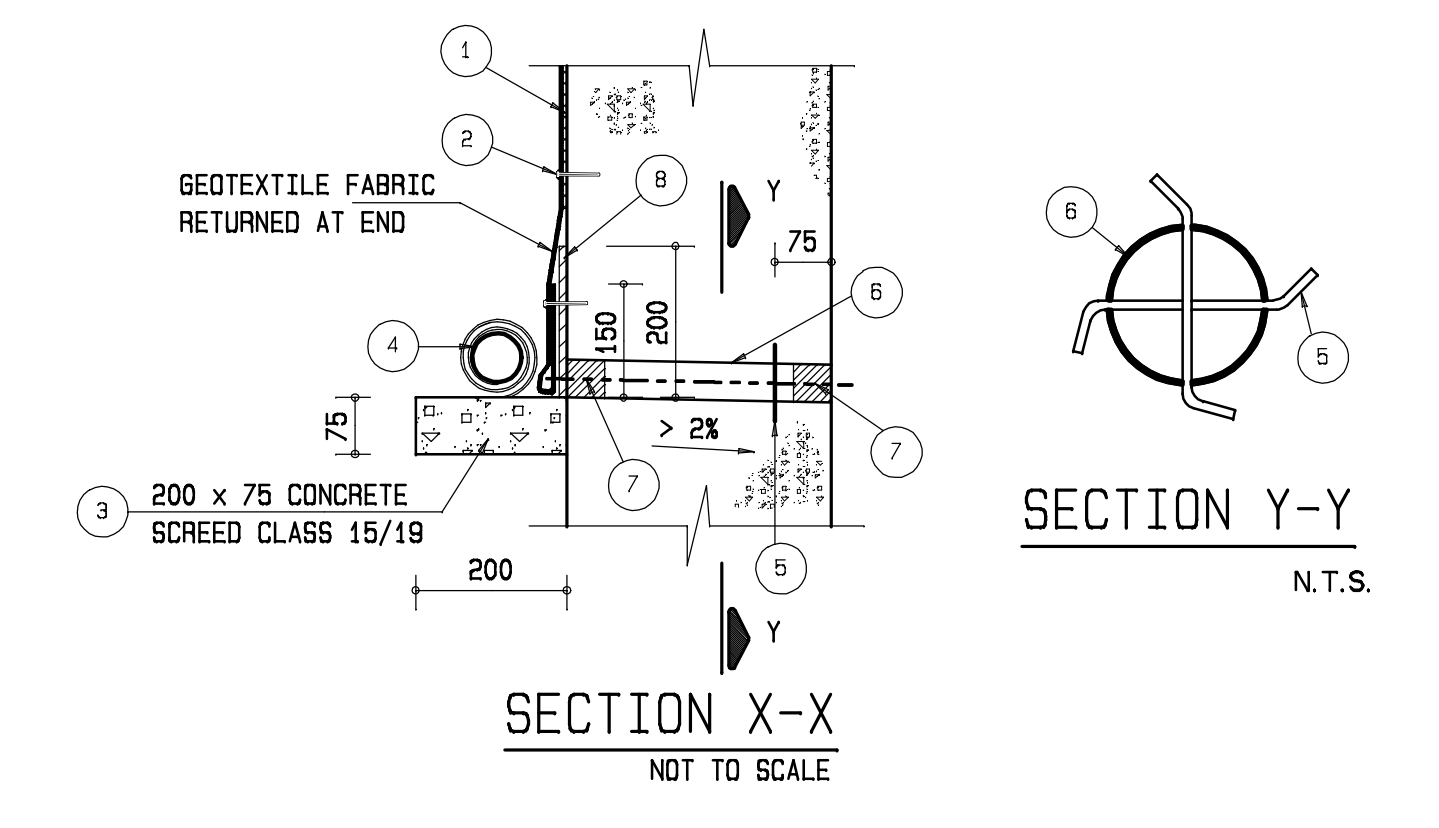
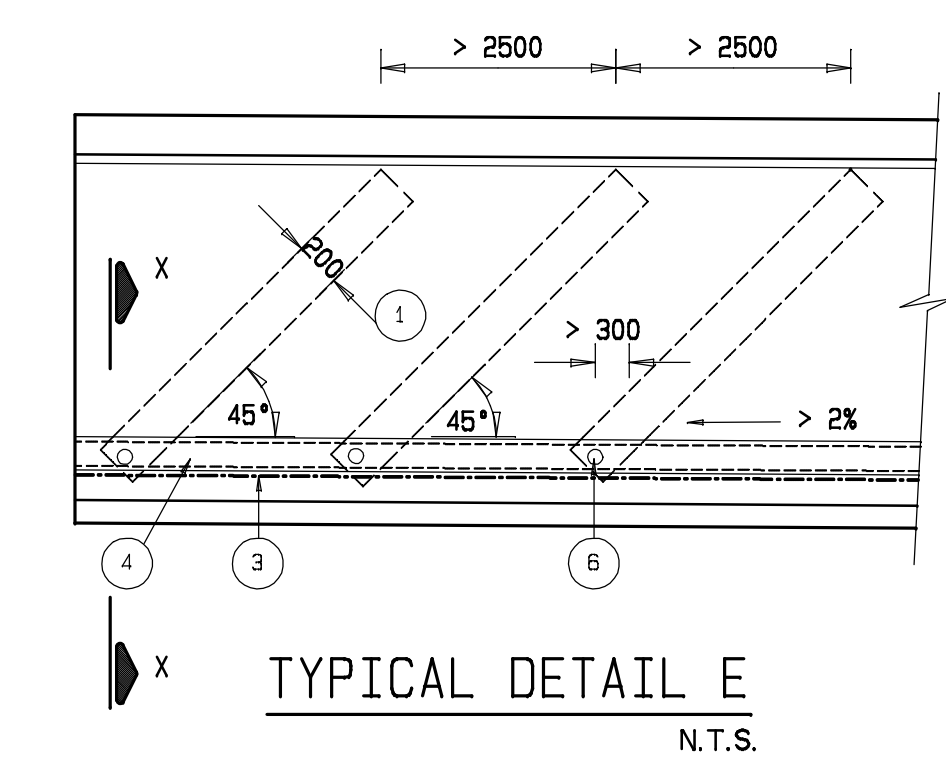



NOTE: JOINING NEW CONCRETE TO OLD

- 1) ALL CONTACT SURFACES SHALL BE ROUGHENED AND CLEANED OF ALL DIRT AND LOOSE PARTICLES TO EXPOSE COARSE AGGREGATE.
- 2) DOWELS SHALL BE INSTALLED IN HOLES DRILLED INTO THE EXISTING STRUCTURE AS SHOWN ON DRAWINGS.
- 3) DRILLED HOLES MUST BE FREE OF DUST AND DEBRIS.
- 4) ALL HORIZONTAL DOWELS TO BE BONDED BY AN APPROVED EPOXY - SIKADUR 31 OR SIMILAR APPROVED
- 5) ALL CONTACT SURFACES SHALL BE PAINTED WITH AN APPROVED WET-TO-DRY EPOXY.

- LEGEND
- ① - 200mm WIDE FILTER ELEMENTS SECURED TO BACK FACE OF STRUCTURE AT 45° SLOPE.
 - ② - CONCRETE NAILS WITH 25 X 25mm HOOP IRON WASHERS, TO SECURE FILTER ELEMENTS TO STRUCTURE AT 1m CENTRES.
 - ③ - CONCRETE SCREED TO GRADE AND LEVEL OF DRAINAGE PIPES PRIOR TO PLACING OF DRAINAGE PIPES.
 - ④ - 65mm dia PERFORATED DRAINAGE PIPES WRAPPED IN GEOTEXTILE. THE GEOTEXTILE SHALL HAVE AN OVERLAP OF NOT LESS THAN 150mm AND BE TIED AT CENTRES NOT GREATER THAN 200mm.
 - ⑤ - 3.5mm dia STAINLESS STEEL WIRE BARRIER.
 - ⑥ - 50mm DIA uPVC WEEPHOLES AT 2.0m CENTRES. THE CONTRACTOR SHALL ENSURE THAT THE WEEPHOLES ARE CLEAR AND APPROVED BY THE ENGINEER BEFORE THE FILTER ELEMENTS ARE INSTALLED
 - ⑦ - TEMPORARY POLYSTYRENE PLUG TO PREVENT INGRESS OF GROUT DURING PLACING OF CONCRETE.
 - ⑧ - 200mm WIDE FILTER ELEMENT SECURED TO BACK FACE OF STRUCTURE AT SAME GRADE AS WEEPHOLES.



FOR TENDER PURPOSES ONLY

			CONSTRUCTION RECORD		Worley Parsons RSA retains the copyright in all intellectual property, including designs and/or documents prepared in terms of this appointment or the project covered by the appointment. The client may use the designs and/or documents for the sole purpose of their intended use on the project only subject to payment for the design having been received. Use for any other purpose, whether or not the design and/or documents have been paid for constitutes an infringement of copyright, and all rights are reserved.	DESIGNED BY		CONSULTANT APPROVAL		HEAD OFFICE 445 Tabor Avenue Val de Grace Pretoria 0184 PO Box 415 PRETORIA 0001 South Africa Tel: (012) 844 8000	 SANRAL <small>SOUTH AFRICAN NATIONAL ROADS AGENCY LTD</small> BUILDING SOUTH AFRICA THROUGH BETTER ROADS	NORTHERN REGION		ACCEPTANCE		REHABILITATION OF NATIONAL ROUTE 11 SECTION 13 FROM R518 INTERSECTION(km 8.340) TO GROOTSANDSLOOT RIVER (km 24.280)				PROJECT NUMBER DRAWING LOCATION DATA		NRA N 011-130-2010/1	
WORKS CONTRACT ENGINEER				CHECKED BY		Name : Prof. Reg. No. : Date :		Name : Prof. Reg. No. : Date :				38 Ida Street Menlo Park Pretoria		THE ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATEVER CAUSE OR HOWSOEVER ARISING.		ROUTE SECTION DRAWING km DISTANCE		N11 13 14.573		START END			
Name : Prof. Reg. No. : Date :				NAME : Prof. Reg. No. : Date :								Private Bag X17 Lynnwood Ridge 0940		NEW 1/2.40 x 1.20m CULVERT AT km 14.573 399		DRAWING TYPE BRIDGE/STRUCTURE No.		STRUCTURES - CULVERTS					
SANRAL PROJECT MANAGER				DRAWN BY										GENERAL DETAILS		CONSULTANT DRAWING No.		251020-PP0-MC16-03					
Name : Date :				NAME : Date :										for CEO : SA NATIONAL ROADS AGENCY LTD Date:		SCALE: AS SHOWN		SHEET 3 OF 4		VER V1			
No.	DATE	REVISION	CONSULT. ENG.			Copyright reserved																	

