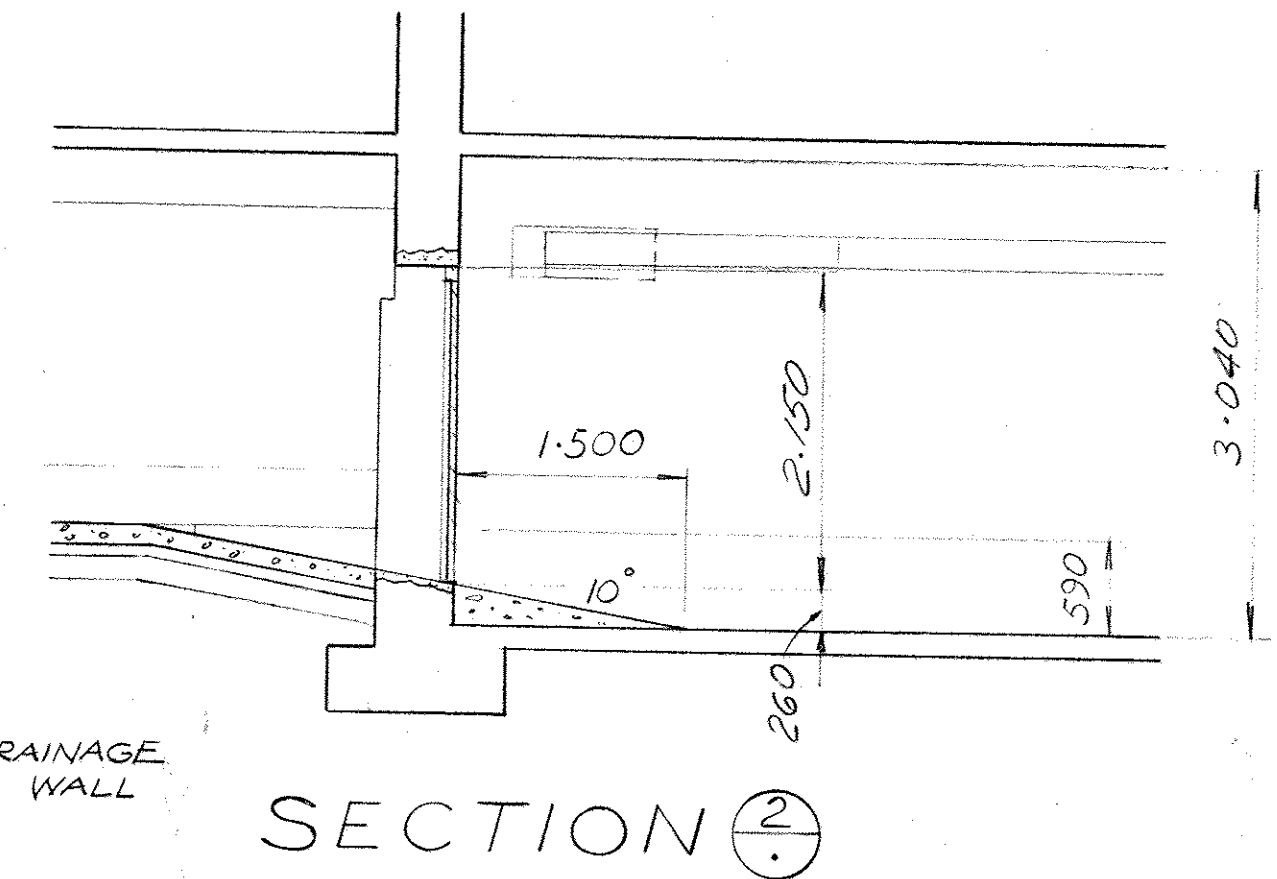
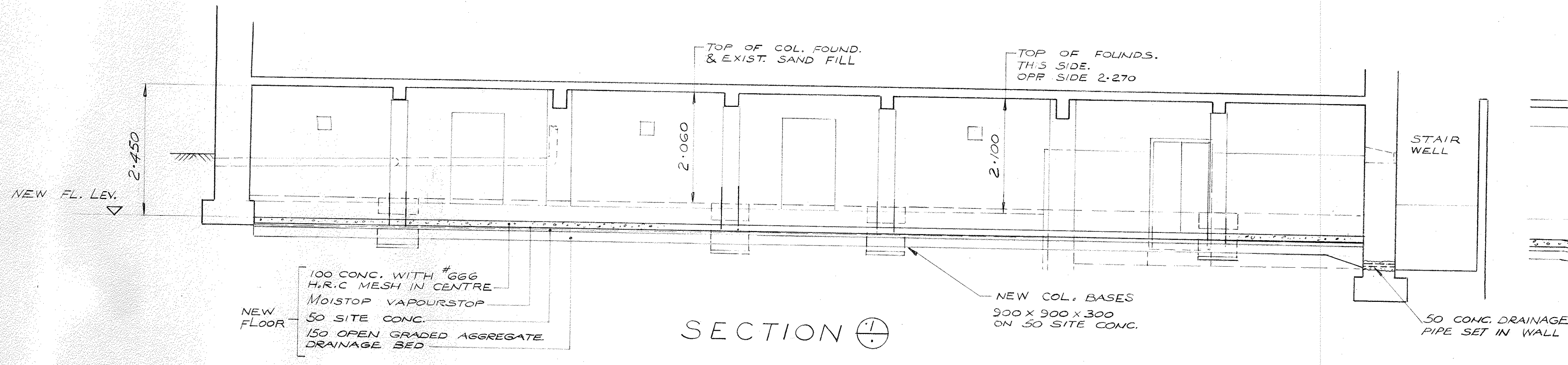
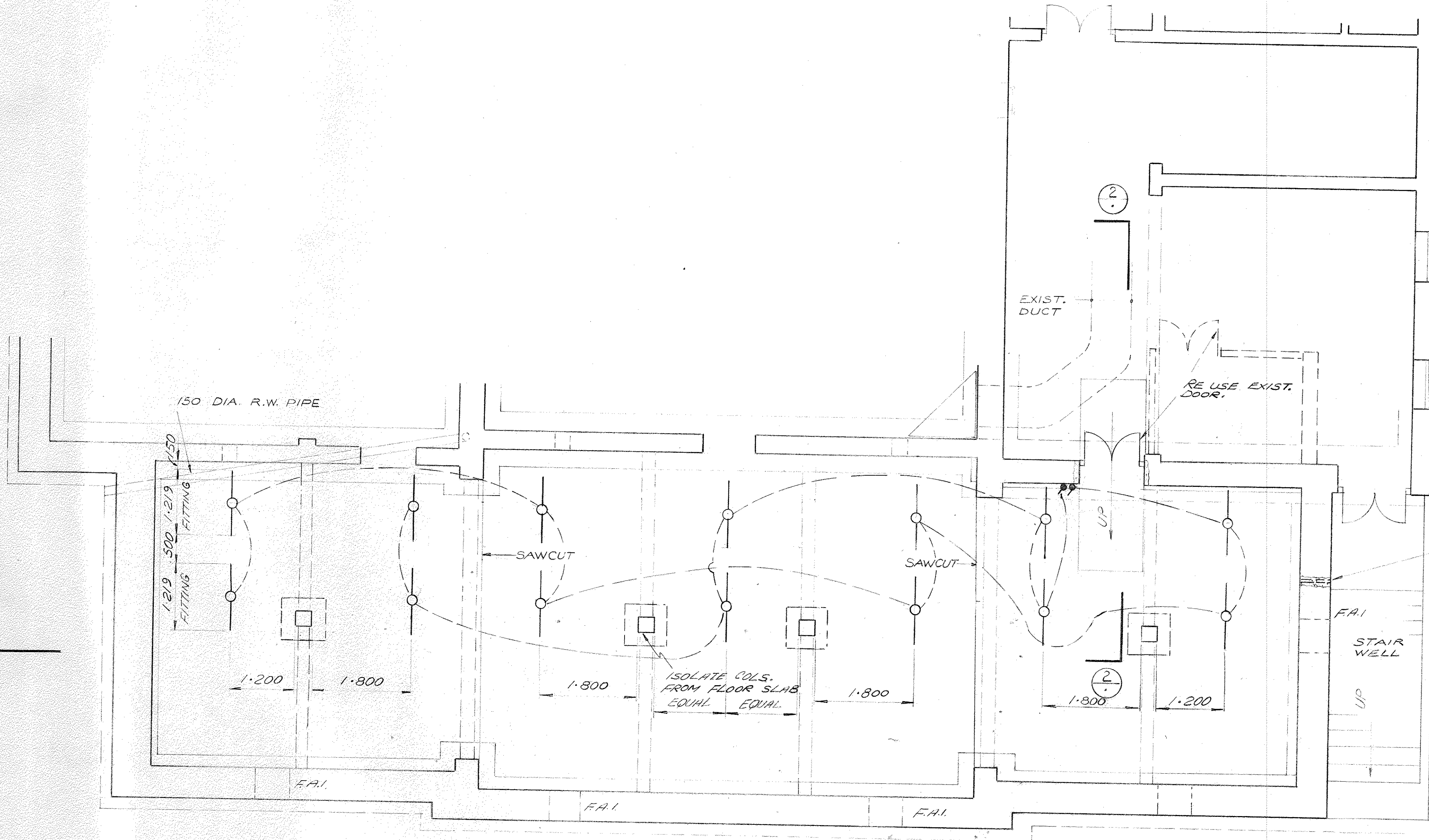


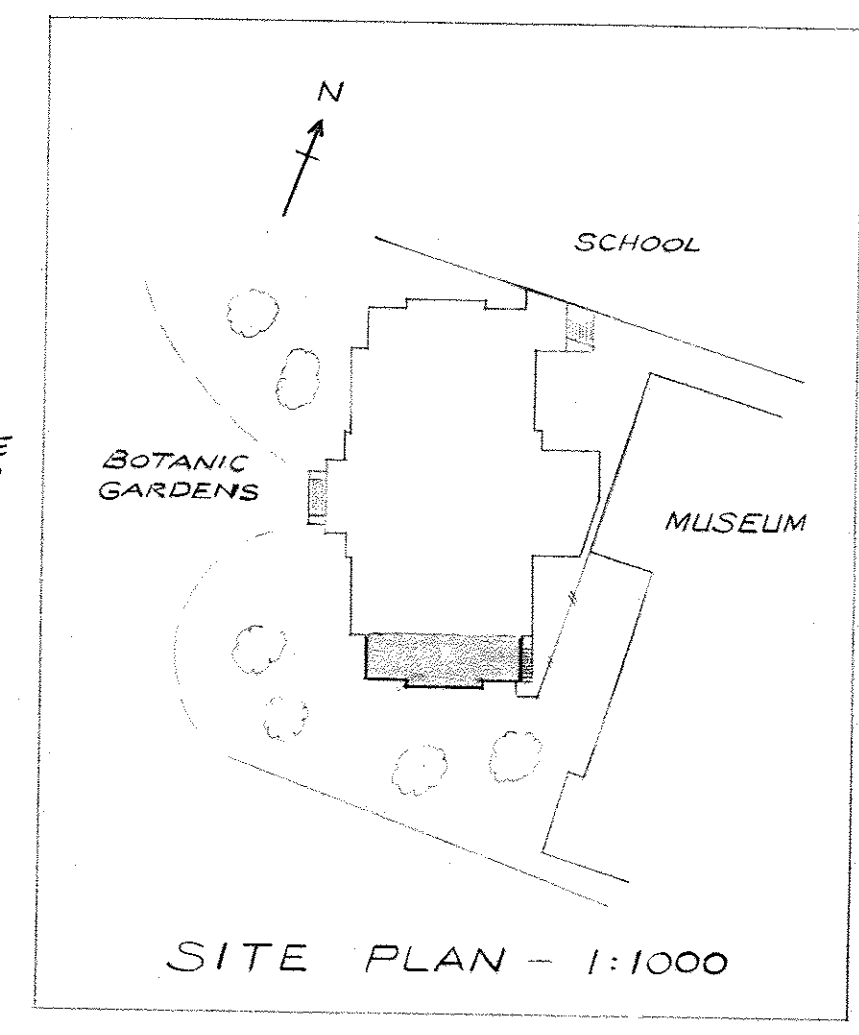


SECTION ①

SECTION ②



PLAN



Service	Initials	Service	Initials	Amendments	Initials	Date	Book	Page	Initials	Date	Designed	Date	Approved
H.P. Water		Lands & Survey	A	NIGHTING INDICATED	YH	17/12/78	Surveyed						
Sewer		Planning	B	LIGHTING CIRCUITS	PM	8-1-79	Levelling						
S.W. Drainage				CHANGED									
Gas													
Cables (M.E.D.)													
(P.O.)													
							B.M.						
							Compiled from						
							Indexed	LR	16/12/79				

CHRISTCHURCH CITY COUNCIL - CITY ENGINEER'S DEPARTMENT

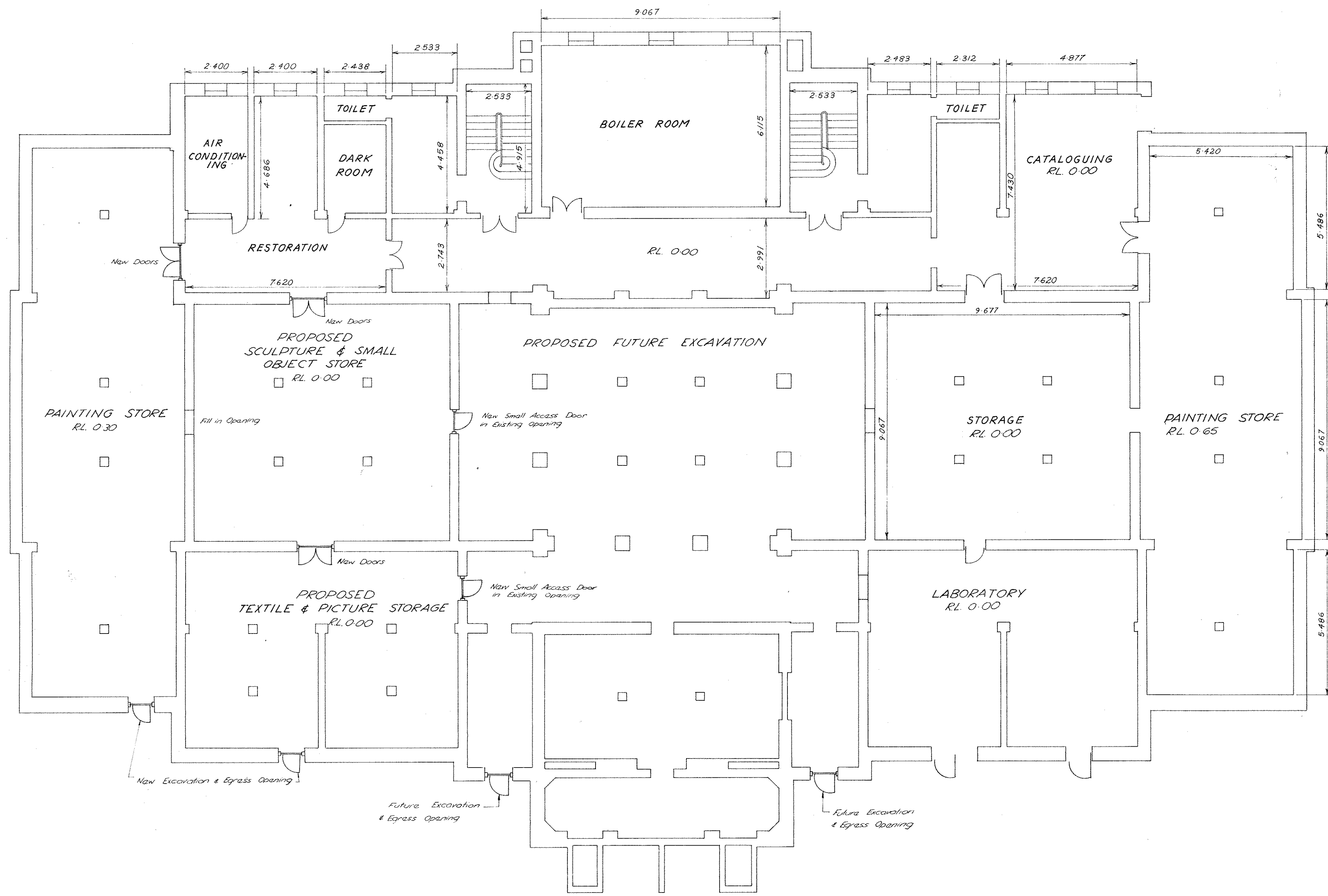
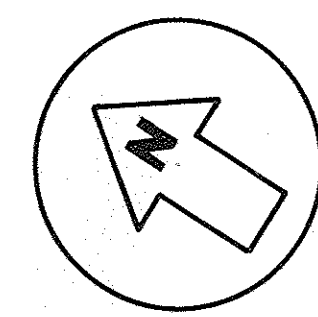
ROBERT MCDUGALL ART GALLERY
NEW STOREROOM (BASEMENT)

1:50

File No. D.2379

Issue 1 of 6

Original scale of millimetres

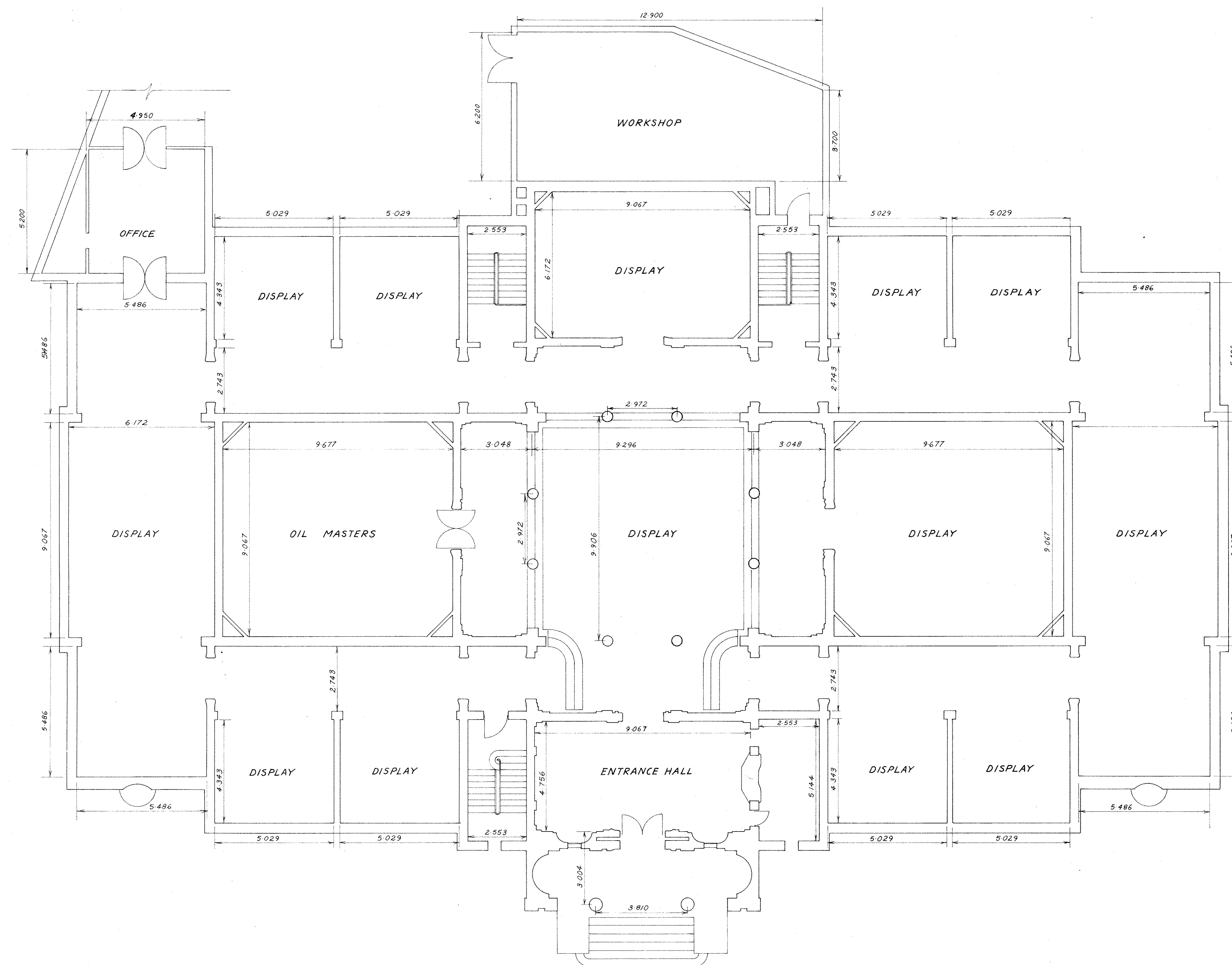


Service	Initials	Service	Initials	Amendments	Initials	Date	Book	Page	Initials	Date	Approved	Date
H.P. Water		Lands & Survey		A Excavated Areas now			Surveyed				M. J. Grady	14.1.80
Sewer		Planning		shown & Proposed Excavation	BY	17/1/80	Levelled					
S.W. Drainage				B North End Basement			B.M.					
Gas				Excavation Constructed	BY	8.80	Completed from				B. D. Sturges	10/79
Cables (M.E.D.)												
(P.O.)												

CHRISTCHURCH CITY COUNCIL — CITY ENGINEER'S DEPARTMENT

MCDUGALL ART GALLERY BASEMENT PLAN

Scale	File No.
1:100	Issue 4
	D.2492
	Sheet 1 of 1



Original scale of millimetres

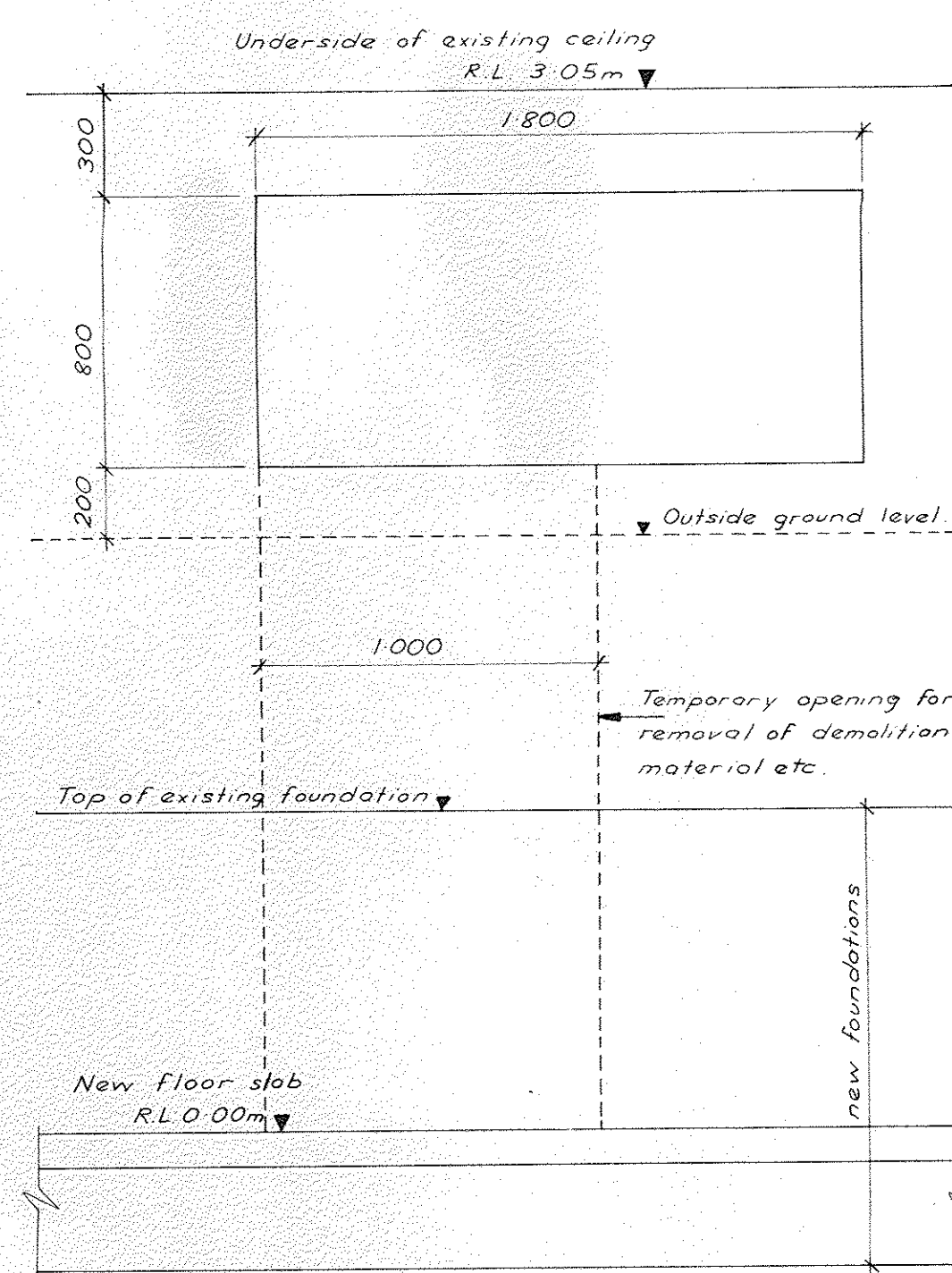
Service	Initials	Service	Initials	Amendments	Initials	Date	Book	Page	Initials	Date	Approved	Date	Scale
H.P. Water		Lands & Survey					Surveyed			Designed			
Sewer		Planning					Levelled			Drawn	M. J. Grady	14.1.80	
S.W. Drainage							B.M.			Traced	A.O.B.	24/10/79	
Gas							Compiled from			Dwg. Chk.			
Cables (M.E.D.)							Indexed			Des. Chk.			
(P.O.)											R.D. Fisher for City Engineer	10/79	1:100

CHRISTCHURCH CITY COUNCIL — CITY ENGINEER'S DEPARTMENT

MCDUGALL ART GALLERY MAIN FLOOR PLAN

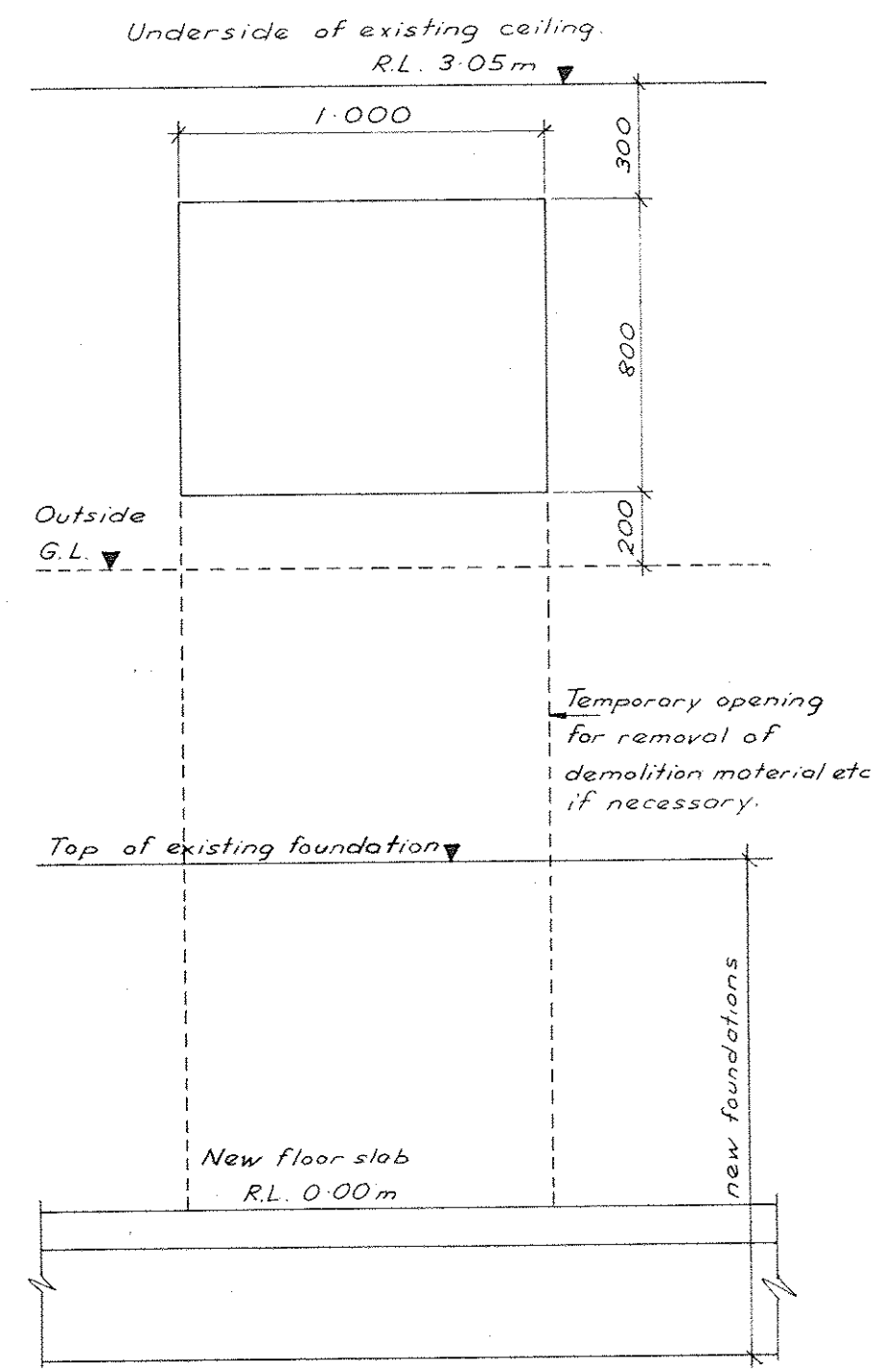


ROBERT McDOUGALL ART GALLERY
NEW OFFICE AND LABORATORY BASEMENT SPACE



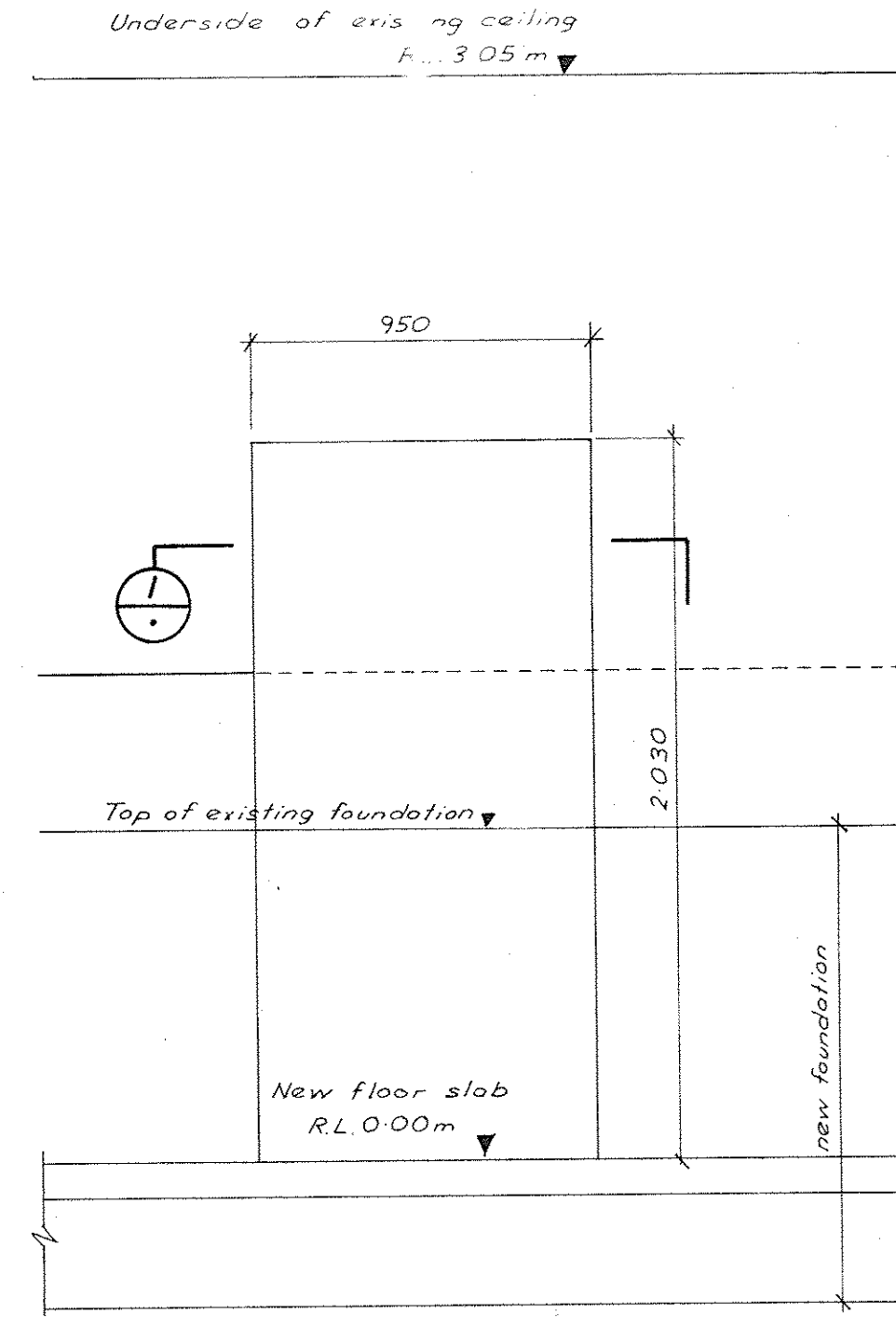
Note: Window + ventilation details
to be supplied later

OPENING 1
Scale 1:20

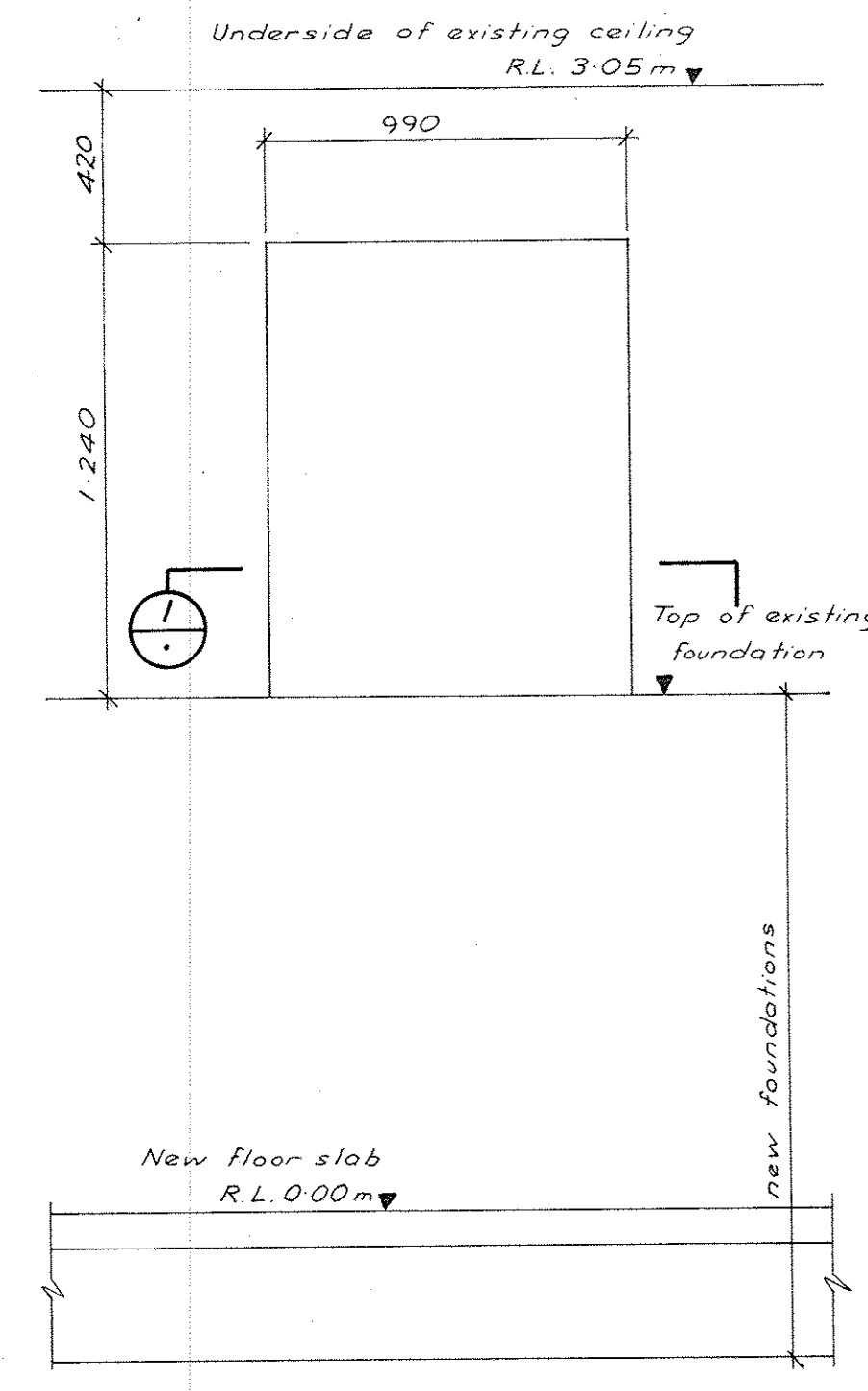


Note : Window + ventilation details
to be supplied later

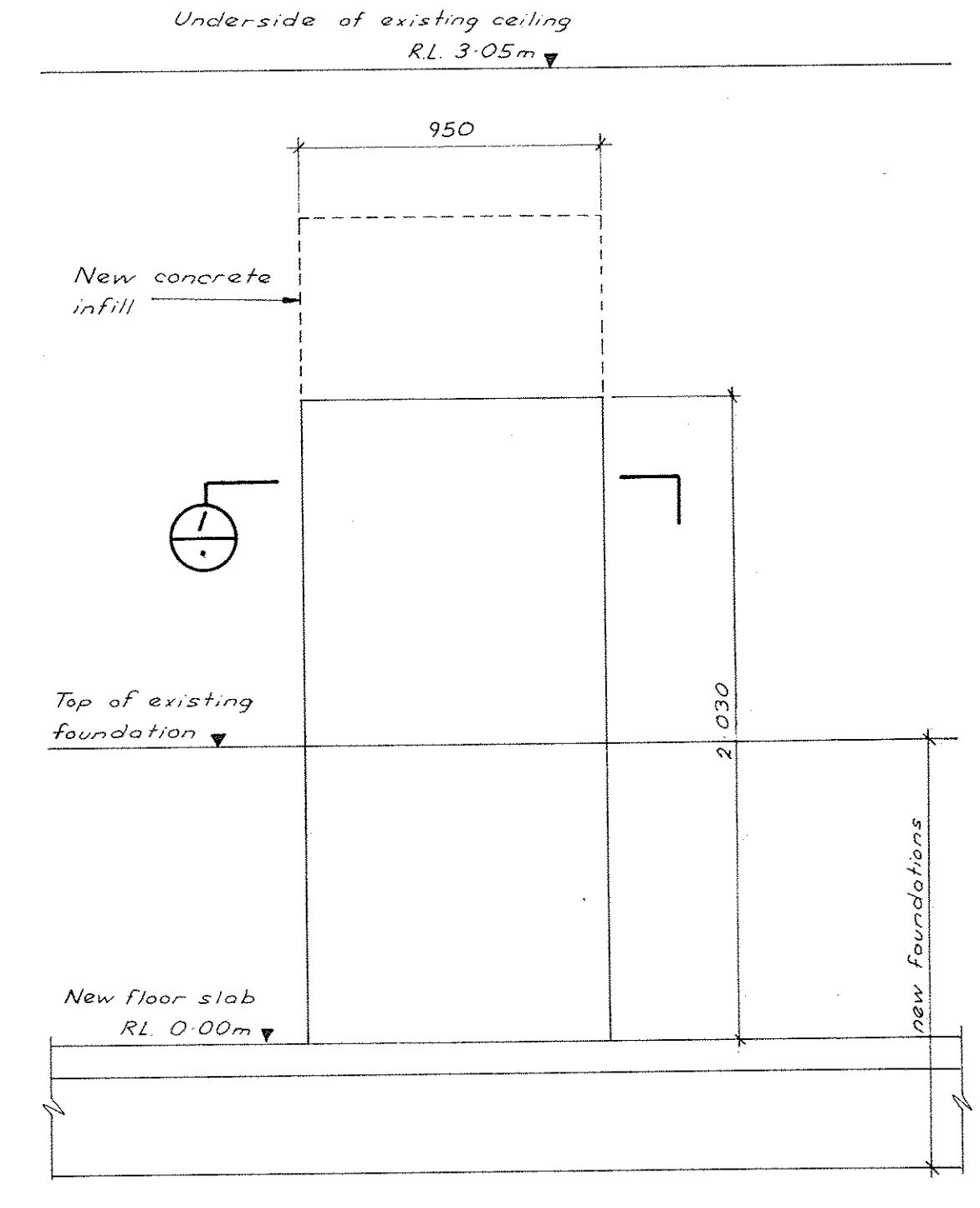
OPENING 2
Scale 1:20



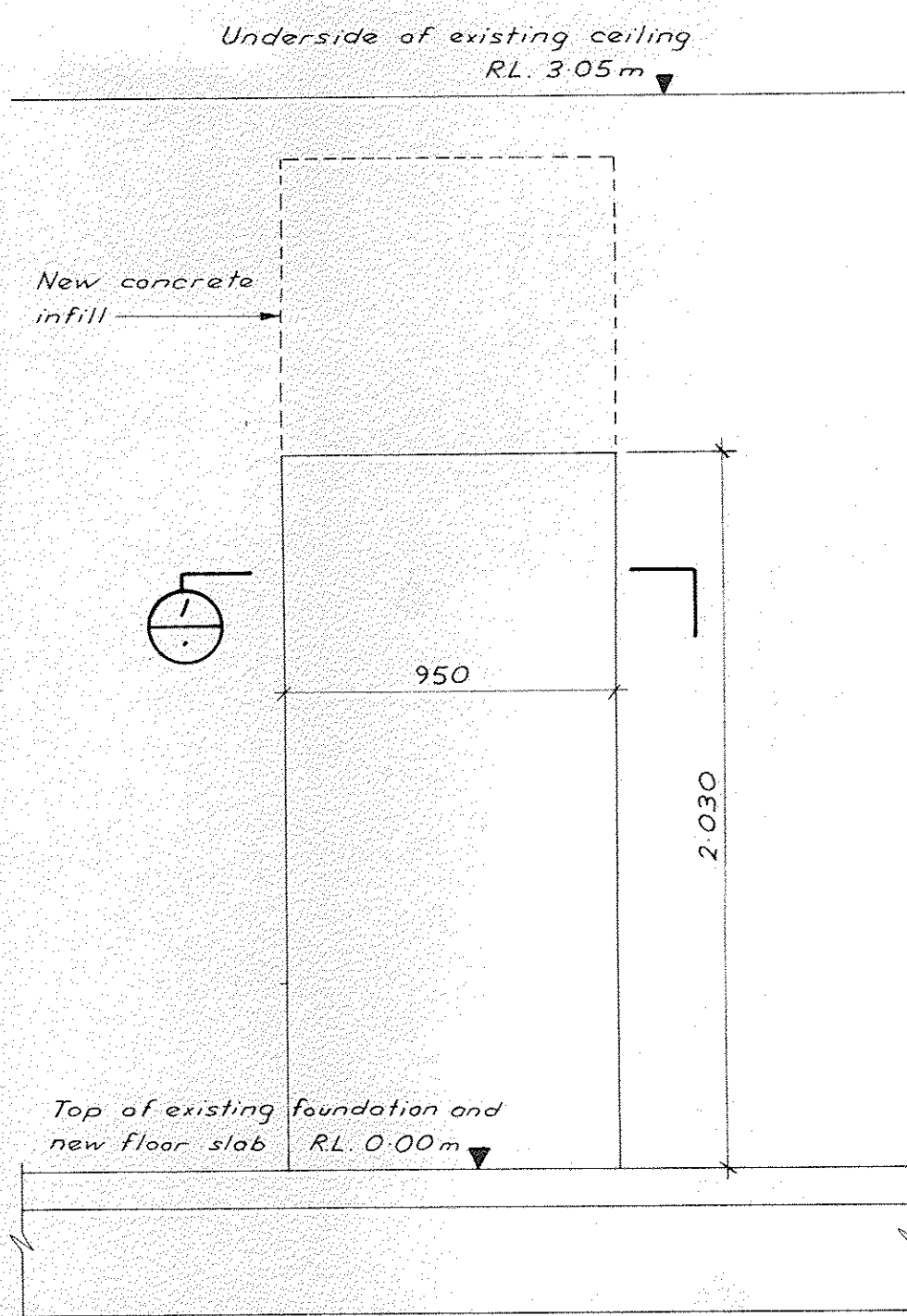
OPENING 3
Scale 1:20



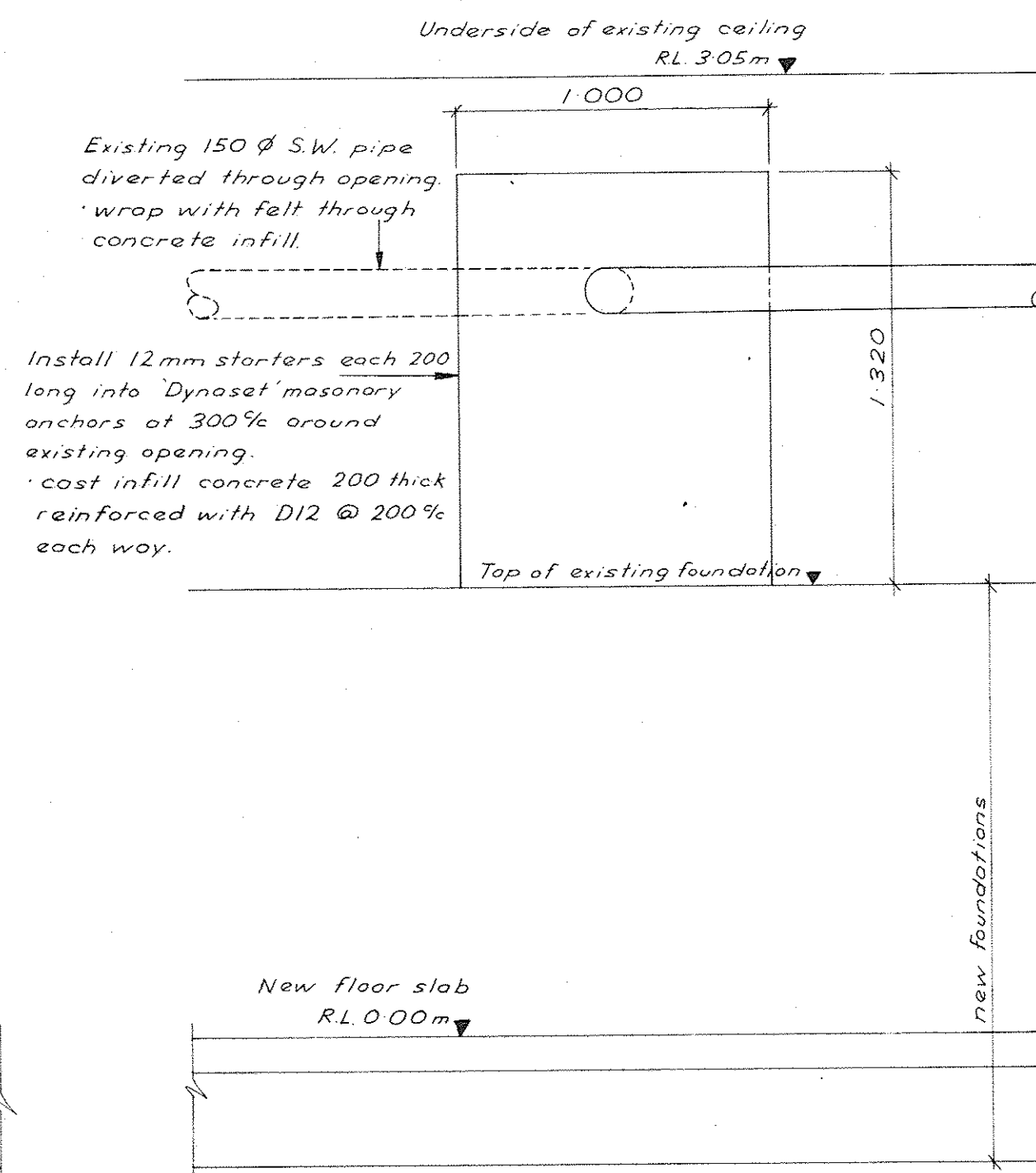
OPENING 4
Scale 1:20



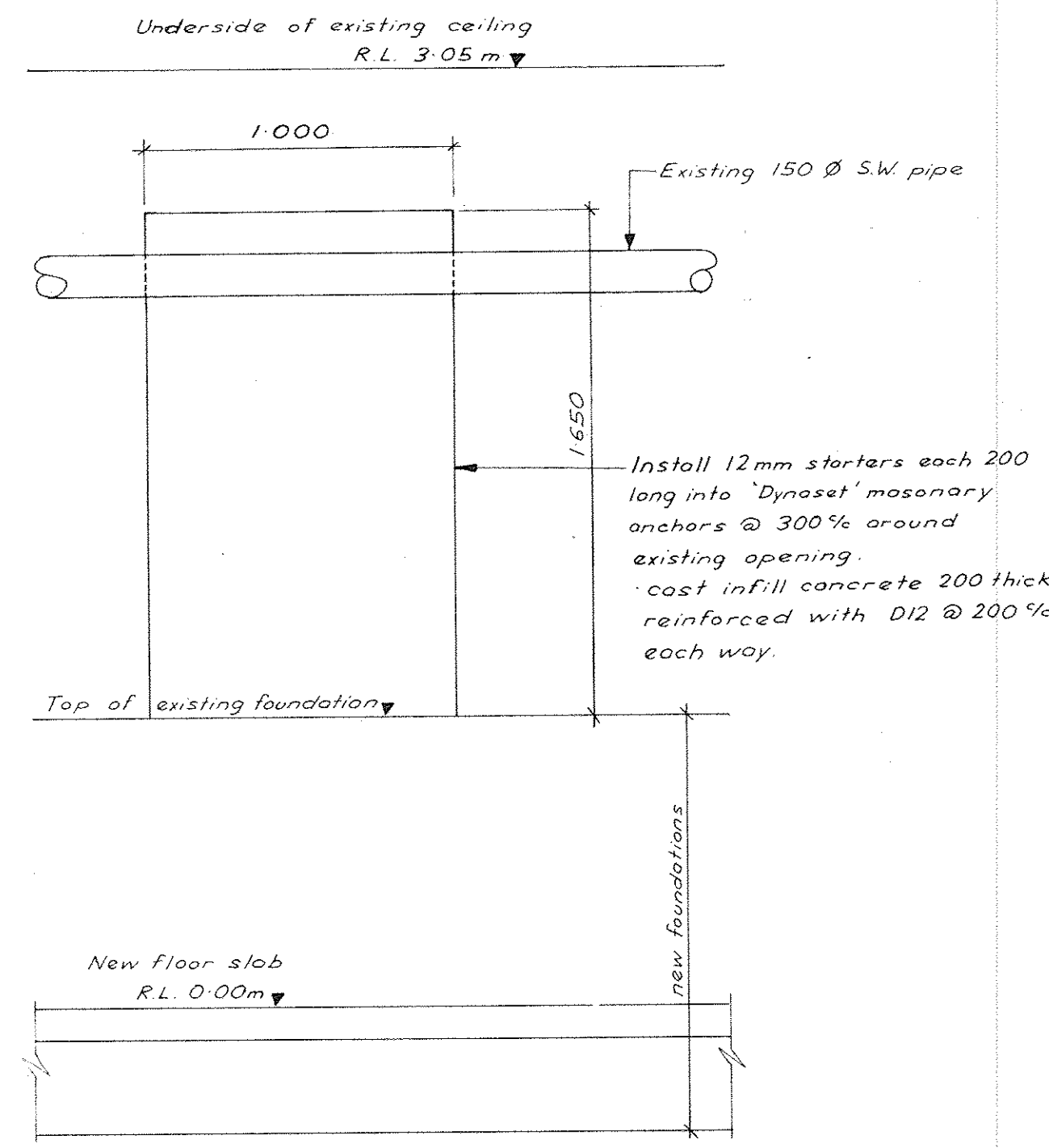
OPENING 5
Scale 1:20



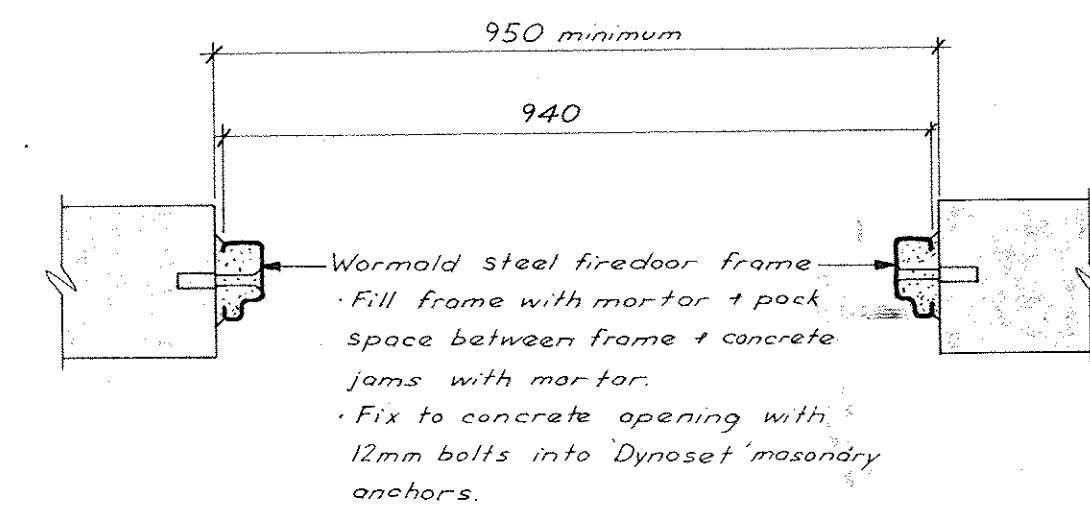
OPENING 6
Scale 1:20



INFILL OPENING 7
Scale 1:20



INFILL OPENING 8
Scale 1:20



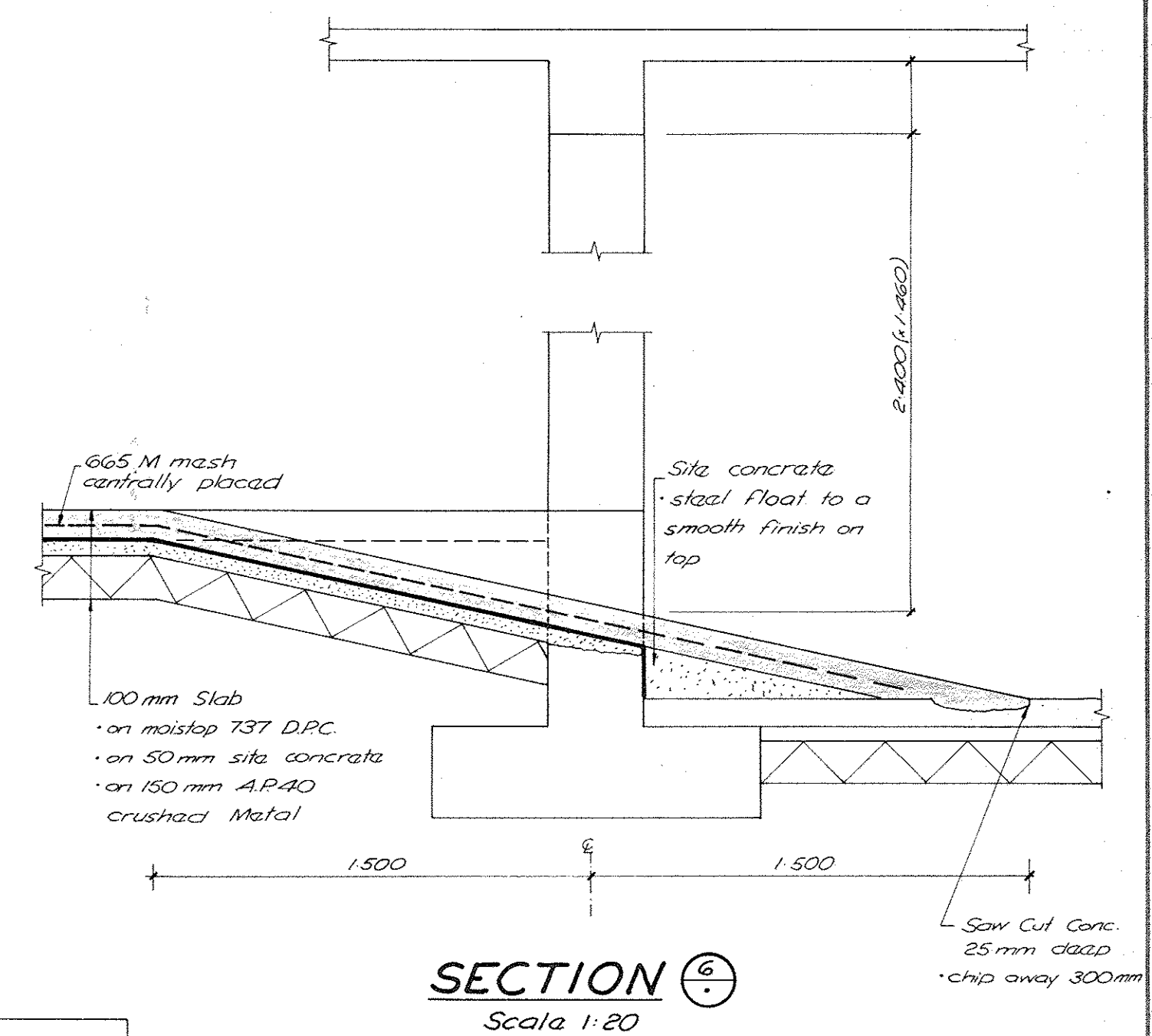
Note: Frames 3, 5 & 6 are for standard 1980 x 860 door leaf.
Frame 4 is for special height x 860 wide door leaf.

Details of doors to be supplied later are - fire rating, cladding material, lock type and direction of opening.

SECTION 
Scale 1:10

NOTES:
Refer to sheet 4

Service	Initials	Service	Initials		Amendments	Initials	Date		Book	Page	Initials	Date		Date	Approved	CHRISTCHURCH CITY COUNCIL — CITY ENGINEER'S DEPARTMENT										Scales	File No. Bu/15/9	
H.P. Water		Lands & Survey						Surveyed					Designed	M Stockwell	11/80	 Design Engineer Date 12-11-80	ROBERT McDOUGALL ART GALLERY NEW OFFICE AND LABORATORY BASEMENT SPACE										1:10 1:20	D.2379
Sewer		Planning					Levelled					Drawn	P Macefield	11/80														
S.W. Drainage							B.M.					Traced	P Macefield	11/80														
Gas												Dwg. Chk.	M Stockwell	11/80														
Gables (M.E.D.)							Compiled from					Des. Chk.																
(P.O.)												Indexed	P.R.M	11/80	City Engineer											Sheet 6 of 6		



SECTION 1

Scale 1:20

100 mm slab

150 mm AP40 crushed metal

665 M mesh centrally placed

20 mm chamfer

100 mm

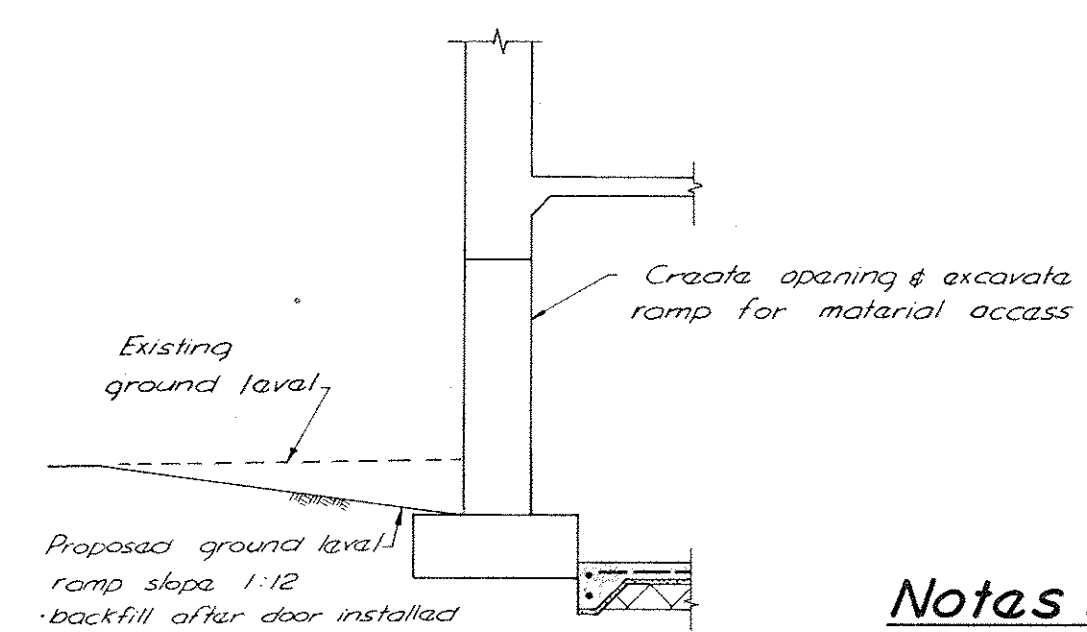
1460

R10 @ 400 top 400

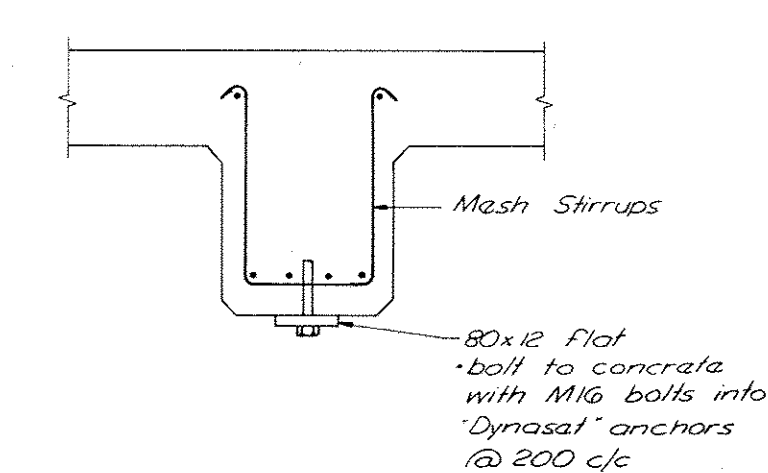
100

100

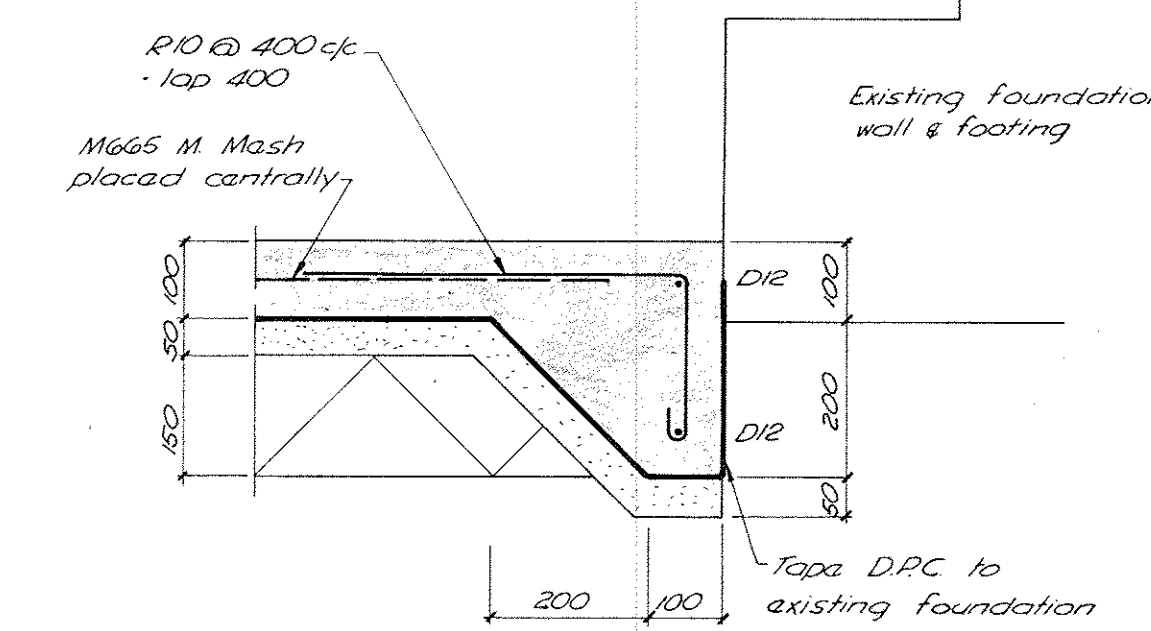
100 mm



SECTION (3)
Scale 1:50



SECTION (5)

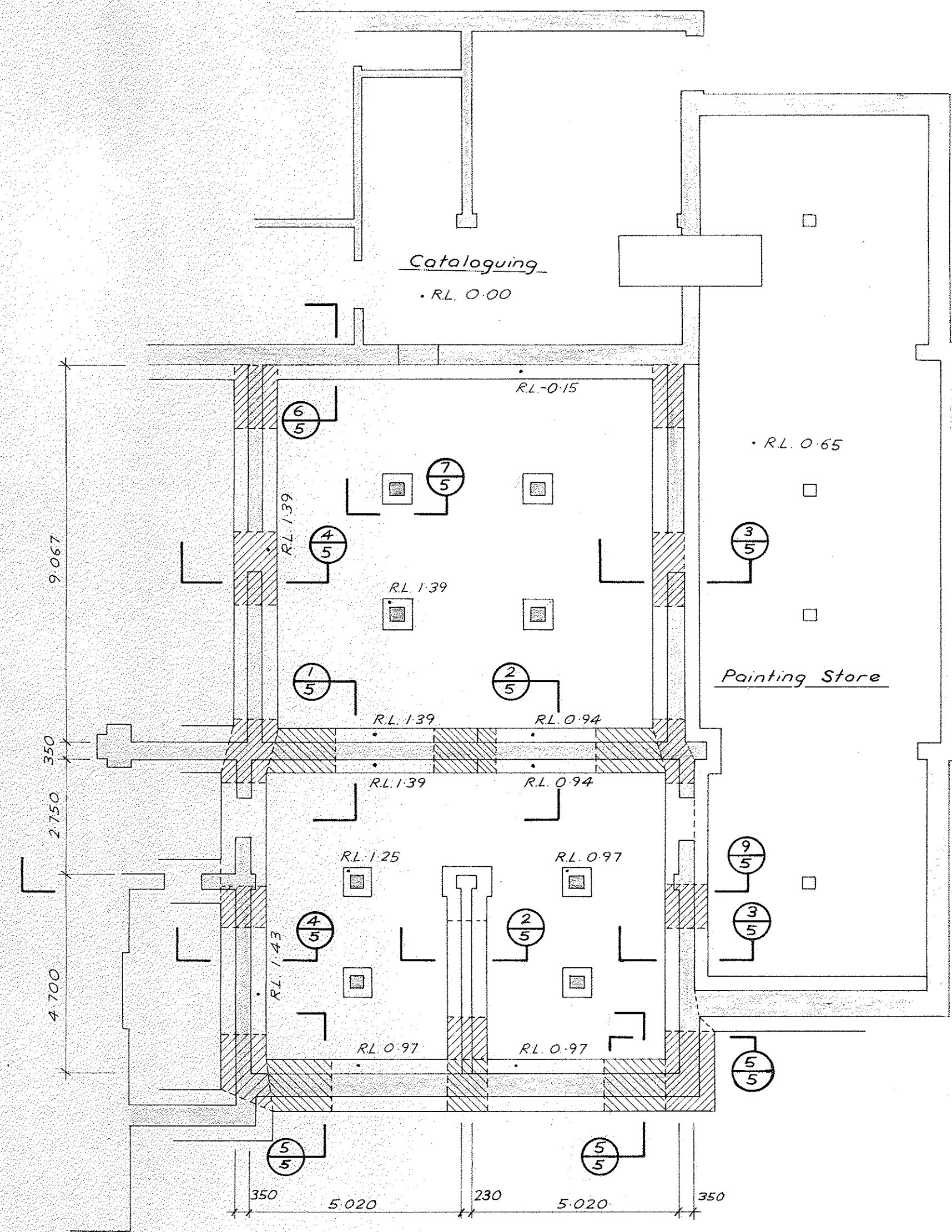


DETAIL 
Scale: 1/10

- # Notes :
- 1/ Concrete Strength
sila concrete :- $f'c$ (28 days) : 10 MPa
all other concrete :- $f'c$ (28 days) : 25 MPa
 - 2/ Reinforcing
R : plain round bar ; D : deformed bar
all reinforcing to be grade 275
lap D12 bars by 500 mm
lap mesh by 350 mm
 - 3/ Waterproof Tanking
All external walls adjoining the extension are to be cleaned by water blasting and then tanked by applying three coats of 'Mulsal' in accordance with the manufacturers instructions
 - 4/ Construction Procedure
 - a) Cut opening on west side for removal of demolition material. After floor has been completed convert opening to fire access window and ventilator
 - b) Remove existing columns and footings under beams and strengthen beams as detailed
 - c) Excavate for and construct new floor slab as detailed
 - d) Break out new opening into existing basement area and construct ramp
 - 5/ Mechanical Services
Details to be supplied at a later date

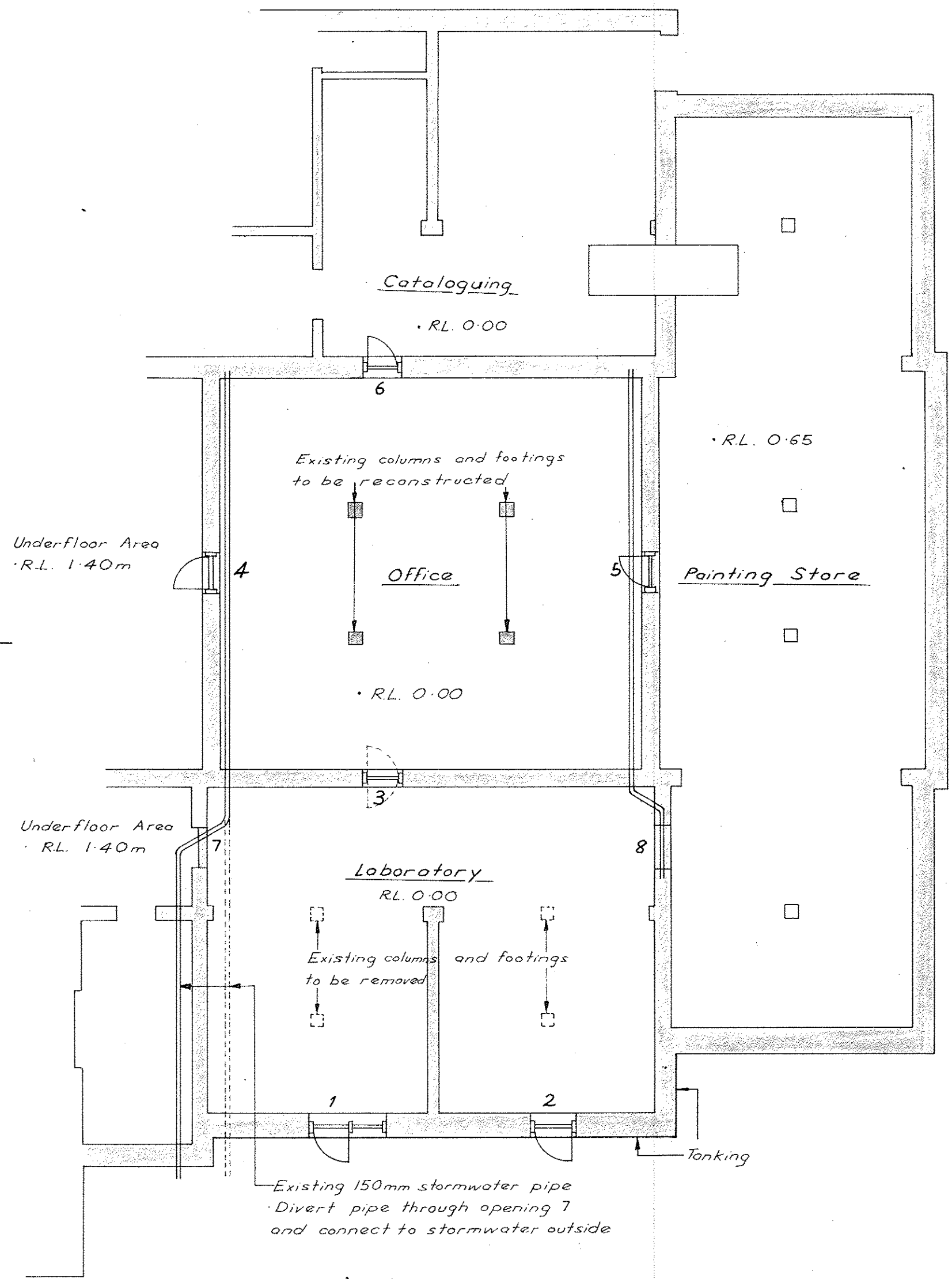
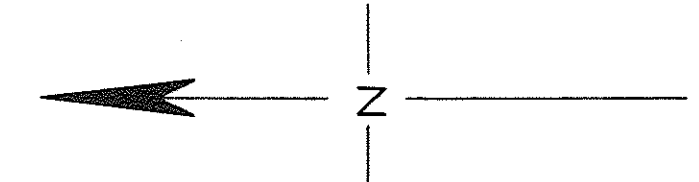
Scale 1:10													CHRISTCHURCH CITY COUNCIL — CITY WORKS AND PLANNING DEPARTMENT										Scales		File No.						
Service	Initials	Service	Initials	Amendments	Initials	Date	Book	Page	Initials	Date	Date	Approved	ROBERT McDOUGALL ART GALLERY NORTHEN EXTENSION TO BASEMENT AREA										1:50 1:20 1:10		D. 2379						
H.P. Water		Lands & Survey					Surveyed				Designed	W.P. Sissons															8-84	Mof. Hobnell Design Engineer		16/8/84	
Sewer		Planning					Levelled				Drawn	BY															-				
S.W. Drainage							B.M.				Traced	BY															-				
Gas											Dwg. Chk.	H.R.S.															-				
Cables (M.E.D.)							Compiled from				Des. Chk.	S. Smith	-	City Engineer																	
.. (P.O.)							Indexed				Indexed	BY	-																		

Original scale of millimetres



PLAN OF EXISTING BASEMENT

Scale 1:100
Levels shown are approx relative to Cataloguing floor = RL 0.00
Notched foundations to be extended as stage 1
Remaining foundations in between to be extended as stage 2.



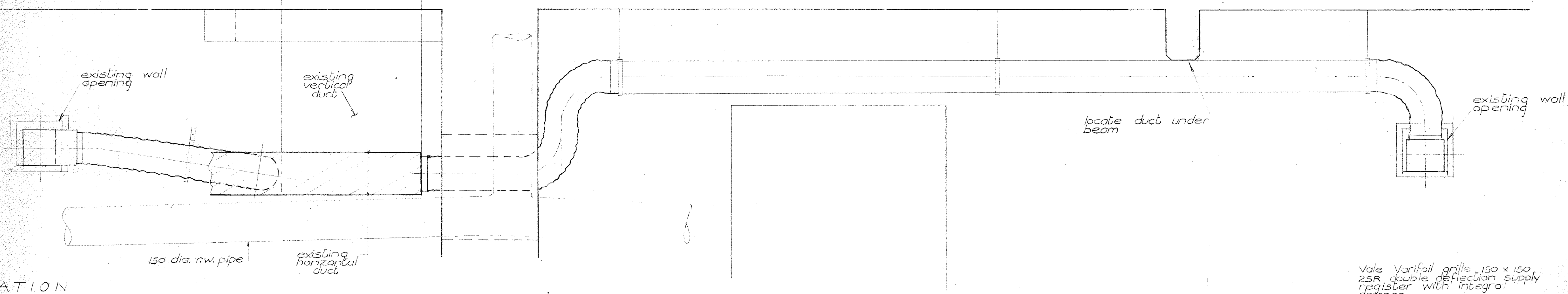
PLAN OF NEW OFFICE AND LABORATORY BASEMENT SPACE

Scale 1:100

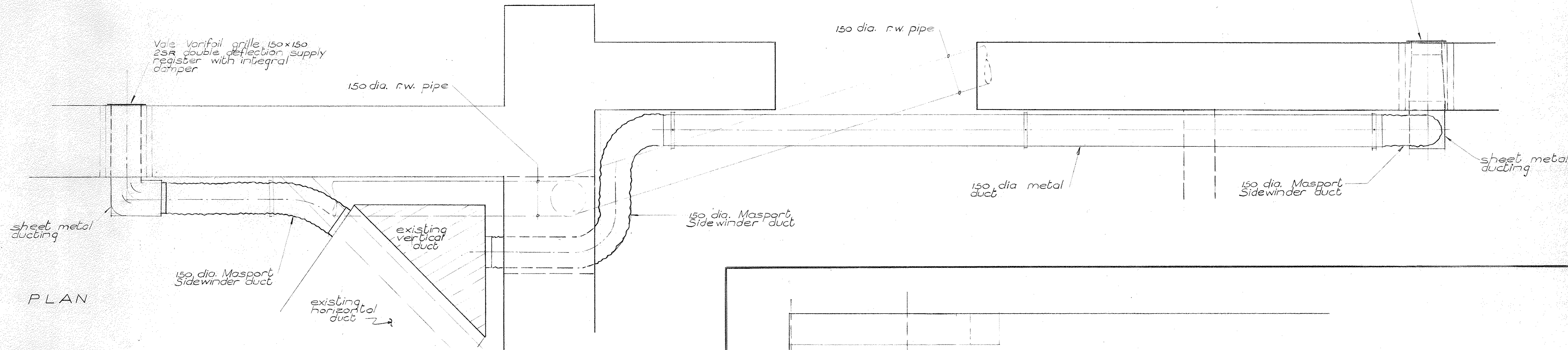
- NOTES:**
- Concrete Strength:**
Site concrete $F_c = 10 \text{ MPa}$
All other concrete $F_c = 25 \text{ MPa}$
 - Reinforcing:**
 $R =$ plain round bar ; $D =$ deformed bar
All reinforcing to be grade 275 MPa
Laps in reinforcing shall be
10mm bar = 400mm
12mm bar = 500mm
16mm bar = 650mm
mesh = 350mm
Cover = 50mm against formwork
15mm against natural ground unless shown otherwise
 - Waterproof Tanking:**
Outside of west wall to be cleaned by water-blasting and tanked with "Bituthene" sheet membrane applied with all primers etc in accordance with Manufacturers instructions.
 - Construction Procedure for Foundations and Floorslab:**
 - Enlarge opening 1 for removal of demolition material.
 - Remove existing columns and footings under beams in Laboratory and strengthen beams as detailed.
 - Remove existing columns and footings in Office and reconstruct as detailed.
 - Construct foundations and floor in Office and Laboratory as follows:
 - Progressively cut away existing foundations and construct new lowered foundations in sections shown on plan as stage 1.
 - Repeat (i) for adjacent stage 2 foundations.
 - Complete excavation of ground inside lowered foundation.
 - Place granular fill, site concrete, d.p.c. and construct new floor slab.
 - Wall Openings:**
Numbered wall openings to be constructed as follows.
Nº1 Enlarge existing vent opening initially for the removal of demolition material.
After foundations and floor completed convert opening to fire egress window and ventilator.
Nº2 Enlarge existing vent opening and install fire egress window.
Nº3 Construct new opening with fire door.
Nº4 Install fire door in existing opening for under floor access.
Nº5 Enlarge existing opening and install fire door.
Nº6 Enlarge existing opening and install fire door.
Nº7 Concrete up existing opening around diverted stormwater pipe.
Nº8 Concrete up existing opening around existing stormwater pipe.
 - Refer to mechanical services drawings for ventilation details.
 - Ceiling and wall lining etc to be carried out later when Art Gallery has determined specific requirements of new Office and Laboratory.

Original scale of millimetres

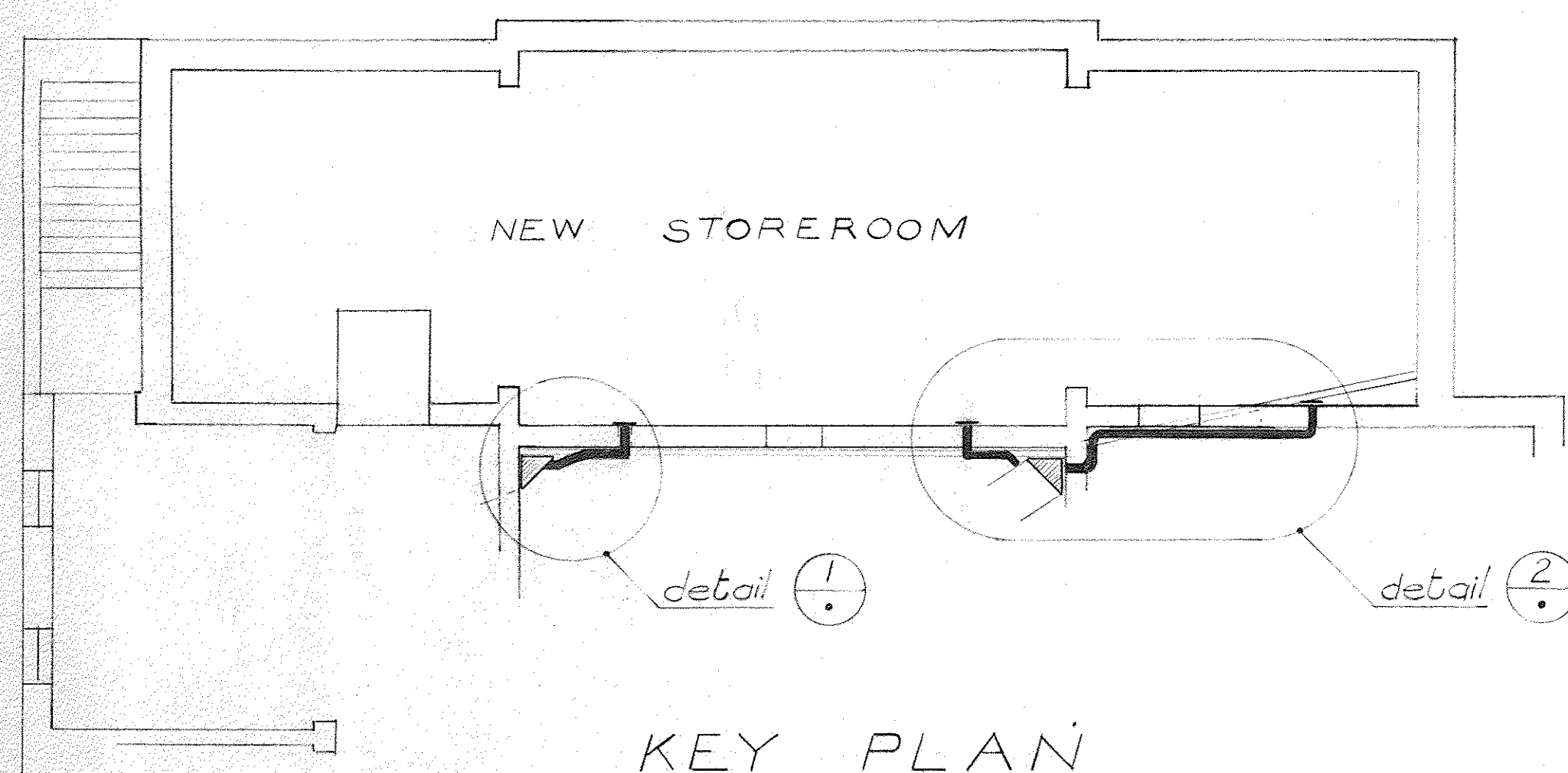
ELEVATION



PLAN

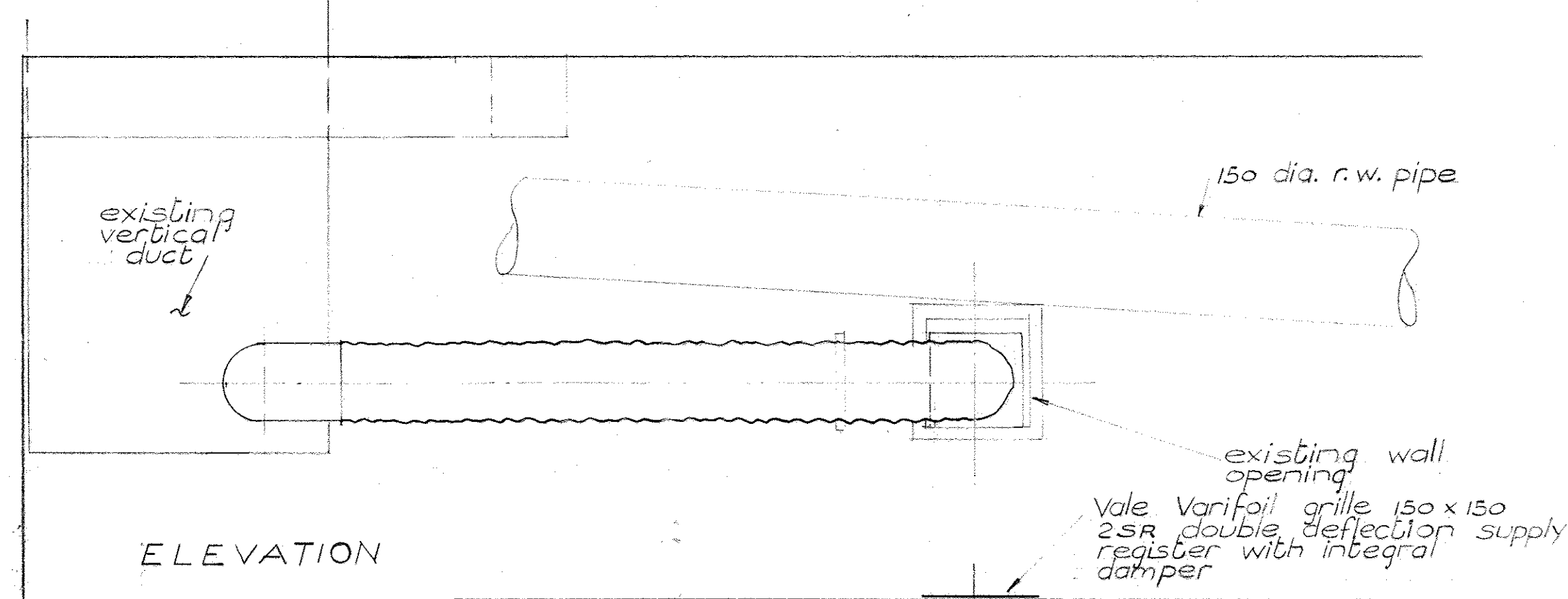


DETAIL ②
1:10

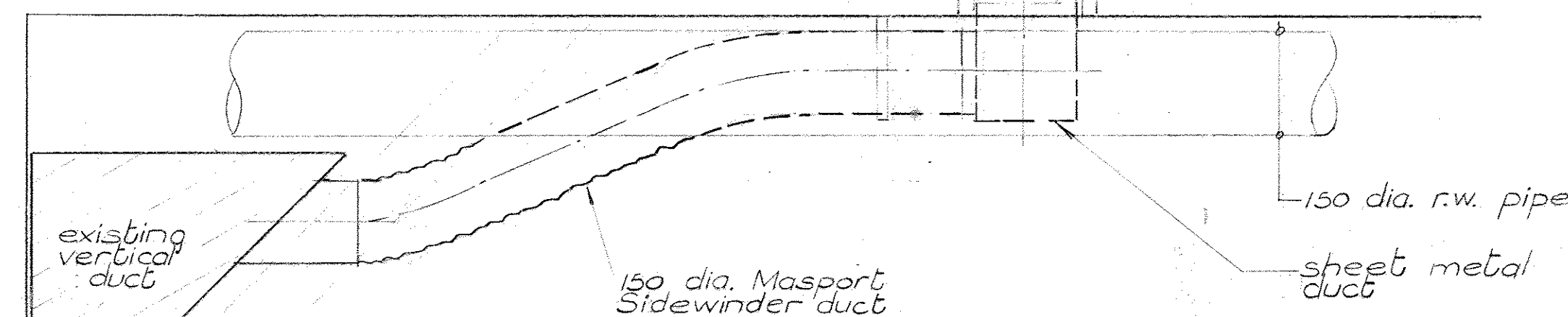


KEY PLAN
1:100

ELEVATION



PLAN



DETAIL ①
1:10

Service	Initials	Service	Initials	Amendments	Initials	Date	Book	Page	Initials	Date	Designed	Date	Approved
H.P. Water		Lands & Survey					Surveyed				Drawn	P.M.	1.79
Sewer		Planning					Levelled				Traced	P.M.	1.79
S.W. Drainage							B.M.				Dwg. Chk.		
Gas							Compiled from				Des. Chk.		
Cables (M.E.D.)							Indexed				LB	18/12/79	City Engineer
(P.O.)													

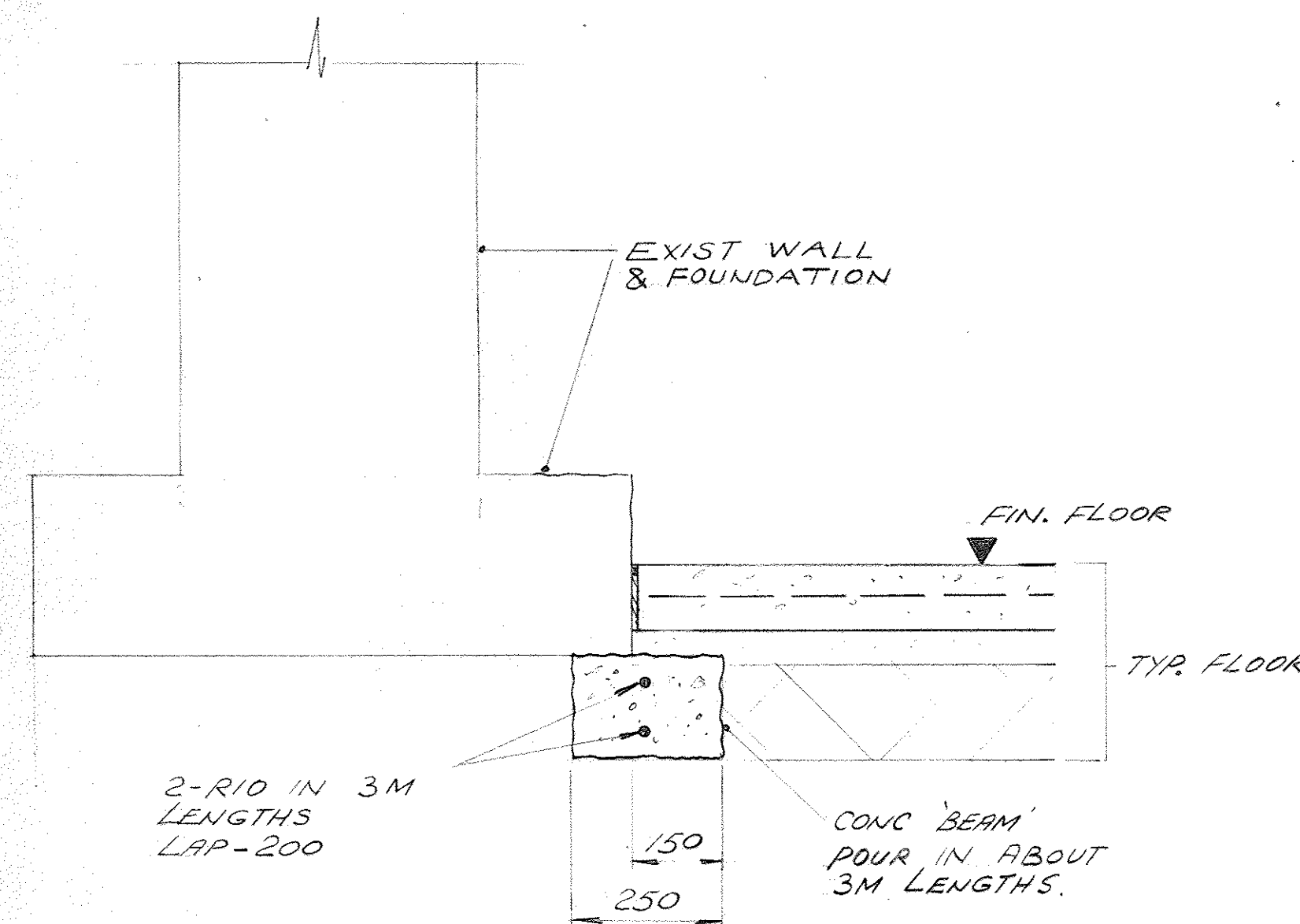
CHRISTCHURCH CITY COUNCIL — CITY ENGINEER'S DEPARTMENT

ROBERT McDOUGALL ART GALLERY
NEW STOREROOM (BASEMENT)
FRESH AIR SUPPLY

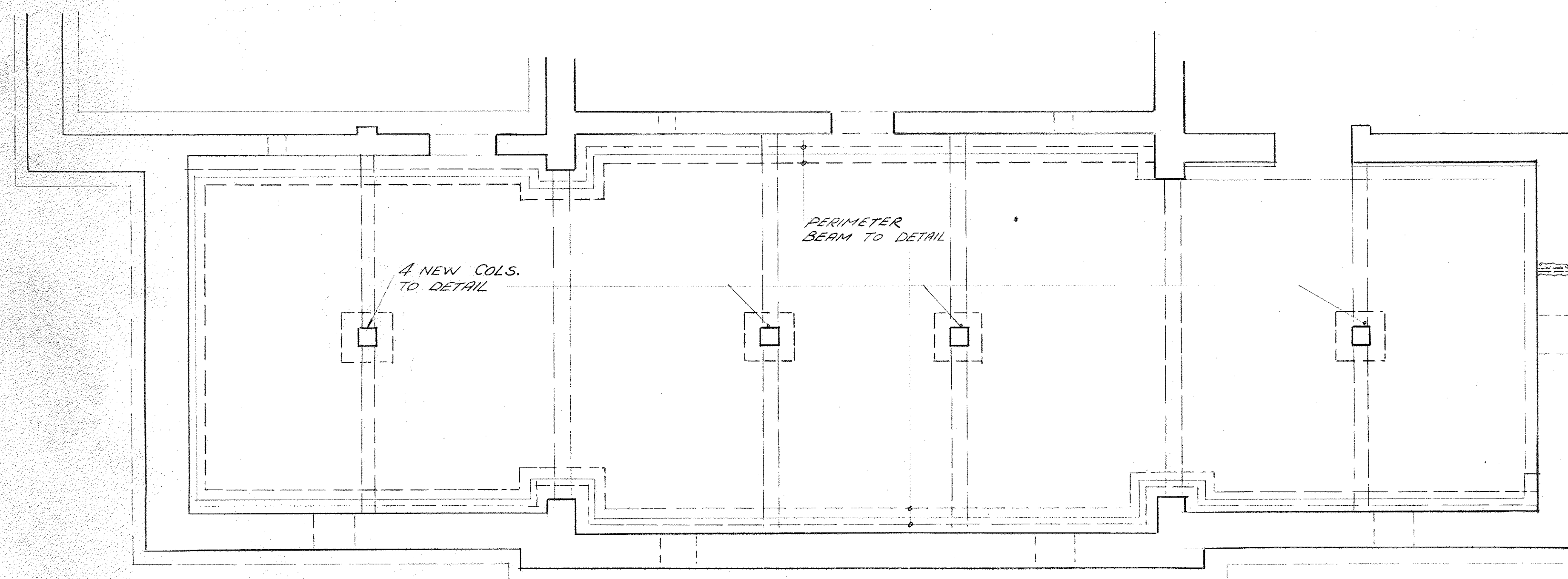
Scales
1:10, 1:100

File No.
Issue
D.2379
Sheet 3 of 6

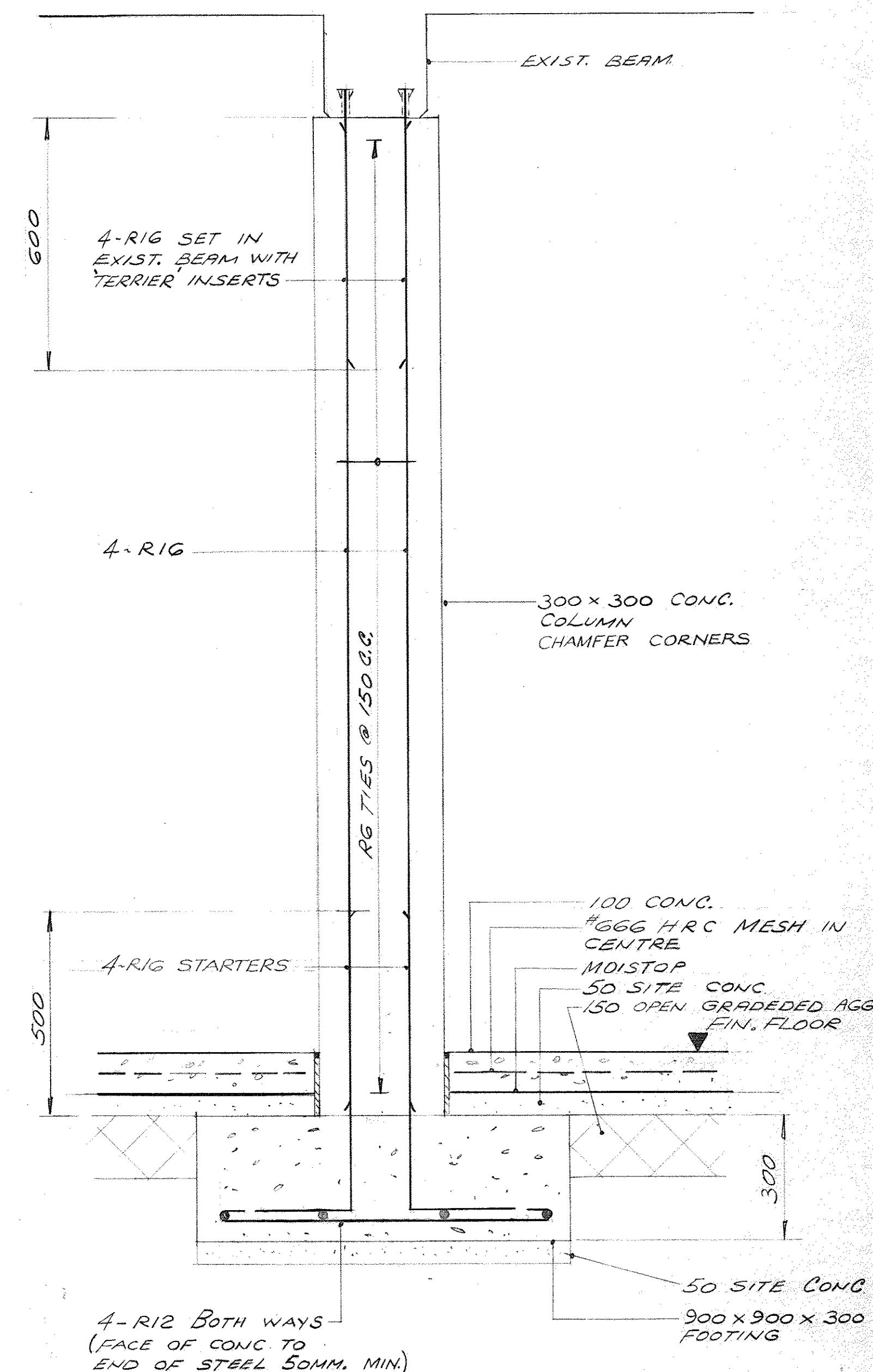
Original scale of millimetres



PERIMETER BEAM
1:10



PLAN
1:50



TYPICAL COLUMN DETAIL
1:10

Service	Initials	Service	Initials	Amendments	Initials	Date	Book	Page	Initials	Date	Designed	Date	Approved
H.P. Water		Lands & Survey					Surveyed				Drawn	1.79	
Sewer		Planning					Levelled				Traced		
S.W. Drainage							B.M.				Dwg. Chk.		
Gas							Compiled from				Des. Chk.		
Cables (M.E.D.)											Indexed	18/12/79	
(P.O.)													City Engineer

CHRISTCHURCH CITY COUNCIL — CITY ENGINEER'S DEPARTMENT

ROBERT MCDUGALL ART GALLERY
NEW STOREROOM (BASEMENT)

Scales

1:50, 1:10

File No.

D.2379

Sheet 2 of 6