

No.	Revisions	Date	Appr'd
A	As Built	4/87	EL
Designed		N. JELLEY	Date
Drawn		N. JELLEY	APRIL 87
Checked			
Approved			
File		21/20/7	L.B./H.H.S.P.

DUFFILL WATTS & KING LTD
Consulting Civil & Structural Engineers
Dunedin Invercargill Alexandra Queenstown

Client
ALEXANDRA BOROUGHCOUNCIL

Project
ENNIS, KELMAN & DUNORLING STREETS

Sheet Title
AS-BUILT PLAN

Job No.	Sheet No.	Revision
10848	1	A
	of 5	shts

ORIGINAL SIZE mm

ALEXANDRA BOROUGH COUNCIL

KELMAN AND DUNORLING
STREETS UPGRADING
STAGES 2 & 3

DUFFILL WATTS & KING LTD.
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DUNEDIN INVERCARGILL ALEXANDRA QUEENSTOWN

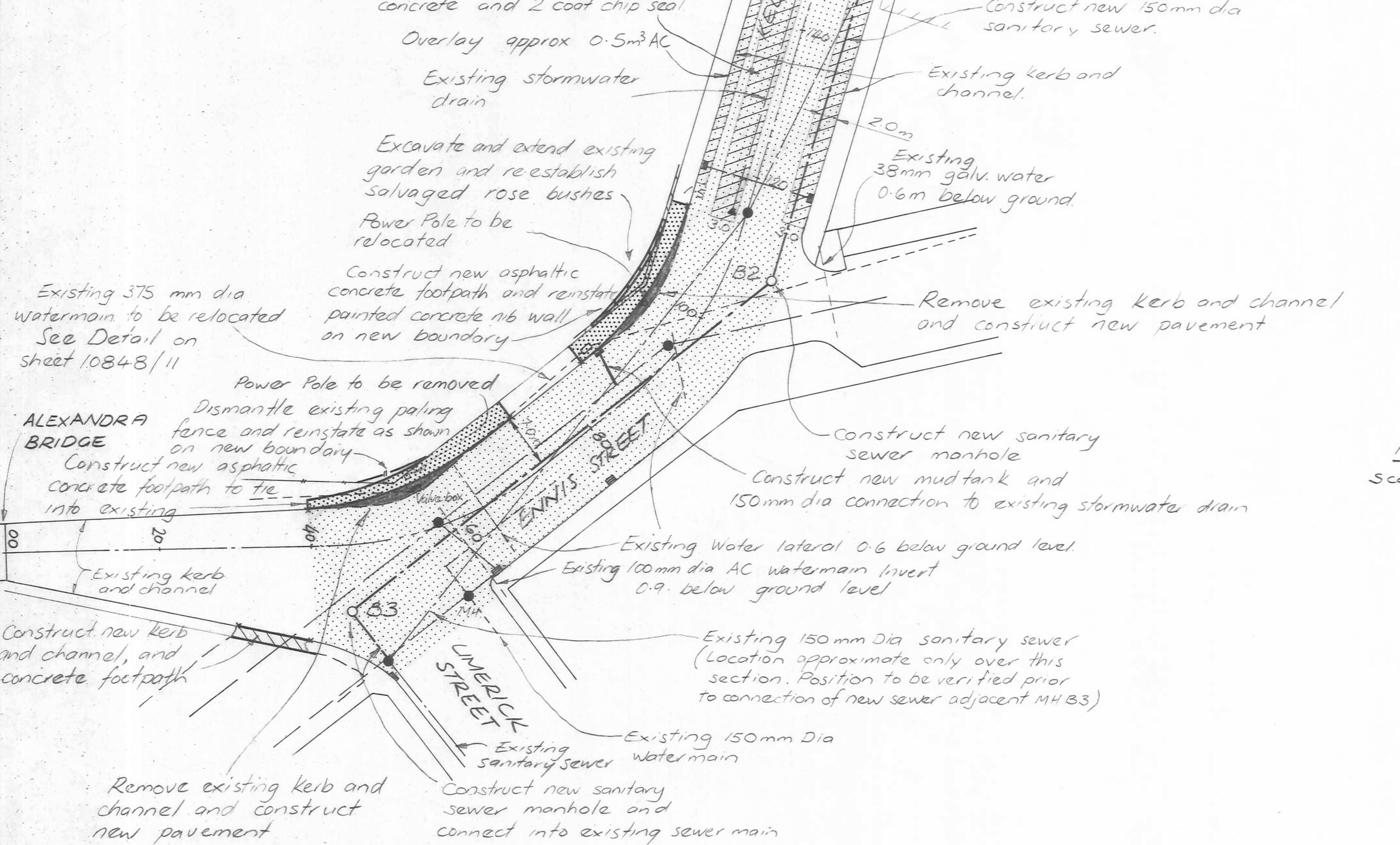
KJ
65 NOV 1988

NOTES:

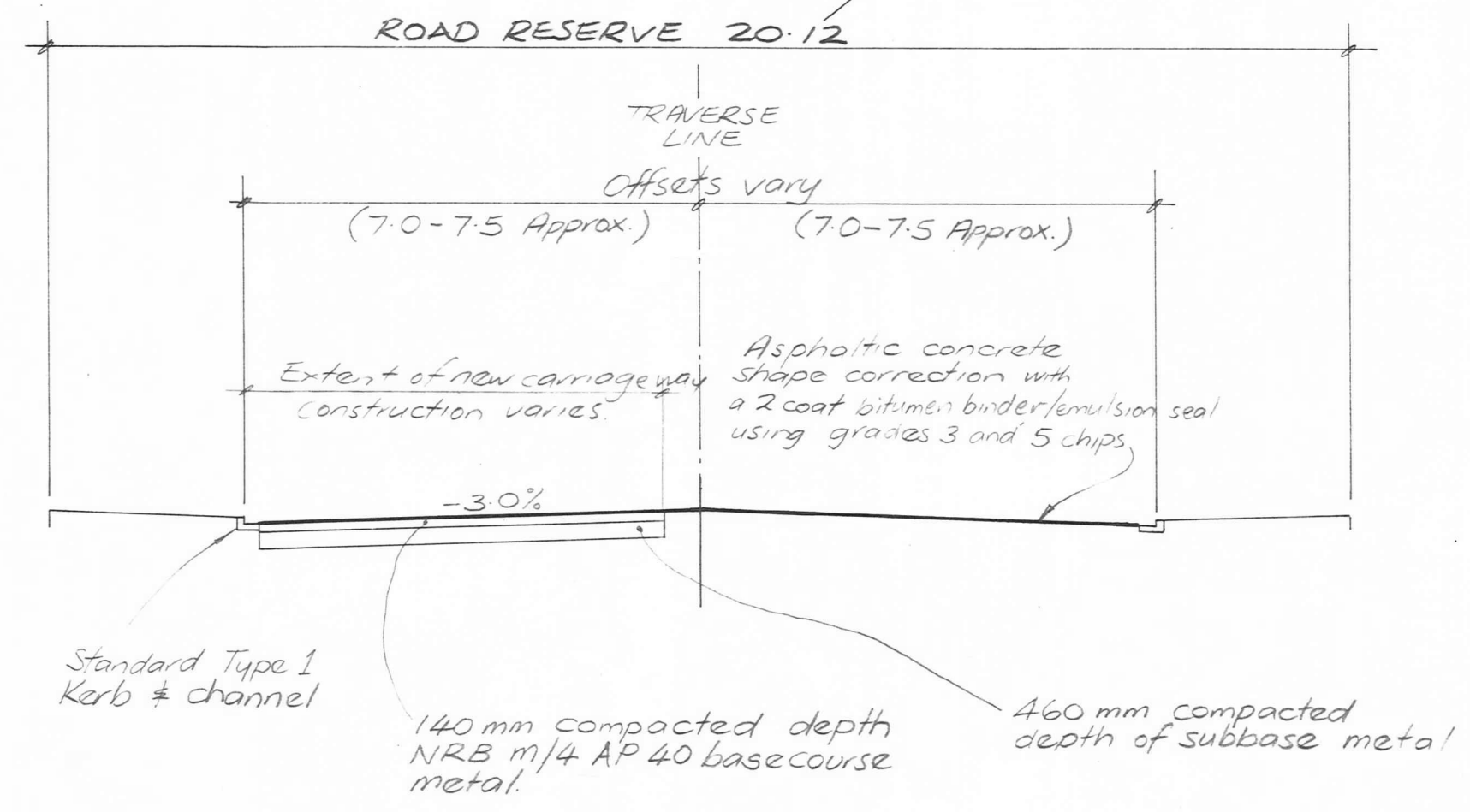
1. Shaded area denotes limit of new carriageway construction. (see typical cross section for details)
2. See Telecom Corporation As Built drawings No: 01788 L17 and M17 for location of underground cables
3. For curve data, setting out details and road marking layout see sheet 10848/10
4. The accuracy and completeness of the existing services indicated on this drawing cannot be guaranteed. The contractor shall take extreme care in exposing services in the vicinity of Contract Works

LEGEND

- New asphaltic concrete footpath or paving tiles as specified
- Existing manhole
- New sanitary sewer and manhole
- New stormwater drain and mudtank
- New Kerb and channel
- New Kerb only (Landscaped plot or traffic island)
- Water connection to landscaped plots incorporating tapping band, Talbot valve, high density polythene brought to ground level with 15mm ball valve on the end
- 10mm layer of coloured asphaltic concrete
- Area to be 2 coat bitumen binder/emulsion chip sealed with grades 3 and 5 chips
- Hatching indicates area to be smoothed using asphaltic concrete prior to sealing
- Existing ulg power cable



PLAN
Scale 1:500



TYPICAL CROSS SECTION
ENNIS/KELMAN/DUNORLING STREETS
Scale 1:100

Notes

No.	Revisions	Date	Appvd
Designed	N. Jelley J. Mure	Date Oct 88	Print Date
Drawn	N. Jelley J. Mure		
Checked	M. Scott	14-11-88	15 NOV 1988
Approved	[Signature]	15/11/88	
File	21/20/7	L.B.	

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ALEXANDRA BOROUGH COUNCIL

Project
KELMAN & DUNORLING STREETS UPGRADING STAGES 2 & 3.

Sheet Title
LAYOUT PLAN

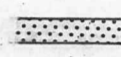

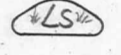
Job No.	Sheet No.	Revision
10848	9	
		of 4 shts

ORIGINAL SIZE mm

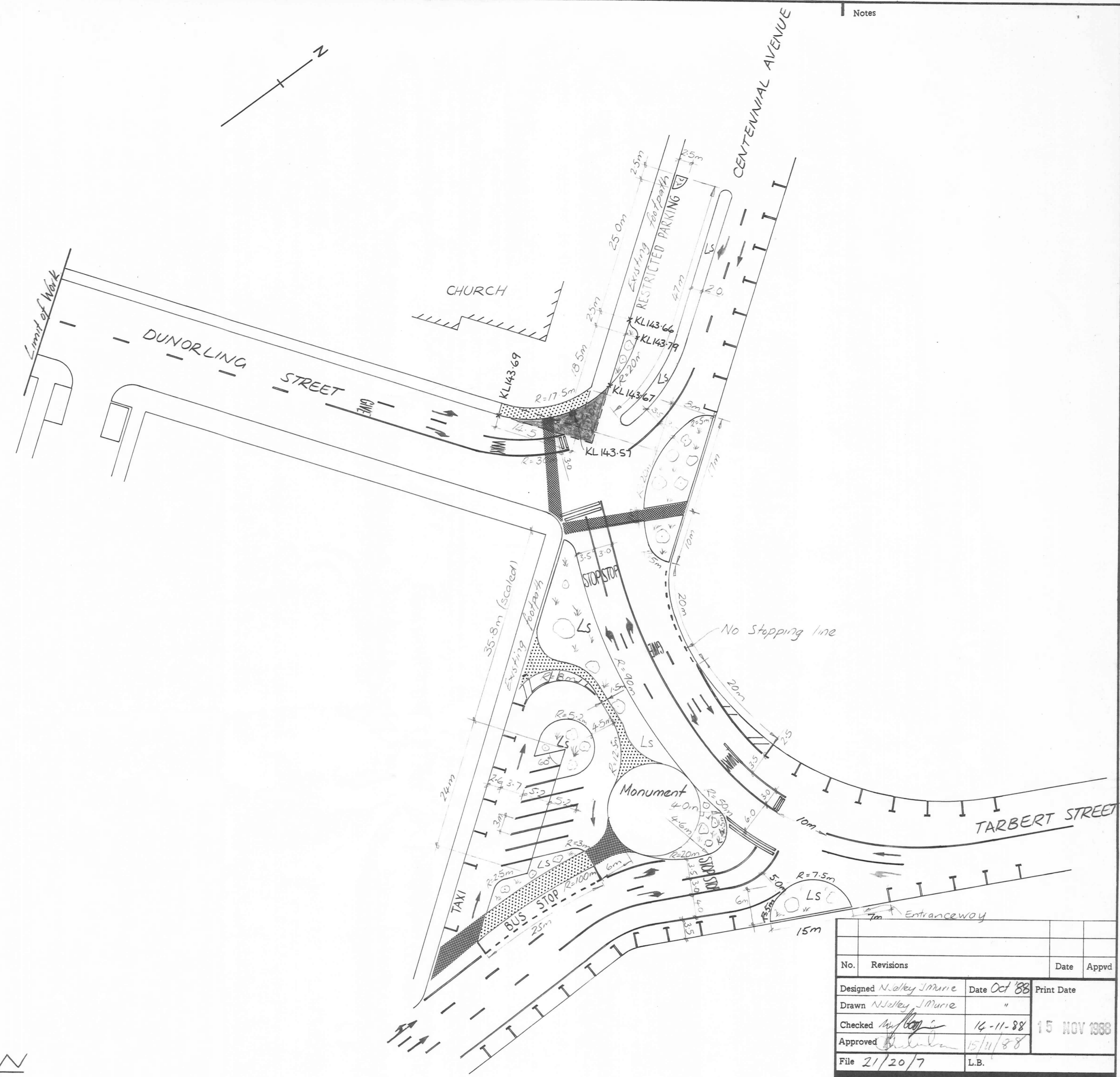
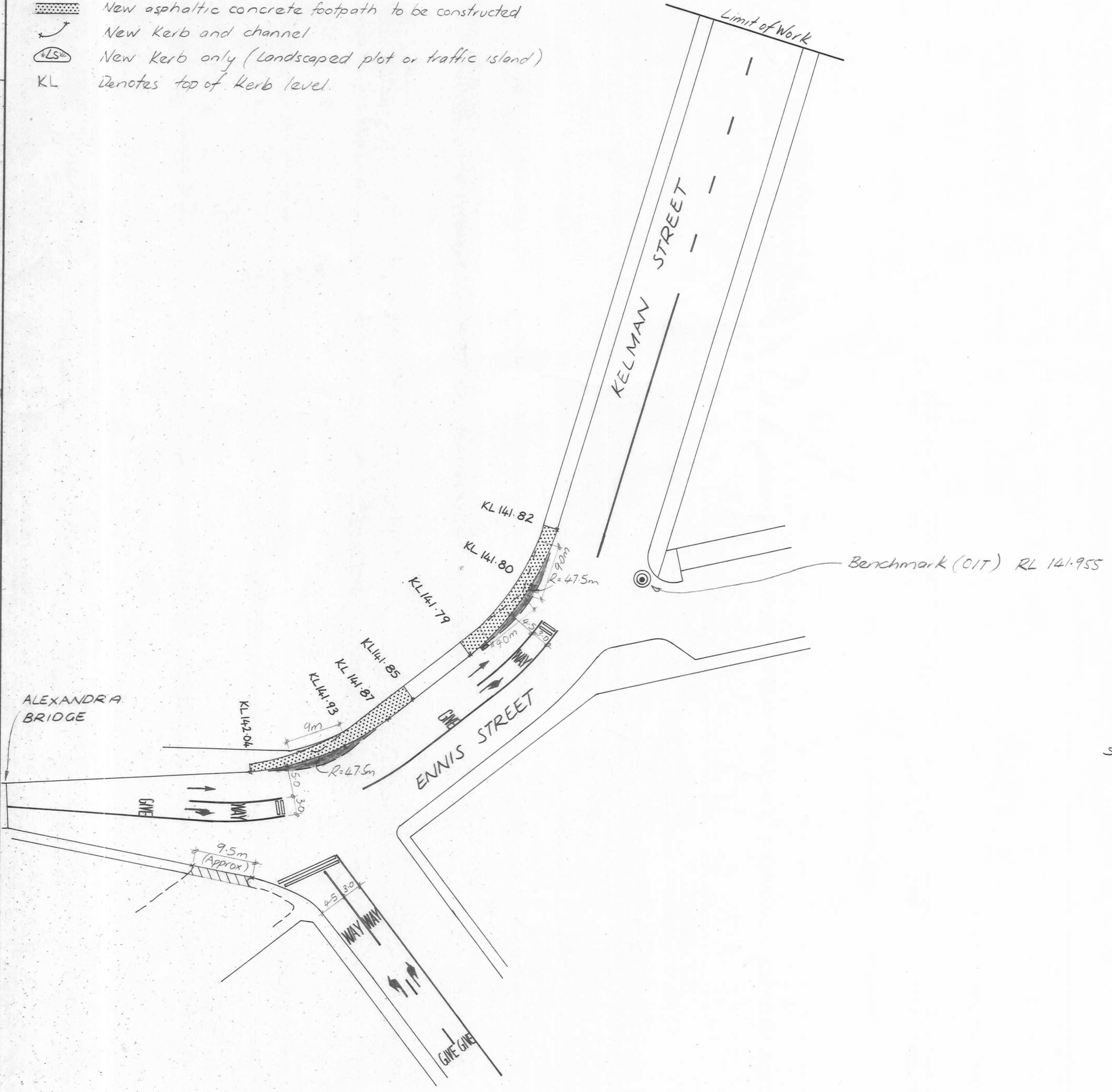
NOTES:

1. All road marking is to be in accordance with NRB Manual of Traffic Signs and Markings, and NRB M/7-Y and M/7-W.
2. Road markings shown are indicative only and alterations to the layout may be required.
3. Shaded area denotes limit of new carriageway construction.
4. All design kerb levels are to be checked on site before commencing construction to ensure the new kerb will match into the existing.

LEGEND

-  New asphaltic concrete footpath to be constructed
-  New kerb and channel
-  New Kerb only (Landscaped plot or traffic island)
- KL Denotes top of kerb level.

ORIGINAL SIZE mm



No.	Revisions	Date	Appvd

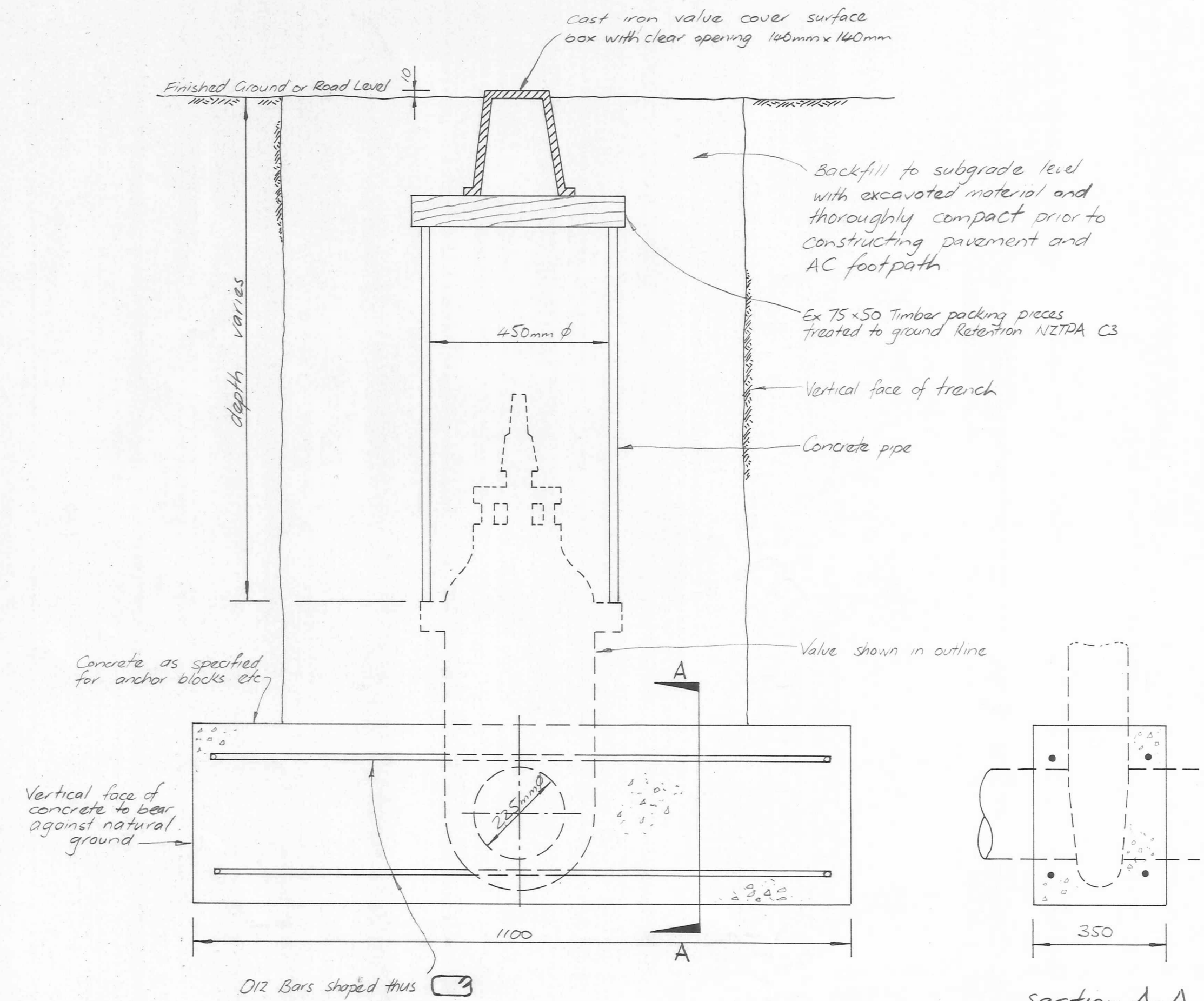
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Project
KELMAN & DUNORLING STREETS UPGRADING STAGES 2 & 3

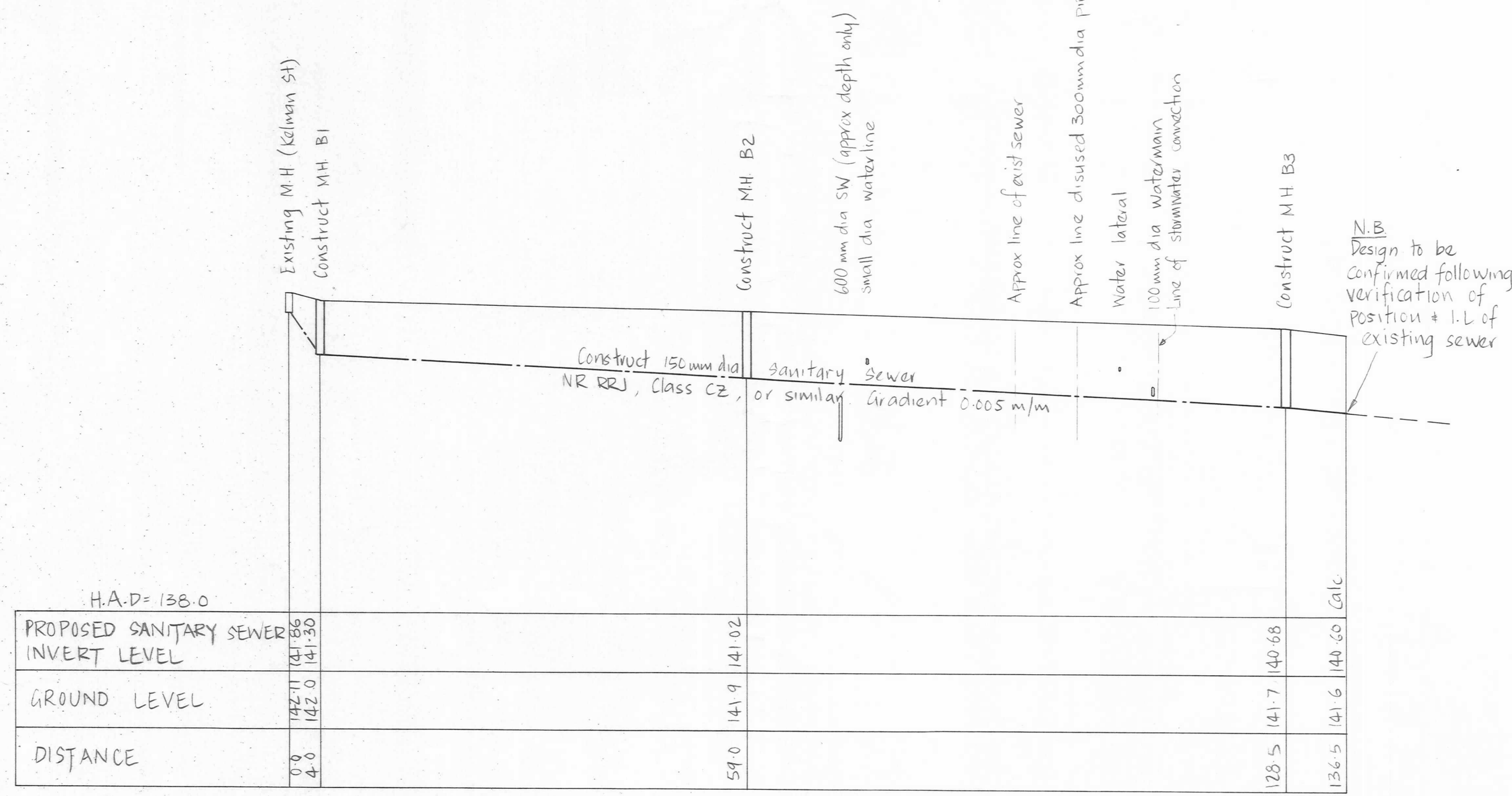
Sheet Title
SETTING OUT DETAILS AND ROAD MARKING

Job No. 10848	Sheet No. 10	Revision of 4 sheets
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SECTION OF 225 Ø WATER VALVE Nts

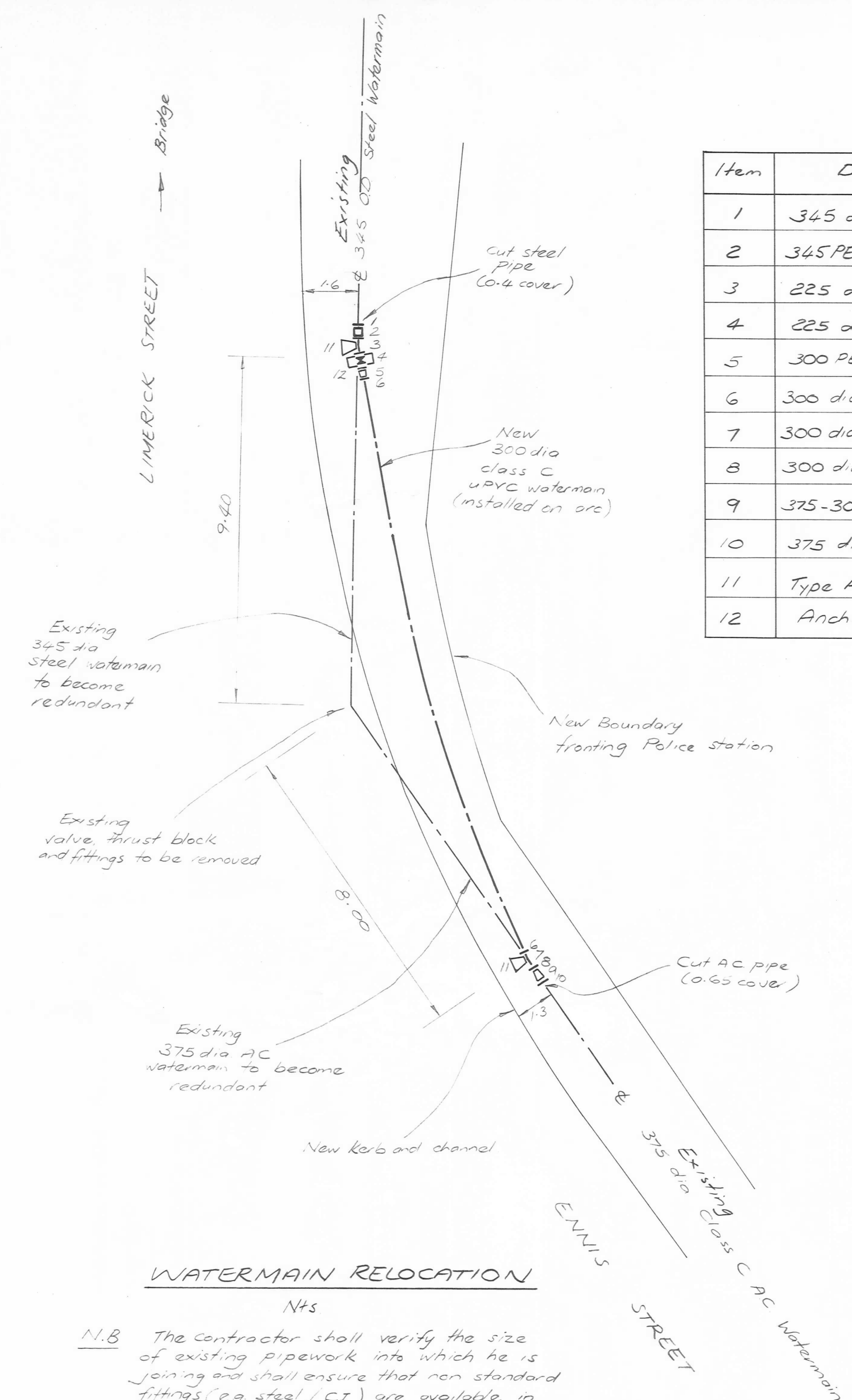
Section A-A



LONGITUDINAL SECTION
KELMAN/ENNIS STREETS
SANITARY SEWER

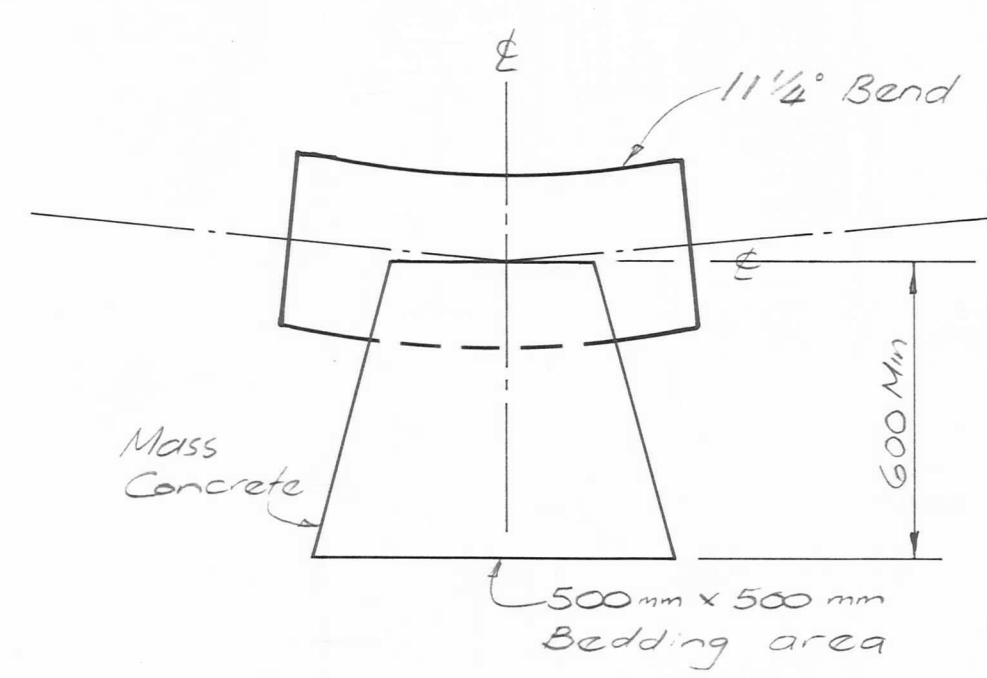
Scales - Hor 1:2 = 1:500, Ver 1:1 = 50

NOTE: Location of Telecom microwave cable ducts to be obtained from Telecom Corporation.



WATERMAIN RELOCATION

Nts
N.B. The contractor shall verify the size of existing pipework into which he is joining and shall ensure that non standard fittings (eg steel / CI) are available in order to allow uninterrupted connection of relocated watermain.



DETAIL OF THRUST BLOCK
- TYPE A -

Item	Description	No. Reqd
1	345 dia gibault steel/CI	1
2	345 PE-225 flanged reducer	1
3	225 dia flanged 1 1/4° bend	1
4	225 dia flanged sluice valve	1
5	300 PE-225 flanged reducer	1
6	300 dia stepped gibault C/PVC	2
7	300 dia PE 1 1/4° bend	1
8	300 dia gibault C.I.	1
9	375-300 P.E reducer	1
10	375 dia gibault CI/AC	1
11	Type A thrust block	2
12	Anchor block	1

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KELMAN & DUNORLING STREETS UPGRADING STAGES 2 & 3.

Sheet Title
WATERMAIN & FOUL SEWER DETAILS

Job No.	10848	Sheet No.	11	Revision	
			of 4		

ORIGINAL SIZE mm

