

LEGEND:

- EXISTING BARRIER KERB
- W- EXISTING WATER MAIN
- T- EXISTING TELECOM
- O/H- EXISTING OVERHEAD POWER
- SW- EXISTING STORMWATER DRAINAGE
- [Hatched Box] EXISTING BUILDINGS
- - - BOUNDARY OF CONTAMINATED AREA



CONCRETE NOTES

- GENERAL
- CARRY OUT ALL WORK IN ACCORDANCE WITH AS 3600 & THE RELEVANT PROJECT WHYBIRD FARR ENGINEERS SPECIFICATIONS.
 - VERIFY ALL DIMENSIONS WITH THE ARCHITECT. DO NOT SCALE THESE DRAWINGS.
 - IN CASE OF DOUBT - ASK!
 - THE DRAWINGS ARE TO BE REGARDED AS PRELIMINARY UNLESS AUTHORISED.
- DESIGN LOADS

CONCRETE

- PLACE CONCRETE HAVING THE FOLLOWING F_c AS DEFINED IN AS 3600.

LOCATION	F _c AT 28 DAYS	F _c AT 56 DAYS

- MAXIMUM AGGREGATE SIZE - 20
 SLUMP - 80
 MAXIMUM DRY SHRINKAGE - 600 USTRAIN
 CURE ALL CONCRETE SURFACES IN ACCORDANCE WITH THE AS 3600. CURING COMPOUNDS TO MEET WITH AS 3799 REQUIREMENTS.
- SAMPLE & TEST AS SPECIFIED IN AS 1012 USING PROJECT ASSESSMENT OF STRENGTH GRADES AS PER AS 3600 (1 20.3).
 - CONSOLIDATE BY VIBRATION.

REINFORCEMENT

- SUPPLY & FIX REINFORCEMENT AS SHOWN ON THE DRAWINGS. THE TYPE & GRADE IS DENOTED BY THE FOLLOWING SYMBOLS FOLLOWED BY A NUMBER INDICATING THE DIAMETER OF THE BAR IN MILLIMETRES.
 - P GRADE 250 HOT ROLLED ROUND BAR.
 - W GRADE 400 HOT ROLLED DEFORMED BAR.
 - N GRADE 450 HARD DRAWN WIRE.
 - F GRADE 450 HARD DRAWN WIRE FABRIC.
 - ALL LAPS IN REINFORCING STEEL TO BE FULL TENSION UNLESS NOTED.
 - FIRE RATING 3hrs.
- FACTORY MAKE DESIGN CATEGORY ACCELERATION CO-EFFICIENT FACTOR.
- Principal Contractors have particular workplace health and safety obligations under this Act. Owners of premises to be constructed, are not Principal Contractors unless they are in control of the building work, hold an owner-builder permit and intend to reside at the premises. Contact your nearest office of the Division of Workplace Health and Safety for information.

CONCRETE STRENGTHS AND COVER

LOCATION	F _c AT 28 DAYS	COVER	DESIGN LOADS
SLAB & WALLS	40MPa	30mm	

NOTE: REFER CONCRETE NOTES FOR GENERAL REQUIREMENTS.

(S) REQUIRED INSPECTIONS

Building - The Inspected and Inspected to the works is required to be for the following:

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

See progress for actions by telephoning 280 8548 before work starts and only after a final inspection.

REDLAND SHIRE COUNCIL
PLANS APPROVED SUBJECT TO

- Building Act, 1975 - 1991
- Standard Building By-Laws
- Compliance with engineering details as submitted.
- Council requirements and conditions

numbered 1 to 6 and noted on face of documents.

Any amendments to these documents require the further approval of Council.

DATE 14/4/97 PERMIT NO. 97-1372
 PRINCIPAL BUILDING SURVEYOR

Right to Information Release

FOR NEW STRUCTURAL DETAILING IN THIS AREA REFER TO 96101-C02

FOR NEW STRUCTURAL DETAILING IN THIS AREA REFER TO 93011-02

FOR NEW STRUCTURAL DETAILING IN THIS AREA REFER TO 96101-C03

DATUM
 AHD DERIVEDAS DETERMINED FROM
 P.S.M. 34951 R.L. 44.530



Rev	Description	Date
E	BOUNDARY OF CONTAMINATED AREA ADDED	13/03/97
D	CONCRETE NOTES ADDED	25/02/97
C	NEW LOAD OUT BAY ADDED	07/02/97
B	FOR COMMENT	01/11/96
A	PRELIMINARY ISSUE ONLY	11/10/96

Architect
 Project Manager

Client
BORAL RESOURCES QLD. PTY. LTD.

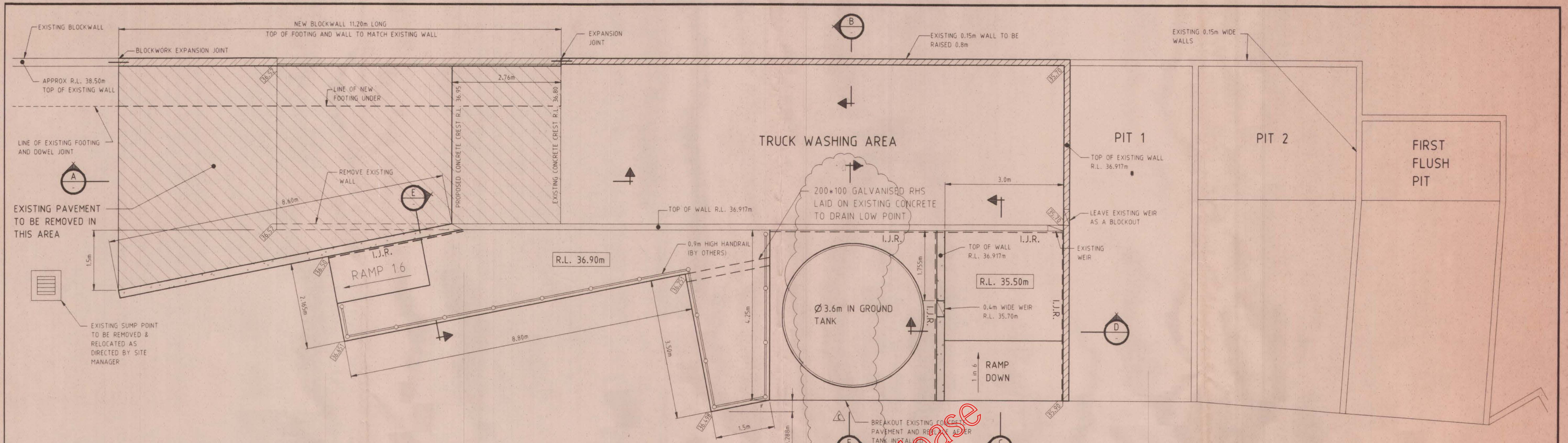
Project
CLEVELAND CONCRETE BATCHING PLANT

Whybird Farr Engineers
 STRUCTURAL AND CIVIL CONSULTANTS
 21 Quay St. Brisbane Q4000
 WHYBIRD BROWN & FARR Pty Ltd ACN 010 649 724
 PH: (07) 3236 2561 FAX: (07) 236 32417

Drawn	P.K.
Checked	S.S.
Passed	
Scale	1:200

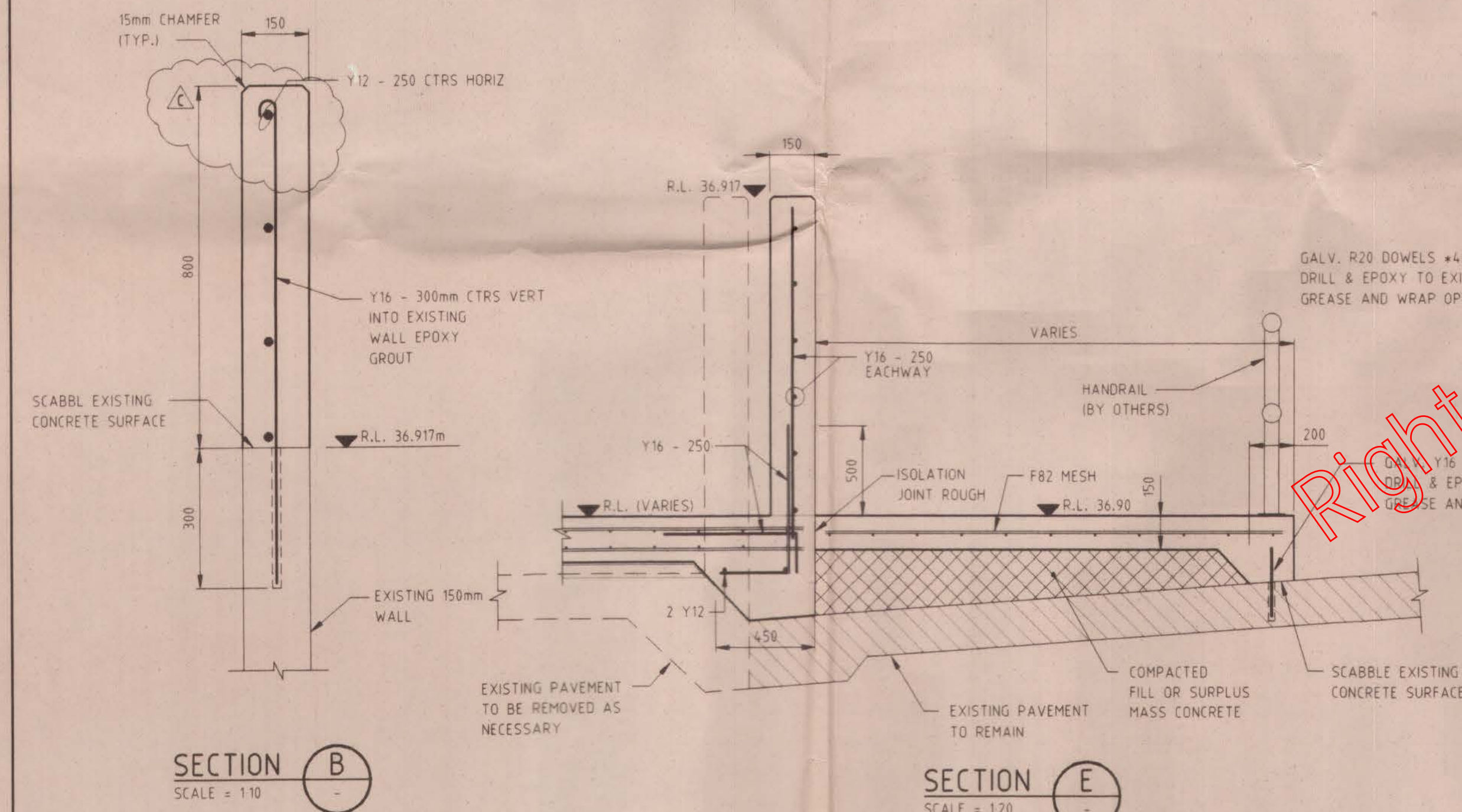
Title
SITE PLAN REVISED WASHBAYS AND FIRST FLUSH PIT

Drawing Number
96101-C01
Rev A B C E



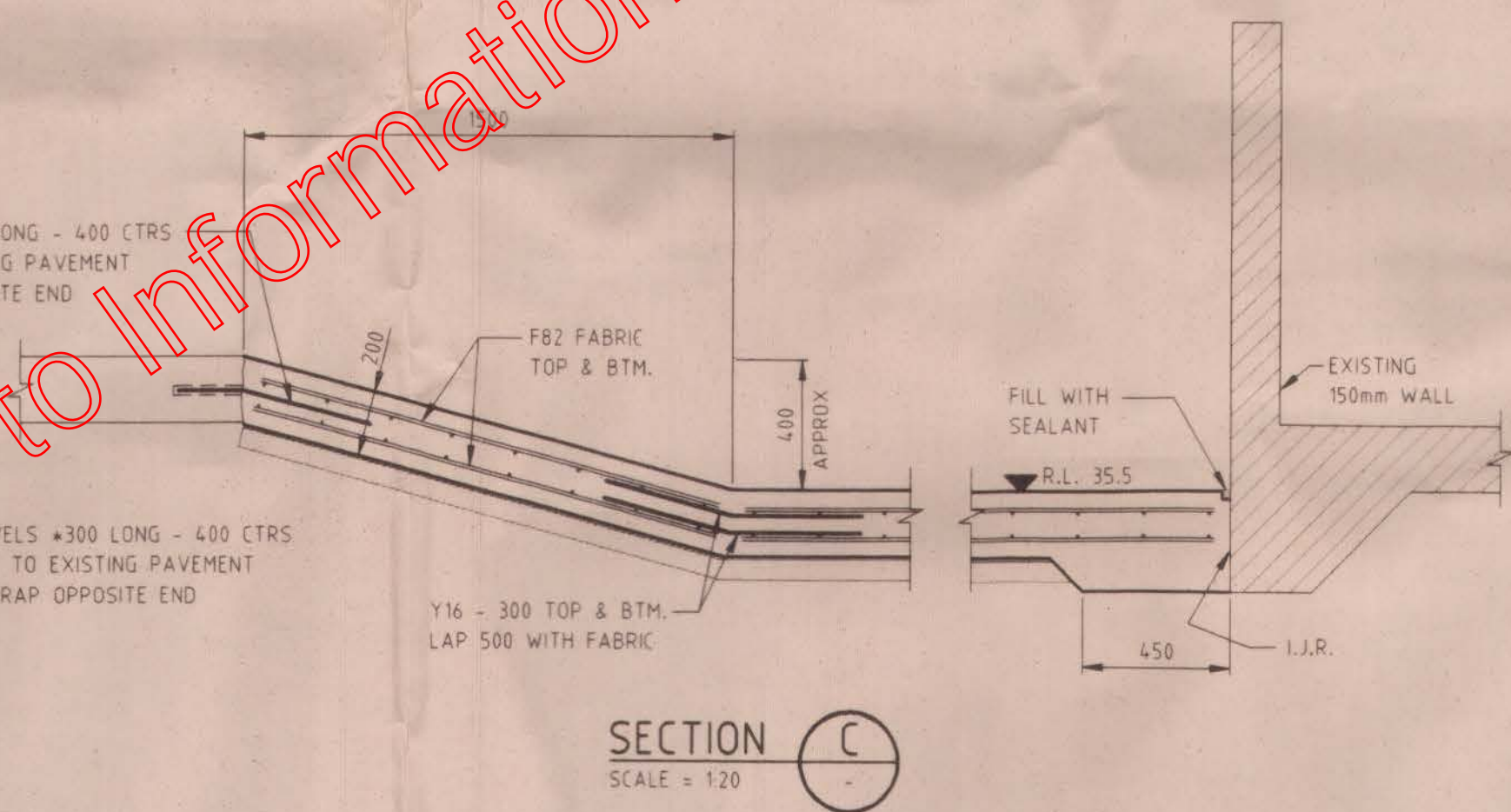
DETAIL OF TRUCK WASHOUT AREA

SCALE 1:50

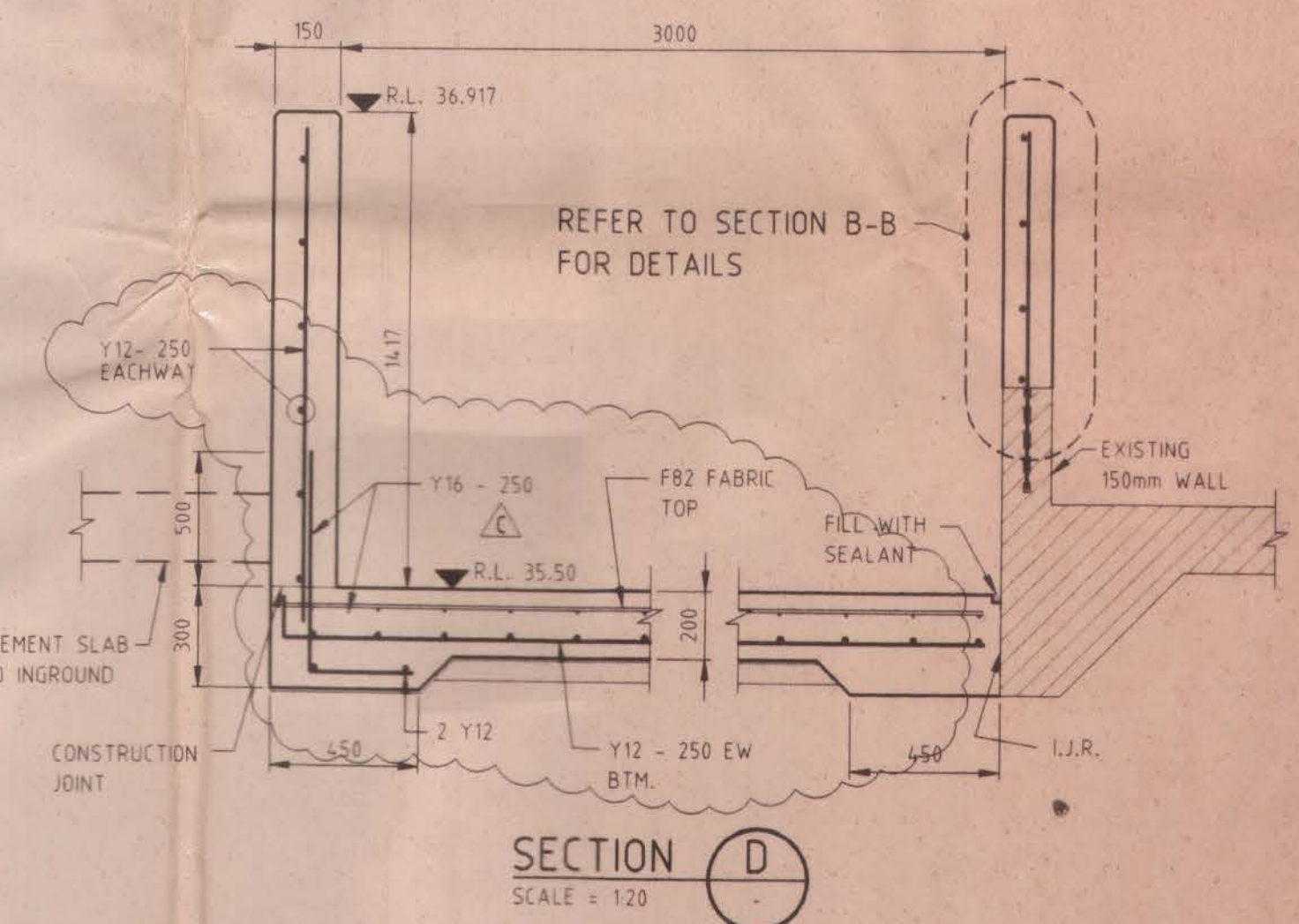


SECTION B
SCALE = 1:10

SECTION E
SCALE = 1:20



SECTION C
SCALE = 1:20

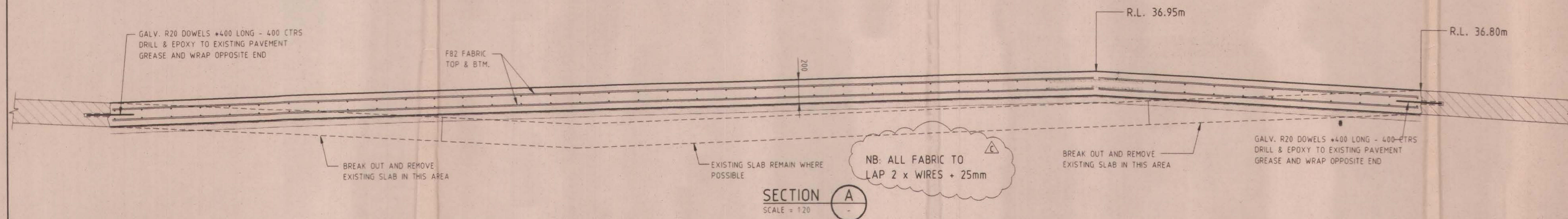
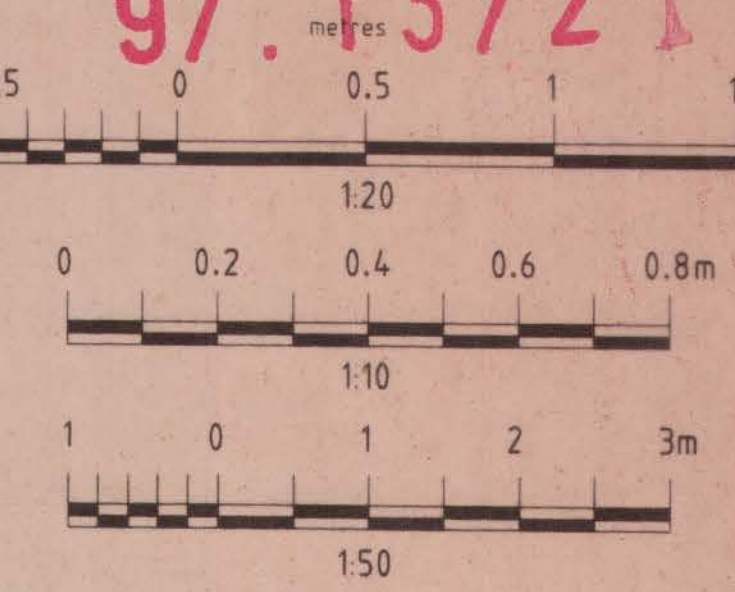


SECTION D
SCALE = 1:20

CONCRETE STRENGTHS AND COVER

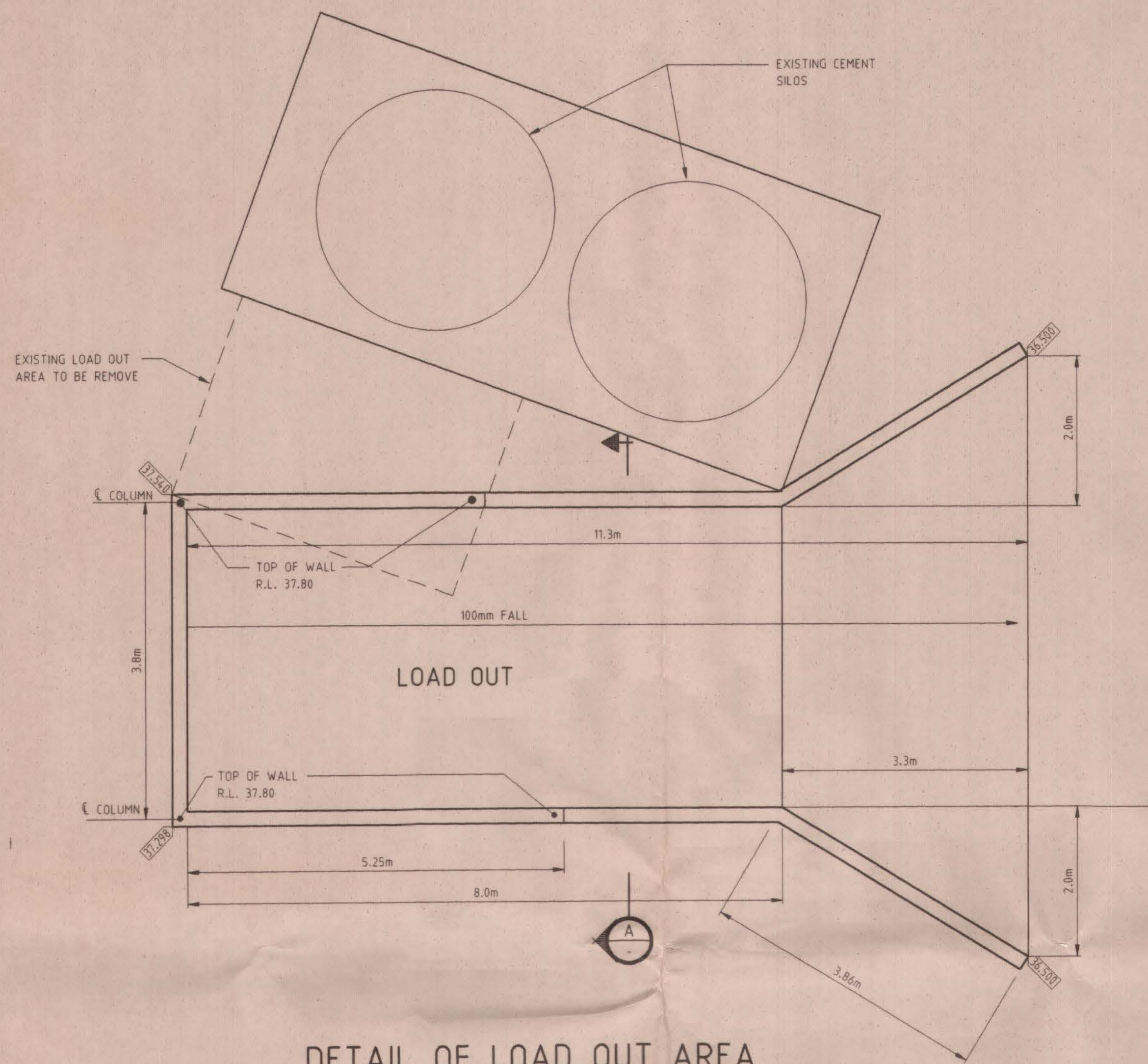
LOCATION	F _c AT 28 DAYS	COVER	DESIGN LOADS
SLAB & WALLS	40MPa	30mm	

NOTE: REFER CONCRETE NOTES FOR GENERAL REQUIREMENTS.



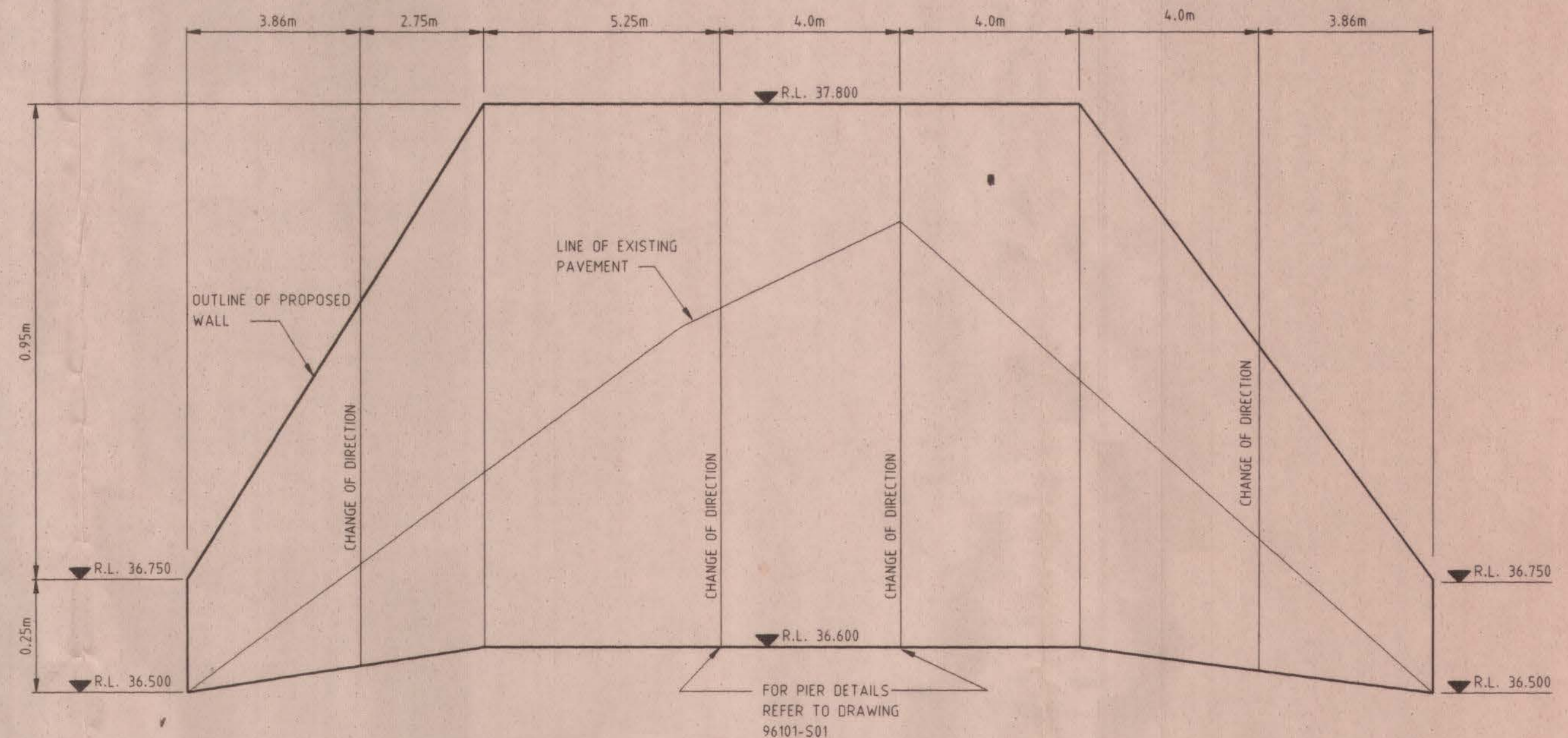
SECTION A
SCALE = 1:20

Architect	Client	Project	Title	Drawn	P.K.	Title	Drawing Number
	BORAL CONSTRUCTION MATERIALS PTY. LTD.	CLEVELAND CONCRETE BATCHING PLANT	Whybird Farr Engineers STRUCTURAL AND CIVIL CONSULTANTS	Checked	S.S.	DETAIL SHEET	96101-C02
Project Manager			21 Quay St. Brisbane Q4000 WHYBIRD BROWN & FARR Pty Ltd ACN 010 849 724 PH:(07) 3236 2561 FAX: (07) 236 32417	Passed			Rev A B C
Rev	Description	Date		Scale	AS SHOWN		



DETAIL OF LOAD OUT AREA

SCALE 1:50



LOAD OUT WALL PROFILE

SCALE H 1:100
V 1:10

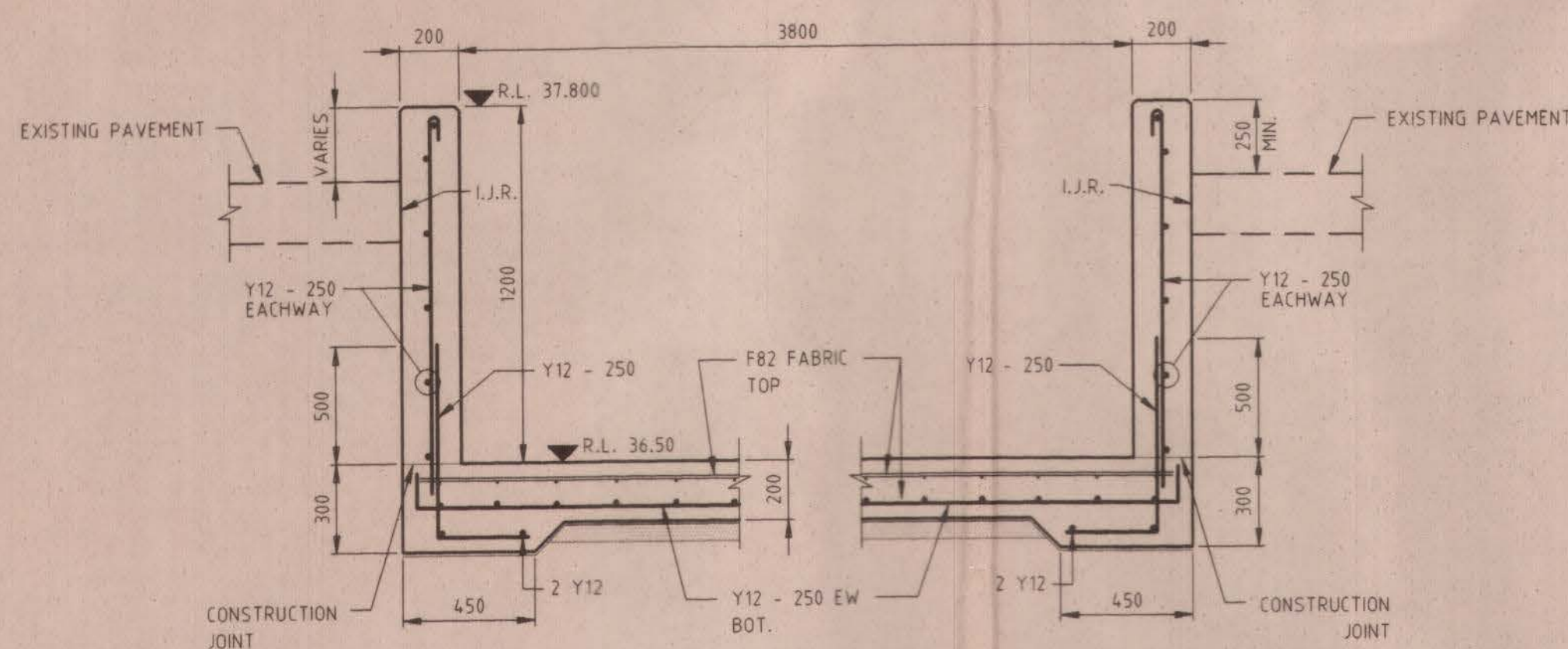
NOTE:
A PROPRIETARY PRECAST CONCRETE TANK MAY BE USED AS AN ALTERNATIVE SYSTEM

CONCRETE STRENGTHS AND COVER

LOCATION	F _c AT 28 DAYS	COVER	DESIGN LOADS
SLAB & WALLS	40MPa	30mm	

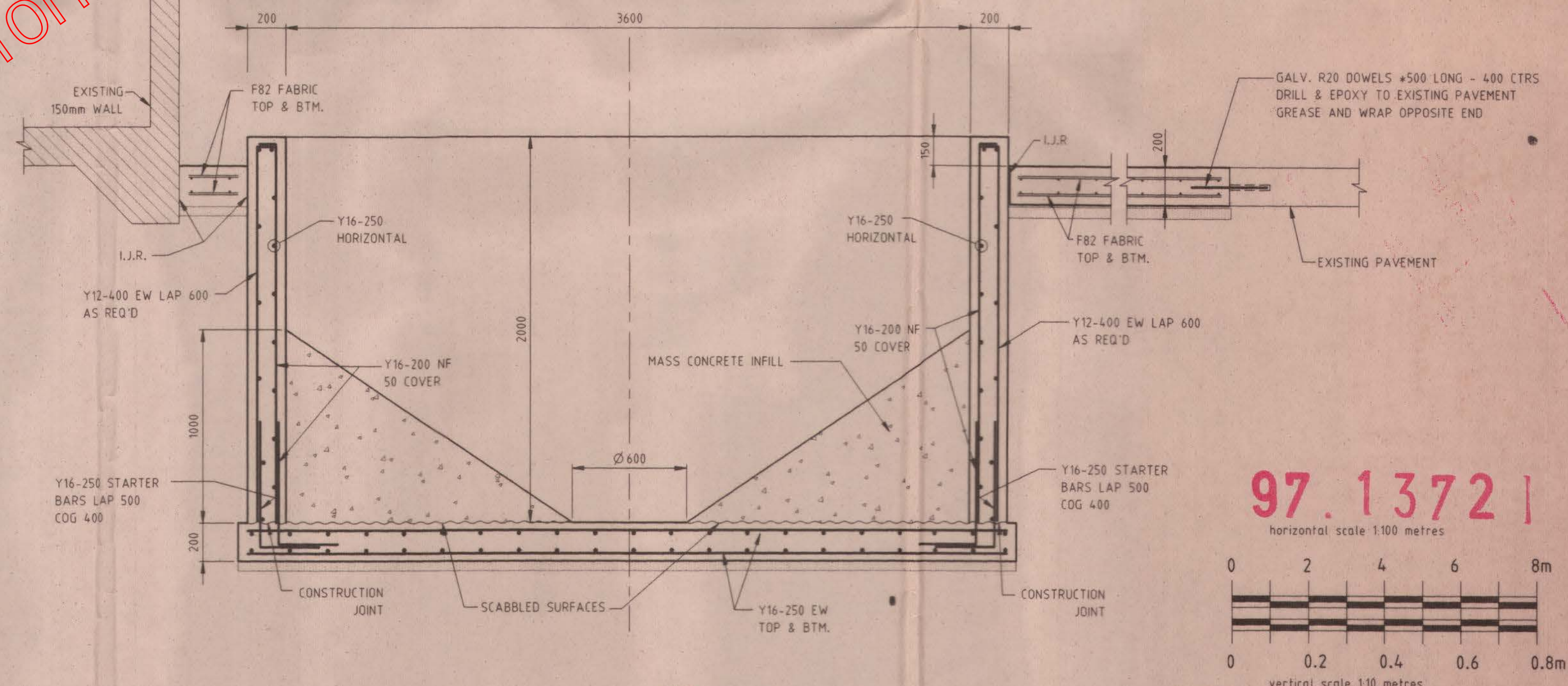
NOTE REFER CONCRETE NOTES FOR GENERAL REQUIREMENTS.

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SECTION A
SCALE = 1:20

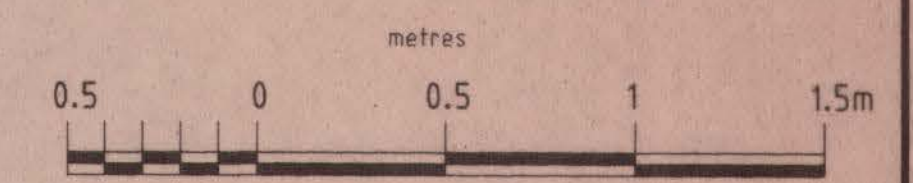
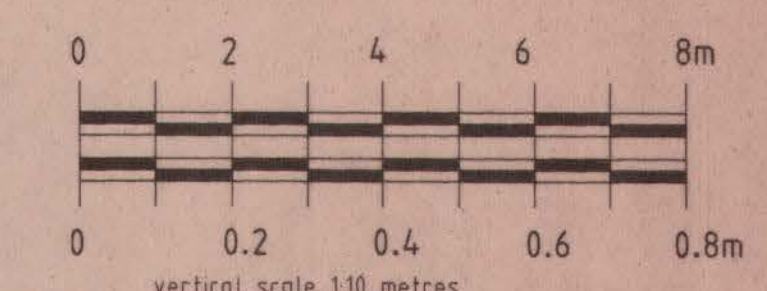
(REFER TO STRUCTURAL DRAWINGS FOR DETAILS)



SECTION F
SCALE = 1:20

97.13721

horizontal scale 1:100 metres



1:20
scales quoted apply to original drawing scale

A1

Architect		Client		Project		Drawn		Title		Drawing Number	
Project Manager		BORAL CONSTRUCTION MATERIALS PTY. LTD.		CLEVELAND CONCRETE BATCHING PLANT		P.K.		DETAIL SHEET SHEET 2 of 2		96101-C03	
Date		13/03/97		18/02/97		Checked		S.S.		Rev	
Description		DIMENSIONS ALTERED AT CLIENTS REQUEST		HOLD REMOVED, PIERS ADDED TO LOADOUT DETAIL		Passed				A B C	
Rev		07/02/97		PRELIMINARY ISSUE ONLY, FOR COMMENT		Scale		AS SHOWN			

Whybird Farr Engineers
STRUCTURAL AND CIVIL CONSULTANTS
21 Quay St. Brisbane Q4000
WHYBIRD BROWN & FARR Pty Ltd ACN 010 649 724
PH: (07) 3236 2561 FAX: (07) 236 32417



STEELWORK NOTES

GENERAL

- FABRICATE & ERECT ALL WORK IN ACCORDANCE WITH AS 1554, AS 1252, AS4100 & THE RELEVANT SPECIFICATIONS.
- VERIFY ALL DIMENSIONS WITH THE ARCHITECT. DO NOT SCALE THESE DRAWINGS.
- IN CASE OF DOUBT - ASK!
- THE DRAWINGS ARE TO BE REGARDED AS PRELIMINARY UNLESS AUTHORISED.

DESIGN LOADS

WIND LOAD: TERRAIN CATEGORY 3
VELOCITY $V_p = 49m/s$

LIVE LOAD: 80 kN HOPPER

FABRICATION

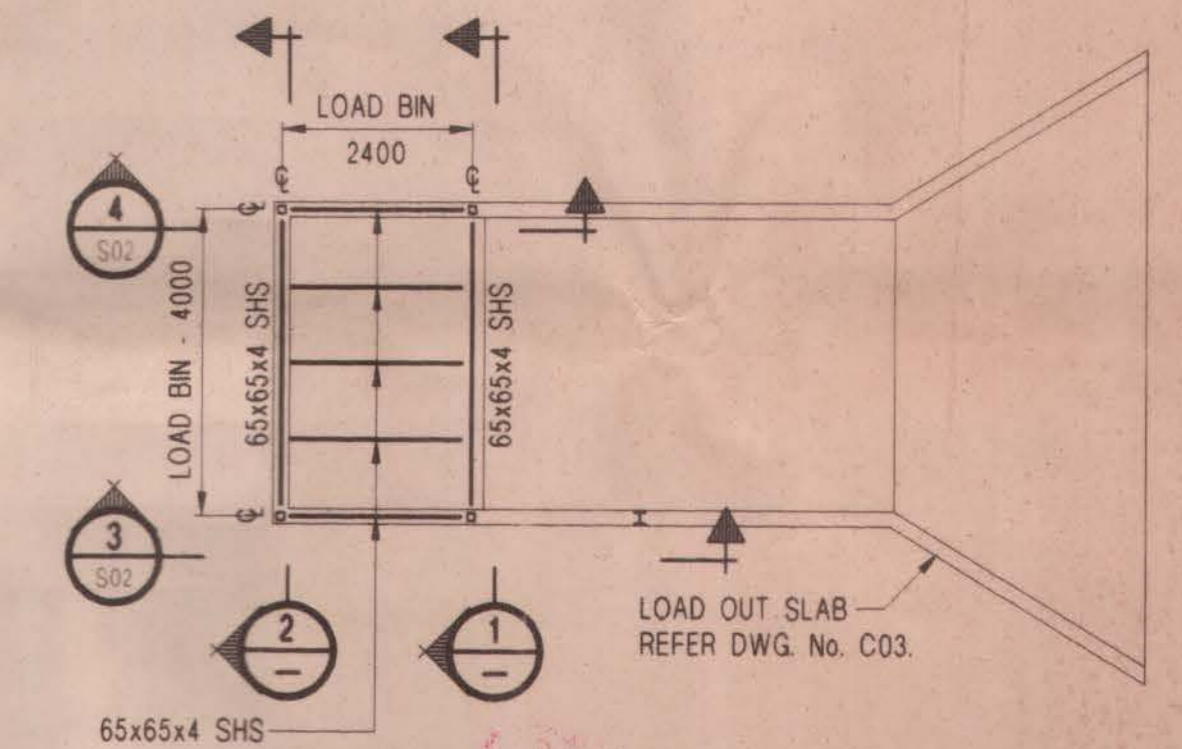
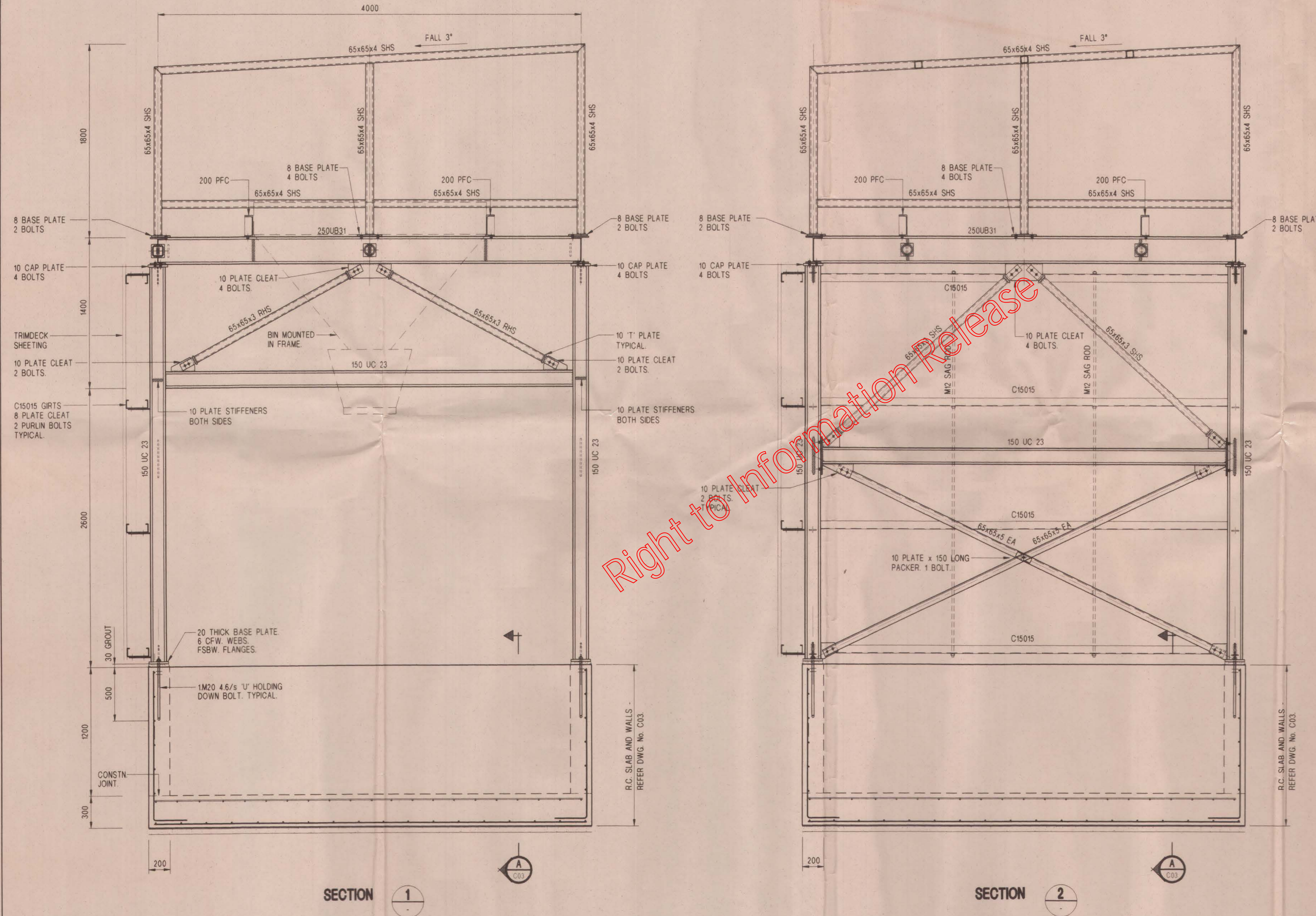
- SUBMIT ALL SHOP DRAWINGS TO THE ENGINEER & ARCHITECT FOR APPROVAL PRIOR TO COMMENCING FABRICATION.
- UNLESS NOTED OTHERWISE USE 10 mm THICK GUSSET, FIN & END PLATES, M20 8.8/S BOLTS, 6 mm CONTINUOUS FILLET WELDS.
- CHIP ALL WELDS FREE OF SLAG.
- PROVIDE TEMPORARY BRACING AS REQUIRED.
- STEELWORK STORED ON OR OFF SITE AWAITING ERECTION SHALL BE SUPPORTED CLEAR OF THE GROUND TO AVOID SOILING & SO AS TO AVOID PONDING OF WATER.
- ANY DAMAGE TO SURFACE TREATMENT OR SOILING OF THE STEELWORK SHALL BE MADE GOOD FOLLOWING ERECTION.

SURFACE TREATMENT

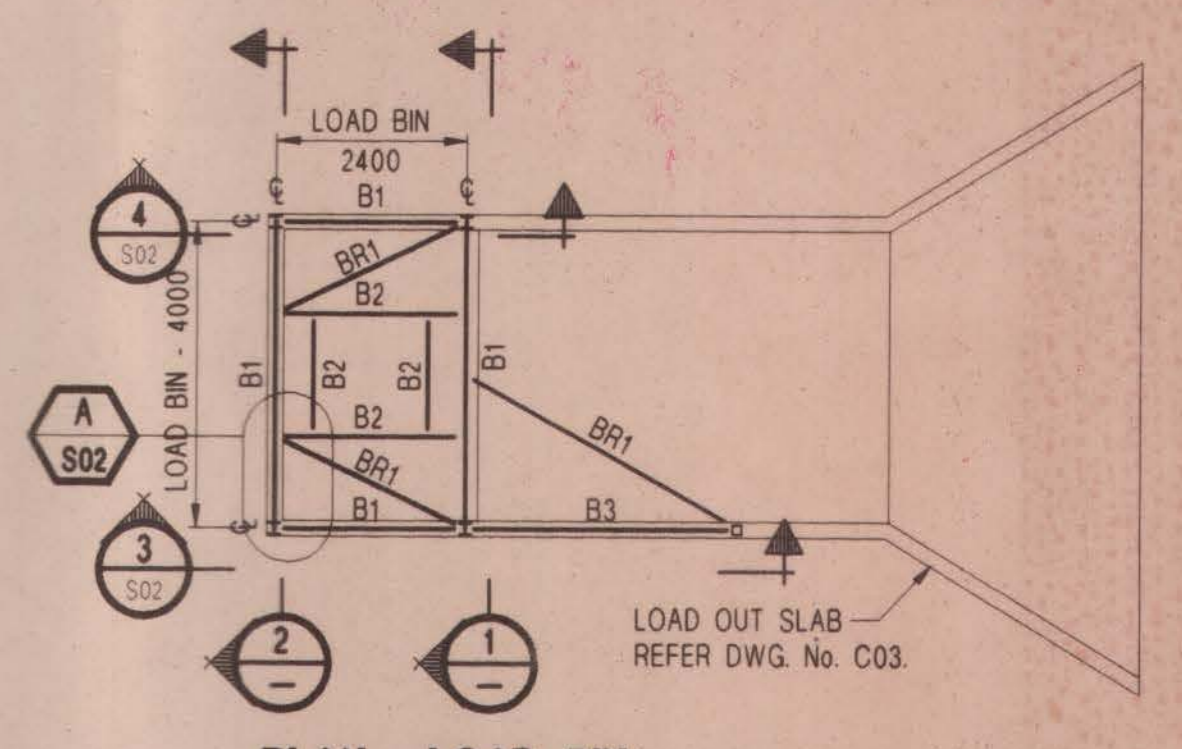
- CLASS 2.5 SAND BLAST
- 125 MICRON EPOXY BILDCOTE PRIMER PLUS 125 MICRON EPOXY BILDCOTE FINISH COAT.
- TOUCH UP BOLTS WITH 125 MICRON EPOXY BILDCOTE COATING.

COLD FORMED SECTIONS

- COLD FORMED SECTIONS SHALL COMPLY WITH AS1538, AS1397, AS1594 AND AS1595.
- MINIMUM YIELD STRESSES: PURLINS 450 MPa
OTHER SECTIONS 250 MPa.
- ALL LAPS, BRIDGING AND PURLIN CONNECTIONS SHALL BE TO MANUFACTURER'S DETAILS.
- ALL COLD FORMED SECTIONS TO BE WELDED WITH 4mm MIG WELD. WELDS TO BE TOUCHED UP WITH 75 MICRON TYPE 4 INORGANIC ZINC SILICATE PAINT.



PLAN - LOAD BIN ROOF

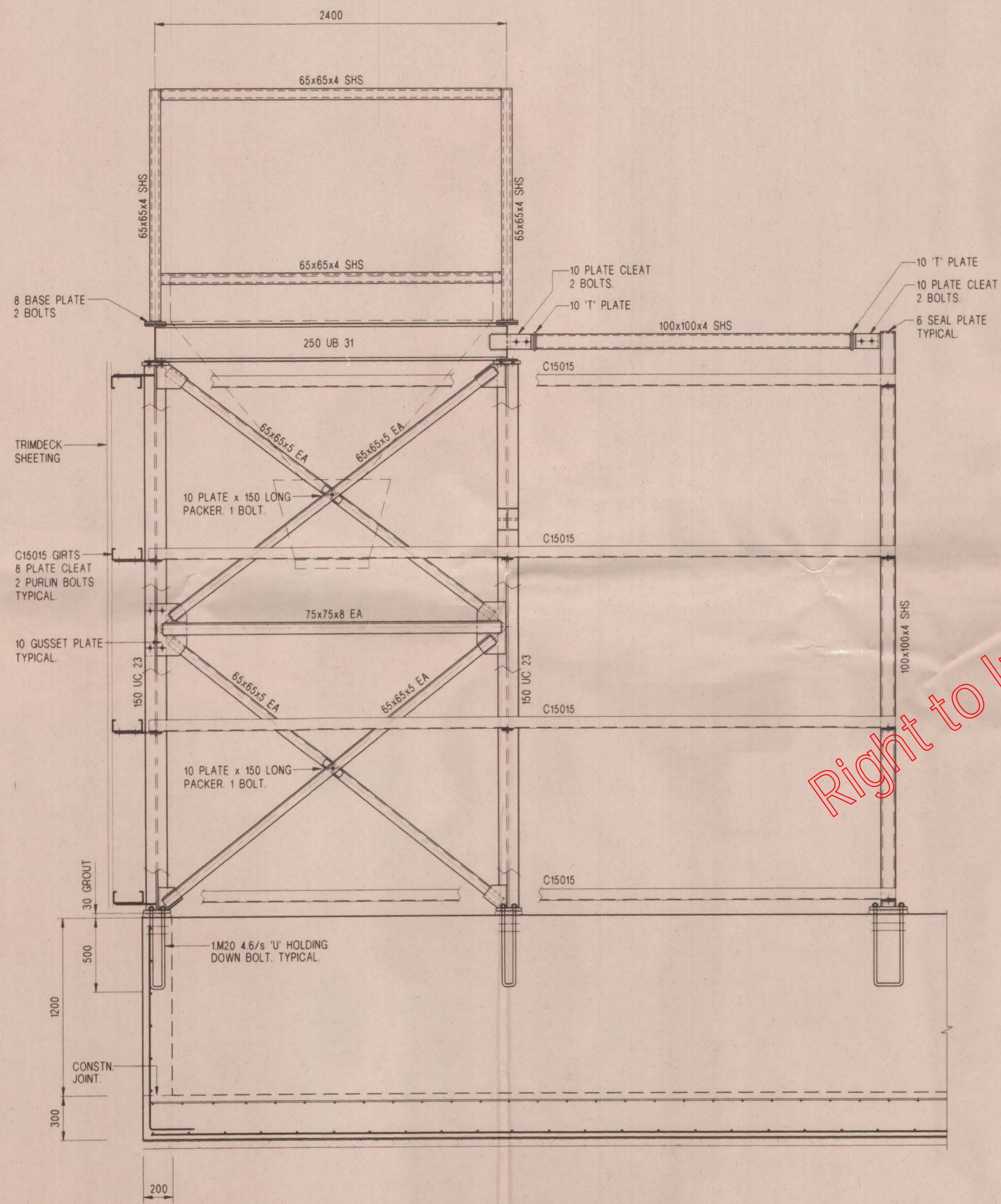


PLAN - LOAD BIN

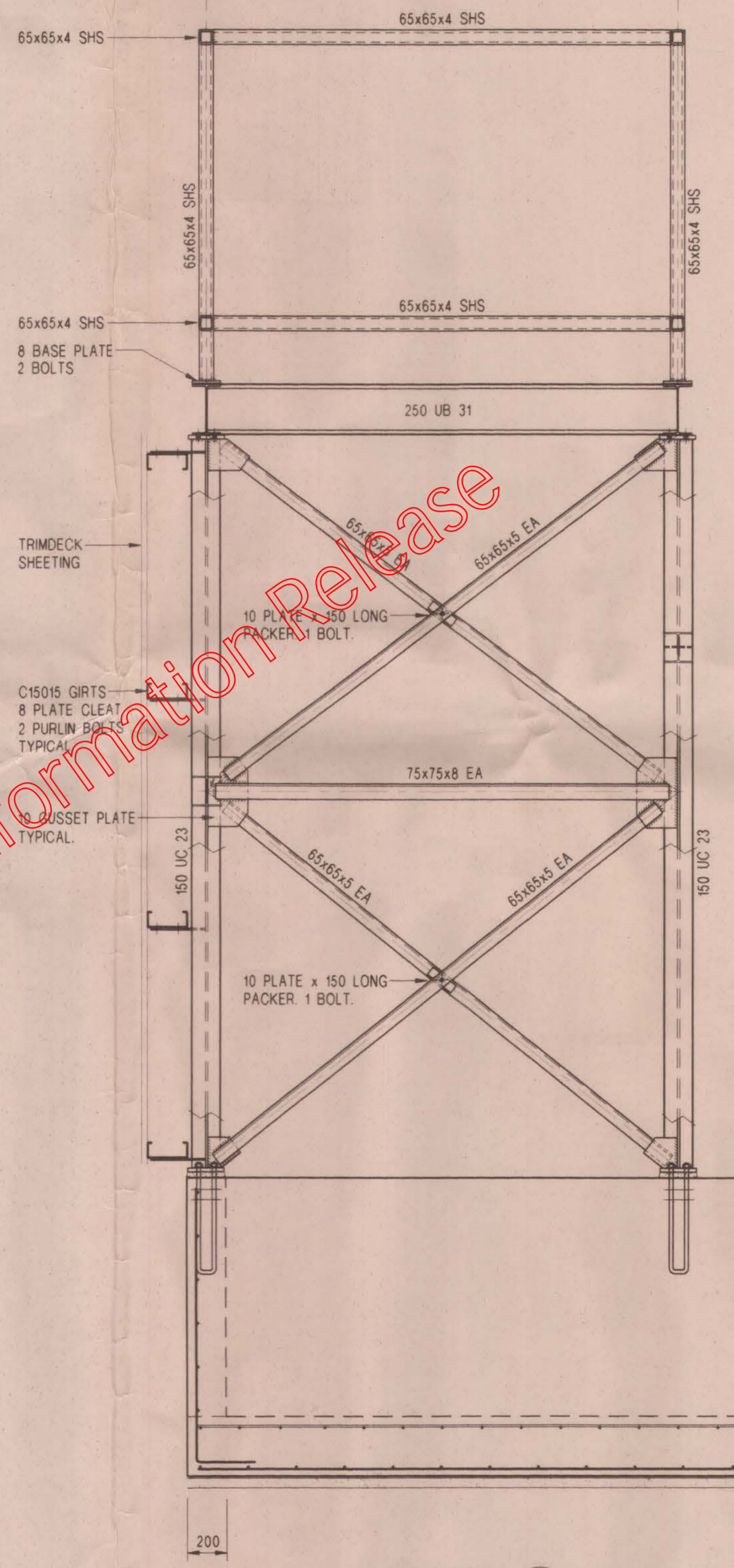
- B1. 250 UB 31
- B2. 200 PFC
- B3. 100 x 100 x 4.0 SHS
- BR1. 100 x 4.0 CHS

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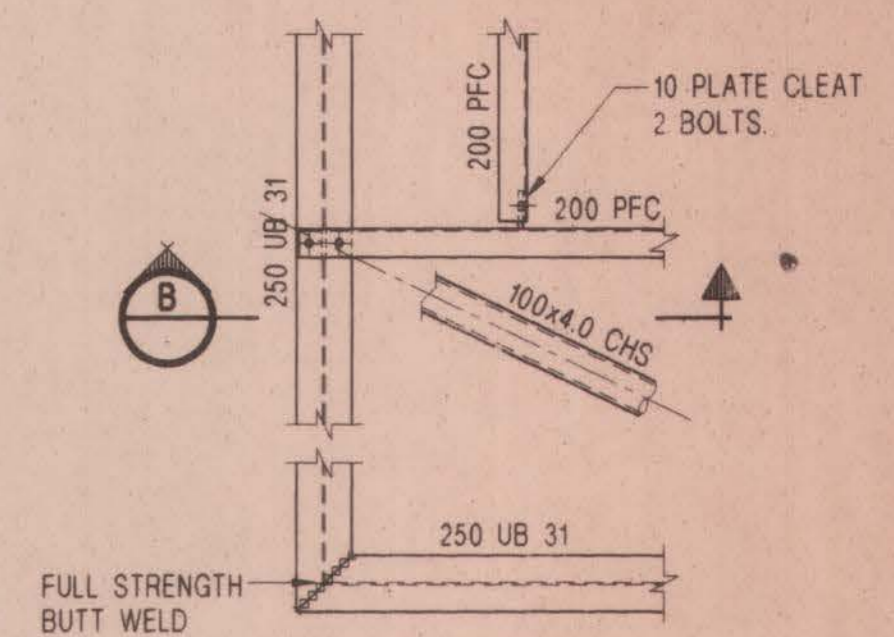
Architect		Client		Project		Title	
BORAL CONSTRUCTION MATERIALS PTY. LTD.		CLEVELAND CONCRETE BATCHING PLANT		Whybird Farr Engineers STRUCTURAL AND CIVIL CONSULTANTS		LOAD BIN DETAILS	
Project Manager		R.C. SLAB AND WALLS - REFER DWG. No. C03.		25 Mein St. Brisbane Q4000 WHYBIRD BROWN & FARR Pty Ltd. ACN 010 649 724 PH: (07) 3831 5655 FAX: (07) 3831 8577		Drawing Number	
Date				Scale 1:100, 1:20		96101 - S01	
Rev						Rev P A B	



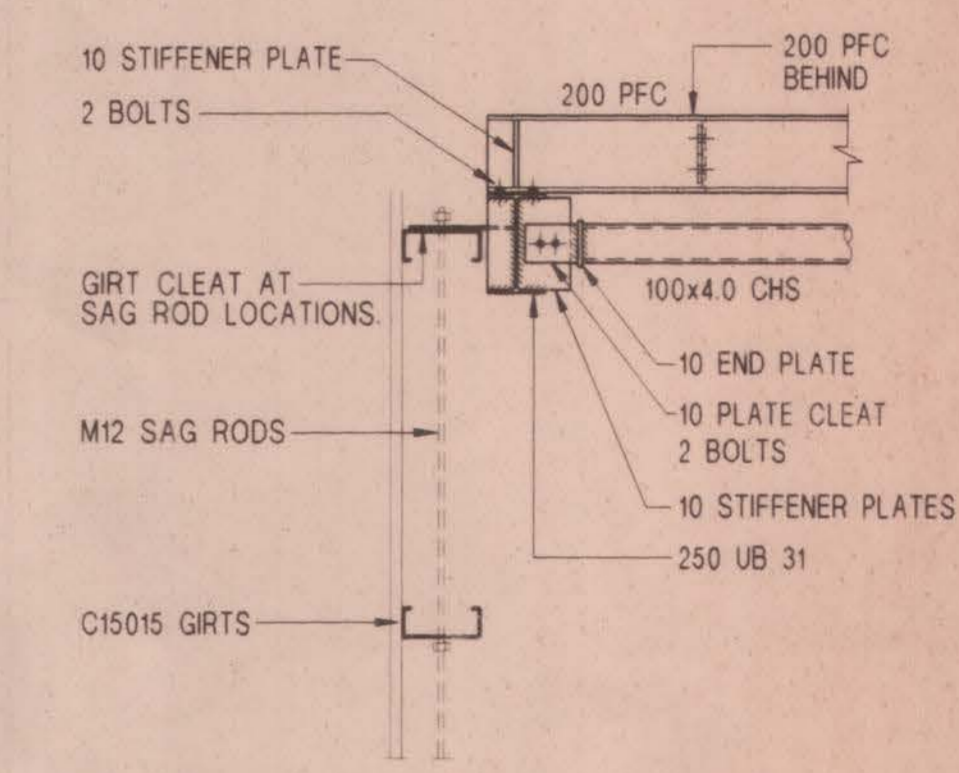
SECTION 3 S01



SECTION 4 S01



DETAIL A



SECTION B

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97.1372

	Architect	Client	Project	Whybird Farr Engineers STRUCTURAL AND CIVIL CONSULTANTS 25 Mein St. Brisbane Q4000 WHYBIRD BROWN & FARR Pty Ltd ACN 010 649 724 PH: (07) 3831 5655 FAX: (07) 3831 8577	Drawn M.S. FEB 97 Checked Passed Scale 1:20	Title LOAD BIN DETAILS	Drawing Number 96101 - S02
B REDRAWN 19.3.97 A ISSUE FOR APPROVAL 27.2.97	Project Manager	BORAL CONSTRUCTION MATERIALS PTY. LTD.	CLEVELAND CONCRETE BATCHING PLANT				Rev A B



Redland
SHIRE COUNCIL

COUNCIL COPY

Redland Shire Council

Corner Bloomfield & Middle Sts
Cleveland Qld 4163

PO Box 21
Cleveland Qld 4163

Telephone (07) 3286 8686
Facsimile (07) 3286 8765

APPROVAL CONDITIONS

**B.A. 97.1372
Boral Resources
Batching Plant
267 - 275 Industry Court
Cleveland**

4. Compliance with the requirements of the Redland Shire Council's Health and Community Services, the food Hygiene Regulations and the provisions of the Environment Protection Act.
5. Structural Certification to be received by Council prior to the final/certificate of classification inspection.
6. Structural building work to be supervised and certified by an INDEPENDENT Registered Professional Engineer.

Right to Information Release

Whybird Farr Engineers

STRUCTURAL AND CIVIL CONSULTANTS

96.101

March 3, 1997

Redland Shire Council
PO Box 21
CLEVELAND QLD 4163

97.1372

Dear Sir,

STRUCTURAL DESIGN CERTIFICATE

BUILDING DESCRIPTION : **Batching Plant**
BUILDING OWNER : **Boral Concrete**
SITE ADDRESS : **Enterprise Street, Cleveland**

We, Whybird Farr Engineers, being "Structural Engineers" within the meaning of the Building Act 1975 - 91, hereby certify that we are responsible for the structural and civil design of the building work to be shown on the structural and civil drawings (numbers: C01-C03, S01, S02) which have been prepared by us.

We certify that the abovementioned structural work has been designed in accordance with the Building Act (as per by Law 2.11 of the Building Act 1985) and other relevant statutes; S.A.A. Codes and other approved codes; in accordance with sound, widely accepted engineering principles; and will be checked internally by suitably qualified staff.

In particular we certify that the structure has been designed for Category 3 Wind Loadings as determined by criteria set down in AS1170, Part 2. Further, the external walls comply with C1.11 of the BCA.

SITE INSPECTIONS

We further certify that we have been commissioned to undertake regular inspections of the structural components of the building, sufficient to establish that it will be constructed reasonably in accordance with the intent of the structural design.


..12

These inspections will be carried out by us or by a duly appointed inspector responsible to us.

We further undertake that in the event of our commission for these inspections being terminated or altered, we will immediately advise the Council in writing.

On completion of the building we will provide certification that the relevant structural components of the building have been constructed to the intent of the structural design, except as may be otherwise excluded on the final certificate.

Yours faithfully,
WHYBIRD FARR ENGINEERS.


J.L. WHYBIRD, R.P.E.Q. 3542

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