

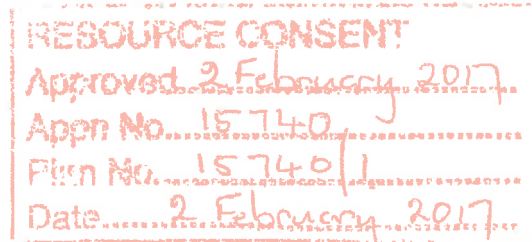
02 February 2017

Copy to P16750
Please Quote: 62-16-194
Doc Ref: RDC - 698968
Enquiries to: **Michelle Fluker**

Civic Centre
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand

RANKILOR CONSULTANTS
PO BOX 313
TAUPO

Attn: David Rankilor



Dear David,

NOTICE OF RESOURCE CONSENT DECISION

Consent no:	RC15740
Property file no:	P16750
Applicant:	PEKA LANDS TRUST
Type of application:	LAND USE - LIMITED DISCRETIONARY
Proposal:	EARTHWORKS ASSOCIATED WITH THE CONSTRUCTION OF 350M OF PRIVATE ROAD AND A SINGLE SPAN BRIDGE ACROSS WAIHUAHUAKAKAHI STREAM.
Site address:	101 S HWAY 30
Legal description:	ML19805 PT PEKA BLK

I wish to advise that the following decision has been made under authority delegated to staff in respect of the above application:

- (a) Pursuant to Section 95A of the Resource Management Act 1991, the Rotorua District Council has decided in its discretion not to publicly notify the application. Council is satisfied after due consideration of Section 95D that the adverse effects on the wider environment will be or are likely to be no more than minor. Council is also satisfied that no special circumstances exist that require notification of the consent application in accordance with Section 95A(4).
- (b) The Council has decided after taking into due consideration the requirements of Sections 95B and 95E of the Resource Management Act 1991 that the adverse effects of the activity on the owners and occupiers of adjacent land are minor and at the time of making this decision all parties who may be adversely affected have provided their written approval to the proposal and therefore limited notification is not required.
- (c) Pursuant to Sections 34A, 104, 104C and 108 of the Resource Management Act 1991, the Rotorua District Council resolves to GRANT consent to carry out earthworks to construct a private road within 25m of the Waihuahuakakahi Stream, subject to the following conditions:

CONDITIONS OF CONSENT:

- 1. The proposal shall proceed in accordance with the application submitted by RANKILOR CONSULTANTS numbered RC15740 and plans numbered RC15740/1 by Council except where modified by any conditions of this consent.**

Engineering

- 2. That all engineering works required to be undertaken to satisfy the conditions of this consent shall be carried out in accordance with the Rotorua Civil Engineering Industry Standard (RCEIS) and the District Plan, to the satisfaction of the Chief Operating Officer, Rotorua District Council or their delegate.**
- 3. No in stream works occur during the sports fish spawning period May to August inclusive.**
- 4. Adequate sediment controls methods will be installed to minimize sediment entering the stream.**
- 5. Any in stream sediment controls methods do not obstruct fish passage at any time.**
- 6. Re-vegetation of any exposed riparian soils will occur as soon as practically possible.**
- 7. No debris will remain within the stream upon removal of the existing bridge.**

Sediment and Erosion Control

- 8. That in carrying out the proposed works no run off, silt, sediment, dust or other materials shall be permitted to discharge off-site that could damage or disturb neighboring properties, public roads, drains or waterways. This shall be achieved by installing and maintaining appropriate erosion, sediment and dust controls (in accordance with the Bay of Plenty Regional Council Sediment and Erosion Control Guidelines) prior to and during the works until the site is stabilised to the satisfaction of the Chief Operating Officer, Rotorua District Council or their delegate.**

Bridge Design Requirements

- 9. That the proposed single span bridge across the Waihuakakahi Stream shall be designed and constructed in accordance with the New Zealand Transport Agency (NZTA) Bridge Manual SP/M/022.**

REASONS FOR COUNCIL DECISION:

- 1. Principal Issues – Earthworks within 25 metres of a waterbody can have a potential impact on water quality and visual amenity.**

2. **Main Findings of Fact – The subject site is located west of the intersection of State Highways 5 and 30, and is legally described as ML19805 PT PEKA BLK. The property includes an area of 633 hectares and is zoned industrial 1 under the Operative Rotorua District Plan. The Waihuahuakakahi Stream runs through the property with an existing stock proof fence located along the bank. The property is used for forestry purposes.**

The applicants seek to construct 350m of private road (from the existing gate across the paddocks) and a single span bridge across the Waihuahuakakahi Stream. This road and bridge is required for heavy vehicles to gain access to the area of forestry ready for harvest. The proposed activity requires earthworks within 25 metres of a waterbody.

The earthworks are to be temporary in nature and will not cause any adverse visual effects. Adequate controls and conditions will ensure that all sedimentation and stormwater discharge during the earthworks and following the construction of the road will be contained within the property and minimize sediment entering the stream.

3. **The site is zoned INDUSTRIAL 2 – HEAVY INDUSTRIAL in the Operative Rotorua District Plan where earthworks not complying with Appendix 10 is a RESTRICTED DISCRETIONARY ACTIVITY. Although the status of the activity is restricted discretionary there is no restricted discretionary assessment criteria for earthworks contained within the Operative Rotorua District Plan and assessment for the earthworks is based on criteria and advice from the Bay of Plenty Regional Council.**
4. **The proposal is considered to be consistent with Part II of the Resource Management Act 1991.**
5. **The Council has had regard to the provisions of the Operative Rotorua District Plan and in particular to Appendix 10 – Earthworks. The proposal is consistent with the relevant objectives and policies of Part 7 – Industrial of the Operative Rotorua District Plan subject to compliance with the conditions of consent.**
6. **The Council is satisfied that the proposed activity will not have, or is unlikely to have, any adverse effects that are more than minor.**
7. **Fish & Game New Zealand, Tuhourangi Tribal Authority and New Zealand Transport Agency have provided written approval to the proposal. While Fish and Games approval was conditional, the applicant has accepted these conditions and therefore forms part of the application. Bay of Plenty Regional Council has received and is currently processing a consent application for the proposed activity/bridge (RM16-0517). All parties Council considered affected persons have provided written consent to the proposal. In making this decision Council has disregarded any effects on these parties as required by section 95D.**
8. **Conditions have been imposed in order to mitigate the adverse effects of the proposal such that they are no more than minor.**
9. **NZTA has approved the proposal to undertake logging operations with direct access to State Highway 30. The vehicle crossing providing access to State Highway 30 complies with the Transport Agency's Diagram E standard which is sufficient for the proposed use.**

10. **The proposed bridge requires a building consent. The engineering requirements will be addressed in conjunction with the building consent application.**

The applicants are advised that:

- (a) Timeframe for Giving Effect to this Consent
The above consent lapses on the expiry of 5 years after the date of receiving this letter, unless the consent is given effect to.
- (b) Right of Objection
If you are dissatisfied with any aspect of the decision, you have a right of objection to Council under section 357A of the Resource Management Act 1991. Please advise Council in writing stating the reasons for the objection and the preferred outcome within 15 working days of receiving this decision. If no objection is received it will be assumed that the applicant accepts this decision. In addition, there is a right of appeal to the Environment Court under section 120 of the Resource Management Act 1991.
- (c) Obligations under the Heritage New Zealand Pouhere Taonga Act 2014
Council has no records of an archaeological site on this property. This may be due to one of two factors. Either, there are no sites present or there has not been an archaeological survey undertaken. Please be advised that both known and unknown archaeological sites are protected under the Heritage New Zealand Pouhere Taonga Act 2014. If during the exercising of this consent any archaeological site is uncovered work must stop and permission be obtained from Heritage New Zealand under section 44 of the Heritage New Zealand Pouhere Taonga Act 2014.
- (d) National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health
All soil disturbances shall be carried out in accordance with the requirements of 8(3) of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011.
- (e) Building Consent Required
The proposed bridge requires building consent prior to construction.
- (f) Works within the road reserve
Prior to any works being undertaken within the road reserve (including vehicle crossings) a Corridor Access Request must be lodged with Council and a Works Access Permit issued. This is available free of charge by going online to the website www.beforeudig.co.nz or by contacting Council's Corridor Access Administrator on 07 351 8201.
- (g) New Zealand Transport Agency
The Transport Agency has reviewed the application received September 2016 and on the basis of the information provided can provide approval to access State Highway 30. The accessway complies with the Transport Agency's Diagram E standard and is sufficient for the proposed land use.

Bay of Plenty Regional Council Advice

(h) Regional Consent

Bay of Plenty Regional Council has received and is currently processing a consent application for this activity – single span bridge construction (consent application M16-0517). Please contact Ryan Standen (Consents Officer) at the BOPRC for any queries regarding the consent application.

(i) Land Improvement Agreement (LIA)

The subject site has an existing LIA registered against the title which is not mentioned in the application. Some of the proposed works are within the LIA protection areas.

For any works undertaken in existing LIA protection areas, the Bay of Plenty Regional Council recommends an offset of at least equal areas. Contact a Land Management Officer at the Bay of Plenty Regional Council to find out which areas may be required to be offset.

If you have any questions regarding this decision, please contact **Michelle Fluker**, or the duty planner.

Yours faithfully



Michelle Fluker
Planner, Consent Solutions

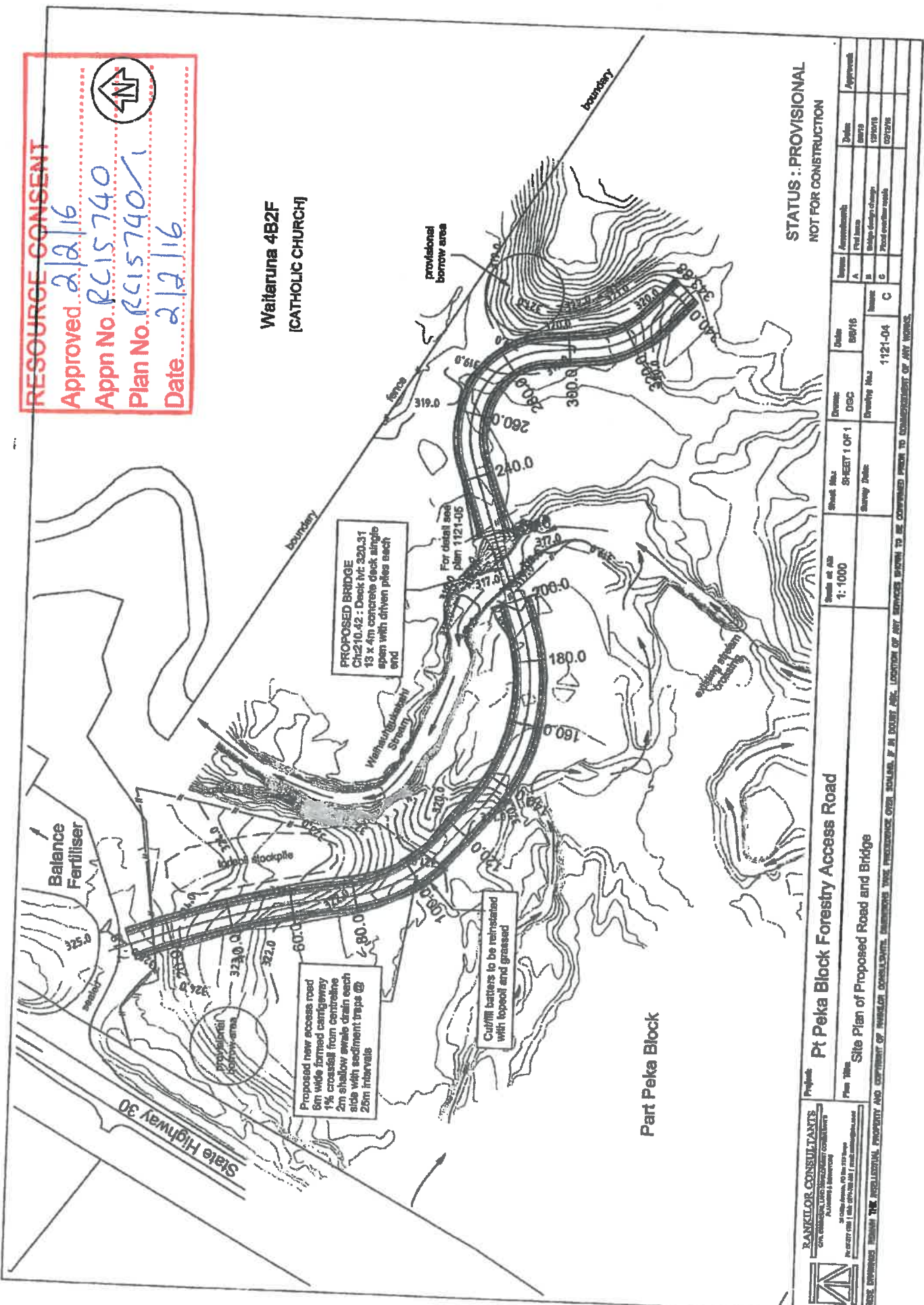
On behalf of
Simon Bell
Lead Planner, Consent Solutions

RESOURCE CONSENT

Approved: 2/2/16
 Appn No. RC15740
 Plan No. RC15740/1
 Date: 2/2/16



Waitaruna 482F
 [CATHOLIC CHURCH]



PROPOSED BRIDGE
 Ch210.42 : Deck lvt: 200.31
 13 x 4m concrete deck single
 span with driven piles each
 end

For detail see
 plan 1121-05

Proposed new access road
 6m wide formed cartway
 1% crossfall from centreline
 2m shallow arable drain each
 side with sediment traps @
 25m intervals

Cutfill batters to be reinstated
 with topsoil and grassed

Part Peka Block

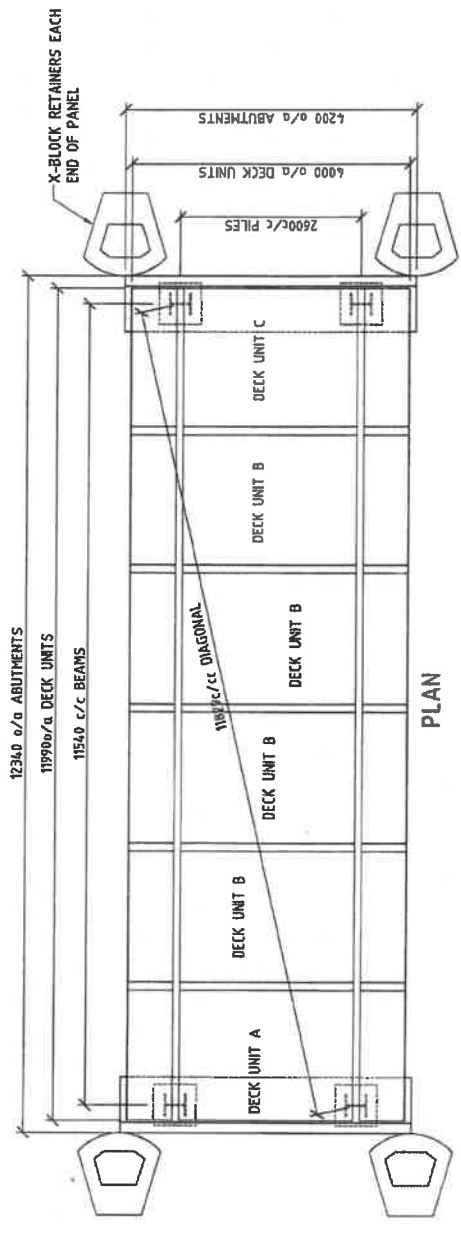
STATUS: PROVISIONAL
 NOT FOR CONSTRUCTION

RANKILOR CONSULTANTS
 CIVIL, GEOTECHNICAL, LAND MANAGEMENT CONSULTANTS
 21 Hillside Avenue, PO Box 2121 Invercargill
 98 0227 000 | 0800 070200 | rankilor.co.nz

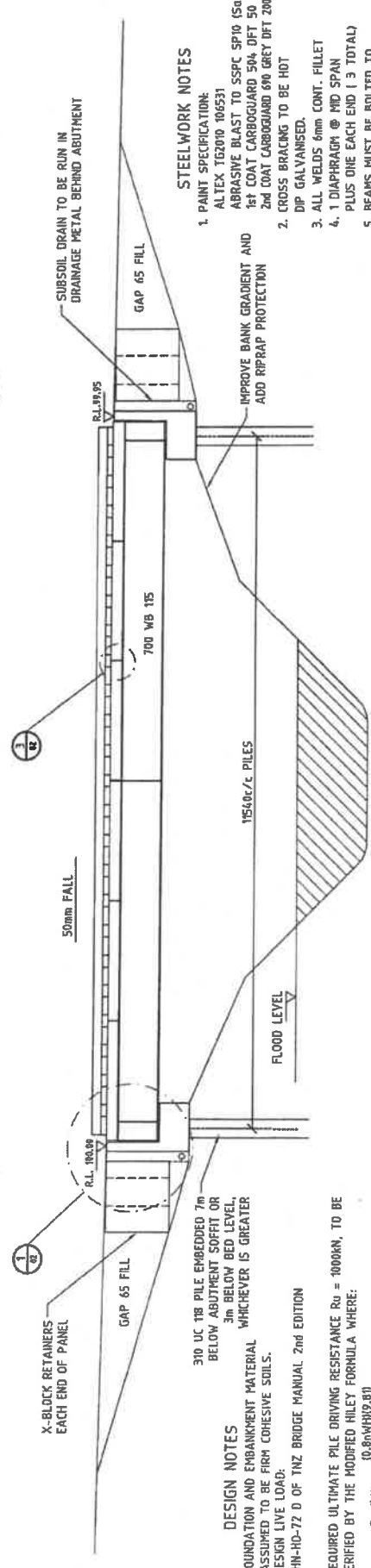
Project: Pt Peka Block Forestry Access Road
 Plan Title: Site Plan of Proposed Road and Bridge

Scale of All: 1:1000	Sheet No.: SHEET 1 OF 1	Dynamic: DGC	Order: BRF16	Accession No.: A	Index: 10000	Approval:
	Survey Date:	Drawing No.: 1121-04	Name: C	Plan No.: RC15740	Project Name:	

THESE DRAWINGS SHOW THE PROPOSED OVER-BUILDING OF AN EXISTING ROAD. LOCATION OF ANY SERVICES SHOWN TO BE CONTAINED WITHIN TO BE CONFIRMED PRIOR TO COMMENCEMENT OF ANY WORKS.



PLAN



STEELWORK NOTES

1. PAINT SPECIFICATION:
ALTEX T62010 106531
ABRASIVE BLAST TO SSPC SP10 (Sa 2.5)
1st COAT CARBOGUARD 504 DFT 50 MICRONS
2nd COAT CARBOGUARD 690 GREY DFT 200 MICRONS
DIP GALVANISED.
2. CROSS BRACING TO BE HOT DIP GALVANISED.
3. ALL WELDS 6mm CONT. FILLET
4. 1 DIAPHRAGM @ MID SPAN PLUS ONE EACH END (3 TOTAL)
5. BEAMS MUST BE BOLTED TO ABUTMENT PRIOR TO PLACING DECK UNITS.
6. BEAMS TO BE BOLTED IN PLACE PRIOR TO BACKFILLING BEHIND ABUTMENT HEADWALLS.
7. STEEL GRADE 300 OR BETTER

CONCRETE NOTES

1. ABUTMENT CONCRETE TO BE MIN 30MPa
2. DECK UNIT CONCRETE TO BE MIN 40MPa
3. REINFORCING TO BE GRADE 500E MANUFACTURED BY THE MICROALLOY PROCESS IN ACCORDANCE WITH AS/NZS 4671:2001

OUR APPROVAL OF THIS DRAWING RELATED TO OUR SPECIFICALLY DESIGNED STRUCTURAL ELEMENTS ONLY.

PR ENGINEERING CONSULTANTS LTD
1480 HINEMOA STREET PH 07 349 1210
ROTORUA
SIGNED: *L. Richardson* DATE: 5/9/11

DESIGN NOTES

1. FOUNDATION AND EMBANKMENT MATERIAL ASSUMED TO BE FIRM COHESIVE SOILS.
2. DESIGN LIVE LOAD:
HN-HD-72 D OF TNZ BRIDGE MANUAL 2nd EDITION
3. REQUIRED ULTIMATE PILE DRIVING RESISTANCE $R_u = 1000kN$, TO BE VERIFIED BY THE MODIFIED HILEY FORMULA WHERE:

$$R_u (kN) = \frac{W \cdot P \cdot e}{(0.8 \cdot W \cdot H \cdot D \cdot B)} \cdot s \cdot 0.5C$$

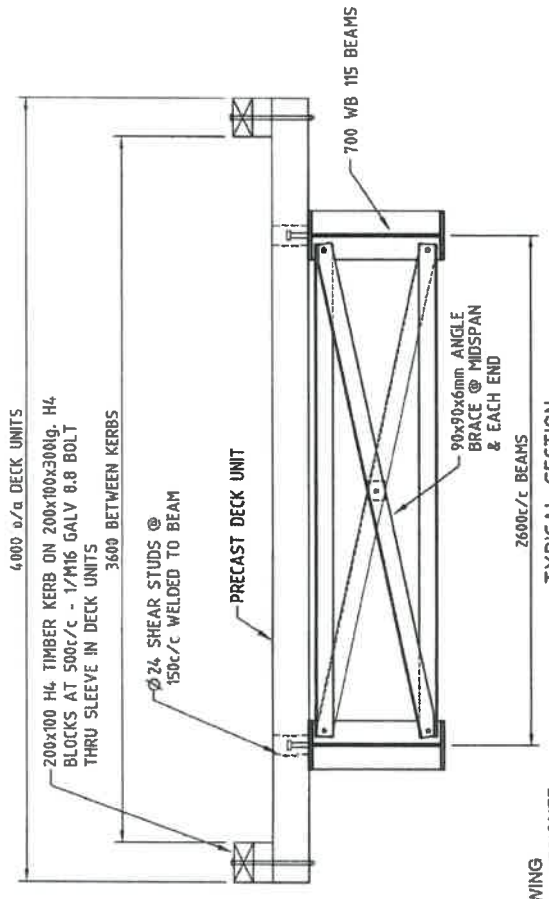
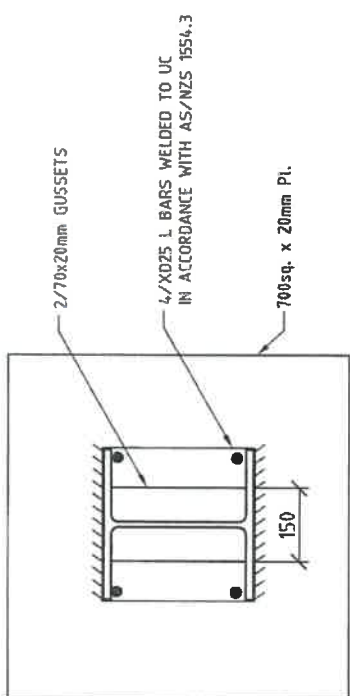
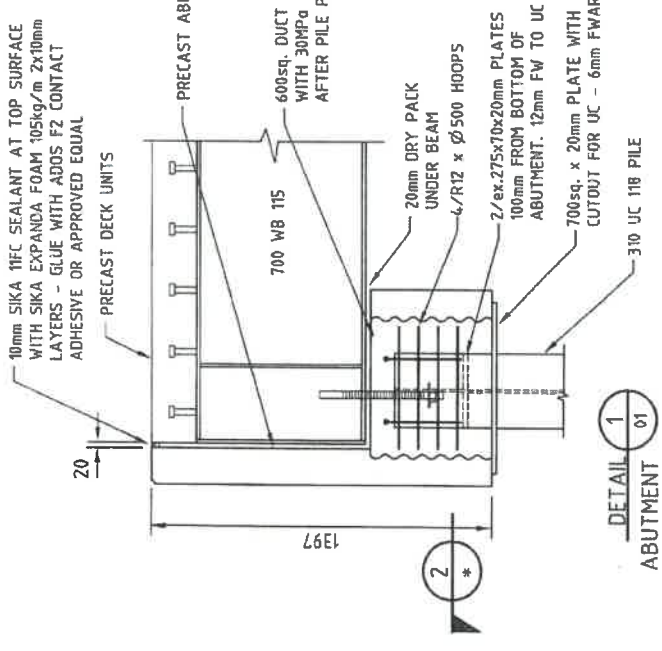
- WHERE $n = \frac{W \cdot P \cdot e^2}{W \cdot P}$
 W = WEIGHT OF HAMMER IN tonne
 P = WEIGHT OF PILE IN tonne
 e = EFFICIENCY OF BLOW DEPENDS ON COEFFICIENT OF RESTITUTION OF DRIVING/DRIVEN MATERIALS
 H = HEIGHT OF HAMMER FREEFALL IN mm
 s = PILE SET IN mm
 C = TEMPORARY PILE COMPRESSION IN mm
4. FOUNDING LEVEL OF PILE TO BE APPROVED BY DESIGN ENGINEER UPON REVIEW OF SITE CONDITIONS AND DRIVING RECORD.
 5. CONTINUOUS DRIVING RECORD TO BE MADE FOR DRIVING OF ALL PILES
 6. SITE EXPOSURE A2 - DESIGN LIFE OF 100 YEARS

REV.	AMENDMENT	DRAWN	CHECKED	DATE	SCALE	FILENAME	LAST PLOT DATE
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					DESIGNED	FILED	
					DATE	DATE	
					DRAWN	DRAWING NO.	REV.
					DATE	R375-01	
					CHECKED		
					DATE		

PROJECT
TAUMATA PLANTATIONS LTD
HOUPOTO FOREST
MAKAKAHO STREAM

HEB STRUCTURES
 31 Aerodrome Road
 Mount Maunganui
 New Zealand
 Phone: 07 373 2826
 Fax: 07 374 8163
 HEB STRUCTURES LTD
 A DIVISION OF HEB INDUSTRIES
 A COMPANY INCORPORATED IN NEW ZEALAND

TITLE
12m BRIDGE
PLAN & ELEVATION



OUR APPROVAL OF THIS DRAWING RELATED TO OUR SPECIFICALLY DESIGNED STRUCTURAL ELEMENTS ONLY.

PR ENGINEERING CONSULTANTS LTD
1460 HINEMOA STREET PH 07 349 1210
ROTORUA FAX 07 349 1219

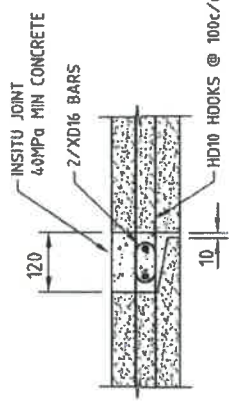
SIGNED: *[Signature]* DATE: 5/19/11

STEELWORK NOTES

- PAINT SPECIFICATION:
ALTEX TG2010 106531
ABRASIVE BLAST TO SSPC SP10 (Sg 2.5)
1st COAT CARBOGUARD 504 DFT 50 MICRONS
2nd COAT CARBOGUARD 690 GREY DFT 200 MICRONS
DIP GALVANISED.
- CROSS BRACING TO BE HOT DIP GALVANISED.
- ALL WELDS 6mm CONT. FILLET
- 1 DIAPHRAGM @ MID SPAN PLUS ONE EACH END (3 TOTAL)
- BEAMS MUST BE BOLTED TO ABUTMENT PRIOR TO PLACING DECK UNITS.
- BEAMS TO BE BOLTED IN PLACE PRIOR TO BACKFILLING BEHIND ABUTMENT HEADWALLS.
- STEEL GRADE 300 OR BETTER

CONCRETE NOTES

- ABUTMENT CONCRETE TO BE MIN 30MPa
DECK UNIT CONCRETE TO BE MIN 40MPa
- REINFORCING TO BE GRADE 500E MANUFACTURED BY THE MICROALLOY PROCESS IN ACCORDANCE WITH AS/NZS 4671:2001



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					DATE		
					CHECKED		
					DATE		
					DRAWING No.	R375-02	
					REV.		

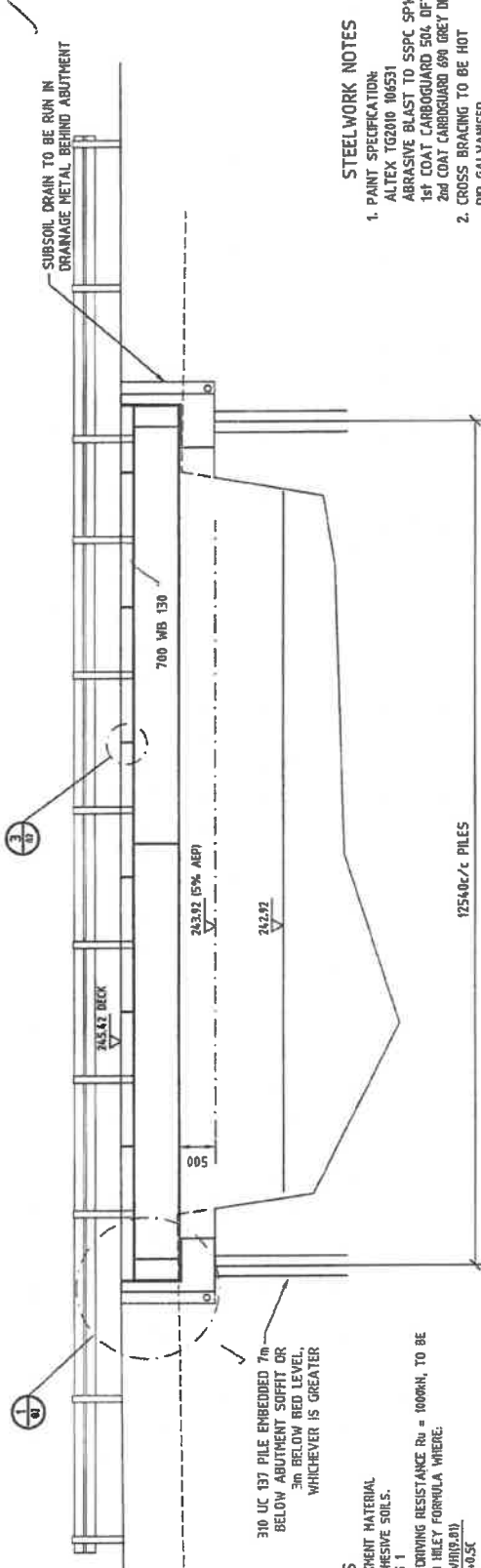
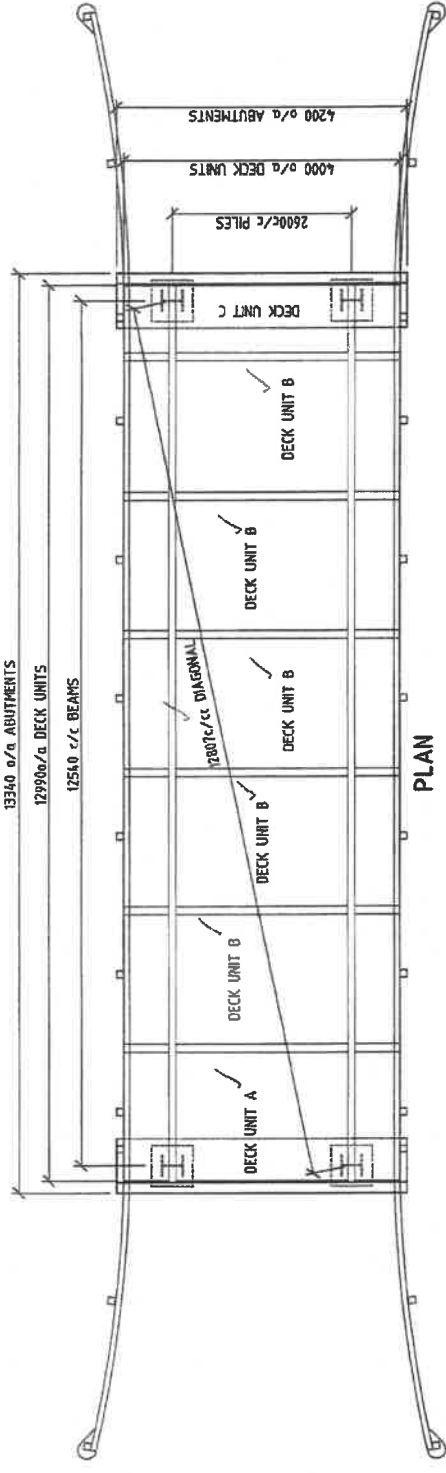
12m BRIDGE
SECTION AND ABUTMENT DETAIL

PROJECT
TAUMATA PLANTATIONS LTD
HOUPOTO FOREST
MAKAKAHO STREAM

21 Andersons Road
Mount Rosedale
New Zealand
Phone: 08 7 570 2325
Fax: 04 7 576 8183



FILE COPY



DESIGN NOTES

- FOUNDATION AND ENDEARMENT MATERIAL ASSUMED TO BE FIRM COHESIVE SOILS.
- DESIGN LIVE LOAD: CLASS 1
- REQUIRED ULTIMATE PILE DRIVING RESISTANCE $R_u = 1000kN$, TO BE VERIFIED BY THE HODFRED HILEY FORMULA WHERE:

$$R_u (kN) = \frac{10.8nWV^{0.5}P}{s+0.5c}$$

WHERE $n = \frac{W \cdot P^2}{V \cdot P}$
 W = WEIGHT OF HAMMER IN tonnes
 P = WEIGHT OF PILE IN tonnes
 η = EFFICIENCY OF BLOW DEPENDING ON COEFFICIENT OF RESTITUTION OF DRIVING/DRIVEN MATERIALS
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- SITE EXPOSURE A2 - DESIGN LIFE OF 100 YEARS

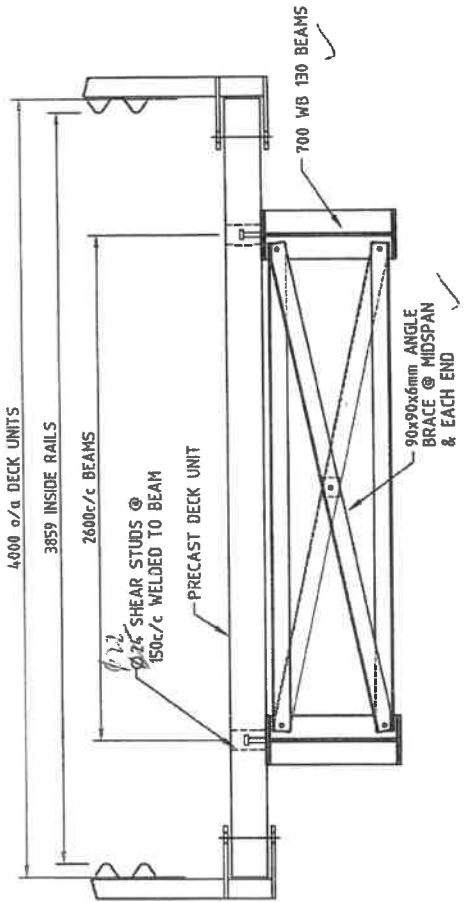
STEELWORK NOTES

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ALTEX TG2010 106531
ABRASIVE BLAST TO SSPC SP10 (Sa 2.5)
1st COAT CARBOGUARD 504 DFT 50 microns
2nd COAT CARBOGUARD 690 GREY DFT 200 microns
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- ALL WELDS 6mm CONT. FILLET
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- BEAMS MUST BE BOLTED TO ABUTMENT PRIOR TO PLACING DECK UNITS
- BEAMS TO BE BOLTED IN PLACE PRIOR TO BACKFILLING BEHIND ABUTMENT HEADWALLS.
- STEEL GRADE 300 OR BETTER

CONCRETE NOTES

- ABUTMENT CONCRETE TO BE M30/35/45
- DECK UNIT CONCRETE TO BE M30/35/45 WITH AS/NZS 4672:2001

REV.	AMENDMENT	DATE	DRAWN	CHECKED	DATE
A	LEVELS REVISION		JM		10/12/13
<p>PROJECT: SELWYN DISTRICT COUNCIL BUSH GULLY BRIDGE MALVERN HILLS ROAD</p> <p>TITLE: 1.3m BRIDGE PLAN & ELEVATION</p> <p>SCALES: 1:50 @ A2 FILENAME: T437 LAST PLOT DATE: 10/12/13</p> <p>DESIGNED: J. HALLARD DATE: 22/11/13 DRAWN: J. HALLARD DATE: 22/11/13 CHECKED: P. MCANDRESON DATE: 22/11/13</p> <p>DRAWING No. T437-001 REV. A</p> <p>SHEET 1 OF 8</p>					



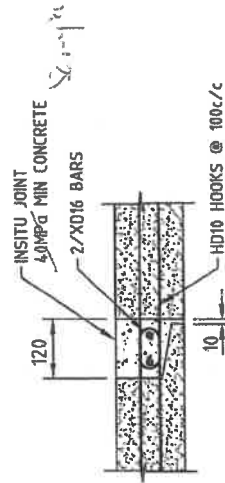
TYPICAL SECTION

STEELWORK NOTES

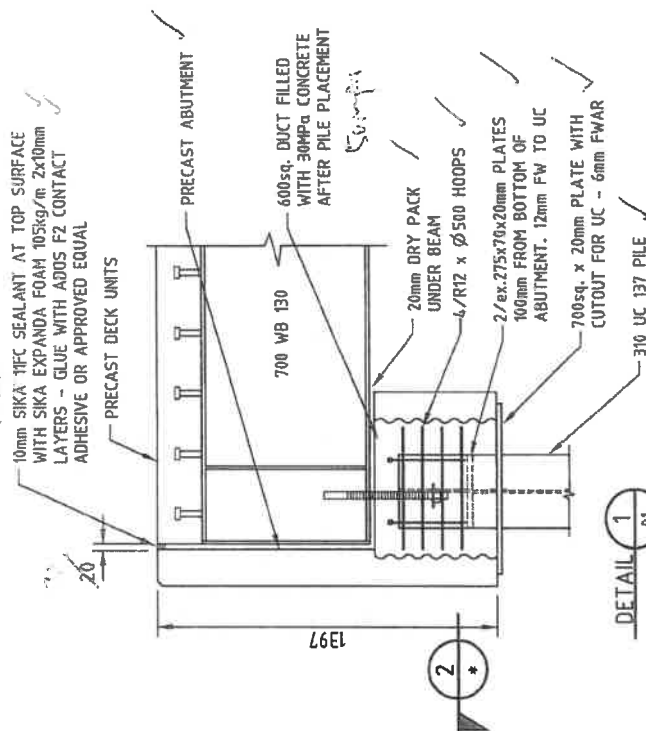
1. PAINT SPECIFICATION:
ALTEX TG2010 106531
ABRASIVE BLAST TO SSPC SP10 (Sa 2.5)
1st COAT CARBOGUARD 504 DFT 50 microns
2nd COAT CARBOGUARD 690 GREY DFT 200 microns
2. CROSS BRACING TO BE HOT DIP GALVANISED.
3. ALL WELDS 6mm CONT. FILLET
4. 1 DIAPHRAGM @ MID SPAN PLUS ONE EACH END (3 TOTAL)
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CONCRETE NOTES

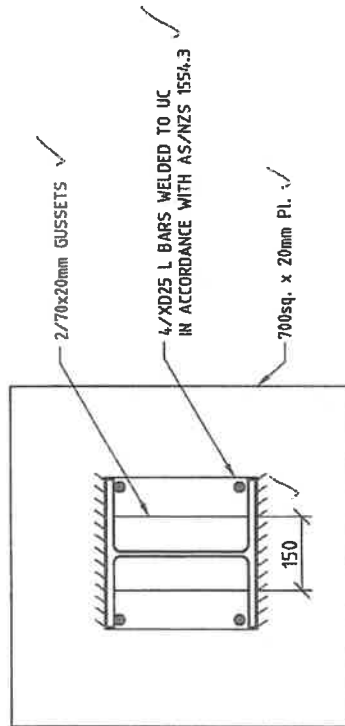
1. ABUTMENT CONCRETE TO BE MIN 30MPa
DECK UNIT CONCRETE TO BE MIN 40MPa
2. REINFORCING TO BE GRADE 500E MANUFACTURED BY THE MICROALLOY PROCESS IN ACCORDANCE WITH AS/NZS 4671:2001



DETAIL 3
IN SITU DECK JOINT

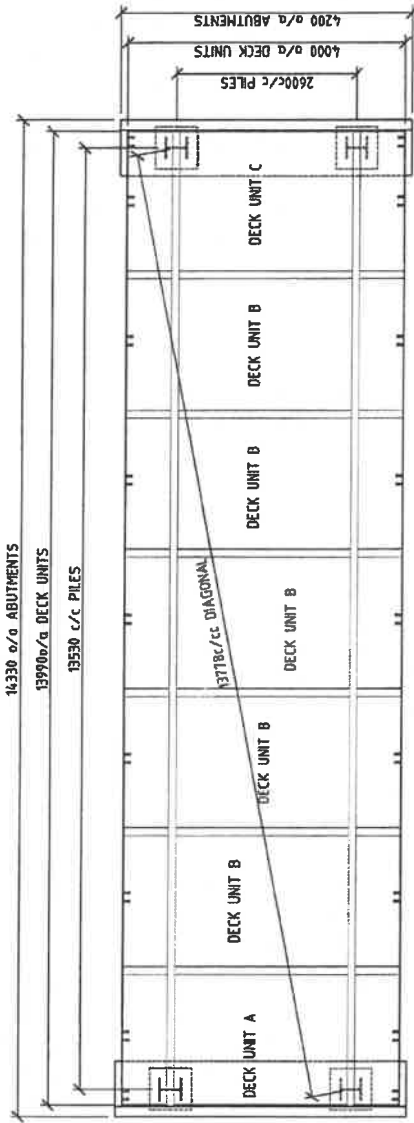


DETAIL 1
ABUTMENT

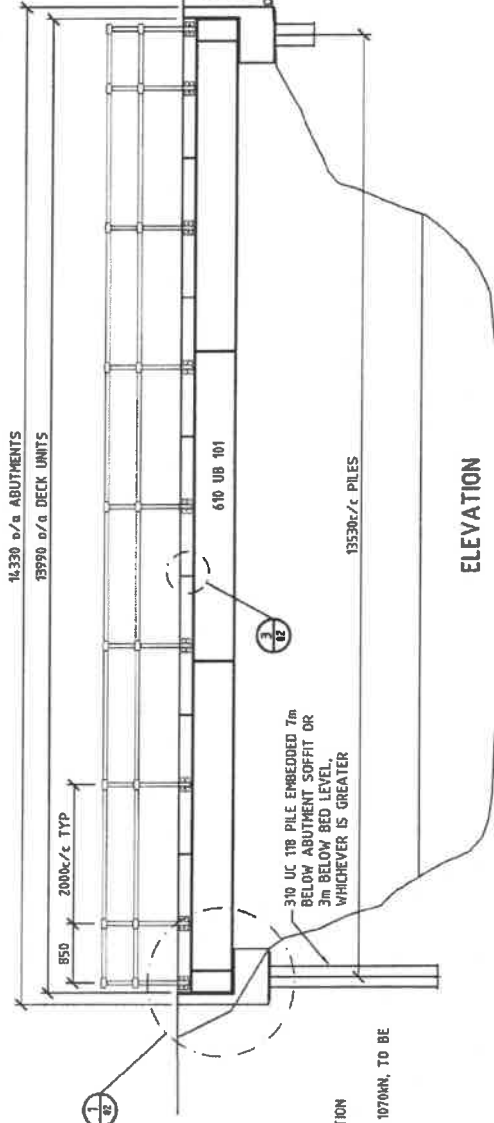


SECTION 2

REV.	AMENDMENT	DRAWN	CHECKED	DATE	PROJECT	TITLE	SCALE	FILENAME	TASK	LAST PLOT DATE
					SELWYN DISTRICT COUNCIL BUSH GULLY BRIDGE MALVERN HILLS ROAD	13m BRIDGE SECTION AND ABUTMENT DETAIL		10220010 @ AS		22/11/13
					172A Bluxton Road New Zealand Phone: 03 313 7298 Fax: 03 313 7020			DESIGNED	PRE CONS.	DRAWING No.
								DATE	11/13	T437-002
								DRAWN	J. BELLARD	REV.
								DATE CHECKED	22/11/13	AB
								DATE	22/11/13	SHEET 2 OF 8



PLAN



ELEVATION

DESIGN NOTES

- FOUNDATION AND EMBANKMENT MATERIAL ASSUMED TO BE FIRM COHESIVE SOILS.
- DESIGN LIVE LOAD:
0.85 MN APPENDIX D TNZ BRIDGE MANUAL 2nd EDITION
- REQUIRED ULTIMATE PILE DRIVING RESISTANCE $R_u = 1070kN$, TO BE VERIFIED BY THE MODIFIED HILEY FORMULA WHERE:

$$R_u (kN) = \frac{10.8nW(H/102.8T)}{s+0.5c}$$

WHERE $n = \frac{W + Pe^2}{W + P}$
 $W =$ WEIGHT OF HAMMER IN $tonne$
 $P =$ WEIGHT OF PILE IN $tonne$
 $e =$ EFFICIENCY OF BLOW DEPENDING ON COEFFICIENT OF RESTITUTION OF DRIVING/DRIVEN MATERIALS
 $H =$ HEIGHT OF HAMMER FREEFALL IN mm
 $s =$ PILE SET IN mm
 $c =$ TEMPORARY PILE COMPRESSION IN mm
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 CONTINUOUS DRIVING RECORD TO BE MADE FOR DRIVING OF ALL PILES
 5. SITE EXPOSURE A2 - DESIGN LIFE OF 100 YEARS

STEELWORK NOTES

- PAINT SPECIFICATION:
ALTEX TG2010 106531
ABRASIVE BLAST TO SSPC SP10 (Sa 2.5)
1st COAT CARBOGLARD 506 DFT 50 microns
2nd COAT CARBOGLARD 690 GREY DFT 200 microns
2. CROSS BRACING TO BE HOT DIP GALVANISED.
3. ALL WELDS 6mm CONT. FILLET
4. 2 DIAPHRAGMS @ 1/3 & 2/3 SPANS PLUS ONE EACH END (4 TOTAL)
5. BEAMS MUST BE BOLTED TO ABUTMENT PRIOR TO PLACING DECK UNITS.
6. BEAMS TO BE BOLTED IN PLACE PRIOR TO BACKFILLING BEHIND ABUTMENT HEADWALLS.
7. STEEL GRADE 300 OR BETTER

CONCRETE NOTES

- ABUTMENT CONCRETE TO BE MIN 30MPa
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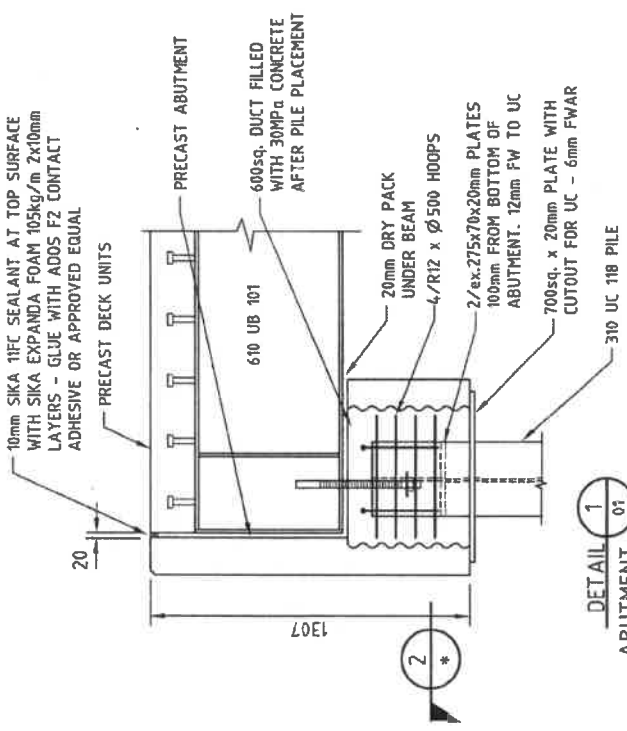
REV.	AMENDMENT	DRAWN	CHECKED	DATE	SCALE	PREPARE	LAST PLOT DATE
A	REVISED FOLLOWING ENGINEERING CHECK	JM	RP	14/07/10	1:80 @ A2	0285	14/07/10
						DRAWING No.	REV.
						Q295-001	A
						DESIGNER	HOLMES
						DATE	07/10
						DRAWN	J. MALLARD
						DATE	09/07/10
						CHECKED	B. PALMER
						DATE	06/07/10

PROJECT
FOUHY FARM BRIDGE
144 TE POI SOUTH ROAD TE POI
RD3 MATAMATA

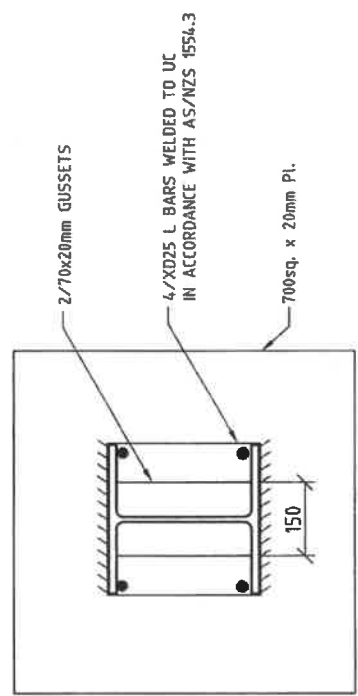
HEB HEAVY STRUCTURES
 HEAVY STRUCTURES LTD
 21 Awaroa Road
 Mount Maunganui
 New Zealand
 Phone 07 7 078 2325
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TITLE
14m BRIDGE
PLAN AND ELEVATION

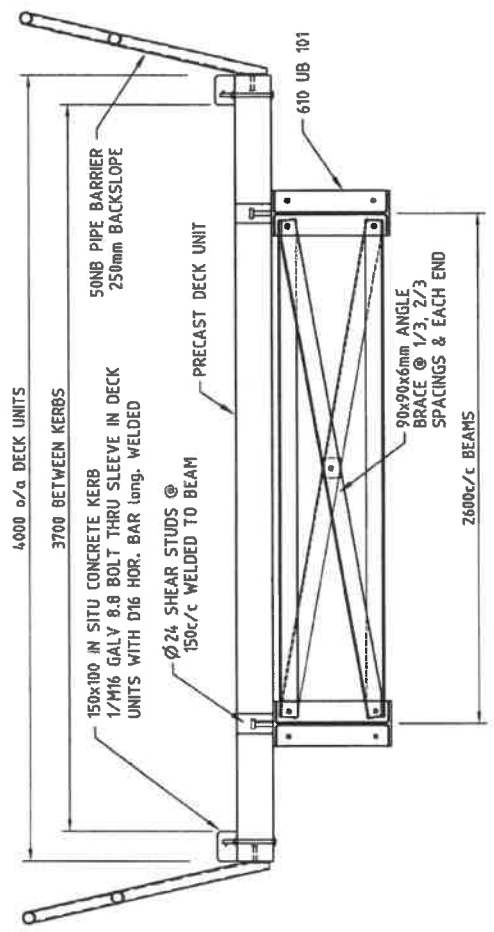
10mm SIKKA 11FC SEALANT AT TOP SURFACE WITH SIKKA EXPANDA FOAM 105kg/m² x10mm LAYERS - GLUE WITH ADDS F2 CONTACT ADHESIVE OR APPROVED EQUAL



DETAIL 1
ABUTMENT



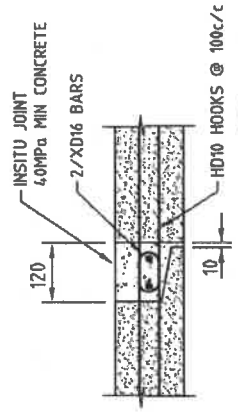
SECTION 2



TYPICAL SECTION

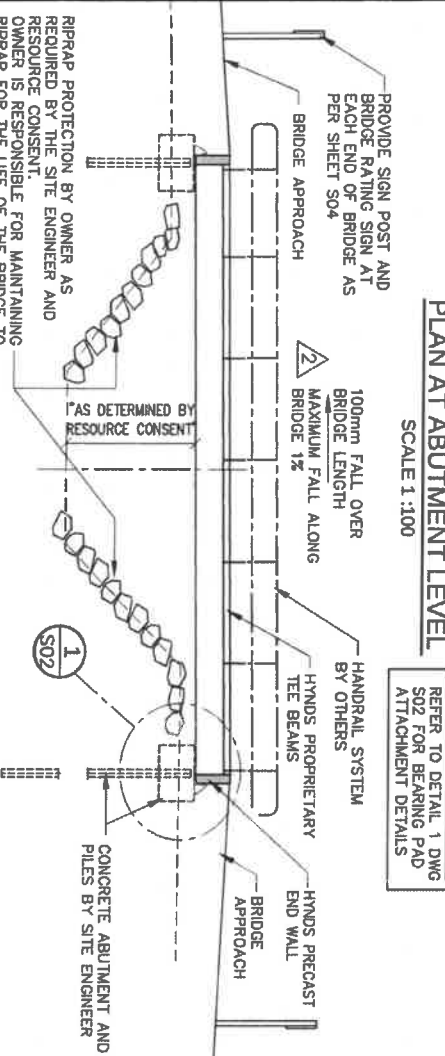
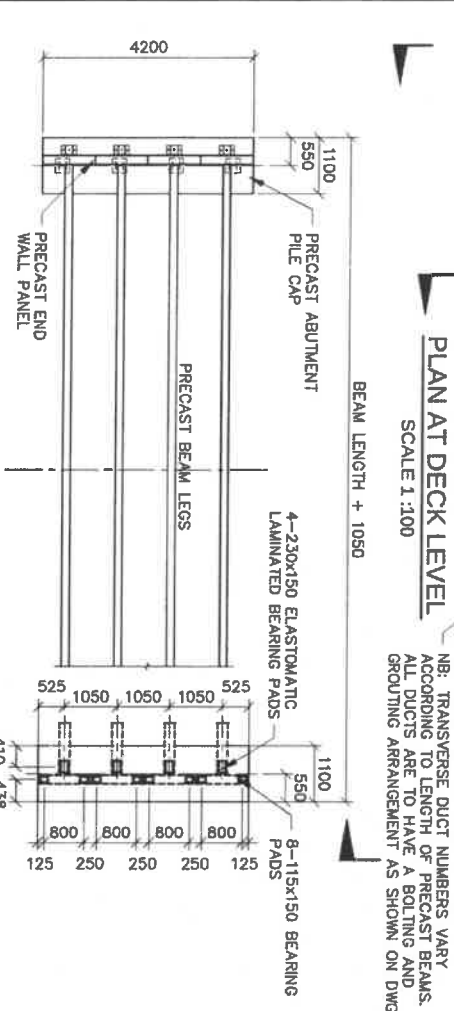
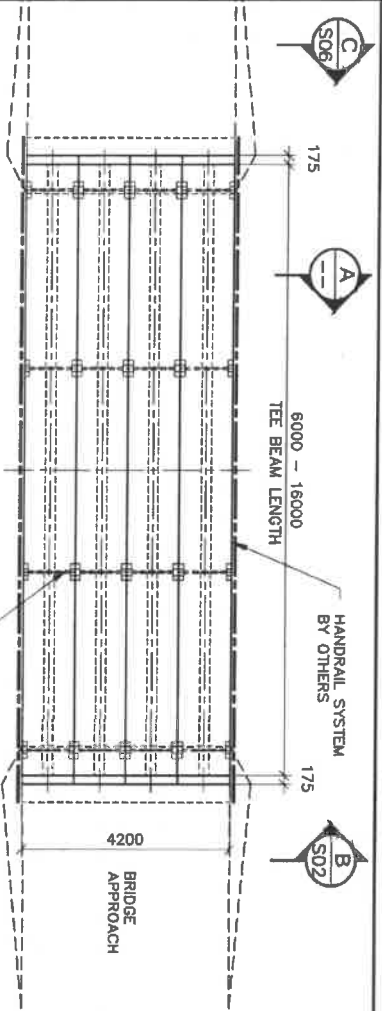
- STEELWORK NOTES**
- PAINT SPECIFICATION:
ALTEX TG2010 106531
ABRASIVE BLAST TO SSPC SP10 (Sa 2.5)
1st COAT CARBOGUARD 504 DFT 50 MICRONS
2nd COAT CARBOGUARD 690 GREY DFT 200 MICRONS
 - CROSS BRACING TO BE HOT DIP GALVANISED.
 - ALL WELDS 6mm CONT. FILLET
 - 2 DIAPHRAGMS @ 1/3 & 2/3 SPANS PLUS ONE EACH END (4 TOTAL)
 - BEAMS MUST BE BOLTED TO ABUTMENT PRIOR TO PLACING DECK UNITS.
 - BEAMS TO BE BOLTED IN PLACE PRIOR TO BACKFILLING BEHIND ABUTMENT HEADWALLS.
 - STEEL GRADE 300 OR BETTER

- CONCRETE NOTES**
- ABUTMENT CONCRETE TO BE MIN 30MPa
DECK UNIT CONCRETE TO BE MIN 40MPa
 - REINFORCING TO BE GRADE 500E MANUFACTURED BY THE MICROALLOY PROCESS IN ACCORDANCE WITH AS/NZS 4671:2001



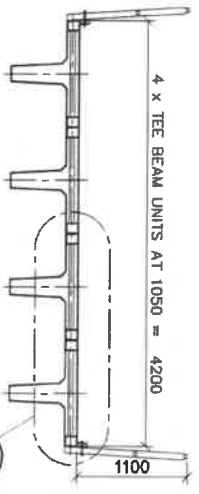
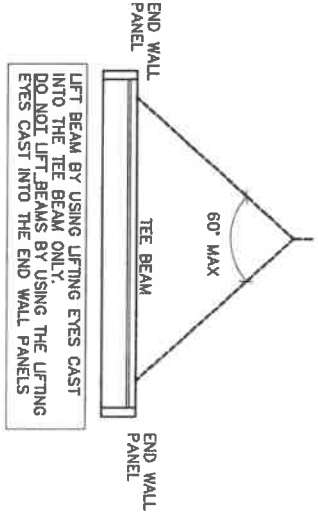
DETAIL 3
IN SITU DECK JOINT

REV.	AMENDMENT	DRAWN	CHECKED	DATE	FILENAME	LAST PLOT DATE
A	REVISED FOLLOWING ENGINEERING CHECK	JM	RP	14/07/10	Q295-002	14/07/10
					DRAWING No.	REV.
					Q295-002	A
					DATE	DATE
					07/10	07/10
					DRAWN	J. HALLARD
					DATE	08/07/10
					CHECKED	R. PH.MTK
					DATE	08/07/10
					<p>PROJECT FOUHY FARM BRIDGE 144 TE POI SOUTH ROAD TE POI RD3 MATAMATA</p> <p>TITLE 14m BRIDGE SECTION AND ABUTMENT DETAILS</p> <p>SCALES 1:25, 20:10 @ A3 DISPOSED DATE 07/10 DRAWN J. HALLARD DATE 08/07/10 CHECKED R. PH.MTK DATE 08/07/10</p>	



- BRIDGE DESIGN CRITERIA**
- BRIDGE DESIGN LOAD TO NEW ZEALAND TRANSPORT AGENCY 0.85 HN-72 TRAFFIC LOADING (CLASS 1) DECK SPAN 16.0m MAX.
 - NO FILL OR RUNNING COURSE SHALL BE PLACED ON BRIDGE DECK.
 - MAXIMUM BRIDGE USAGE 250 VEHICLES PER DAY AND DESIGNED BY THE SITE ENGINEER.
 - SEISMIC DESIGN ASSUMPTIONS
ELASTIC DESIGN
ZONE FACTOR = 1.2
RISK FACTOR = 1.0
STRUCTURAL PERFORMANCE FACTOR = 0.8 (INTERMEDIATE OR FLEXIBLE/DEEP SOIL SITES.)
BASIC ACCELERATION COEFFICIENT = 1.0

- GENERAL NOTES**
- THE CONTRACTOR SHALL CONFIRM GROUND CONDITIONS AND SITE LEVELS WITH THE SITE ENGINEER PRIOR TO CONSTRUCTION.
 - ALL CAST IN PILE PINS SHALL BE HOT DIP GALVANISED. DROSSBACH DUCTS TO BE FILLED WITH CONCRETE OR NON-SHRINK CEMENTITIOUS GROUT OR APPROVED EQUIVALENT.



NOTES:

REV #	REVISION DESCRIPTION	DATE	BY	APP

ISO 9001 CERTIFIED MANAGEMENT SYSTEM
PROJECT DESCRIPTION: _____
SERVICE DETAIL: _____

REFERENCE/QUOTE NUMBER: _____	DESIGN: _____	CHECKED: _____
DRAWN: _____	DATE: _____	REVISION NUMBER: _____

SECTION A
SCALE 1:50
SCALE 1:100
SCALE 1:100
DRAWING NUMBER: _____