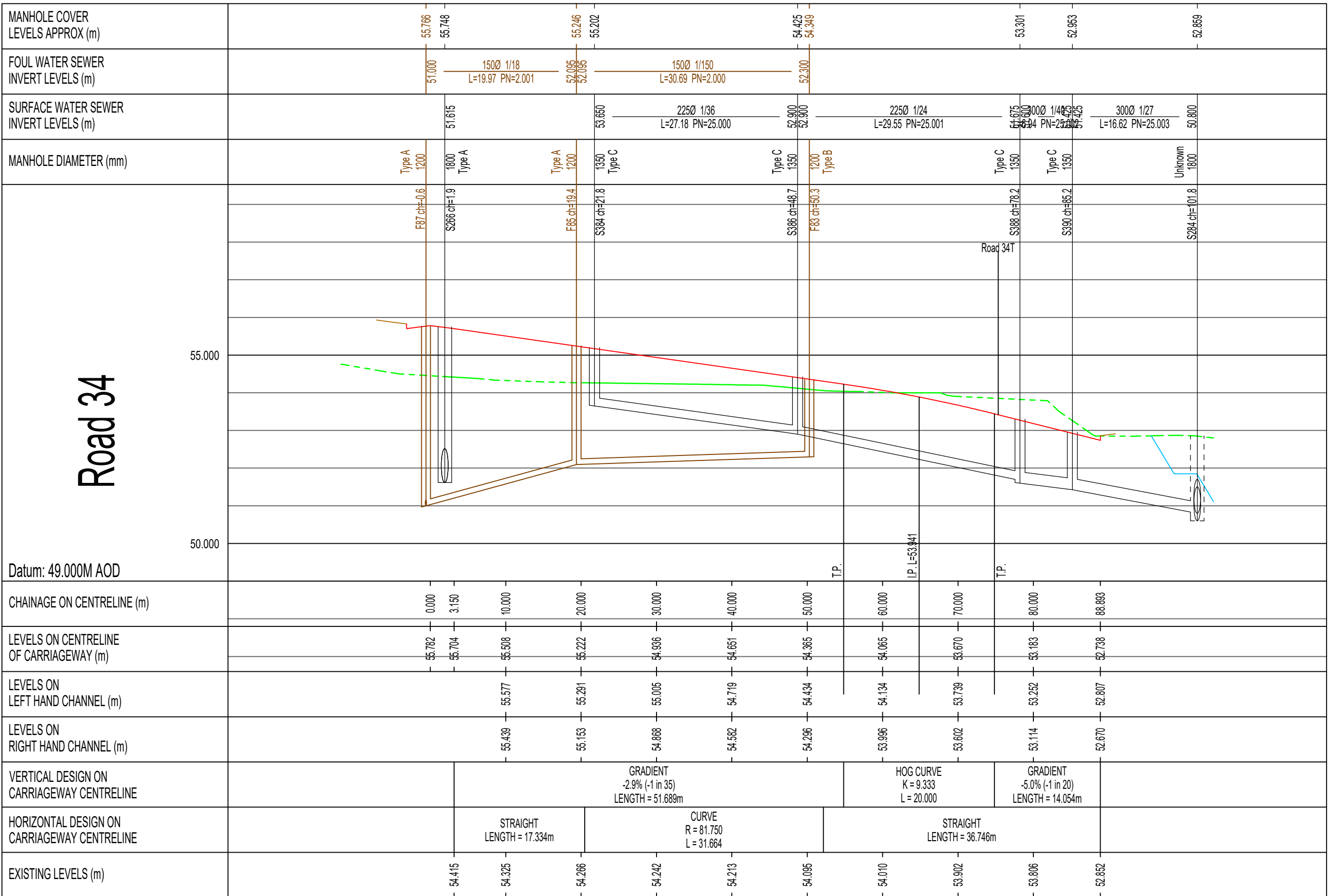
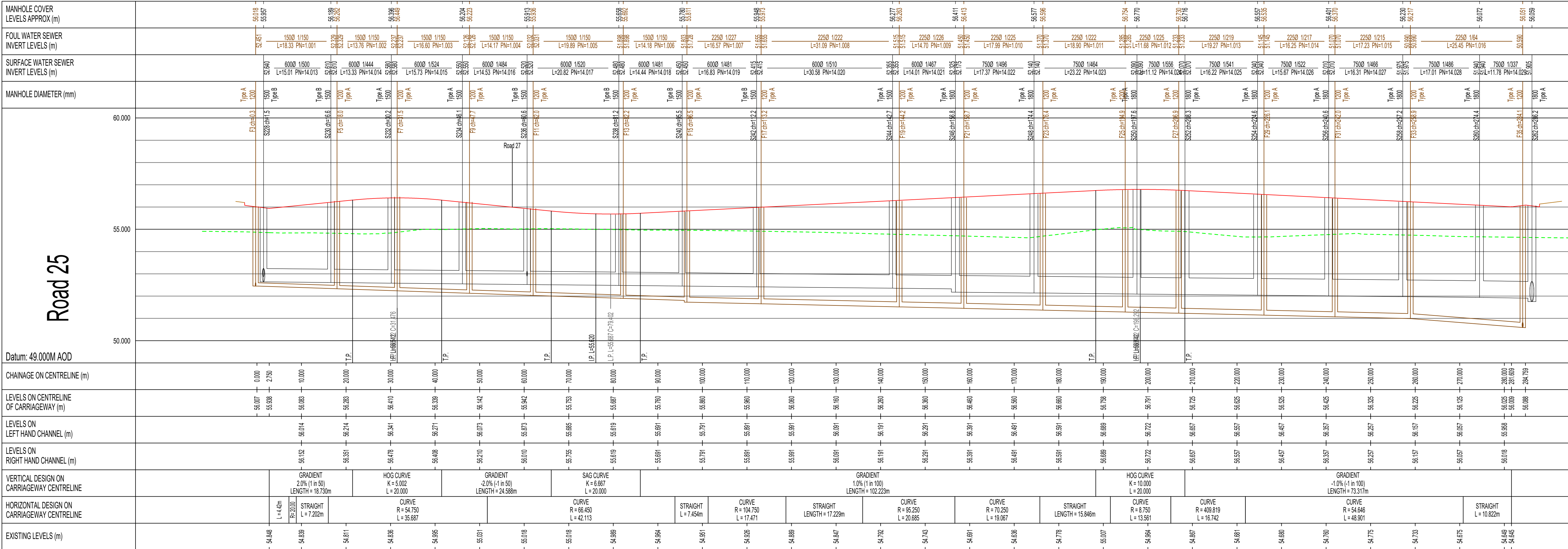


- Notes
1. This drawing has been prepared in accordance with the scope of RPS's appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
 2. If received electronically it is the recipient's responsibility to print to correct scale. Only written dimensions should be used.
 3. This drawing should be read in conjunction with all other relevant drawings and specifications.

PRELIMINARY
SUBJECT TO SECTION 38 & 104
APPROVAL



MINIMUM DIMENSIONS FOR MANHOLES					
Type	Size of largest pipe (DN)	Min internal dimensions*	Min clear opening area*		
		Rectangular length and width	Circular diameter	Rectangular length and width	Circular diameter
Manhole	≤ 150	750 x 675	1000	750 x 675	na
< 1.5m deep to soffit	225	1200 x 675	1200	1200 x 675	
300	300	1200 x 750	1200		
> 300	> 300	1800 x 1800 or (DN+450)	The larger of 1800 or (DN+775)		
> 1.5m deep to soffit	≤ 225	1200 x 1000	1200	675 x 675	600
300	300	1200 x 1075	1200		
> 300	375-450	1350 x 1225	1200		
> 450	1800 x (DN+775)	The larger of 1800 or (DN+775)			
Manhole* > 3.0m deep to soffit	Steps	1050 x 800	1050	675 x 675	800
	Ladders	1200 x 800	1200		
	Winch	900 x 800	900	675 x 675	600

NOTES:

- 1) LARGER SIZES MAY BE REQUIRED FOR MANHOLES ON BENDS OR WHERE THERE ARE JUNCTIONS.
- 2) MAY BE REDUCED TO 675 BY 675 WHERE REQUIRED BY HIGHWAY LOADING CONSIDERATIONS. SUBJECT TO A SAFE SYSTEM OF WORK BEING SPECIFIED.
- 3) NOT APPLICABLE DUE TO WORKING SPACE NEEDED.
- 4) MINIMUM HEIGHT OF CHAMBER IN SHAFED MANHOLE 2M FROM BENCHING TO UNDERSIDE OF REDUCING SLAB.
- 5) MIN CLEAR SPACE BETWEEN LADDERS OR STEPS AND THE OPPOSITE FACE OF THE SHAFT SHOULD BE APPROXIMATELY 900MM.
- 6) WINCH ONLY - NO STEPS OR LADDERS, PERMANENT OR REMOVABLE.
- 7) THE MINIMUM SIZE OF ANY MANHOLE SERVING A SEWER (I.E ANY DRAIN SERVING MORE THAN ONE PROPERTY) SHOULD BE 1200 MM X 675 MM RECTANGULAR OR 1200 MM DIAMETER

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DESIGN DRAWINGS AND OTHER INFORMATION.

LEVEL OF EXISTING ROAD AT POINT OF TIE IN WITH PROPOSED SITE ROAD MUST BE CHECKED BEFORE COMMENCEMENT OF WORKS AND ANY DISCREPANCIES REPORTED IMMEDIATELY.

A SCREEN AND SUMP IS TO BE FITTED OVER THE OUTGOING PIPE TO THE LAST NEW SURFACE AND FOUL MANHOLES BEFORE ENTERING THE EXISTING SEWERS IN ACCORDANCE WITH SEWERS FOR ADOPTION 6. THE SCREEN SHALL ONLY BE REMOVED ONCE ON SITE CONSTRUCTION WORKS HAVE BEEN COMPLETED.

ALL EXISTING SEWER LEVELS AND LOCATIONS TO BE CHECKED AND VERIFIED PRIOR TO ANY CONSTRUCTION WORKS AND ANY DISCREPANCIES REPORTED IMMEDIATELY.

MANHOLE RINGS SHALL NOT BE CUT

ALL SEWERS ARE TO COMPLY WITH THE DESIGN AND CONSTRUCTION GUIDE AND SEVERN TRENT WATER REQUIREMENTS.

GENERAL NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

2. LEVELS INDICATED IN BLOCKS ARE FINISHED FLOOR LEVELS WHICH ARE GENERALLY 150MM ABOVE GROUND LEVEL.

3. ROADS FOOTPATHS AND PARKING BAYS WHICH FORM PART OF THE HIGHWAY TO BE ADOPTED UNDER SECTION 38 OF THE HIGHWAYS ACT 1980 SHALL COMPLY WITH THE RELEVANT COUNCIL HIGHWAY SPECIFICATION.

4. SEWERS TO BE ADOPTED UNDER SECTION 104 OF THE WATER INDUSTRIES ACT 1991 SHALL COMPLY WITH THE WATER AUTHORITIES ASSOCIATION 'SEWERS FOR ADOPTION 6TH EDITION AND COMBINED ADDENDUM' OR THE CURRENT WATER AUTHORITIES SPECIFICATIONS.

5. ALL PIPE MATERIALS TO BE USED IN ADOPTABLE SEWERS SHALL BE AS SPECIFIED ON THE ROAD AND SEWER SECTION BOX. CLAYWARE TO COMPLY TO BS EN 295, CONCRETE TO COMPLY WITH BS 5911, UNPLASTICISED PVC PIPES TO BS 4860 / BS EN1401-1:1998 / BS EN 13368-1:2003. PVC PIPES ONLY TO BE USED AS AGREED WITH THE WATER AUTHORITY AND AS RECOMMENDED BY THE GROUND REPORT. THE USE OF PLASTIC PIPES SHOULD NOT BE USED IN CONTAMINATED GROUND.

THE MINIMUM REQUIREMENT FOR PIPES TO BE USED IN ADOPTABLE SEWERS IS TO BE AS FOLLOWS:

150MM DIA - CLASS 187 - MIN CRUSHING STRENGTH 28KN/M
225MM DIA - CLASS 120 - MIN CRUSHING STRENGTH 28KN/M
300MM DIA - CLASS 120 - MIN CRUSHING STRENGTH 36KN/M

LARGER THAN 300MM DIA - HIGH STRENGTH CONCRETE.

PIPES WITH MORE THAN 1200MM COVER TO BE LAID WITH CLASS S BEDDING UNLESS OTHERWISE STATED.

WHERE COVER TO PIPES IS LESS THAN 1200MM UNDER CARRIAGEWAYS OR VEHICULAR ACCESS AREAS OR OTHER PAVED AREAS THEY SHALL HAVE 150MM GRADE C20/25 CONCRETE SLAB PROTECTION IN ACCORDANCE WITH STW REQUIREMENTS. FOR PRIVATE DRAINAGE, CLASS Z 150MM CONCRETE BED AND SURROUND, WITH FLEXIBILITY OF JOINTS BEING MAINTAINED BY USING COMPRESSIBLE FIBREBOARD AT EVERY PIPE JOINT.

6. ALL EXISTING DRAINAGE INVERT LEVELS, DIAMETERS AND LOCATIONS ARE TO BE CHECKED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY PROPOSED DRAINAGE WORK. ANY DIFFERENCE BETWEEN ACTUAL AND DRAWN DETAILS IS TO BE REPORTED IMMEDIATELY.

7. POSITIONS OF EXISTING SERVICES/AUTOMATIC UNDERTAKERS APPARATUS ADJACENT TO OR CROSSING PROPOSED SEWERS IS TO BE CHECKED BY THE CONTRACTOR PRIOR TO STARTING WORK.

P01	First Issue			
Rev	Description	By	Ckd	Date



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Client **David Wilson Homes
East Midlands**

Project **Drakelow Park**

Title **Longitudinal Sections
Sheet 2 of 2**

Status **Preliminary** Scale @ A1 **V1:100 / H1:500** Date Created **18.03.2022**

Task Team Manager **CW** Information Author **GB** Task Information Manager **CW**

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