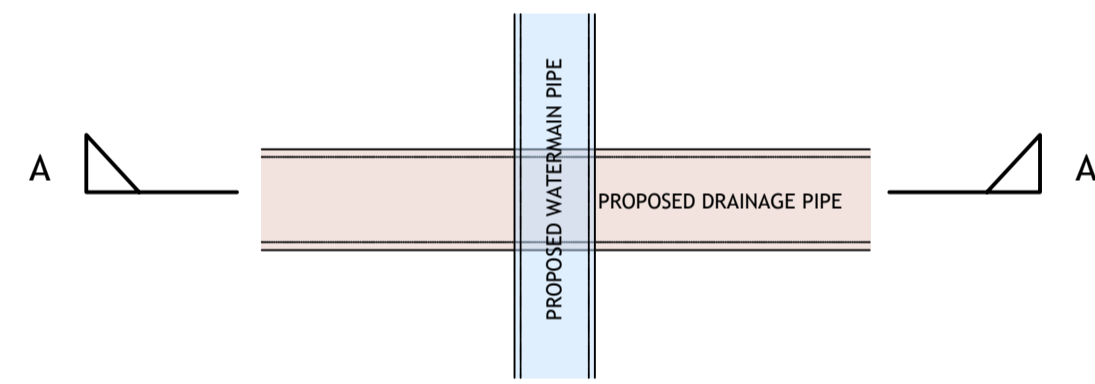
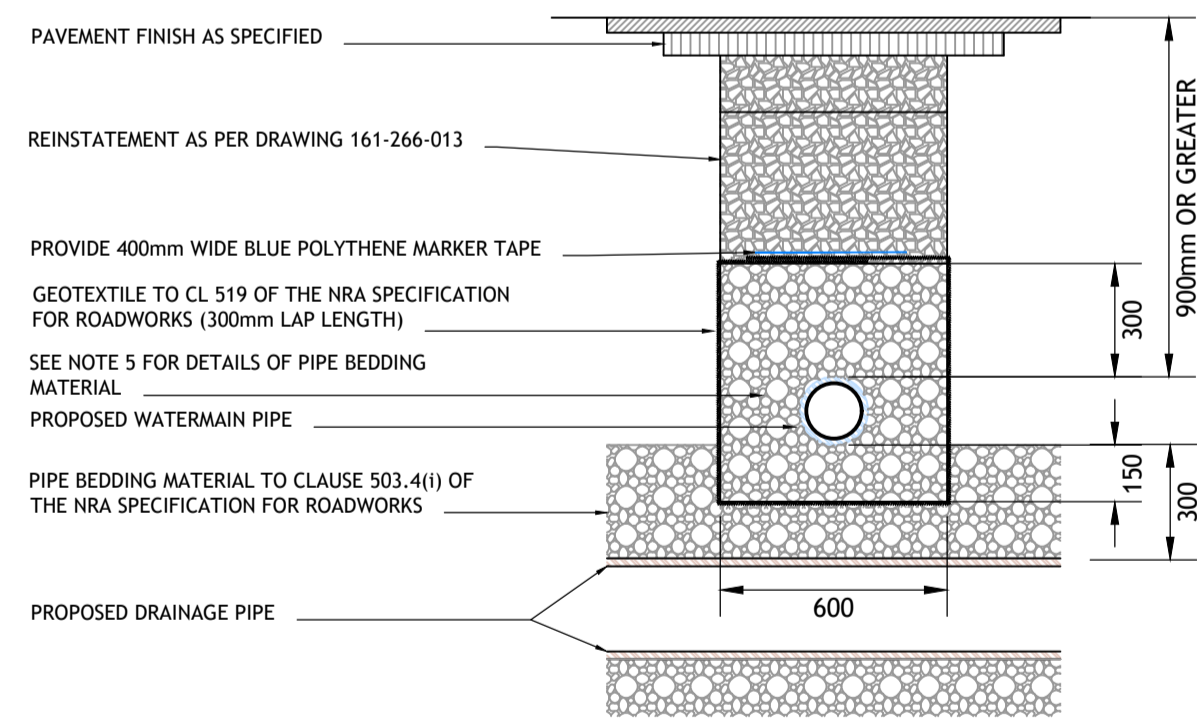


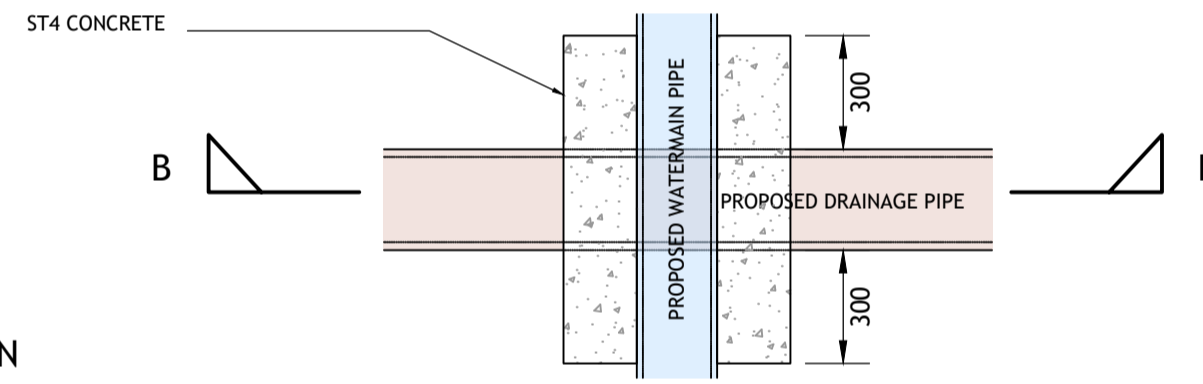
**CONCRETE SURROUND TO PIPE RUN NEAR BUILDINGS**  
NOT TO SCALE



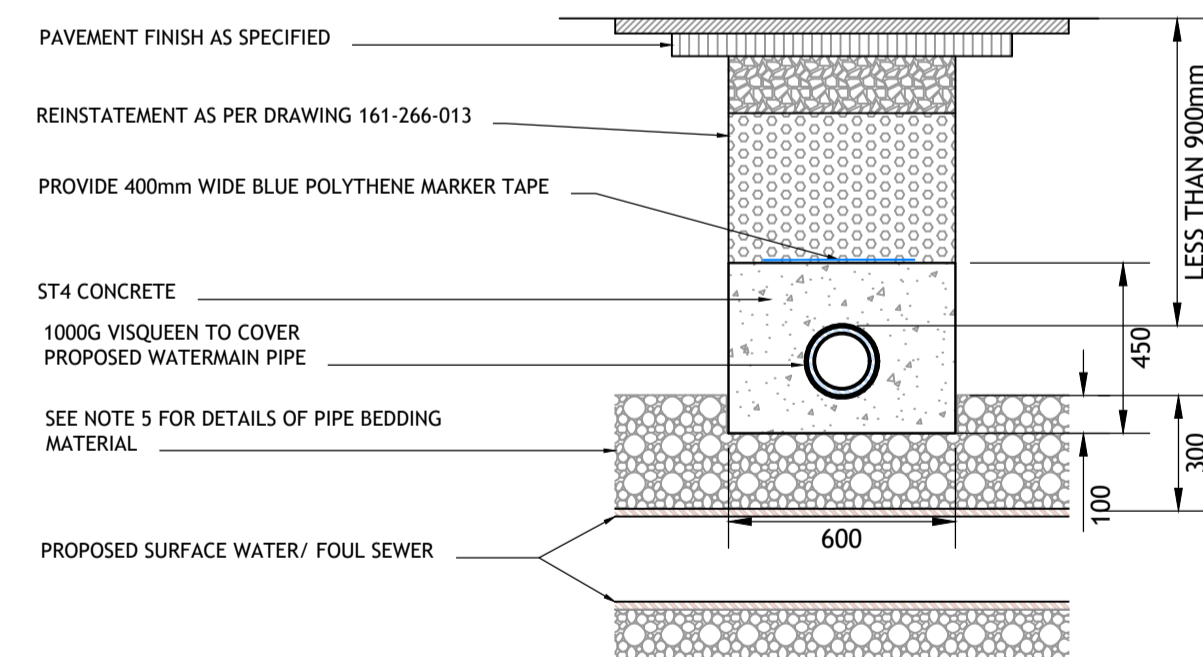
**KEYPLAN**  
SCALE 1:20



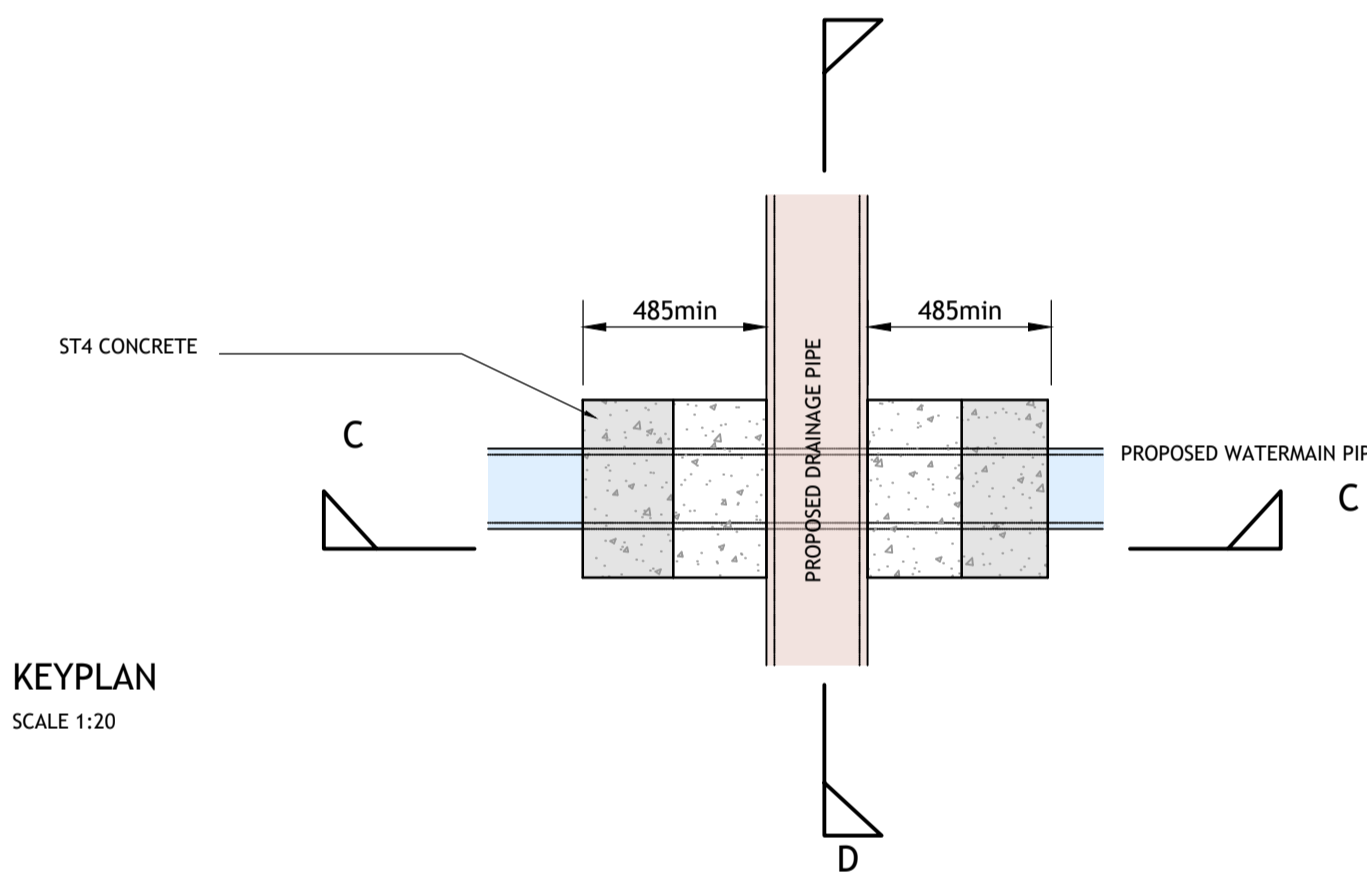
**A-A WATERMAIN CROSSING OVER PROPOSED DRAINAGE**  
(MINIMUM DEPTH OF COVER OR GREATER)  
SCALE 1:20



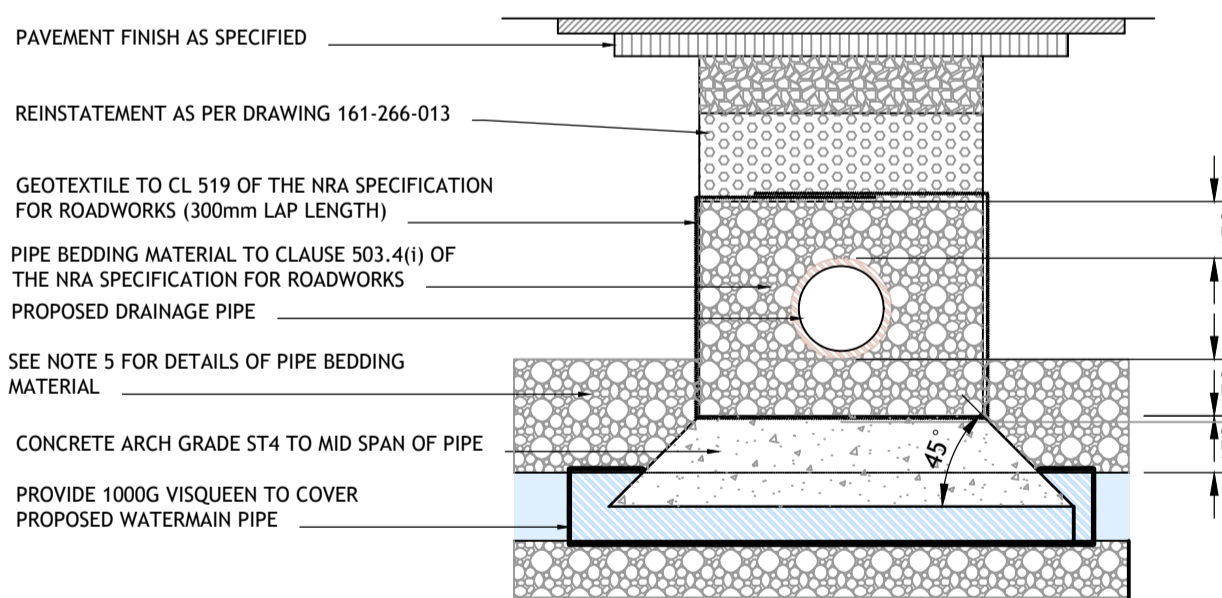
**KEYPLAN**  
SCALE 1:20



**B-B WATERMAIN CROSSING OVER PROPOSED DRAINAGE**  
(LESS THAN MINIMUM DEPTH OF COVER)  
SCALE 1:20

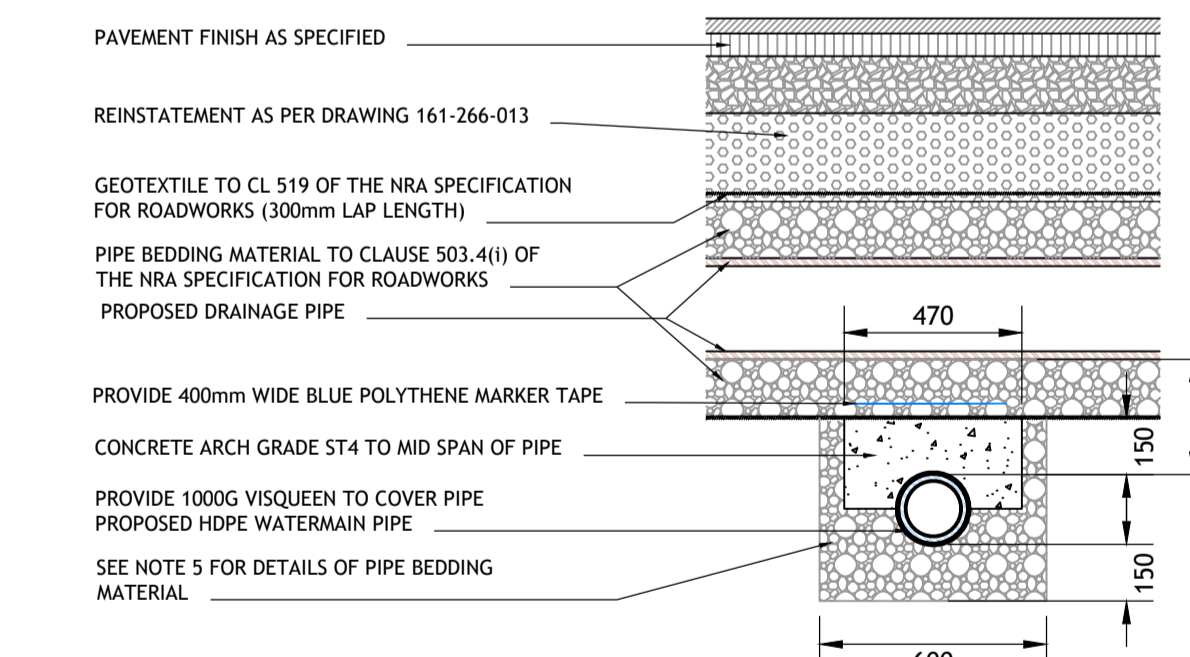


**KEYPLAN**  
SCALE 1:20



**C-C SEWER CROSSING OVER WATERMAIN**  
SCALE 1:20

- NOTE**
- ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
  - DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER WORKS REQUIREMENTS.
  - THE MINIMUM DEPTH OF COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF THE WATERMAIN SHALL BE 1200mm FOR WATERMANS IN ROADWAYS
  - PIPE BEDDING MATERIAL TO COMPLY WITH WS 4-08-02 & IGN 4-08-01. GRANULAR MATERIAL SHALL BE 14mm to 5mm GRADED AGGREGATE OR 10mm SINGLE SIZED AGGREGATE TO IS EN 1242



**D-D SEWER CROSSING OVER WATERMAIN**  
SCALE 1:20

© PUNCH Consulting Engineers

This drawing and any design hereon is the copyright of the Consultants and must not be reproduced without their written consent. All drawings remain the property of the Consultants. Figured dimension only to be taken from this drawing. Consultants to be informed immediately of any discrepancies before work proceeds.



COLOUR DRAWING

Date Drawn: 2019-05-10

Drawn By: P.J. Mulcahy

Date Issued: 2019-07-24

Issued By: T.Hanley



Rev	Amendment	By	Date
PL0	ISSUED FOR PLANNING	TH	2019-07-24

Client:  
**Comhairle Contae Thiobraid Árann**  
 Tipperary County Council

Job: NENAGH STORM WATER DRAINAGE ASSESSMENT  
 Title: PROPOSED WATER MAIN CROSSING DETAILS  

 Dublin | Limerick | Cork | Galway | Glasgow  
 97 Henry Street, Limerick, V94 YC2H  
 TEL: +353 61 221 200 www.punchconsulting.com

Stage: PLANNING  
 Scale @ A1: AS SHOWN  
 Technician Check: P.J. Mulcahy  
 Engineer Check: F. Timlin  
 Approved: D.GALLERY  
 Drawing No: 161-266-031 Rev: PLC