



DRAINAGE/EXTERNAL WORKS KEY:

- EXISTING FOUL WATER MANHOLE/DRAINAGE.
- EXISTING SURFACE WATER MANHOLE/DRAINAGE.
- EXISTING RAINWATER DOWNPIPE.
- FOUL WATER MANHOLE/DRAINAGE 100mm U.N.O.
- SOIL & VENT PIPE (100mm) / INSPECTION CHAMBER
- SURFACE WATER MANHOLE/DRAINAGE 150mm U.N.O.
- RAINWATER PIPE (100mm) / INSPECTION CHAMBER
- RODDING EYE (100mm)
- FORMPAVE OUTLET - REFER DRG. No 18-3130-501 FOR FORMPAVE DETAILS
- HYDRAWAY FIN DRAIN CONNECTED TO 110mm PVC-U PIPE WITH FORMPAVE TOP HAT SEAL AT OUTLET TO HYDROBRAKE.
- ACO DRAIN.
- PETROL INTERCEPTOR. CONDER NSB 7.5/2.
- ROAD - FORMPAVE POROUS PAVING. REFER TO DRG. No. 18-3130-551 FOR FORMPAVE DETAILS (AREA = 383m2)
- FOOTWAY - FORMPAVE POROUS PAVING. TO DRG. No. 18-3130-551 FOR FORMPAVE DETAILS (AREA = 165m2)
- TARMAC CARRIAGEWAY. REFER TO DRG No 18-3130-552 FOR DETAILS (AREA = 45m2)
- TACTILE PAVING SLABS (400x400) BUFF.
- PRECAST CONCRETE SQUARE PROFILE EDGINGS.
- PRECAST CONCRETE UPSTAND KERB.
- TK / DK TRANSITION KERB / DROPPED KERB.

- NOTES:**
- THIS DRAWING IS COPYRIGHT AND SHOULD NOT BE REPRODUCED WITHOUT APPROVAL.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF BOTH PARTIES IMMEDIATELY.
 - ANY DIMENSIONS/LEVELS INDICATED 'ref.' REFER TO ASSUMED/EXISTING DIMENSIONS WHICH ARE TO BE SITE CHECKED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- DRAINAGE NOTES:**
- INVERT LEVELS AND POSITIONS OF EXISTING DRAINS /CHAMBERS /SEWERS WHERE NEW CONNECTIONS ARE TO BE MADE MUST BE CHECKED AND CONFIRMED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS.
 - ALL DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY, ENVIRONMENT AGENCY AND IN CONJUNCTION WITH ALL RELEVANT BRITISH STANDARDS, CODES OF PRACTICE AND 'SEWERS FOR ADOPTION' AS APPROPRIATE.
 - ALL DRAINAGE SHALL COMPLY WITH THE TYPICAL DETAILS AND THE REQUIREMENTS OF BSEN 752.
 - REFER TO MANHOLE SCHEDULE OR DRAWINGS FOR MANHOLE TYPES, SIZE, DEPTHS AND SPECIFIC REQUIREMENTS.
 - FOR SETTING OUT DIMENSIONS OF SWP'S, RWP'S ETC. REFER TO ARCHITECT'S DRAWINGS.
 - ALL PIPES UP TO 300mm DIAMETER TO BE VITRIFIED CLAY, EXTRA STRENGTH TO BSEN 295 OR BS 65 WITH PLAIN ENDED SLEEVED OR SOCKETED FLEXIBLE JOINTS. ALL PIPES OF 375mm DIAMETER AND OVER, TO BE SULPHATE RESISTING CONCRETE CLASS M WITH SOCKETED FLEXIBLE JOINTS.
 - INVERTS OF INCOMING BRANCHES SHALL BE AT SPRINGING LEVEL TO THE MAIN PIPE AND FORMED GENERALLY USING CHANNEL PIPES AND SLIPPER BENDS, CUT TO SUIT.
 - ALL GULLY AND DRAINAGE CHANNEL CONNECTIONS SHALL BE 150mm DIAMETER AND TRAPPED UNLESS OTHERWISE SPECIFIED.
 - ALL FOUL AND RWP CONNECTIONS SHALL BE 100MM DIAMETER UNLESS OTHERWISE SPECIFIED.
 - ALL PRE-CAST CONCRETE UNITS IN THE DRAINAGE WORKS SHALL BE MANUFACTURED USING SULPHATE RESISTING CEMENT.
 - MANHOLE COVERS AND FRAMES SHALL BE TO BSEN 124 AND KITEMARKED. COVER AND FRAMES SHALL BE HEAVY DUTY D400 IN CARRIAGEWAYS AND VEHICULAR AREAS AND MEDIUM DUTY B125 IN FOOTWAYS AND SOFT LANDSCAPING. IN BLOCK PAVED AREAS COVERS SHALL BE RECESSED FABRICATED STEEL.
 - REFER TO STRUCTURAL DRAWINGS FOR DETAILS OF MANHOLES AND DRAINS CONSTRUCTED WITHIN FLOOR SLABS AND FOUNDATIONS.
 - COVER LEVELS ARE TO BE ADJUSTED LOCALLY TO SUIT FINISHED GROUND LEVELS.
 - HEALTH & SAFETY: THE WORKS SHALL BE CARRIED OUT BY SPECIALIST COMPETENT AND EXPERIENCED CONTRACTORS WHO ARE MEMBERS OF A RECOGNISED NATIONAL ORGANISATION. OPERATIVES SHALL HAVE RECEIVED FULL AND APPROPRIATE TRAINING FOR THE OPERATION THEY ARE TO UNDERTAKE. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL PERTINENT HEALTH AND SAFETY REGULATIONS.
 - PIPES TO BE LAID TO A MINIMUM GRADIENT OF 1:150 UNLESS NOTED OTHERWISE.

Foul Manhole Schedule

Manhole Ref	Cover Level	Invert Level	Depth (m)	Size/Construction	Cover/Grade
F1	3.15	2.40	0.75	1200/B	D400
F2	3.15	2.01	1.14	1200/B	D400
F3	3.15	1.66	1.49	1200/B	D400
F4	3.15	TBC	TBC	1200/B	B125

PRELIMINARY

P7	PRELIMINARY	HDL/04.19	HDL/04.19	HDL/04.19
P6	PRELIMINARY	HDL/03.19	HDL/03.19	HDL/03.19
P5	PRELIMINARY	HDL/02.19	HDL/02.19	HDL/02.19
P4	PRELIMINARY	HDL/01.19	HDL/01.19	HDL/01.19
P3	PRELIMINARY	HDL/01.19	HDL/01.19	HDL/01.19
P2	PRELIMINARY	HDL/01.19	HDL/01.19	HDL/01.19
P1	PRELIMINARY	HDL/07.18	HDL/07.18	HDL/07.18
Version	Amendment	Revised by and date	Checked by and date	Approved by and date
ORIGINAL DRAWING SIZE - A1		X-REFS: -		
CAD REF: -		-		



HAMILL DAVIES LIMITED
Consulting Civil and Structural Engineers

Client: JEREMY SAMUELS
Project: DOLPHIN QUAY, EMSWORTH
Drawing Title: DRAINAGE & EXTERNAL WORKS LAYOUT
Purpose: PRELIMINARY
Issuing Office: SWANMORE
Telephone: 01489 893 596

Drawn: HDL
Designed: -
Drawing Number: 18-3130-501
Version: P7

Scale: 1:125 @ A1