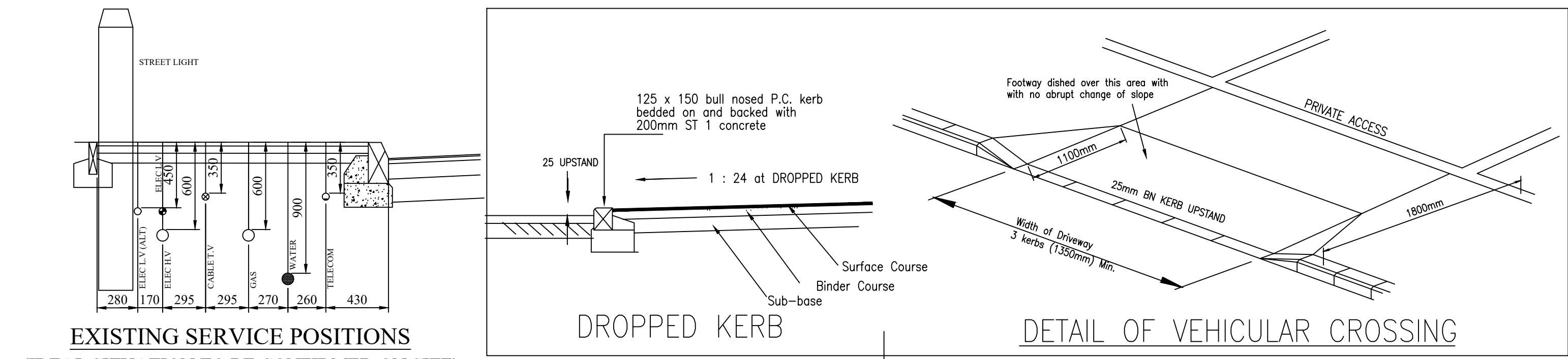
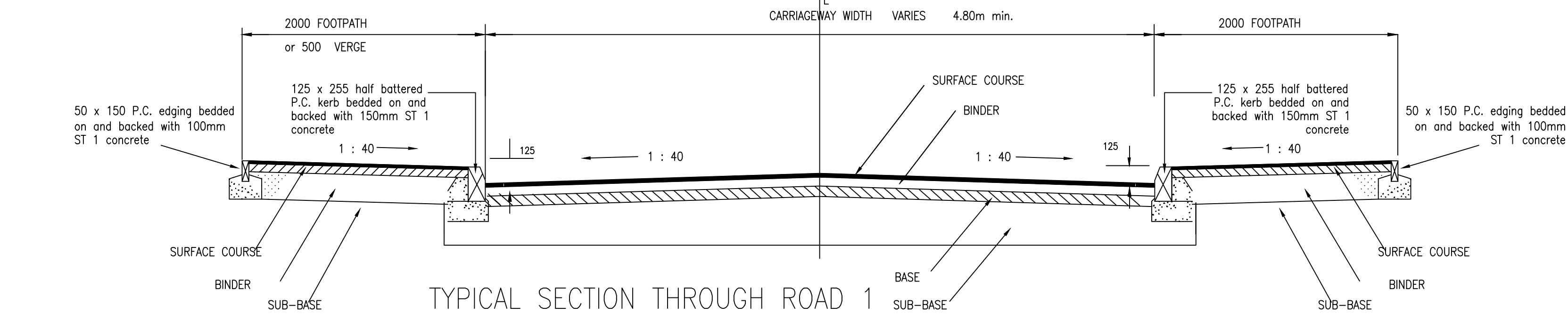
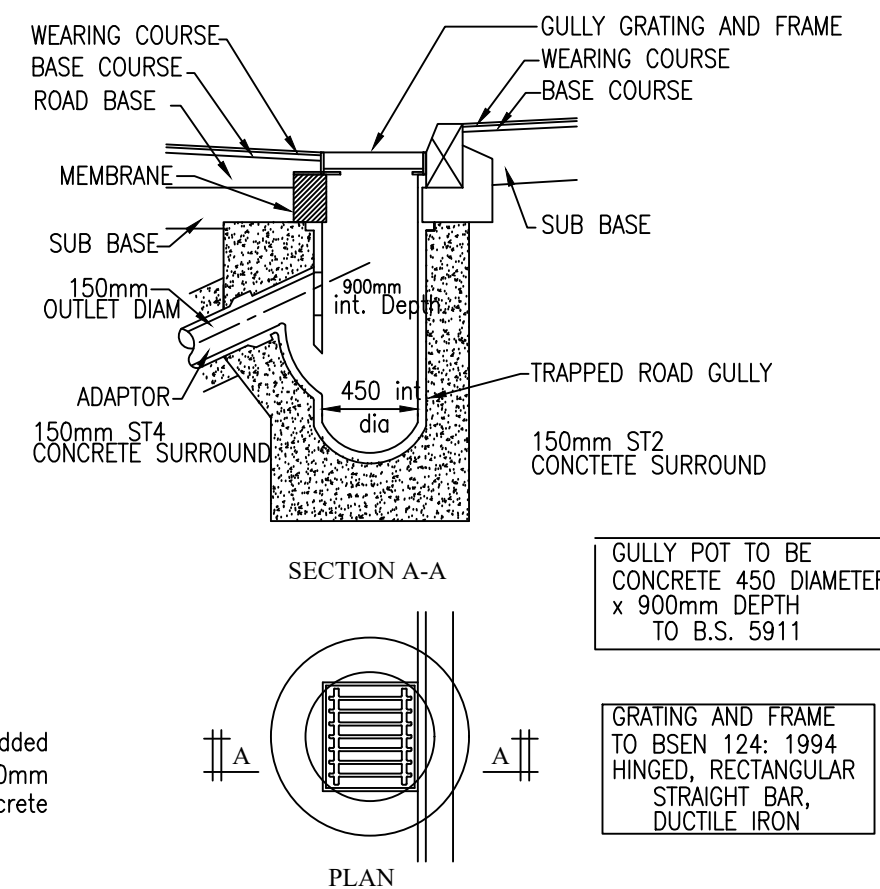




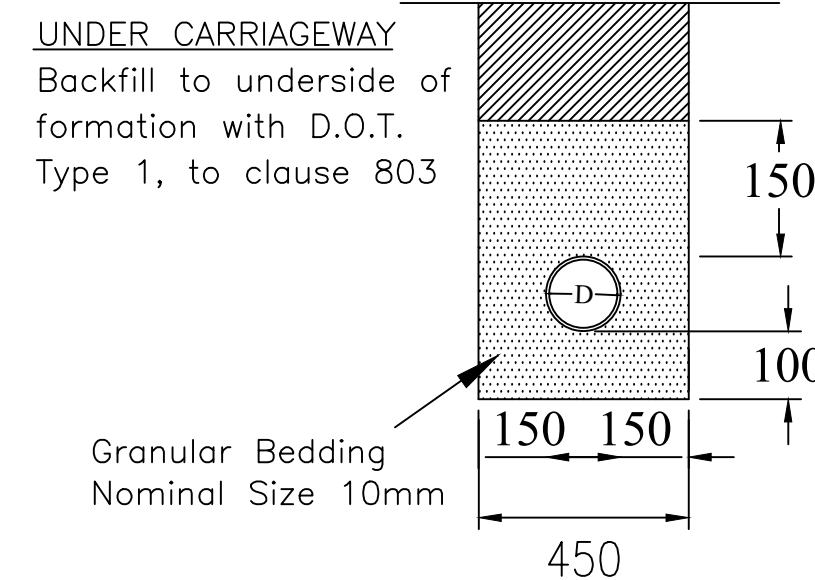
EXISTING SERVICE POSITIONS
(IDEAL SITUATION TO BE CONFIRMED ON SITE)



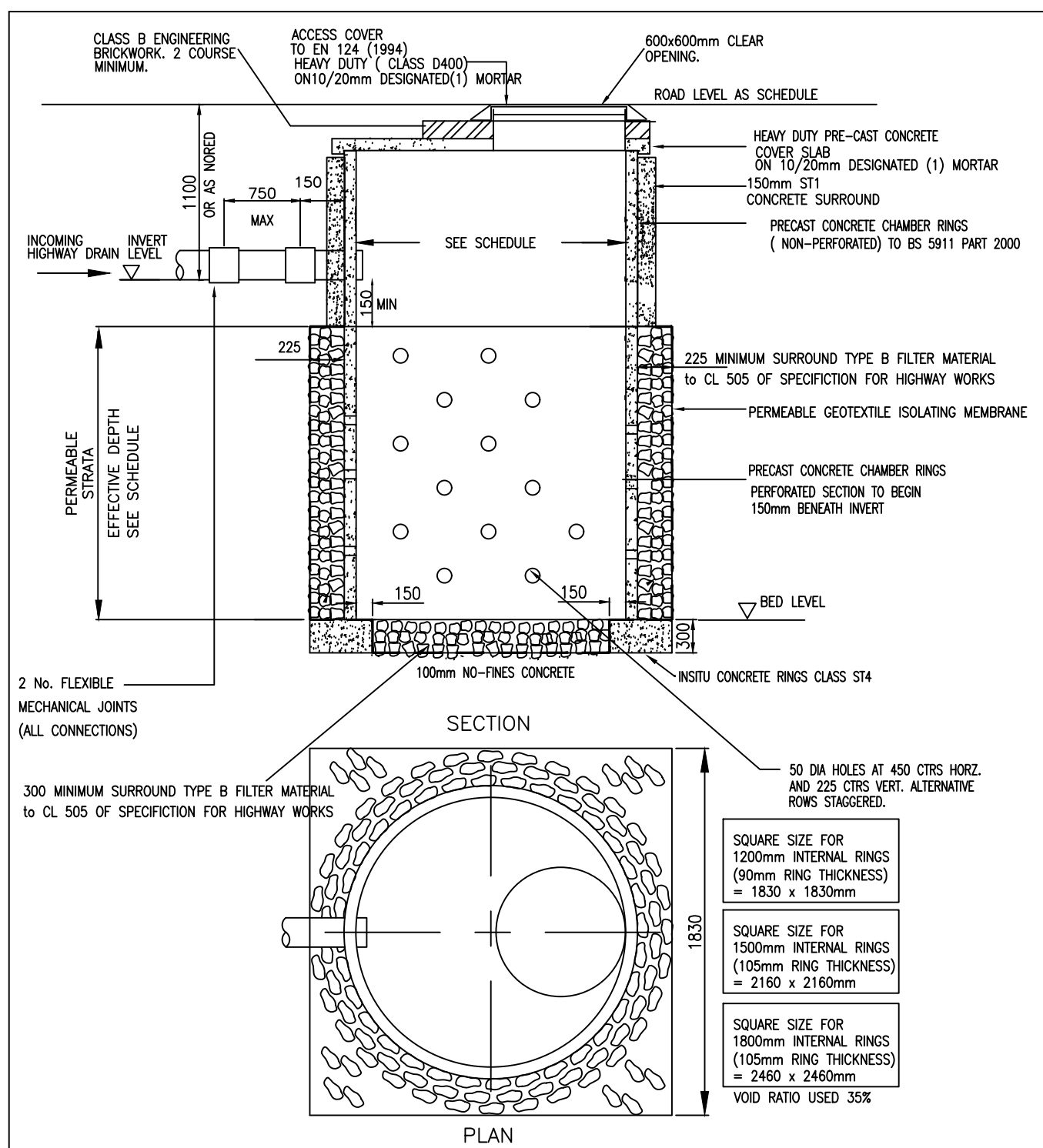
TYPICAL SECTION THROUGH ROAD 1



TRAPPED GULLY DETAIL



BEDDING CLASS S
DRAINAGE UNDER ROADS



HIGHWAY DRAINAGE SOAKAWAY DETAIL
1:25

	ROAD LEVEL (m)	INVERT LEVEL (m)	DEPTH TO MAIN PIPE (m)	OVERALL DEPTH (m)	BED LEVEL (m)	INCOMING PIPE DIA. (mm)	MANHOLE INTERNAL DIA. (mm)	AREA DRAINED:
HD1	74.450	73.350	1.10	3.90	70.55	225	1200	191m ²
HD2	74.520	73.420	1.10	4.20	70.32	225	1500	256m ²
HD3	73.990	72.490	1.50	4.90	69.09	225	1800	236m ²
HD4	73.870	71.960	1.92	4.91	68.96	225	1500	153m ²
HD5	73.765	71.950	1.81	4.42	68.96	225	1500	153m ²

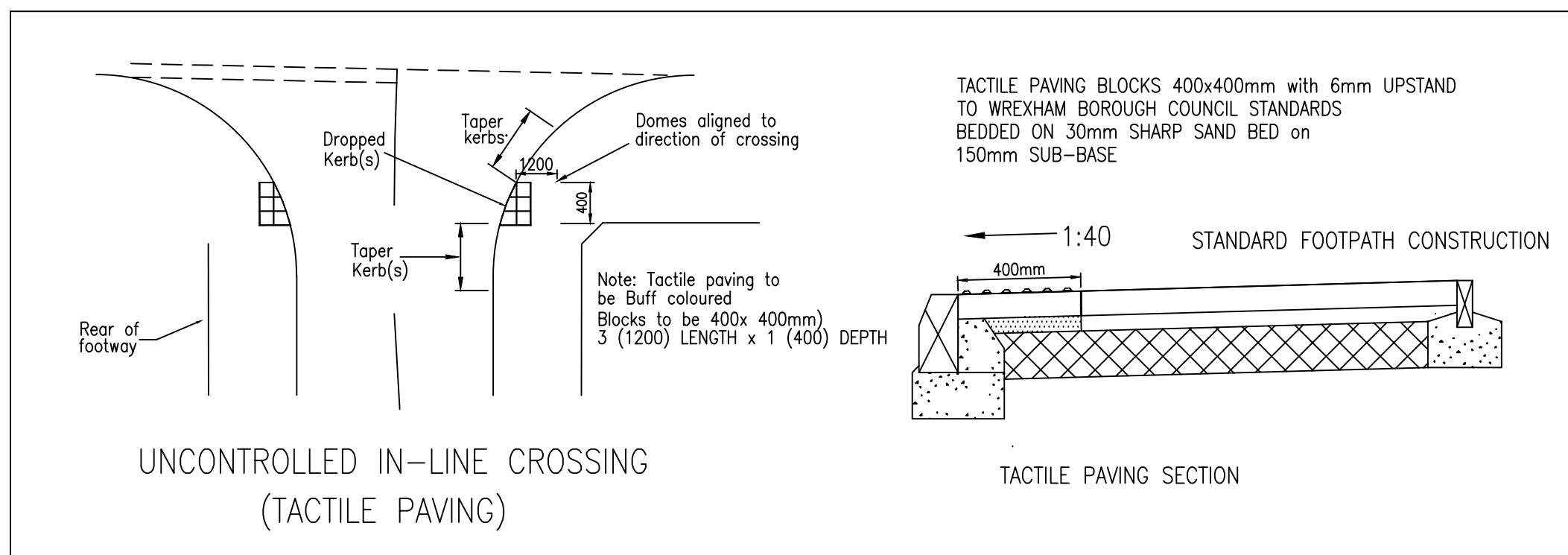
REF	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO MAIN PIPE (m)	MANHOLE COVER INTERNAL DIA. (mm)	MANHOLE TYPE	NOTES
CP1	74.45	73.45	1.00	225	1200	D400 HEAVY DUTY
CP2	74.49	73.49	1.00	225	1200	D400 HEAVY DUTY
CP3	73.69	72.69	1.00	225	1200	D400 HEAVY DUTY
CP4	73.46	72.13	1.33	225	1200	D400 HEAVY DUTY

- NOTE:
- SOAKAWAYS TO TAKE HIGHWAY DRAINAGE ONLY.
 - SOAKAWAYS DESIGNED TO TAKE 100 YEAR STORM+CLIMATE CHANGE.
 - SOAKAWAY WIDTHS/DEPTHS MAY BE VARIED IF AGREED, OVERALL VOLUME TO REMAIN CONSTANT
 - ALL HIGHWAY PIPEWORK TO BE 150mm OR 225mm DIAMETER UPVC TO BS 4660

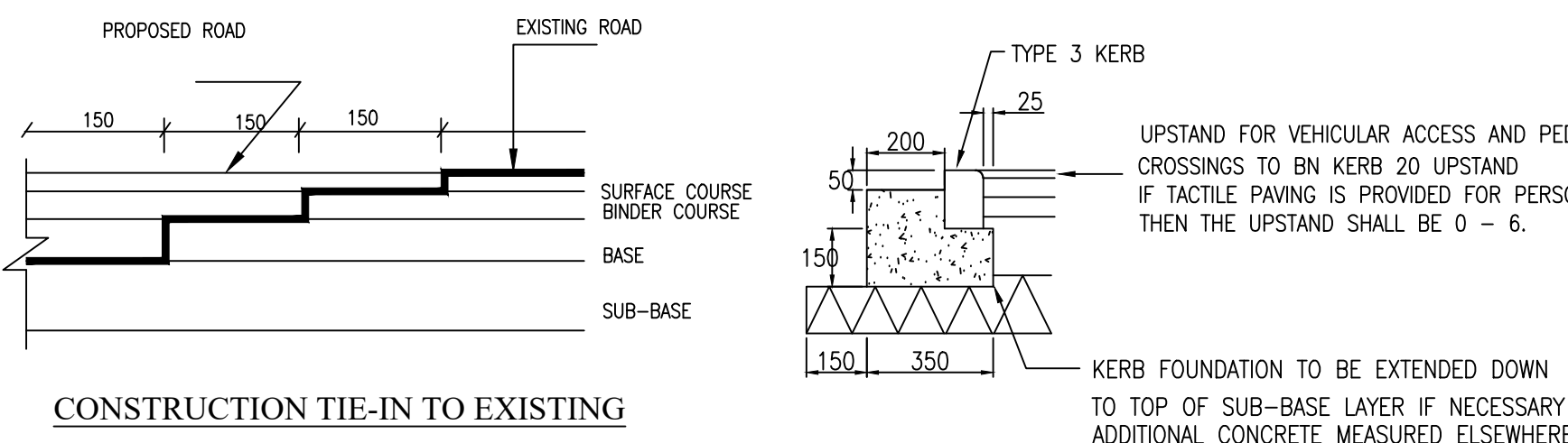
FOR HIGHWAY DRAINAGE CATCHPIT SEE DRAWING 05

ROAD CONSTRUCTION DETAILS					
	MATERIAL	B.S. EN 13108 Section REF.	NOMINAL AGGREGATE SIZE	THICKNESS OF LAYER (mm)	
				PSV	
SURFACE COURSE	STONE MASTIC ASPHALT (SMA) surface 40/60	SECTION 5	10mm	40mm	60
BINDER COURSE	ASPHALT CONCRETE BINDER DMB 50 (40/60) See note 7	SECTION 1	20mm	60mm	
BASE	ASPHALT CONCRETE BINDER 50	SECTION 1	32mm	100mm	
SUB-BASE	Granular Type 1	D.O.T. Clause 803	-	150mm	
CAPPING LAYER	Type 6F2	D.O.T.	-	150mm	based on 15%
TOTAL THICKNESS (mm)				500mm	

NOTE:
1. CBR TESTS PENDING: SEE TABLE:



UNCONTROLLED IN-LINE CROSSING
(TACTILE PAVING)



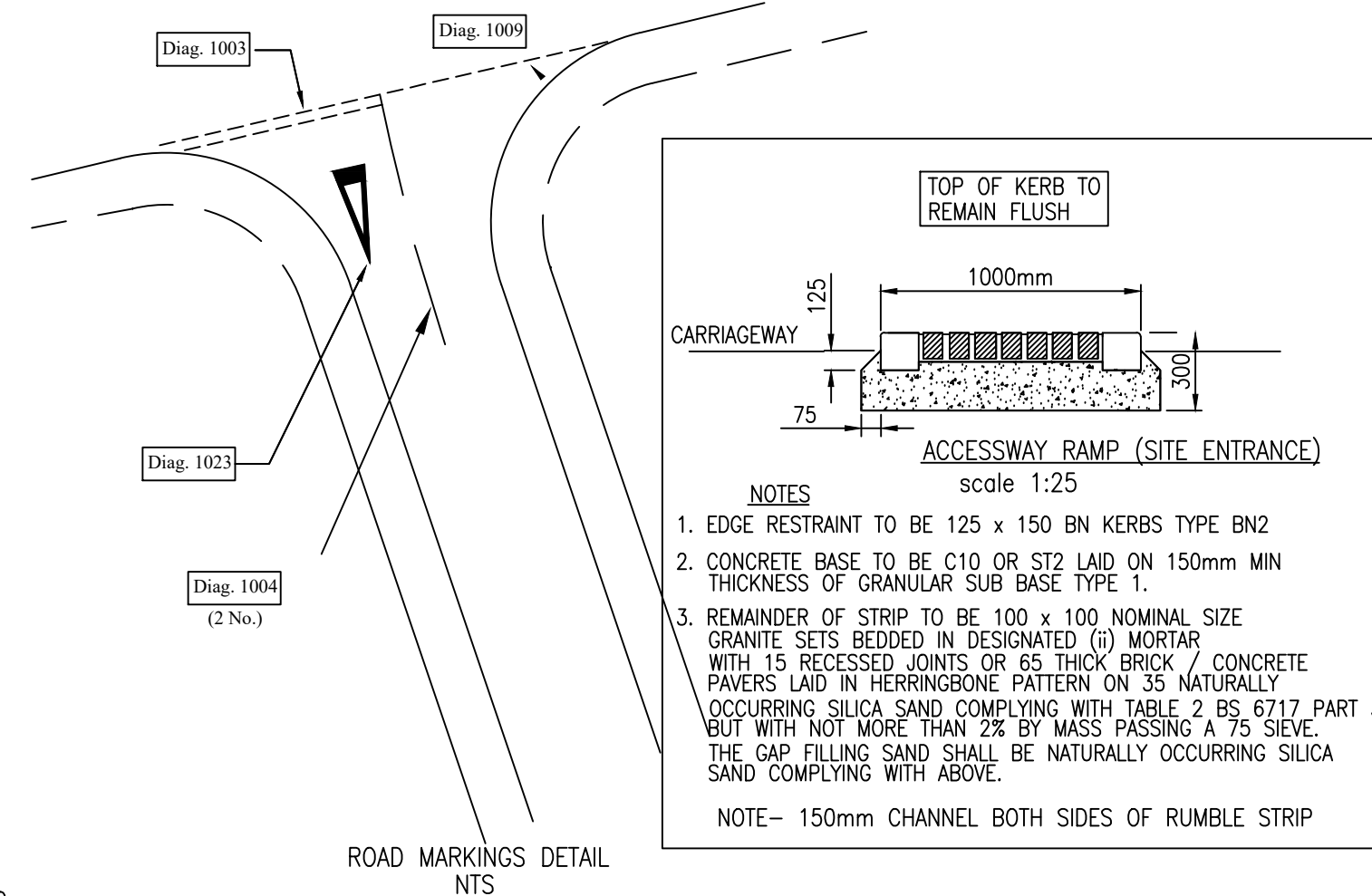
CONSTRUCTION TIE-IN TO EXISTING

FOOTPATH CONSTRUCTION DETAILS: 2.0m WIDTH					
LAYER	MATERIAL	B.S. EN 13108 Section REF.	NOMINAL AGGREGATE SIZE	THICKNESS OF LAYER (mm)	
				FOOTPATH	VEHICLE CROSSOVERS
SURFACE COURSE	ASPHALT CONCRETE BINDER 160/220	SECTION 1	6mm	20mm	20mm
BINDER COURSE	ASPHALT CONCRETE BINDER 160/220	SECTION 1	20mm	40mm	60mm
SUB-BASE	Granular Type 1	D.O.T. Clause 803	-	100mm	150mm
TOTAL THICKNESS (mm)				160mm	230mm

CBR TEST RESULTS: - SEE REPORT
TEST 1 NR ENTRANCE: 15%
TEST 2 MID-POINT ROAD: 15% MIN. [INTERPOLATED]
TEST 3 NR END OF SCHEME: 47%

TABLE TAKEN FROM "WREXHAM COUNCIL RESIDENTIAL ROADS AND FOOTPATHS" APPENDIX D: MINIMUM CONSTRUCTION SPECIFICATION
CBR VALUES TO BE CONFIRMED ON SITE

CAPPING/SUB-BASE THICKNESS		
CBR%	Capping	Sub-base
2.5	250mm	350mm
4	240mm	320mm
3	230mm	270mm
5	210mm	240mm
6	200mm	220mm
7	200mm	210mm
8	190mm	200mm
9	180mm	190mm
10	170mm	180mm
11	170mm	170mm
12	160mm	160mm
13	160mm	160mm
14	150mm	150mm
15 and greater	150mm	150mm



ALL WORKS SHALL BE CONSTRUCTED TO ADAPTABLE STANDARDS IN ACCORDANCE WITH WREXHAM COUNTY BOROUGH COUNCIL (WCBC) STANDARD DETAILS. ALL FOUNDATION DESIGN / MATERIALS TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH WCBC RESIDENTIAL ROADS AND FOOTPATH - APPENDIX D MINIMUM CONSTRUCTION SPECIFICATION. ALL TEST RESULTS AND CERTIFICATES SHALL BE SUBMITTED TO WCBC FOR FURTHER APPROVAL

NOTES

- All earthworks and road works shall comply with the requirements of the National Assembly for Wales Specification for Highway Works (SHW) including amendments, unless stated otherwise. Information below and elsewhere on this drawing are intended to comply with the latest specification. Should there be any discrepancies please contact Kane Design.
- All unreinforced concrete bedding and backing to kerbs and edgings shall be low slump designated mix GEN 0 or standard mix ST1 in accordance with BS 5328 : 1991
- Precast concrete kerbs and edgings shall comply with BS 7263
- Workmanship for concrete works shall comply with BS 8000 : Section 2 : 1990
- Hot Rolled Asphalt surface course shall be to Clause 911 SHW, and to BS13108 Section 4: with 50% pen binder and minimum target binder content of 7.3%. At target binder content the minimum stability shall be 5500 N, the maximum flow 4mm and the minimum Marshall Quotient 1.4 N/mm . Coated chippings to clause 915 SHW, shall be 20mm nominal size and applied to give 1.5mm average texture depths when measured to clause 921 SHW and a 60% shoulder to shoulder cover at roundabouts. Minimum Polished stone value of chippings shall be 60mm.
- The use of crushed limestone rock shall not be permitted in any wearing course layer
- Binder course: DBM50 Dense Binder Asphalt Course (recipe mix) shall comply with clause 90 of the Highways specification. The mixture designation shall be AC20 dense bin 40/60 in accordance with BS13108 PART 1.
- The rear edges of all footways must present smooth flowing alignments and should not undulate to accommodate private drives
- Sub-grade improvement (capping) layer material to be Class 6F2 to DOT Specification Clause 6/3
- The total carriageway thickness shall be a minimum of 450mm on frost susceptible sub grades.
- Service strips to be grass seeded using Mix A as defined by National Assembly for Wales Specification
- Sub -base thickness to be finalised at the time of construction after CBR testing of the road sub-base
- Road markings and signs refer to the "Traffic Signs Regulations and General Directions 2002" by the Department of Transport.

SURFACING MATERIALS TO BE AGREED WITH STREETSCENE ENGINEER TEL 01 978 729732

PENDING HIGHWAYS APPROVAL PRELIMINARY

F	ROAD BASE - BINDER GRADE REVISED	24:07:19	AK	AK
E	CBR / ROAD CONSTRUCTION	11:07:19	AK	AK
D	SOAKAWAY SCHEDULE REVISED	24:06:19	AK	AK
C	SOAKAWAY SCHEDULE REVISED, NOTE 7 ADDED.	11:06:19	AK	AK
B	SOAKAWAY, RUMBLE STRIP, NOTES REVISED	02:05:19	AK	AK
A	SOAKAWAY, RUMBLE STRIP, NOTES REVISED	17:11:18	AK	AK
Rev	Description	Date	Drwn	Chkd

KANE DESIGN Civil Engineering Design

15 Winchester Way
Gresford
Wrexham
LL12 8HH
Tel: 01 978 855888

Client

M & M DEVELOPMENTS LTD

Project
PROPOSED DEVELOPMENT at FORMER CARAVAN
SITE, OLD WREXHAM ROAD, GRESFORD, WREXHAM

Title

ROAD CONSTRUCTION DETAILS

DRAWING NUMBER	SCALE	AS NOTED / NTS
1387/03	DATE	22:06:18
	DRAWN	AK
	CHECKED	A.K
	REVISION	F