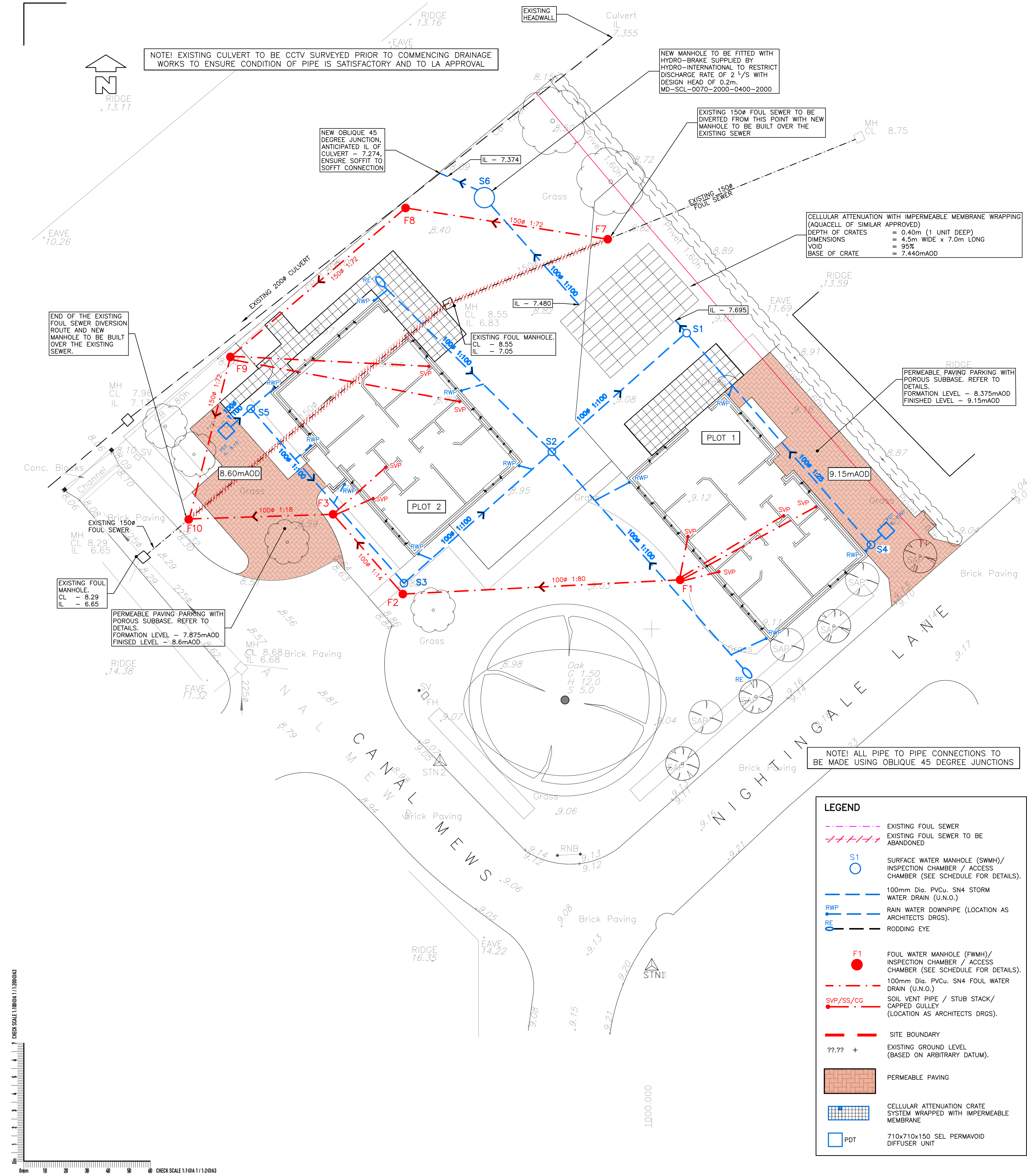




| SUDS OPERATION & MAINTENANCE                                         |                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GENERAL                                                              |                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                            |
| MAINTENANCE SCHEDULE                                                 | REQUIRED ACTION                                                                                                                                                                                       | FREQUENCY                                                                                                                                                                                                                                                                                                                  |
| REGULAR MAINTENANCE                                                  | REMOVE SEDIMENT & DEBRIS FROM PRE-TREATMENT DEVICES & FLOOR OF INSPECTION TUBE OR CHAMBER                                                                                                             | ANNUALLY                                                                                                                                                                                                                                                                                                                   |
|                                                                      | CLEANING OF ANY GUTTERS & ANY FILTERS ON DOWNPIPES                                                                                                                                                    | ANNUALLY                                                                                                                                                                                                                                                                                                                   |
|                                                                      | TRIMMING ANY ROOTS THAT MAY BE CAUSING BLOCKAGES                                                                                                                                                      | ANNUALLY (OR AS REQUIRED).                                                                                                                                                                                                                                                                                                 |
| MONITORING                                                           | INSPECT SILT TRAPS AND NOTE RATE OF SEDIMENT ACCUMULATION                                                                                                                                             | MONTHLY IN THE FIRST YEAR & THEN ANNUALLY                                                                                                                                                                                                                                                                                  |
| OPERATION AND MAINTENANCE REQUIREMENTS FOR PERMEABLE PAVING          |                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                            |
| MAINTENANCE SCHEDULE                                                 | REQUIRED ACTION                                                                                                                                                                                       | TYPICAL FREQUENCY                                                                                                                                                                                                                                                                                                          |
| REGULAR MAINTENANCE                                                  | BRUSHING AND VACUUMING (STANDARD COSMETIC SWEEP OVER WHOLE SURFACE)                                                                                                                                   | ONCE A YEAR, AFTER AUTUMN LEAF FALL, OR REDUCED FREQUENCY AS REQUIRED, BASED ON SITE-SPECIFIC OBSERVATIONS OF CLOGGING OR MANUFACTURER'S RECOMMENDATIONS - PAY PARTICULAR ATTENTION TO AREAS WHERE WATER RUNS ONTO PVIOUS SURFACE FROM ADJACENT IMPERMEABLE AREAS AS THIS AREA IS MOST LIKELY TO COLLECT THE MOST SEDIMENT |
|                                                                      | STABILISE AND MOW CONTRIBUTING AND ADJACENT AREAS                                                                                                                                                     | AS REQUIRED                                                                                                                                                                                                                                                                                                                |
| OCCASIONAL MAINTENANCE                                               | REMOVAL OF WEEDS OR MANAGEMENT USING GLYPHOSPATE APPLIED DIRECTLY INTO THE WEEDS BY AN APPLICATOR RATHER THAN SPRAYING                                                                                | AS REQUIRED - ONCE PER YEAR ON LESS FREQUENTLY USED PAVEMENTS                                                                                                                                                                                                                                                              |
| REMEDIAL ACTIONS                                                     | REMEDIAL WORK TO ANY DEPRESSIONS, RUTTING AND CRACKED OR BROKEN BLOCKS CONSIDERED DETRIMENTAL TO THE STRUCTURAL PERFORMANCE OR A HAZARD TO USERS, AND REPLACE LOST JOINTING MATERIAL                  | AS REQUIRED                                                                                                                                                                                                                                                                                                                |
|                                                                      | REHABILITATION OF SURFACE AND UPPER SUB-STRUCTURES BY REMEDIAL SWEEPING                                                                                                                               | EVERY 10 TO 15 YEARS OR AS REQUIRED (IF INFILTRATION PERFORMANCE IS REDUCED DUE TO SIGNIFICANT CLOGGING)                                                                                                                                                                                                                   |
| MONITORING                                                           | INITIAL INSPECTION                                                                                                                                                                                    | MONTHLY FOR THREE MONTHS AFTER INSTALLATION                                                                                                                                                                                                                                                                                |
|                                                                      | INSPECT FOR EVIDENCE OF POOR OPERATION AND/OR WEED GROWTH - IF REQUIRED, TAKE REMEDIAL ACTION                                                                                                         | THREE-MONTHLY, 48 HOURS AFTER LARGE STORMS IN FIRST SIX MONTHS                                                                                                                                                                                                                                                             |
|                                                                      | INSPECT SILT ACCUMULATION RATES AND ESTABLISH APPROPRIATE BRUSHING FREQUENCIES                                                                                                                        | ANNUALLY                                                                                                                                                                                                                                                                                                                   |
|                                                                      | MONITOR INSPECTION CHAMBERS                                                                                                                                                                           | ANNUALLY                                                                                                                                                                                                                                                                                                                   |
| MONITORING                                                           | INSPECT TREATED TIMBER EDGING AND REPLACE AS AND WHEN REQUIRED.                                                                                                                                       | ANNUALLY                                                                                                                                                                                                                                                                                                                   |
|                                                                      |                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                            |
| OPERATION AND MAINTENANCE REQUIREMENTS FOR ATTENUATION STORAGE TANKS |                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                            |
| MAINTENANCE SCHEDULE                                                 | REQUIRED ACTION                                                                                                                                                                                       | TYPICAL FREQUENCY                                                                                                                                                                                                                                                                                                          |
| REGULAR MAINTENANCE                                                  | INSPECT AND IDENTIFY ANY AREA THAT ARE NOT OPERATING CORRECTLY. IF REQUIRED, TAKE REMEDIAL ACTION                                                                                                     | MONTHLY FOR 3 MONTHS, THEN ANNUALLY                                                                                                                                                                                                                                                                                        |
|                                                                      | REMOVE DEBRIS FROM THE CATCHMENT SURFACE (WHERE IT MAY CAUSE RISK TO PERFORMANCE)                                                                                                                     | MONTHLY                                                                                                                                                                                                                                                                                                                    |
|                                                                      | FOR SYSTEMS WHERE RAINFALL INFILTRATES INTO THE TANK FROM ABOVE, CHECK SURFACE OF FILTER FOR BLOCKAGE BY SEDIMENT, ALGAE OR OTHER MATTER. REMOVE AND REPLACE SURFACE INFILTRATION MEDIUM AS NECESSARY | ANNUALLY                                                                                                                                                                                                                                                                                                                   |
|                                                                      | REMOVED SEDIMENT FROM PRE-TREATMENT STRUCTURES AND/OR INTERNAL FOREBAYS                                                                                                                               | ANNUALLY, OR AS REQUIRED                                                                                                                                                                                                                                                                                                   |
| REMEDIAL ACTIONS                                                     | REPAIR/REHABILITATE INLETS, OUTLETS, OVERFLOWS AND VENTS                                                                                                                                              | AS REQUIRED                                                                                                                                                                                                                                                                                                                |
| MONITORING                                                           | INSPECT/CHECK ALL INLETS, OUTLETS, VENTS AND OVERFLOWS TO ENSURE THAT THEY ARE IN GOOD CONDITION AND OPERATING AS DESIGNED                                                                            | ANNUALLY                                                                                                                                                                                                                                                                                                                   |
|                                                                      | SURVEY INSIDE OF TANK FOR SEDIMENT BUILD-UP AND REMOVE IF NECESSARY                                                                                                                                   | EVERY 5 YEARS OR AS REQUESTED                                                                                                                                                                                                                                                                                              |

- NOTES
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- GENERAL NOTES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS AND DETAILS.
  - ALL FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS.
  - ANY DISCREPANCIES BETWEEN THIS DRAWING AND OTHER INFORMATION IS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF THE WORKS ON SITE.
  - THE TOPOGRAPHY SURVEY SHOWN ON THIS DRAWING HAS BEEN PRODUCED BY STUART BAILEY LAND SURVEY ON JANUARY 2017, BASED ON ARBITRARY DATUM RATHER THAN THE TRUE DATUM INFORMATION. IT SHALL BE NOTED THAT ARCH ASSOCIATES TAKES NO RESPONSIBILITIES TO THIRD PARTIES PRODUCTS.
  - THE MAIN CONTRACTOR SHALL BE RESPONSIBLE FOR THE SETTING OUT AND ACCURACY OF ALL DIMENSIONS.
  - THE CONTRACTOR IS TO ENSURE THE STABILITY AND STRUCTURAL INTEGRITY OF THE EXISTING PROPERTY AT ALL TIMES DURING WORKS AND IS TO BE RESPONSIBLE FOR ALL PROPPING AND SHORING AS REQUIRED.
  - MAIN CONTRACTOR TO PROVIDE AND FIX SUITABLE BRACING AND PROPPING FOR ALL ELEMENTS IN THE TEMPORARY CONDITION DURING CONSTRUCTION STAGE, SUCH AS TO ENSURE STRUCTURE STABILITY AT ALL TIMES.
  - IT IS THE CONTRACTORS SOLE RESPONSIBILITY FOR ASCERTAINING SAFE DISPOSAL OF ANY OFF-SITE EXCAVATED SPOIL. NO CLAIM RESULTING FROM ABNORMAL TIP REQUIREMENTS WILL BE ENTERTAINED.
- DRAINAGE
- ALL MATERIALS AND WORKMANSHIP TO 'SEWERS FOR ADOPTION, 7th EDITION'
  - ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH BS EN 752-1: 1996
  - WHEN USING VITRIFIED CLAY PIPEWORK WITH FLEXIBLE JOINTS, SUPERSTRENGTH SHALL BE USED. ALL ADAPTABLE WORKS SHALL USE PIPEWORK FOR NON-ADOPTED SYSTEM PVCU-SN4 CLASS PIPEWORK AND FITTINGS MAY BE SUBSTITUTED.
  - CONCRETE ENCASMENT, MINIMUM 150 BED AND HAUNCH, TO BE USED ON PIPEWORK UNDER ROADS WITH LESS THAN 1200 COVER TO CROWN.
  - UNLESS OTHERWISE STATED, ALL PIPEWORK TO BE BEDDED AND SURROUNDED IN 10mm SINGLE SIZE AGGREGATE UP TO 450mm DIAMETER. FOR LARGER PIPEWORK, 20mm SHALL BE USED.
  - REFER TO MANHOLE SCHEDULE FOR SIZES, COVERS ETC.
  - ALL MATERIALS TO COMPLY WITH THE RELEVANT BS-EN, LATEST EDITION, FOR PIPEWORK AND FITTING.
  - UPON COMPLETION, ALL WORKS TO BE THOROUGHLY CLEANED BY FLUSHING.

| CDM REGULATIONS 2015                                                                                                                                                                                                                                                                                                           |        |         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------|
| ARCH ASSOCIATES HAVE CONSIDERED AND, WHERE REASONABLY PRACTICABLE, AVOIDED FORESEEABLE RISKS IN THE PREPARATION OF THE DESIGN SHOWN ON THIS AND RELATED DRAWINGS. SIGNIFICANT RISKS WHICH REMAIN AND ASSOCIATED CONTROL MEASURES ARE IDENTIFIED BELOW AND SHOULD BE GIVEN PARTICULAR ATTENTION BY THE MAIN CONTRACTOR ON SITE. |        |         |
| ACTIVITY                                                                                                                                                                                                                                                                                                                       | HAZARD | CONTROL |
|                                                                                                                                                                                                                                                                                                                                |        |         |
| NOTE: THE ABOVE ASSESSMENT RECORDS ONLY THOSE ELEMENTS CONSIDERED UNUSUAL, DIFFICULT TO MANAGE OR OUTSIDE OF THE ANTICIPATED EXPERTISE OF A COMPETENT CONTRACTOR                                                                                                                                                               |        |         |

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| FOUL MANHOLE SCHEDULE |             |              |                 |      |        |              |                                                                                                    |
|-----------------------|-------------|--------------|-----------------|------|--------|--------------|----------------------------------------------------------------------------------------------------|
| REF                   | COVER LEVEL | INVERT LEVEL | DEPTH TO INVERT | SIZE | TYPE   | COVER        | COMMENTS                                                                                           |
| F1                    | 9.150       | 8.400        | 0.750           | 450ø | TYPE 3 | B125 300x300 |                                                                                                    |
| F2                    | 8.900       | 7.600        | 1.300           | 450ø | TYPE 3 | B125 300x300 |                                                                                                    |
| F3                    | 8.850       | 7.150        | 1.700           | 450ø | TYPE 3 | B125 450x450 |                                                                                                    |
| F7                    | 8.820       | ~7.200       | 1.620           | 450ø | TYPE 3 | B125 450x450 | START OF THE DIVERSION ROUTE. NEW MANHOLE TO BE INSTALLED OVER THE EXISTING 150mm DIA. FOUL SEWER. |
| F8                    | 8.200       | 7.030        | 1.170           | 450ø | TYPE 3 | B125 450x450 |                                                                                                    |
| F9                    | 8.200       | 6.830        | 1.370           | 450ø | TYPE 3 | B125 450x450 |                                                                                                    |
| F10                   | 8.330       | 6.700        | 1.630           | 450ø | TYPE 3 | C250 450x450 | END OF THE DIVERSION ROUTE. NEW MANHOLE TO BE INSTALLED OVER THE EXISTING 150mm DIA. FOUL SEWER.   |

| SURFACE WATER MANHOLE SCHEDULE |             |              |                 |       |        |              |                                                                                                        |
|--------------------------------|-------------|--------------|-----------------|-------|--------|--------------|--------------------------------------------------------------------------------------------------------|
| REF                            | COVER LEVEL | INVERT LEVEL | DEPTH TO INVERT | SIZE  | TYPE   | COVER        | COMMENTS                                                                                               |
| S1                             | 9.000       | 7.724        | 1.276           | 450ø  | TYPE 3 | B125 450x450 | 300MM SUMP/CATCHPIT                                                                                    |
| S2                             | 8.850       | 7.830        | 1.020           | 450ø  | TYPE 3 | B125 450x450 |                                                                                                        |
| S3                             | 8.900       | 7.945        | 0.955           | 450ø  | TYPE 3 | B125 450x450 |                                                                                                        |
| S4                             | 9.100       | 8.400        | 0.700           | 450ø  | TYPE 3 | B125 450x450 | 300MM SUMP/CATCHPIT                                                                                    |
| S5                             | 8.850       | 8.082        | 0.768           | 450ø  | TYPE 3 | B125 450x450 | 300MM SUMP/CATCHPIT                                                                                    |
| S6                             | 8.300       | 7.395        | 0.905           | 1200ø | TYPE 2 | C250 675x675 | HYDRO-BRAKE SUPPLIED BY HYDRO-INTERNATIONAL TO RESTRICT FLOW RATE TO 2 1/2 S, WITH DESIGN HEAD AT 0.2m |

| P7       | 17.06.21 | AMENDED TO SUIT LLFA COMMENTS  | CH  |
|----------|----------|--------------------------------|-----|
| P6       | 28.05.21 | AMENDED TO SUIT LLFA COMMENTS  | CH  |
| P5       | 18.05.21 | AMENDED TO SUIT LLFA COMMENTS  | CH  |
| P4       | 12.04.21 | PLOT 1 UPDATED                 | JH  |
| P3       | 09.04.21 | SITE LAYOUT & DRAINAGE UPDATED | JH  |
| P2       | 12.08.19 | SITE LAYOUT & DRAINAGE UPDATED | JH  |
| P1       | 12.12.18 | PRELIMINARY ISSUE FOR COMMENT  | PJM |
| Revision | Date     | Description                    | By  |

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Architect: STUDIO LACK ARCHITECTURE  
Project Title: LAND OFF CANAL MEWS BARNHAM

Drawing Title: DRAINAGE STRATEGY

|                    |                 |                 |               |                 |
|--------------------|-----------------|-----------------|---------------|-----------------|
| Scale: 1:125       | Paper Size: A1  | Date: NOV. 2018 | Drawn By: PJM | Checked By: AWR |
| Project No: SPR032 | Drawing No: 500 | Revision: P7    |               |                 |