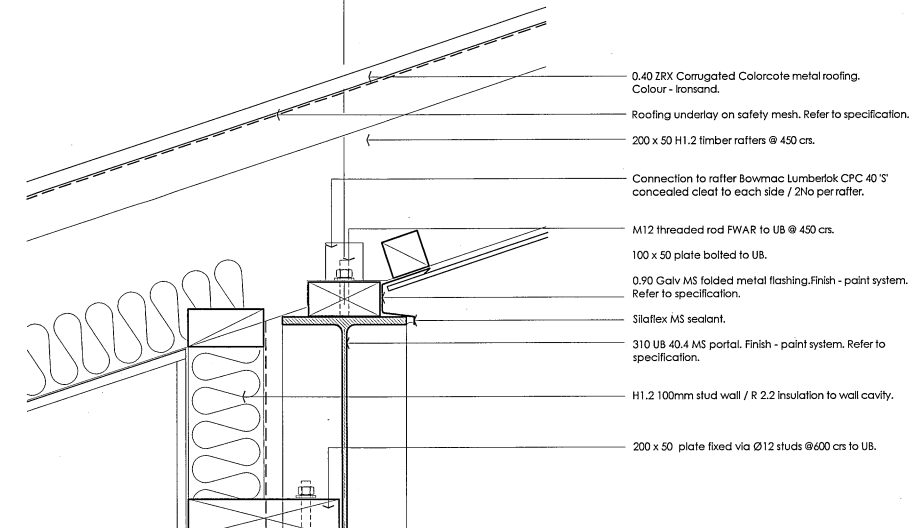
43
03-3
ROOF FLASHING
WINDOW SILL DETAIL



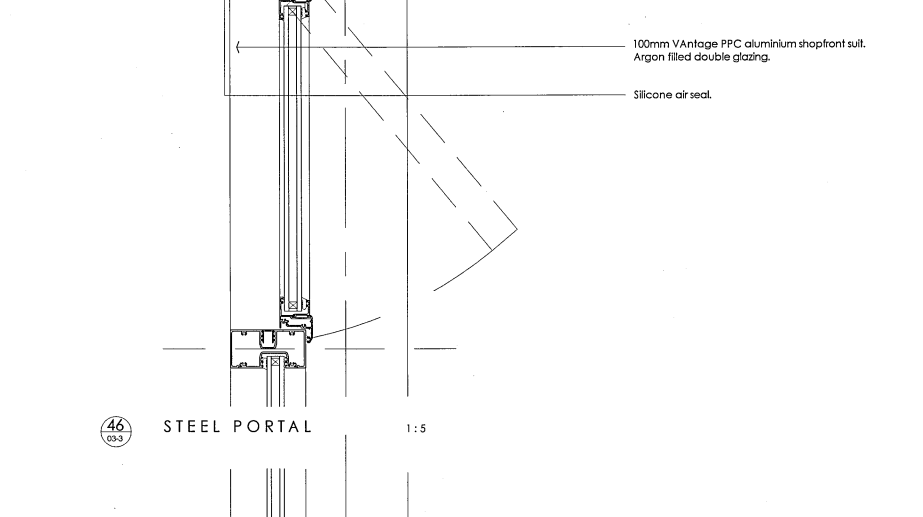
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MOVABLE PANEL
SUPPORT GUIDE



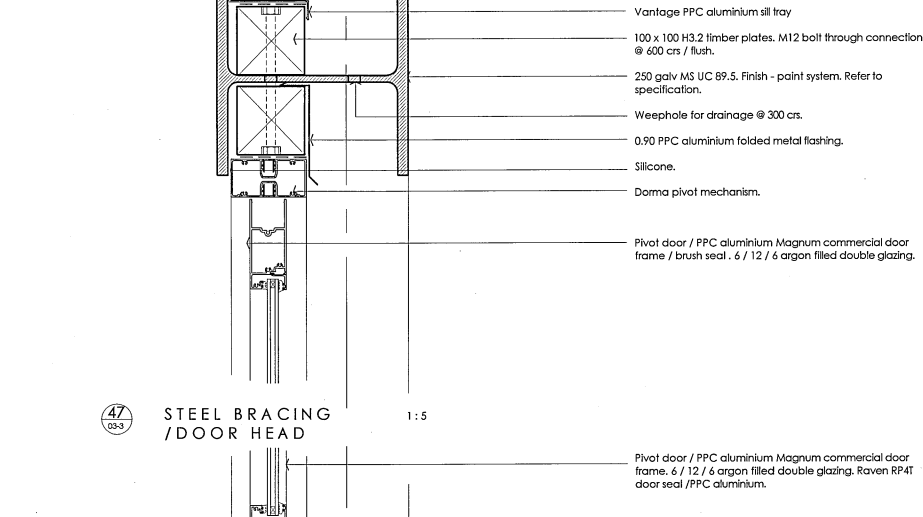
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MOVABLE PANEL
BASE DETAIL



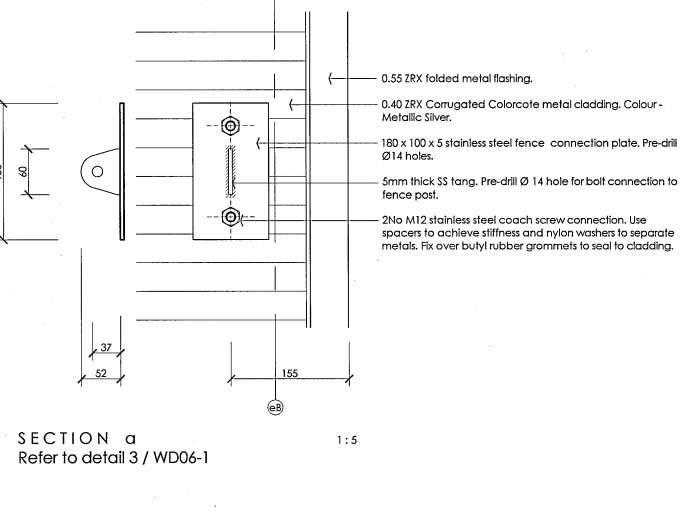
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STEEL PORTAL



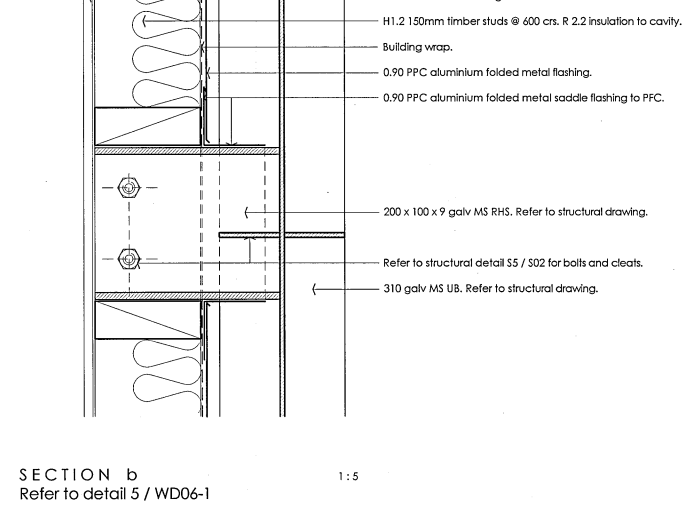
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03-3
STEEL BRACING
/ DOOR HEAD



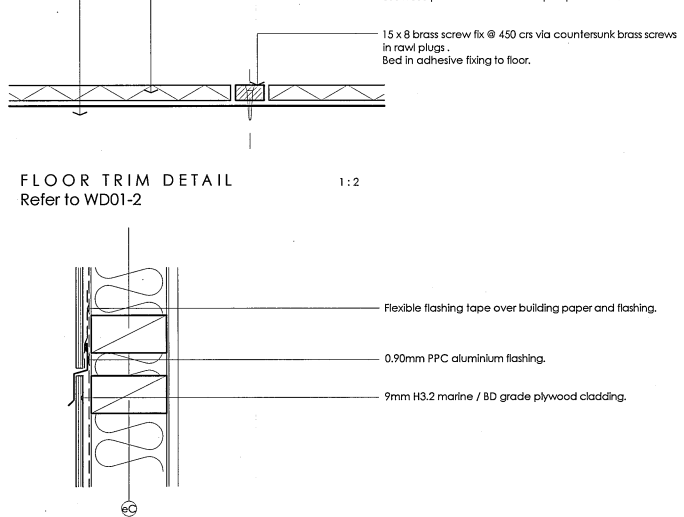
48
03-3
ACO DRAIN
/ DOOR SILL



SECTION a
Refer to detail 3 / WD06-1



SECTION b
Refer to detail 5 / WD06-1



FLOOR TRIM DETAIL
Refer to WD01-2



51
03-3
PLYWOOD CLADDING
HORIZONTAL JOINT

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AMENDED PLANS

CHRISTCHURCH CITY COUNCIL
RECEIVED
CONSENT DOCUMENT
- 8 JUN 2005
All building work shall comply with the consented documents.

| | | | |
|---|---------------|----|----------|
| CHRISTCHURCH CITY COUNCIL RECEIVED - 7 JUN 2005 CITY OFFICES 10050063 | | | |
| 8 | Construction | CS | 23/02/05 |
| A | Construction | CS | 26/01/05 |
| 3 | Tender | CS | 11/10/04 |
| 2 | Tender | CS | 06/10/04 |
| 1 | Schedule | CS | 20/09/04 |
| 0 | Client review | CS | 23/08/04 |
| # | revision | by | date |

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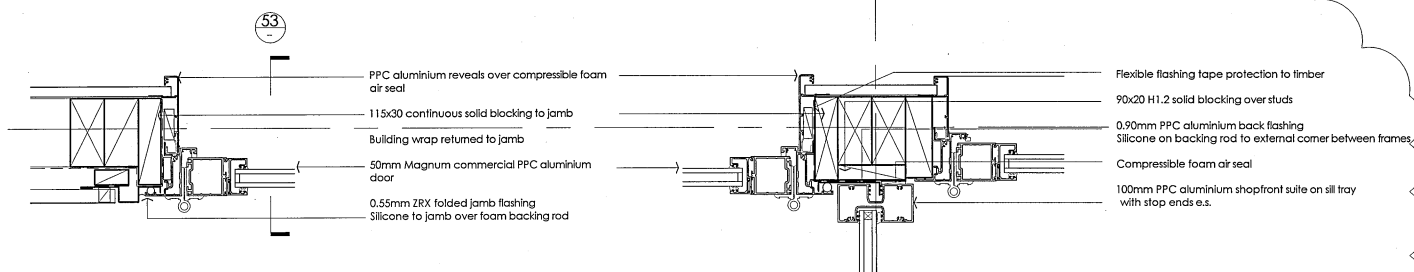
PARKLANDS LIBRARY
PROPOSED BUILDING CONVERSION

| | | |
|------------|----------------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Sladjana Radivojevic | Sept 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | 11 |

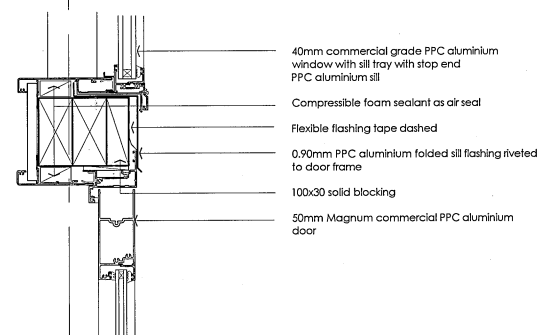
DETAILS

| | | |
|----------|----------|------|
| scale | 1 : 5 | rev. |
| contract | 04/05-02 | B |
| sheet | WD 06-5 | |

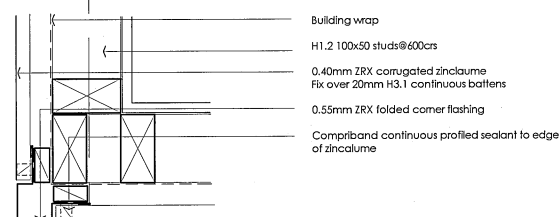
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52 MAGNUM DOOR JAMB 1:5
01-2 TYPICAL

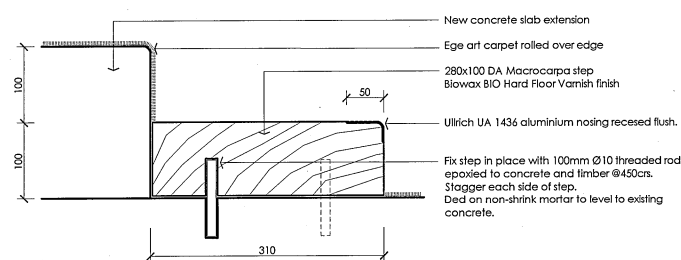


53 MAGNUM DOOR HEAD 1:5
WINDOW SILL



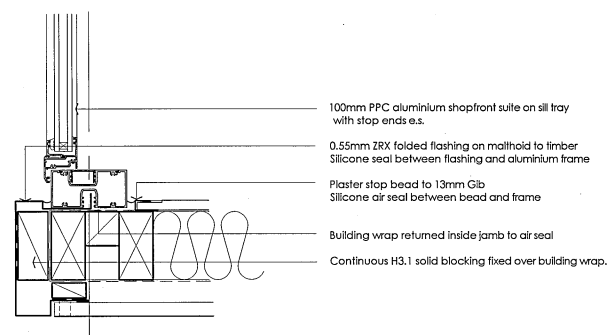
54
01-2

CORRUGATED CLADDING 1:5
TYPICAL EXTERNAL CORNER

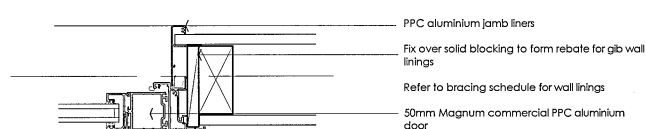


55 TIMBER STEP 1:5

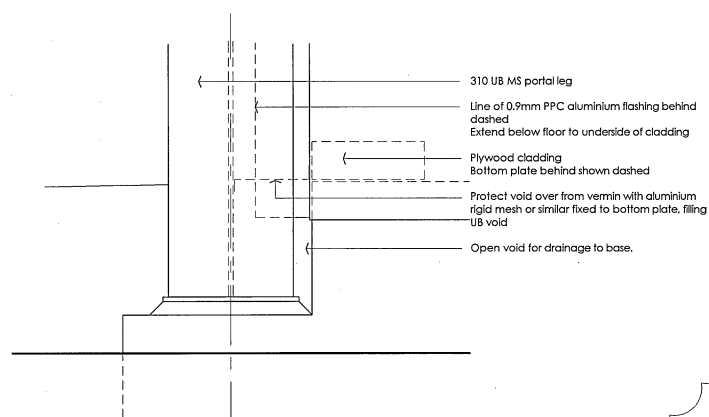
56 MAGNUM DOORS / SHOPFRONT 1:5
01-2 JUNCTION



57 SHOPFRONT SUITE / WING WALL 1:5
01-2 FLASHING

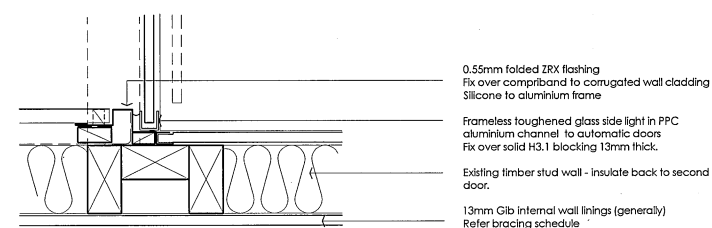


58 MAGNUM DOOR 1:5
01-2 INTERNAL JAMB

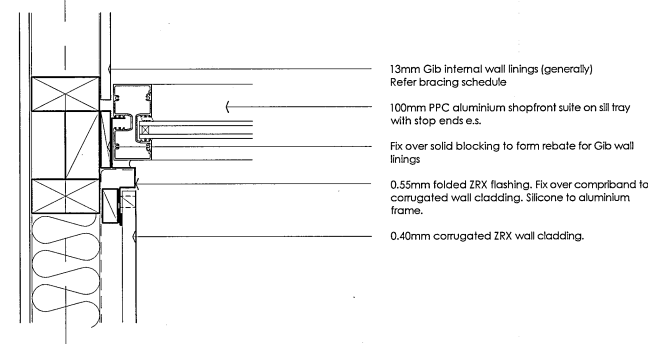


59
02-1

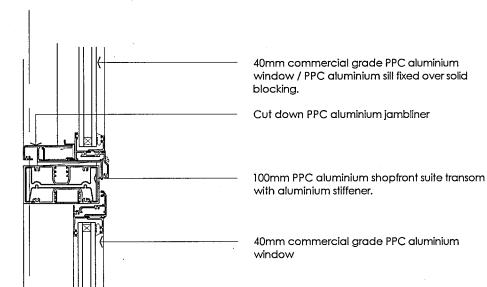
PORTAL ELEVATION 1:5
FLASHING DETAIL



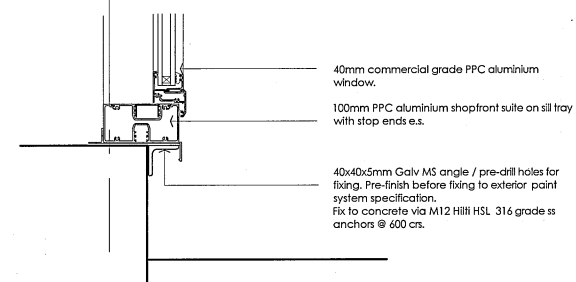
60 01-2 FRAMELESS GLAZING ABUTMENT TO CORRUGATED CLADDING 1:5



61 SHOPFRONT ABUTMENT TO CORRUGATED CLADDING 1:5



62 SHOPFRONT SUITE
WINDOW SILL/WINDOW HEAD



63 SHOPFRONT SUITE 1:5
WINDOW SILL

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AMENDED PLANS

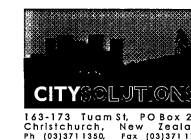
CHRISTCHURCH CITY COUNCIL

 CONSENT DOCUMENT
 - 8 JUN 2005

All building work shall comply with the consented documents.

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RECEIVED
- 7 JUN 2005
CIVIC OFFICES
10 05 0063

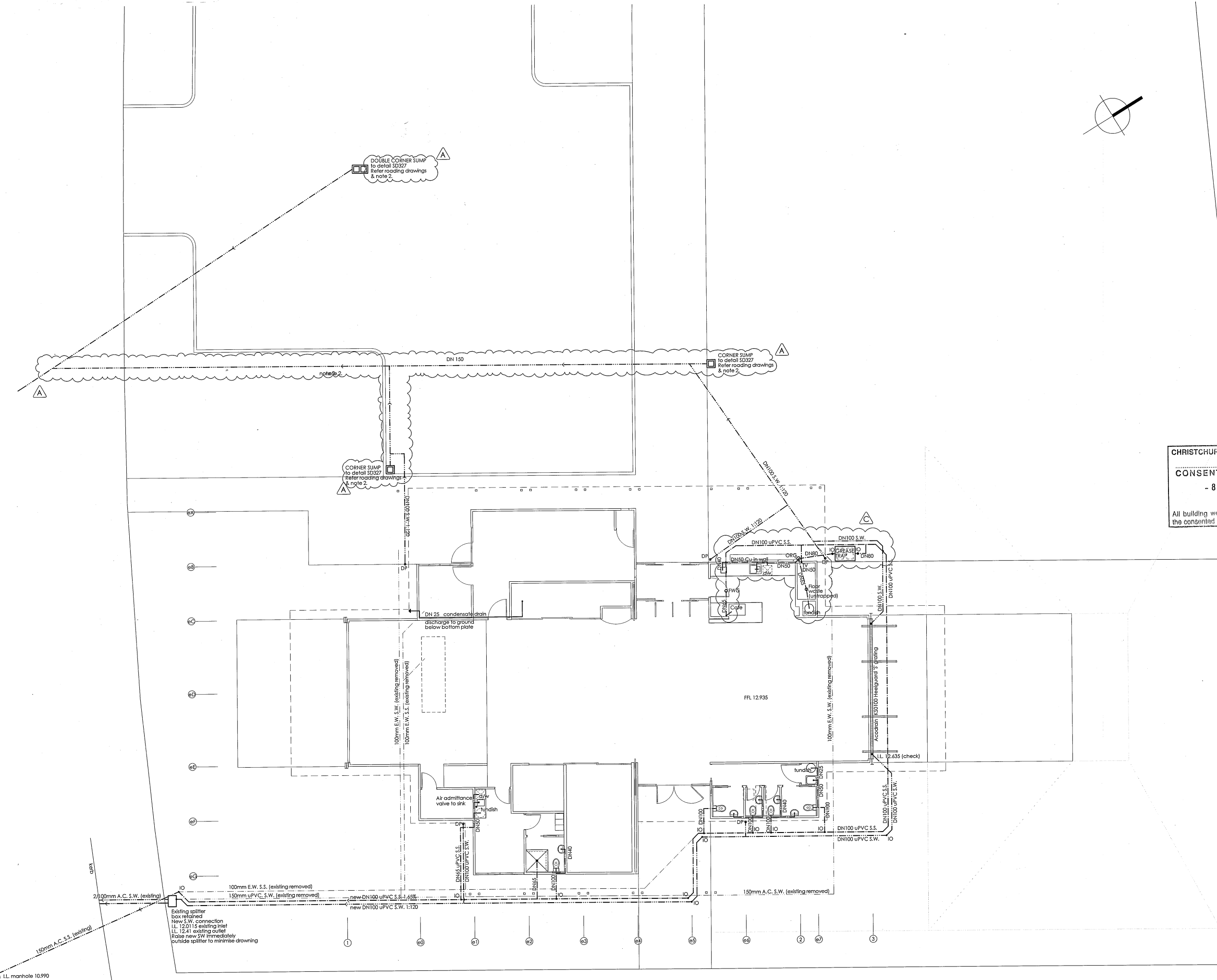
| | | | |
|---|--------------------|----|----------|
| B | Door abutments | CS | April 05 |
| A | Construction issue | CS | 21/01/05 |
| # | revision | by | date |

PARKLANDS LIBRARY
PROPOSED BUILDING CONVERSION

| | | |
|------------|----------------|-----------|
| designed | Crispin Schurr | Sept 2004 |
| drawn | Crispin Schurr | Jan 05 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | // |

DETAILS

| | |
|----------|----------|
| scale | 1 : 5 |
| contract | 04/05-62 |
| sheet | WD 06-6 |



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KEY AMENDED PLANS

- KEY
- ⊗ Elia wall hung WC
 - ⊗ Elia WC suite
 - ⊗ Lyra wall hung WHB
 - ⊗ refer section A sheet 10
 - ⊗ grid A

- SEWER
- WATER (cold mains)
 - STORMWATER
 - ORION
 - TELECOM
 - GAS (TELECOM)
 - WATER (HOT)
 - CONDENSATE

FINAL CONNECTION SIZES

- Ø15 Shower
- Ø15 WC
- Ø15 WHB (HW & CW)
- Ø15 Espresso Machine
- Ø15 Hose pipe
- Ø20 Dishwasher
- Ø20 Sink
- Ø20 Cleaners Tub
- Ø20 Urinal (no cistern)
- Ø20 HWC
- Ø20 Hose pipe

Note:

1. Condensate drains to discharge to plant boxes at GF level / in copper.

2. Sumps drainage in asphalt areas to have submerged outlets as per building code detail E1 / AS1 3.6.2 type 2.

CHRISTCHURCH CITY COUNCIL
CONSENT DOCUMENT
- 8 JUN 2005
All building work shall comply with the consented documents.

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10 05 00 63

| | | | |
|---|--------------|----|----------|
| B | Cafe fitout | CS | 24/05/05 |
| A | Construction | CS | 28/01/05 |
| # | revision | by | date |

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| | | |
|------------|----------------|----------|
| designed | Crispin Schurr | Aug 2004 |
| drawn | Crispin Schurr | Aug 2004 |
| dsg. check | CS | Jan 05 |
| dwg check | CS | Jan 05 |
| indexed | | |
| approved | | |

PLUMBING & DRAINAGE
PLAN

| | | |
|----------|----------|------|
| scale | 1:100 | rev. |
| contract | 04/05-02 | |
| sheet | WD 07-1 | |

2 5 9 4 3 / 0 1

PLUMBING & DRAINAGE

1:100

AMENDED PLANS

- SEWER
WATER (cold mains)
STORMWATER
ORION
TELECOM
GAS (TELECOM)
WATER (HOT)
CONDENSATE

Ø15 Shower
 Ø15 WC
 Ø15 WHB (HW & CW)
 Ø15 Espresso Machine
 Ø15 Hose pipe
 Ø20 Dishwasher
 Ø20 Sink
 Ø20 Cleaners Tub
 Ø20 Urinal (no cistern)
 Ø20 HWC
 Ø20 Hose pipe

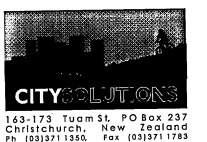
Condensate drains to discharge to plant boxes at GF level / in copper.

CHRISTCHURCH CITY COUNCIL
 [Signature]
 CONSENT DOCUMENT
 - 8 JUN 2005

All building work shall comply with the consented documents.

CHRISTCHURCH CITY COUNCIL
RECEIVED
- 7 JUN 2005
10 05 00 63
Application No

| | | | |
|---|--------------|----|----------|
| B | Cafe fitout | CS | 24/05/05 |
| A | Construction | CS | 24/01/05 |
| # | revision | by | date |



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| | | |
|------------|----------------|----------|
| designed | Crispin Schurr | Aug 2004 |
| drawn | Crispin Schurr | Aug 2004 |
| dsg. check | | |
| dwg check | | |
| indexed | | |
| approved | | // |

WATER SUPPLY
PLAN

scale 1:100
 contract 04/05-62
 sheet WD 07-2

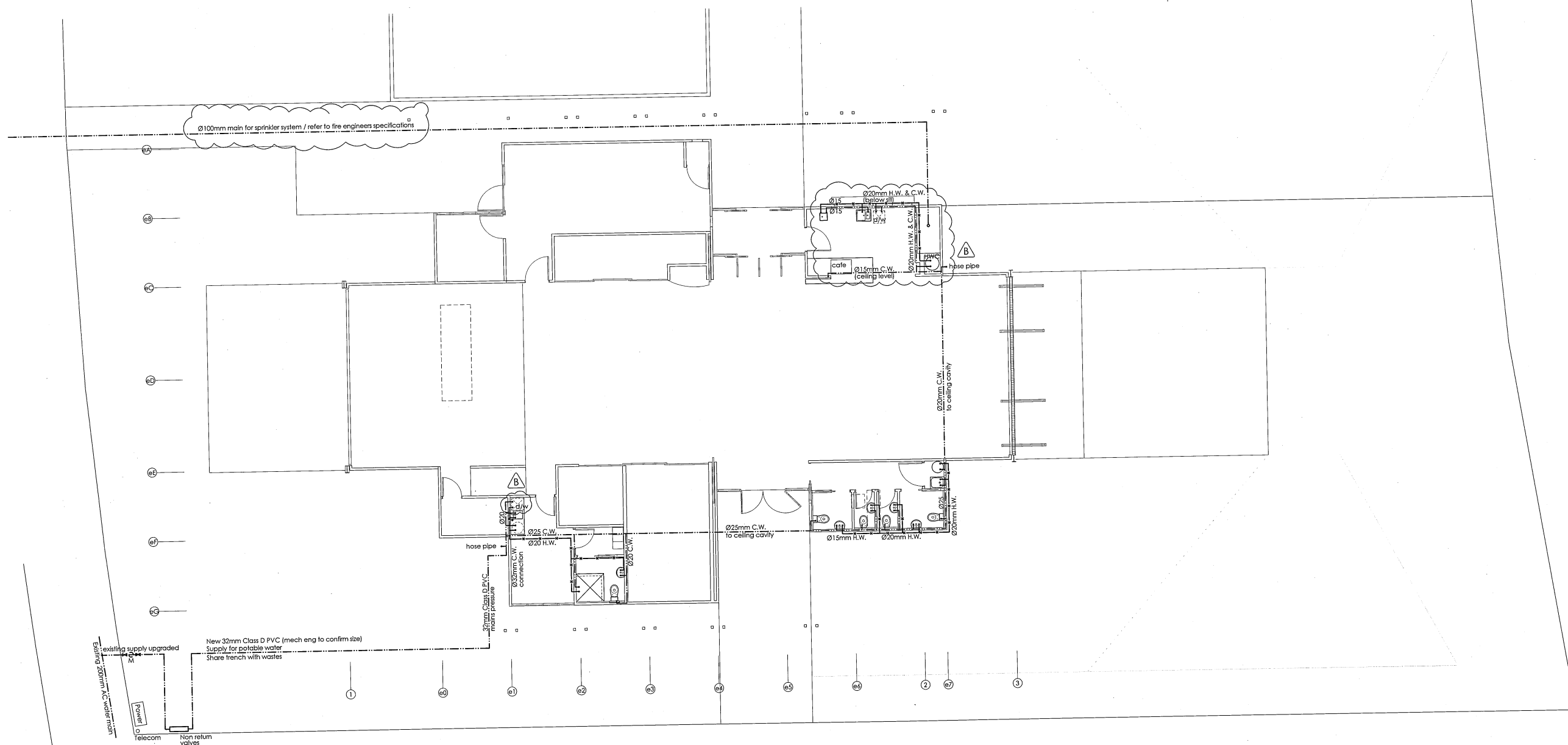
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AutoCAD 2000

Original size

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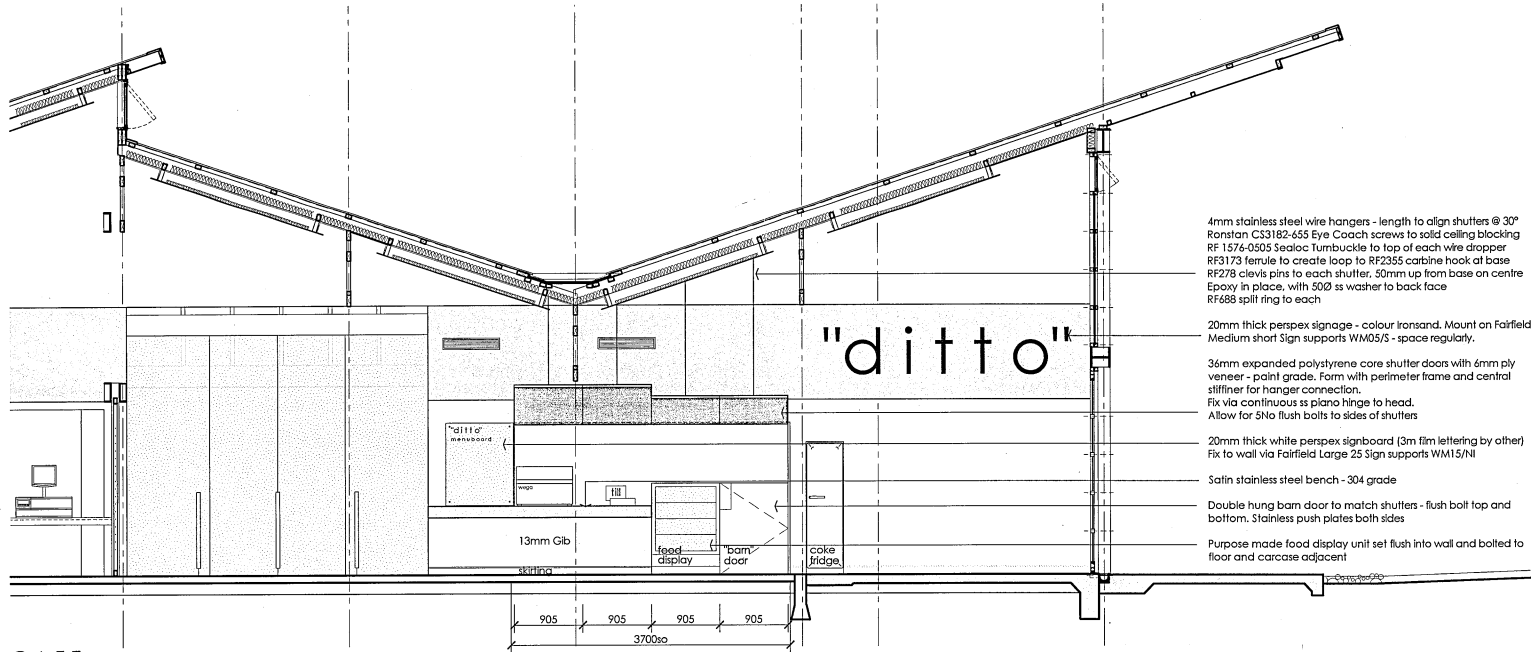
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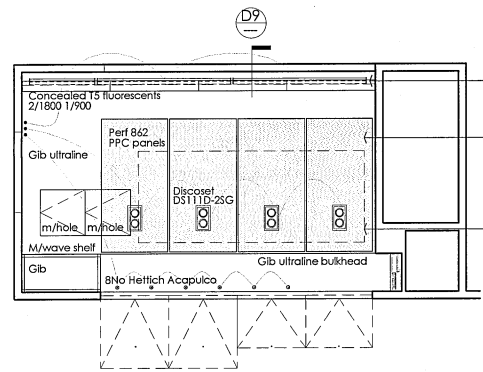
WATER SUPPLY
1:100

$$26441 / 01$$

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Original size mm



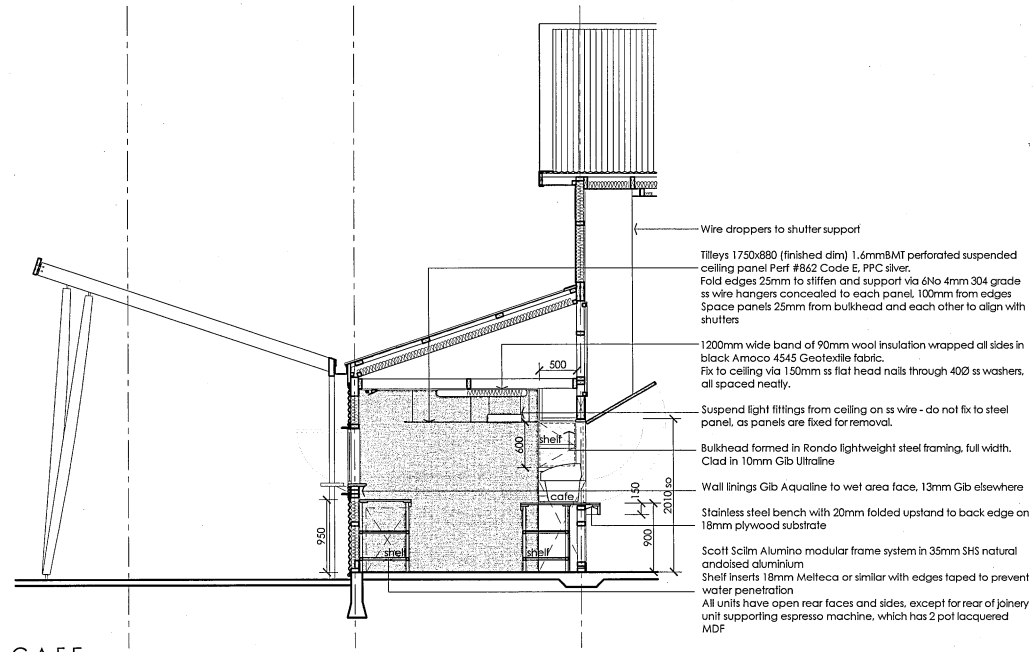
CAFE
LIBRARY ELEVATION 1:50



REFLECTED CEILING PLAN 1:50

Luminaire schedule
2No 1800mm 1No 900mm Thorn Arrowslim T5 fluorescents
4No Concept Lighting Discoveil DS111D-25G
8No 12V Hettich Acapulco Stainless 20W + transformers
Allow to supply and install lamps for each.

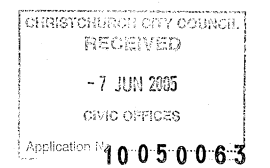
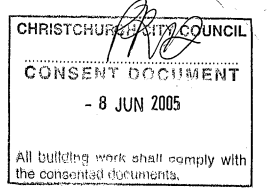
4mm stainless steel wire hangers - length to align shutters @ 30°
Ranstam CS3182-655 Eye Coach screws to solid ceiling blocking
RF 1576-0505 Sealoc Turnbuckle to top of each wire dropper
RF3173 ferrule to create loop to RF2355 carabine hook at base
RF278 clevis pins to each shutter, 50mm up from base on centre
Epoxy in place, with 500 ss washer to back face
RF688 split ring to each
20mm thick perspex signage - colour ironsand. Mount on Fairfield
Medium short Sign supports WM05/S - space regularly.
36mm expanded polystyrene core shutter doors with 6mm ply
veneer - paint grade. Form with perimeter frame and central
stiffener for hanger connection.
Fix via continuous ss piano hinge to head.
Allow for 5No flush bolts to sides of shutters
20mm thick white perspex signboard (3m film lettering by other)
Fix to wall via Fairfield Large 25 Sign supports WM15/NL
Satin stainless steel bench - 304 grade
Double hung barn door to match shutters - flush bolt top and
bottom. Stainless push plates both sides
Purpose made food display unit set flush into wall and bolted to
floor and carcass adjacent



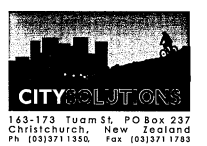
CAFE
CROSS SECTION 1:50

Wire droppers to shutter support
Tilleys 1750x880 (finished dim) 1.6mmBMT perforated suspended
ceiling panel Perf #862 Code E, PPC silver.
Fold edges 25mm to stiffen and support via 6No 4mm 304 grade
ss wire hangers concealed to each panel, 100mm from edges
Space panels 25mm from bulkhead and each other to align with
shutters
1200mm wide band of 90mm wool insulation wrapped all sides in
black Amoco 4545 Geotextile fabric.
Fix to ceiling via 150mm ss flat head nails through 402 ss washers,
all spaced neatly.
Suspend light fittings from ceiling on ss wire - do not fix to steel
panel, as panels are fixed for removal.
Bulkhead formed in Rondo lightweight steel framing, full width.
Clad in 10mm Gib Utraline
Wall linings Gib Aqualine to wet area face, 13mm Gib elsewhere
Stainless steel bench with 20mm folded upstand to back edge on
18mm plywood substrate
Scott Scim Alumina modular frame system in 35mm SHS natural
anodised aluminium
Shelf inserts 18mm Metteca or similar with edges taped to prevent
water penetration
All units have open rear faces and sides, except for rear of joinery
unit supporting espresso machine, which has 2 pot lacquered
MDF

Notes:
The concept, form, configuration and detailing of this
project are copyright. No part thereof shall be copied
or otherwise used without the written consent of the
designer.
All construction is to comply with the New Zealand
Building Code.
Use dimensions only - do not scale from drawings.
Drawings are to be read in conjunction with all other
drawings and specifications pertaining to this contract.
Any discrepancies are to be referred to the Architect
for clarification.



| | | | |
|---|----------|----|----------|
| A | Pricing | CS | 23/05/05 |
| # | revision | by | date |



PARKLANDS LIBRARY
PROPOSED CAFE FITOUT

| | | |
|------------|----------------|--------|
| designed | Crispin Schurr | May 05 |
| drawn | Crispin Schurr | May 05 |
| dsig check | | |
| dwg check | | |
| indexed | | |
| approved | | // |

| | | |
|-------------------|------|------|
| SECTIONS | | |
| REFLECTED CEILING | | |
| scale | 1:50 | rev. |
| contract | | A |
| sheet | wd02 | |

2 6 4 4 1 / 0 1

058-9825

AMENDED
ROLL PLANS

46 Queenspark Drive
Change of Use:
Community Library
10050063



Tube-370

Appendix C

CERA DEE Summary Data

Detailed Engineering Evaluation Summary Data

V1.11

| | | | | | | | |
|---------------------------------------|--|---|--|--------------------------------|--|---|--|
| Location | | Building Name: Parklands Library | | Unit: No: Street | | Reviewer: Samir Govind | |
| Building Address: 46 Queenspark Drive | | CP Eng No: 167736 | | Company: Beca | | Company project number: 5323355 | |
| Legal Description: | | Company phone number: 03 3663521 | | Date of submission: 14/06/2013 | | Inspection Date: 17/04/2012 | |
| GPS south: _____ | | Degrees Min Sec | | Revision: A | | Is there a full report with this summary? yes | |
| GPS east: _____ | | Building Unique Identifier (CCC): BU 2334-001 EQ2 | | | | | |

| | | | | | |
|--|--|--|--|---------------------------------|--|
| Site | | Site slope: flat | | Max retaining height (m): _____ | |
| Soil type: silty sand | | Soil Profile (if available): _____ | | | |
| Site Class (to NZS1170.5): D | | If Ground improvement on site, describe: _____ | | | |
| Proximity to waterway (m, if <100m): _____ | | Approx site elevation (m): _____ | | | |
| Proximity to cliff top (m, if <100m): _____ | | | | | |
| Proximity to cliff base (m, if <100m): _____ | | | | | |

| | | | | | | | |
|--------------------------------------|--|---|--|--|--|---|--|
| Building | | No. of storeys above ground: 1 | | single storey = 1 | | Ground floor elevation (Absolute) (m): 0.00 | |
| Ground floor split? no | | Ground floor elevation above ground (m): 0.00 | | if Foundation type is other, describe: _____ | | height from ground to level of uppermost seismic mass (for IEP only) (m): 6.5 | |
| Storeys below ground: 0 | | Foundation type: mat slab | | Date of design: 1976-1992 | | | |
| Building height (m): 6.50 | | Floor footprint area (approx): 420 | | | | | |
| Age of Building (years): 34 | | Strengthening present: no | | If so, when (year): _____ | | And what load level (%g): _____ | |
| | | Use (ground floor): other (specify) _____ | | Brief strengthening description: _____ | | | |
| | | Use (upper floors): _____ | | | | | |
| | | Use notes (if required): Public library | | | | | |
| Importance level (to NZS1170.5): IL2 | | | | | | | |

| | | | | | |
|--------------------------|--|------------------------------|--|--|--|
| Gravity Structure | | Gravity System: frame system | | truss depth, purlin type and cladding: 800mm timber truss, timber rafters, metal clad roof | |
| Roof: timber truss | | Floors: concrete flat slab | | slab thickness (mm): 100 | |
| Beams: timber | | Columns: load bearing walls | | typical dimensions (mm x mm): 100 framing typical | |
| Walls: _____ | | | | | |

| | | | | | | | |
|--|--|---|--|---|--|-------------------------------------|--|
| Lateral load resisting structure | | Lateral system along: lightweight timber framed walls | | Note: Define along and across in detailed report! | | note typical wall length (m): 3 | |
| Ductility assumed, μ : 3.00 | | Period along: 0.40 | | estimate or calculation: estimated | | 3m grids typical each way typical | |
| Total deflection (ULS) (mm): _____ | | maximum interstorey deflection (ULS) (mm): _____ | | estimate or calculation: _____ | | estimate or calculation: _____ | |
| Lateral system across: lightweight timber framed walls | | Ductility assumed, μ : 3.00 | | note typical wall length (m): 3 | | End bay frames are structural steel | |
| Period across: 0.40 | | Total deflection (ULS) (mm): _____ | | estimate or calculation: estimated | | estimate or calculation: _____ | |
| maximum interstorey deflection (ULS) (mm): _____ | | estimate or calculation: _____ | | estimate or calculation: _____ | | | |

| | | | | | |
|---------------------|--|-------------------|--|-----------------------------|--|
| Separations: | | north (mm): _____ | | leave blank if not relevant | |
| east (mm): _____ | | south (mm): _____ | | | |
| west (mm): _____ | | | | | |

| | | | | | |
|--------------------------------|--|--------------------------|--|------------------------------------|--|
| Non-structural elements | | Stairs: _____ | | None | |
| Wall cladding: other light | | Roof Cladding: Metal | | describe: GIB board lining typical | |
| Glazing: aluminium frames | | Ceilings: plaster, fixed | | describe: _____ | |
| Services (list): _____ | | | | | |

| | | | | | |
|--------------------------------|--|-----------------------|--|--|--|
| Available documentation | | Architectural: full | | original designer name/date: Cowey Mills & Co. (1978), City Solutions (2004) | |
| Structural: none | | Mechanical: partial | | original designer name/date: Powell Fenwick (2004) | |
| Electrical: partial | | Geotech report: _____ | | original designer name/date: Powell Fenwick (2004) | |
| | | | | original designer name/date: Tonkin & Taylor (draft) / March 2012 | |

| | | | | | |
|---|--|---|--|---|--|
| Damage | | Site performance: Liquefaction, cosmetic cracks, opening at slab joints | | Describe damage: Liquefaction observed adjacent to building and elsewhere nearby. Spread of ground and slab joints opened | |
| Settlement: none observed | | Differential settlement: 0-1.350 | | notes (if applicable): _____ | |
| Liquefaction: 0-2 m ² /100m ² | | Lateral Spread: 0-50mm | | notes (if applicable): Observed in areas adjacent to buildings | |
| Differential lateral spread: none apparent | | Ground cracks: none apparent | | notes (if applicable): Slab joints opened | |
| Damage to area: slight | | notes (if applicable): _____ | | | |

| | | | | | |
|------------------|--|-------------------------------|--|---|--|
| Building: | | Current Placard Status: green | | Describe how damage ratio arrived at: _____ | |
| Along | | Damage ratio: 20% | | Describe (summary): _____ | |
| Across | | Damage ratio: 20% | | Damage _ Ratio = $\frac{(\% \text{ NBS (before)} - \% \text{ NBS (after)})}{\% \text{ NBS (before)}}$ | |
| Diaphragms | | Damage?: no | | Describe: Slab settlement noted however no cracks observed | |
| CSWs: | | Damage?: no | | Describe: Site characteristics - liquefaction observed | |
| Pounding: | | Damage?: no | | Describe: N/A | |
| Non-structural: | | Damage?: yes | | Describe: To wall cladding, non-structural beams, glazing, floor tiles | |

| | | | | | |
|-------------------------------|--|--|--|--|--|
| Recommendations | | Level of repair/strengthening required: minor structural | | Describe: Cosmetic repair. Settlement may be significant insurance | |
| Building Consent required: no | | Interim occupancy recommendations: do not occupy | | Describe: _____ | |
| Along | | Assessed %NBS before: 55% | | 55% %NBS from IEP below | |
| Assessed %NBS after: 44% | | If IEP not used, please detail assessment methodology: _____ | | | |
| Across | | Assessed %NBS before: 55% | | 55% %NBS from IEP below | |
| Assessed %NBS after: 44% | | | | | |

| | | | |
|--|--|--|--|
| IEP | | Use of this method is not mandatory - more detailed analysis may give a different answer, which would take precedence. Do not fill in fields if not using IEP. | |
| Period of design of building (from above): 1976-1992 | | h _n from above: 6.5m | |
| Seismic Zone, if designed between 1965 and 1992: _____ | | not required for this age of building: _____ | |

not required for this age of building

along

across

Period (from above):

0.4

0.4

(%NBS)_{nom} from Fig 3.3:

16.5%

16.5%

Note:1 for specifically design public buildings, to the code of the day: pre-1965 = 1.25; 1965-1976, Zone A =1.33; 1965-1976, Zone B = 1.2; all else

1.0

1.00

Note 2: for RC buildings designed between 1976-1984, use 1.2

1.2

1.0

Note 3: for buildings designed prior to 1935 use 0.8, except in Wellington (1.0)

1.0

1.0

Final (%NBS)_{nom}:

17%

17%

2.2 Near Fault Scaling Factor

Near Fault scaling factor, from NZS1170.5, cl 3.1.6

1.00

1.00

Near Fault scaling factor (1/N(T,D), **Factor A**:

1

1

2.3 Hazard Scaling Factor

Hazard factor Z for site from AS1170.5, Table 3.3

0.30

0.30

Z₁₉₉₂, from NZS4203:1992

1.0

1.0

Hazard scaling factor, **Factor B**:

3.33333333

3.33333333

2.4 Return Period Scaling Factor

Building Importance level (from above)

2

2

Return Period Scaling factor from Table 3.1 **Factor C**:

1.00

1.00

2.5 Ductility Scaling Factor

Assessed ductility (less than max in Table 3.2)

3.00

3.00

Ductility scaling factor: =1 from 1976 onwards; or = μ , if pre-1976, from Table 3.3

1.57

1.57

Ductility Scaling Factor, **Factor D**:

1.00

1.00

2.6 Structural Performance Scaling Factor:

Sp:

0.700

0.700

Structural Performance Scaling Factor **Factor E**:

1.428571429

1.428571429

2.7 Baseline %NBS, (NBS)_b = (%NBS)_{nom} x A x B x C x D x E

%NBS_b:

79%

79%

Global Critical Structural Weaknesses:(refer to NZSEE IEP Table 3.4)

3.1. Plan Irregularity, factor A:

insignificant

1

3.2. Vertical irregularity, Factor B:

insignificant

1

3.3. Short columns, Factor C:

insignificant

1

3.4. Pounding potential

Pounding effect D1, from Table to right

1.0

1.0

Height Difference effect D2, from Table to right

1.0

1.0

Therefore, Factor D:

1

1

3.5. Site Characteristics

significant

0.7

0.7

3.6. Other factors, Factor F

For ≤ 3 storeys, max value =2.5, otherwise max value =1.5, no minimum

1.0

1.0

Rationale for choice of F factor, if not

Detail Critical Structural Weaknesses:(refer to DEE Procedure section 6)

List any:

Refer also section 6.3.1 of DEE for discussion of F factor modification for other critical structural weaknesses

3.7. Overall Performance Achievement ratio (PAR)

0.70

0.70

4.3 PAR x (%NBS)_b:

PAR x Baseline %NBS

55%

55%

4.4 Percentage New Building Standard (%NBS), (before)

55%

| Table for selection of D1 | | Severe | Significant | Insignificant/none |
|---|-------------|--------|---------------|--------------------|
| Separation | 0<sep<.005H | | .005<sep<.01H | Sep>.01H |
| Alignment of floors within 20% of H | | 0.7 | 0.8 | 1 |
| Alignment of floors not within 20% of H | | 0.4 | 0.7 | 0.8 |

| Table for Selection of D2 | | Severe | Significant | Insignificant/none |
|----------------------------------|-------------|--------|---------------|--------------------|
| Separation | 0<sep<.005H | | .005<sep<.01H | Sep>.01H |
| Height difference > 4 storeys | | 0.4 | 0.7 | 1 |
| Height difference 2 to 4 storeys | | 0.7 | 0.9 | 1 |
| Height difference < 2 storeys | | 1 | 1 | 1 |

Appendix D

Previous Reports and Assessments

Christchurch Eq RAPID Assessment Form - LEVEL 2

Inspector Initials
Territorial Authority

NC
Christchurch City

Date
Time

30.01.2012
11.30

Final Posting
(e.g. UNSAFE)

INSPECTED

Building Name

PARKLANDS LIBRARY

Short Name

Address

46 QUEENSPARK DR
PARKLANDS

GPS Co-ordinates

S° E°

Contact Name

MIKE SHEPPARD (CCC)

Contact Phone

941 6207

Storeys at and above
ground level

1

Below
ground
level

0

Total gross floor area
(m²)

~300m²

Year
built

~2005

No of residential Units

excl. carports

Photo Taken

Yes

No

Type of Construction

- ☒ Timber frame *timber roof trusses*
☒ Steel frame
☐ Tilt-up concrete
☐ Concrete frame
☐ RC frame with masonry infill

- ☐ Concrete shear wall
☐ Unreinforced masonry
☐ Reinforced masonry
☐ Confined masonry
☐ Other:

Primary Occupancy

- ☐ Dwelling
☐ Other residential
☒ Public assembly *library + cafe*
☐ School
☐ Religious

- ☐ Commercial/ Offices
☐ Industrial
☐ Government
☐ Heritage Listed
☐ Other

Investigate the building for the conditions listed on page 1 and 2, and check the appropriate column. A sketch may be added on page 3

Overall Hazards / Damage

Minor/None

Moderate

Severe

Comments

Collapse, partial collapse, off foundation

☒

☐

☐

Building or storey leaning

☒

☐

☐

Wall or other structural damage

☒

☐

☐

Overhead falling hazard

☒

☐

☐

Ground movement, settlement, slips

☐

☒

☐

Neighbouring building hazard

☒

☐

☐

Electrical, gas, sewerage, water, hazmats

☐

☐

☐

roof canopy support columns warped/bowed
~ 5-10mm diff. settlement internally noted
NOT INSPECTED BUT OPERATING

Record any existing placard on this building:

Existing
Placard Type
(e.g. UNSAFE)

GREEN 11/06/2011

Choose a new posting based on the new evaluation and team judgement. Severe conditions affecting the whole building are grounds for an UNSAFE posting. Localised Severe and overall Moderate conditions may require a RESTRICTED USE. Place INSPECTED placard at main entrance. Post all other placards at every significant entrance. Transfer the chosen posting to the top of this page.

INSPECTED

GREEN

G1

G2

RESTRICTED USE

YELLOW

Y1

Y2

UNSAFE

RED

R1

R2

R3

Record any restriction on use or entry:

Further Action Recommended:

Tick the boxes below only if further actions are recommended

☐ Barricades are needed (state location):

☒ Detailed engineering evaluation recommended

☒ Structural

☒ Geotechnical

☐ Other:

☐ Other recommendations:

Estimated Overall Building Damage (Exclude Contents)

| | | | |
|---------|-------------------------------------|---------|--------------------------|
| None | <input type="checkbox"/> | 31-60 % | <input type="checkbox"/> |
| 0-1 % | <input type="checkbox"/> | 61-99 % | <input type="checkbox"/> |
| 2-10 % | <input checked="" type="checkbox"/> | 100 % | <input type="checkbox"/> |
| 11-30 % | <input type="checkbox"/> | | |

Inspection ID: (Office Use Only)

Sign here on completion

Date & Time
ID

30.01.2012 12:00

| Structural Hazards/ Damage | Minor/None | Moderate | Severe | Comments |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|
| Foundations | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Roofs, floors (vertical load) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Columns, pilasters, corbels | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | See below |
| Diaphragms, horizontal bracing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Pre-cast connections | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Beam | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | N/A. |
| Non-structural Hazards / Damage | | | | |
| Parapets, ornamentation | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Cladding, glazing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Ceilings, light fixtures | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Interior walls, partitions | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | cracking in gip panels |
| Elevators | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | minor gip cracking, door frames |
| Stairs/ Exits | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | N/A |
| Utilities (eg. gas, electricity, water) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Other <u>roof canopy supports</u> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | NOT INSPECTED BUT OPERATIVE |
| Geotechnical Hazards / Damage | | | | |
| Slope failure, debris | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | some damage to timber braces & fixings extend to bldg. See comments below |
| Ground movement, fissures | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Soil bulging, liquefaction | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | up to ~10mm differential settlement intensity located in an area that has had severe liquefaction |
| General Comment | | | | |

East and west elevations have ^{included} timber braces connected between the roof cantilevers and ground - Some have warped/bowed and base connections (bolts) have split at bolt location. Not supporting significant load (generally) and may be more architectural than structural. Likely differential settlement across building footprint,

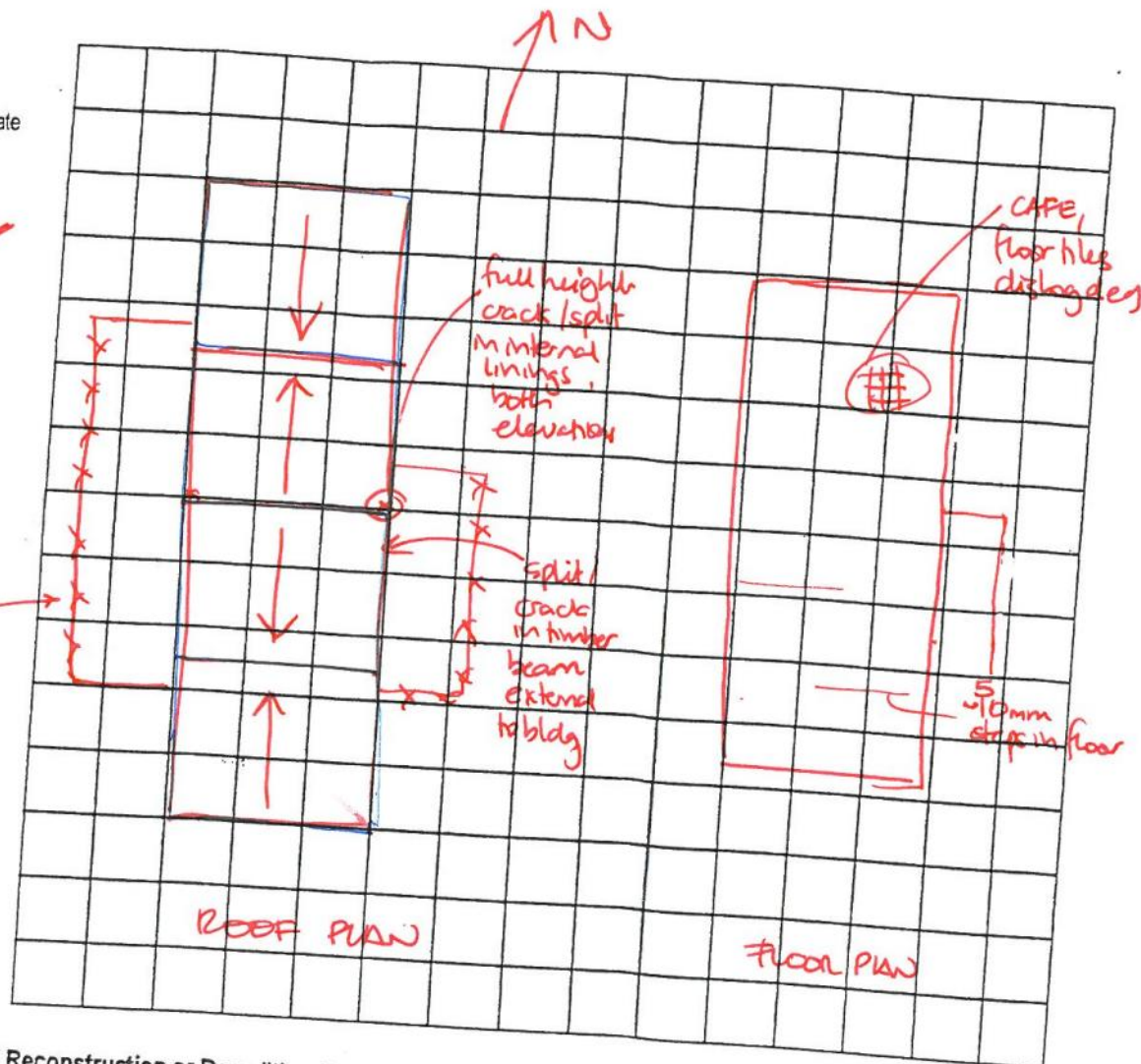
Usability Category

| Damage Intensity | Posting | Usability Category | Remarks |
|------------------|-------------------------|---|---------|
| Light damage | Inspected (Green) | G1. Occupiable, no immediate further investigation required | |
| Low risk | | G2. Occupiable, repairs required | |
| Medium damage | Restricted Use (Yellow) | Y1. Short term entry | |
| Medium risk | | Y2. No entry to parts until repaired or demolished | |
| Heavy damage | Unsafe (Red) | R1. Significant damage; repairs, strengthening possible | |
| High risk | | R2. Severe damage: demolition likely | |
| | | R3. At risk from adjacent premises or from ground failure | |

up to 10mm step noticed at floor joint locations (rippling of carpet). Tiles have dislodged in café seating area but overall movement does not appear significant. Possibly some movement of one half of the building North-South dirⁿ as vert. crack full height of bldg internally noted

Sketch (optional)

Provide a sketch of the entire building or damage points. Indicate damage points.



Recommendations for Repair and Reconstruction or Demolition (Optional)

- x undertake detailed engineering evaluation
- x assess reliance of roof on timber braces to provide support → confirm if non-structural

Additional gen. comments ex pg 2

- x Some windows no longer operable following 23/12/11 earthquake
- x Leaking at windows to North elevation
- x cracks in staff toilet floor tiles

Important Note: Structural Inspection

1.1 Background

Beca has carried out an inspection of the following building following the 15 January 2012 earthquakes

| | |
|------------------|-----------------------------|
| Building Name | PARKLANDS LIBRARY |
| Building Address | 46 QUEENSPARK DR, PARKLANDS |
| Date: | 30 JAN 2012 |

1.2 Basis of inspection

This Level 2 rapid assessment has been prepared based upon limited visual inspection, and is intended to record the damage caused by the aftershocks of 15 January 2012. In all other respects, it is not intended to supersede previous more detailed inspections and reports. Its scope is confined to assessing the likely effect of observed damage upon the building lateral capacity, to establish the degree to which this has been diminished (relative to the building in its undamaged state). It does not serve as a substitute for an IEP (or more detailed seismic assessment) which provides an assessment of the building against current code requirements and hence quantifies the risk presented by the building relative a building designed in accordance with modern codes.

1.3 Earthquake Prone Buildings

We will attempt to review work Beca has completed on the above building including highlighting again if this is an earthquake prone building. If Beca has no history with the property the onus is on the Manager or Owner to highlight any inspection history and make known who and when inspections have been undertaken.

1.4 No State of Emergency, therefore no placard system operational

No state of emergency has been declared and as such, the emergency placard system has not been activated. Beca will not apply placards as part of this inspection.

1.5 No observed reduced capacity

If our inspection indicates **no apparent reduced capacity** this **does not** mean that the building is declared safe to occupy by Beca. This means that the building appears to be in no worse state than before 15 January 2012. The **ultimate decision on whether to occupy the building remains with the building owner and the tenants.**

1.6 Diminished Capacity

If our inspection indicates diminished capacity, then our recommendation will be to carry out a full IEP assessment. This will need to be prioritised and scheduled once the initial response is over.

1.7 Badly damaged buildings

If we have any concern in relation to the level of damage, we will of course highlight this to you. Beca will refer your building for further inspection to the Christchurch City Council who have the authority to declare a building unsafe under the Building Act or to CERA who may require further detailed work or demolition under the Canterbury Earthquake Recovery Act 2011.

1.8 Further clarification

If you require further clarification on the important points above, please contact one of the following:

Samir Govind, Technical Director Beca Structural Engineering; 027 276 7308

Mark Spencer; General Manager Beca Structural Engineering; 021 370 756

Craig Price; South Island Regional Manager; 027 488 4123

2 Scope of Services

- a. Our building inspections will be initially limited to structural inspections in accordance with the Level 2 Rapid Structural Safety Assessments guidelines identified above. While these guidelines assume that the inspections will be carried out for a territorial authority during a state of emergency, our work will be carried out for you (instead of for a territorial authority), and will continue to be carried out, in line with the guideline, after the state of emergency has been lifted. Our inspections will be for the sole purpose of providing an urgent assessment of the damage to key structural elements of a building that may pose a risk for life safety and access purposes, and are based on an internal and an external visual inspection of key elements of the structure readily accessible at the time of the inspection. The assessment may include recommendations for work to be done under urgency where there is a need to demolish or secure the structure to ensure the safety of the public or protect adjacent property.

We will be passing the Level 2 Assessment forms to the Christchurch City Council and/or CERA. We believe from discussions with the Council that these reports will fulfil their requirements for Level 2 assessments for these buildings and the Council will not separately inspect these buildings.

- b. Beca and its employees and agents are not able to give any warranty or guarantee that all defects, damage, conditions or qualities have been identified and further post disaster engineering advice should be sought regarding a detailed inspection of the building and the detailed repair and remedial work required on the building to restore functionality and Building Code compliance. Beca liability for any loss, damage, costs, or claim arising due to, or in connection with the assessment for any particular building and any related advice is limited to direct property damage and shall not exceed the fees rendered by Beca for that particular building assignment.
- c. The inspections will not cover building services systems however such inspections and any advice on detailed repair or remedial work for these systems can be undertaken in association with other post disaster engineering advice at your request.
- d. The terms of this letter and the conditions of engagement described below will continue to apply to all services performed by Beca in respect of the buildings for which this commission applies unless and until new written conditions of engagement are entered into.

3 Conditions of Engagement

The conditions that will apply to our Services are the ACENZ/IPENZ Short Form Model Conditions of Engagement (Commercial), dated April 2007 (the "Conditions"), with the following two modifications:

- Point 2.b. above under our scope of services prevails over the Conditions, including the amount of our liability; and
- Although we will apply the standard of care in accordance with clause 2 of the Conditions, such standard will be applied in the context of the scope of services above, including the urgency we will need to work, the limited nature of the inspections, and the limited information available to us.

4 Acknowledgement

I confirm I have read the above and will liaise with and advise the building owner/tenants accordingly.

| | |
|------------------------|---|
| Building Owner/Manager | Name: Signature: |
| Beca Engineer | Name: NICHOLAS CHARMAN Signature: NZ |
| Date | 30 JAN 2012 |

Beca Staff Present:

| Name | Signature |
|------------------|-----------|
| NICHOLAS CHARMAN | NZ |
| | |
| | |