



- DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT CONTACT TRAVIS BAKER LIMITED.
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS RELATING TO THIS PROJECT.
- ALL DIMENSIONS SHOULD BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHOULD BE IMMEDIATELY NOTIFIED IN WRITING TO TRAVIS BAKER LIMITED.
- THE CONTRACTOR SHALL PRIOR TO CONSTRUCTION CHECK AND VERIFY THAT THE DETAILS SHOWN ON THIS DRAWING ARE FULLY COMPATIBLE WITH ANY AS CONSTRUCTED DIMENSIONS OR LEVELS. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY IN WRITING TO TRAVIS BAKER LIMITED.
- THIS DRAWING HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF THE COMMISSIONING PARTY AND UNLESS AGREED IN WRITING BY TRAVIS BAKER LIMITED NO OTHER PARTY MAY USE OR RELY ON ITS CONTENTS. NO LIABILITY IS ACCEPTED BY TRAVIS BAKER LIMITED FOR ANY USE OF THIS DRAWING OTHER THAN FOR THE PURPOSE FOR WHICH IT WAS ORIGINALLY PREPARED.
- IT SHOULD BE NOTED THAT THIS DRAWING MAY INCLUDE DATA PROVIDED BY THIRD PARTIES. NO LIABILITY IS ACCEPTED BY TRAVIS BAKER LIMITED AS TO THE ACCURACY OF THIS DATA.
- THIS DRAWING SHALL NOT BE REPRODUCED IN ANY WAY WITHOUT THE WRITTEN PERMISSION OF TRAVIS BAKER LIMITED.

PROPOSED ATTENUATION BASIN
SIZED FOR THE 100YR + 40%CC
STORM EVENT.
TOP OF POND LEVEL = 108.40
POND BED LEVEL = 106.40
PERMANENT WATER LEVEL - 106.90
TOP WATER LEVEL = 108.10
POND ATTENUATION VOLUME =
928m³

PROPOSED FOUL DRAINAGE
OUTFALL ROUTE LINE AND
LEVEL SUBJECT TO EXISTING
SERVICES/DRAINAGE WHICH
MAY BE PRESENT IN THE
EXISTING ROAD

EXISTING MANHOLE INVERT
LEVEL TAKEN FROM STW SEWER
RECORDS. EXACT LINE AND
LEVEL TO BE CONFIRMED BY
CLIENT.

PROPOSED FOUL WATER
SEWER TO OUTFALL TO
EXISTING COMBINED WATER
SEWER SUBJECT TO SECTION
106 APPROVAL

ADDITIONAL TOPOGRAPHICAL
SURVEY REQUIRED ALONG
WESTERN BOUNDARY TO
CONFIRM TIE-IN LEVELS FROM
THE TOP OF POND TO EXISTING
GROUND LEVELS

PROPOSED HYDROBRAKE FLOW
CONTROL MANHOLE. FLOW RATE
RESTRICTED TO 1 IN 1 YEAR
QBAR RATE OF 9.4l/s BASED ON
A SITE AREA OF 2.58 HECTARES.

MANHOLE DEPTH
CIRCA 4-5M DEEP

MANHOLE DEPTH
CIRCA 4.5-5.5M DEEP

4m WIDE GATED
ACCESS

ADOPTABLE SEWERS
SUBJECT TO SECTION 104
APPROVAL

MINIMUM DIMENSIONS FOR ACCESS FITTINGS AND INSPECTION CHAMBERS

Type	Depth to invert from cover level (m)	Internal sizes		Cover sizes	
		Length x width (mm x mm)	Circular (mm)	Length x width (mm x mm)	Circular (mm)
Rodding eye	As drain but min 100	150 x 100 225 x 100	150 225	150 x 100 225 x 100	Same size as pipework
Access Fitting	Small 150 Diam 150 x 100 Large 225 x 100	0.6 or less except where situated in a chamber	150 x 100 225 x 100	150 x 100 225 x 100	Same size as pipework
Inspection chamber	Shallow 0.6 or less 1.2 or less Deep +1.2	225 x 100 450 x 450 450 x 450	190 450 450	Min 430 x 430 Max 300 x 300	190 430 Access restricted to max 350

- THE CONTRACTOR IS TO CONFIRM THE POSITIONS, SIZES AND LEVELS OF ALL EXISTING SERVICES ON THE SITE AND ARRANGE FOR ANY DISCREPANCIES THAT MAY BE REQUIRED.
- PRIVATE DRAINAGE TO BE IN ACCORDANCE WITH PART 4 OF THE BUILDING REGULATIONS 2002.
- THE INVERT OF THE HORIZONTAL DRAIN AT THE BASE OF A STACK TO BE NOT LESS THAN 400mm BELOW THE CENTRE LINE OF THE LOWEST BRANCH PIPE. LEVEL TO BE SET TO ENSURE THAT AT LEAST 50mm CLEARANCE TO FOOTINGS.
- HORIZONTAL GRADIENT OF UNDERSLAB DRAINAGE TO BE:
100mm 1 in 40
150mm 1 in 80 (min 1 in 60)
200mm 1 in 150 (min 1 in 100)
- WHERE A PIPE PASSES THROUGH A WALL AN OPENING IS TO BE FORMED THROUGH THE WALL TO GIVE AT LEAST 50mm CLEARANCE AROUND THE PIPE. BRICKWORK OVER SHALL BE SUPPORTED BY A LINTEL. THE OPENING IS TO BE MARKED EACH SIDE OF THE OPENING WITH RED SHEET MATERIAL.
- GRANULAR SURROUND TO PIPES TO BE TO BS 882. WHERE CONCRETE SURROUND IS REQUIRED TO PIPES IT IS TO BE BUILT WITH VERTICAL JOINTS FORMED AT THE FACE OF EACH FLEXIBLE JOINT USING 18mm THICK COMPRESSIBLE BOARD.
- DRAIN TRENCHES SHOULD NOT BE EXCAVATED LOWER THAN THE FOUNDATIONS OF ANY BUILDING NEARBY UNLESS EITHER:
a) WHERE THE TRENCH IS WITHIN 1m OF THE FOUNDATION THE TRENCH IS FILLED WITH CONCRETE UP TO THE LOWEST LEVEL OF THE FOUNDATION, OR
b) WHERE THE TRENCH IS FURTHER THAN 1m FROM THE BUILDING, THE TRENCH IS FILLED WITH CONCRETE TO A LEVEL BELOW THE LOWEST LEVEL FOR THE BUILDING EQUAL TO THE DISTANCE FROM THE BUILDING LESS 100mm.
- WHERE TWO CLAY PIPES CROSS WITH LESS THAN 300mm SEPARATION SURROUND EACH WITH GENS CONCRETE FOR NOT LESS THAN 1m CENTRED ON THE CROSSING POINT. EXTEND CONCRETE SURROUNDS AS NECESSARY TO WITHIN 100mm OF THE NEAREST FLEXIBLE JOINT.
- CONCRETE PROTECTION SHALL BE PROVIDED TO ALL UPVC PIPES WITH LESS THAN 600mm COVER AND TO ALL CLAY PIPES WITH LESS THAN 300mm COVER.
- BACKFILL TO TRENCHES MAY BE SUITABLE EXCAVATED MATERIAL IN LANDSCAPED AREAS. TYPE 1 GRANULAR MATERIAL TO BE USED UNDER HARD STANDING AND ROADS.
- ALL PRIVATE DRAINS TO BE 100mm DIAMETER UNLESS OTHERWISE SHOWN ON DRAWING.
- ALL MANHOLE AND DRAINAGE CHANNEL COVERS SHALL COMPLY WITH BS EN124 MANHOLE COVERS WITHIN BLOCK PAVED AREAS AND BUILDINGS SHALL BE RECESSED. COVER STRENGTHS TO BE:
CLASS C250 IN LIGHTLY TRAFFICATED AREAS (CAR PARK ASILES & CAR PARK SPACES) CLASS B125 WITH MIN 100mm DEEP FRANK IN LANDSCAPE AND NON TRAFFICATED AREAS (PLANTING PEDESTRIAN AREAS ETC).
- THE LEVELS AND POSITIONS OF ALL EXISTING MANHOLES AND LATERALS ARE TO BE CHECKED ON SITE PRIOR TO ANY WORKS COMMENCING. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER.

- KEY**
- PROPOSED PUBLIC STORM SEWER
 - PROPOSED PUBLIC FOUL SEWER
 - EXISTING COMBINED WATER SEWER
 - PRIVATE STORM SEWER
 - PRIVATE FOUL SEWER
 - FINISHED FLOOR LEVEL
 - PART M PLATFORM
 - PROPOSED LEVEL
 - RETAINING
 - BANKING
 - PROPOSED GRADIENT
 - EXPOSED BRICKWORK
 - TANKING
 - STEPS
 - ACO DRAIN
 - PRIVATE GULLY
 - HIGHWAY GULLY
 - RODDING EYE

travis baker

Travis Baker
Tennyson Road
New Road
West Midlands
B83 2PP

Tel: 0121 550 8037
Fax: 0121 550 8947
info@travisbaker.co.uk
www.travisbaker.co.uk

CLIENT OWL HOMES			
PROJECT HIGHAM ON THE HILL			
TITLE PROPOSED PRIVATE DRAINAGE AND EXTERNAL WORKS			
DRAWN GE	AUTHORISED RWT	SCALE 1:250@A0	DATE 27.10.23
PROJECT NO. 23031		DRAWING NO. 100	REV -
STATUS PRELIMINARY/FOR APPROVAL			

COPYRIGHT TRAVIS BAKER LIMITED. ALL RIGHTS RESERVED.