
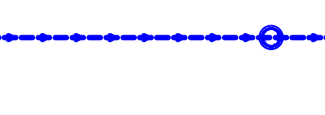

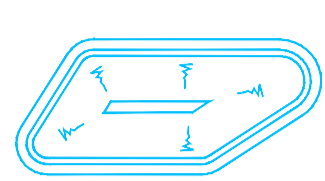








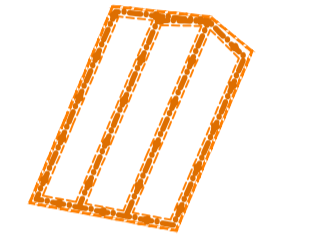
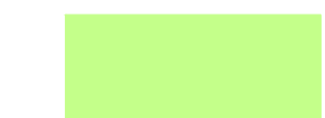
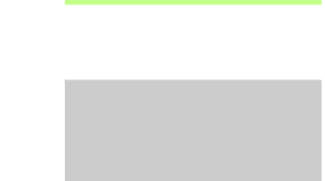


DRAINAGE KEY

-  SIC
CL:46.100
IL:45.265
-  PRIVATE DRAN AND ACCESS CHAMBER.
LEVELS AS SHOWN
150mm DRAIN UNLESS OTHERWISE STATED
450mm INSPECTION CHAMBER, UNLESS OTHERWISE STATED
-  ACO RainDrain, B125 GRATING WITH SUMP OUTLET UNIT.
-  PROPOSED INFILTRATION BASIN
DESIGN INFILTRATION RATE OF 0.5436m/hr AS RECORDED.
REFER TO GROUND INVESTIGATION REPORT.
FOOTPRINT TO BE AGREED AT DETAILED DESIGN WITH
LANDSCAPING PROPOSALS AND DRAINAGE REQUIREMENTS.
-  150mm LAND DRAIN
-  150mm PERFORATED PIPE
-  INDICATIVE LOCATION OF RAIN WATER PIPE.
RODDING PROVISION TO BE MADE.
-  INDICATIVE LOCATION OF SVP. RODDING
PROVISION TO BE MADE.
-  FIC
CL:46.000
IL:45.350
-  PRIVATE INSPECTION CHAMBER.
450mm SHAFT DIAMETER, UP TO 1200mm MAX DEPTH
AND 100mm DRAIN
-  PROPOSED BIN REFUSE GULLY
-  PRIVATE INSPECTION CHAMBER.
300mm SHAFT DIAMETER, 600mm DEEP
-  PROPOSED FOUL DRAINAGE FIELD
150mm PERFORATED PIPES, IN 600mm WIDE TRENCHES. PIPES
LAID AT GRADIENT 1 IN 300. REFER TO BUILDING REGULATIONS
PART H - SECTION ON DRAINAGE FIELDS.
RECORDED PERCOLATION RATE - 52.26sec/mm
REQUIRED AREA TO BE FORMED BASED ON GROUND
PERCOLATION AND IN ACCORDANCE WITH BUILDING REGULATION
PART H

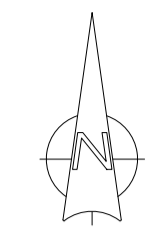
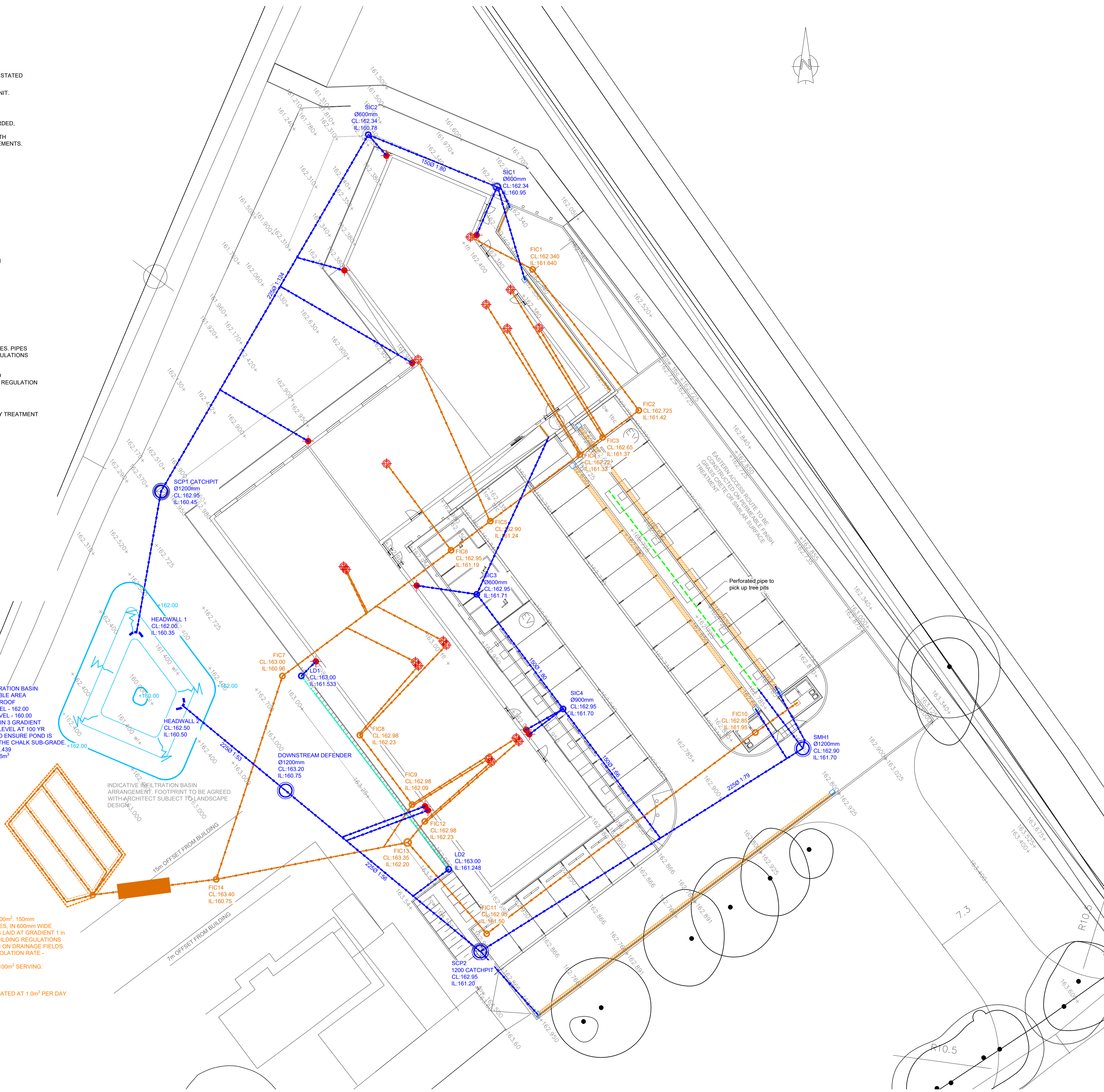
CATCHMENT KEY

-  PROPOSED GREEN ROOF AREA - 1,530m²
-  PROPOSED EXTERNAL AREA - 1,577m²

PROPOSED INFILTRATION BASIN
 3100m² IMPERMEABLE AREA
 1500m² OF GREEN ROOF
 TOP OF BASIN LEVEL - 162.00
 BASE OF BASIN LEVEL - 160.00
 SIDE SLOPES AT 1 IN 3 GRADIENT
 MAXIMUM WATER LEVEL AT 100 YR
 CONSTRUCTION TO ENSURE POND IS
 EXCAVATED INTO THE CHALK SUB-GRADE.
 STORM + 40% - 161.439
 TOTAL VOLUME ~46m³

INDICATIVE INFILTRATION BASIN
 ARRANGEMENT. FOOTPRINT TO BE AGREED
 WITH ARCHITECT SUBJECT TO LANDSCAPE
 DESIGNER'S ADVICE

DRAINAGE FIELD
 TOTAL AREA OF 100m². 150mm
 PERFORATED PIPES, IN 600mm WIDE
 TRENCHES. PIPES LAID AT GRADIENT 1 IN
 300. REFER TO BUILDING REGULATIONS
 PART H - SECTION ON DRAINAGE FIELDS.
 ESTIMATED PERCOLATION RATE -
 52.26sec/mm
 REQUIRED AREA 100m² SERVING:
 14 WCs
 1 KITCHENS
 2 SHOWERS
 TOTAL USE ESTIMATED AT 1.0m³ PER DAY



- NOTES**
1. This drawing is to be read in conjunction with all relevant architects', engineers', and specialist's drawings, bills of quantities and specifications.
 2. Do not scale off this drawing.
 3. All dimensions are to be confirmed on site by the contractor.
 4. Refer to MHA drawing 130 for all general notes.

- DRAINAGE NOTES**
1. THIS DRAWING SHOULD NOT BE REPRODUCED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.
 2. DO NOT SCALE FROM THIS DRAWING. UNITS ARE IN METRES UNLESS OTHERWISE SPECIFIED.
 3. THE CONTRACTOR IS TO CHECK ALL INFORMATION PROVIDED PRIOR TO COMMENCING WORKS AND SEEK CLARIFICATION FROM THE ENGINEER IN RESPECT TO ANY AMBIGUITIES FOUND.
 4. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER SCHEME SPECIFIC DRAWINGS.
 5. NON-ADOPTED DRAINAGE, TO BUILDING REGULATIONS PART H, (INCLUDING DITCHES AND PONDS) ARE TO REMAIN THE RESPONSIBILITY OF THE DEVELOPER/SITE OWNER UNLESS OTHERWISE TRANSFERRED.
 6. PIPE MATERIALS SHALL BE AS FOLLOWS:
 DIAMETER
 1500 TO 2250 - CLAYWARE CLASS 120 TO BS EN 295
 3000 AND ABOVE - CLASS 120 CONCRETE TO BS EN 1916
 PLASTIC PIPEWORK MAY BE PROPOSED AND IS SUBJECT TO APPROVAL BY THE DESIGN ENGINEER AS APPROPRIATE
 7. BACKFILL TO TRENCHES MAY BE SUITABLE EXCAVATED MATERIAL IN LANDSCAPED AREAS. GRANULAR MATERIAL BACKFILL IS TO BE USED UNDER HARDSTANDINGS AND ROADS.
 8. ALL MANHOLE COVER, AND GULLY TOPS ARE TO COMPLY WITH THE STRENGTH / GROUP REQUIREMENTS OF BS EN 124 AND KITE MARKED.
 - 8.1. B125 LOAD CLASS FOR LANDSCAPED AREAS
 - 8.2. C250 LOAD CLASS IN PAVED AREAS
 - 8.3. D400 LOAD CLASS AREAS TRAFFICKED BY REFUSE VEHICLES AND DELIVERY VANS
 9. COVER LEVELS FOR MANHOLES ARE TO BE ADJUSTED TO MATCH SURROUNDING FINISHED LEVELS ON SITE.
 10. WHERE PIPE WORK HAS LESS THAN 0.9m IN VEHICULAR AREAS AND NOT PROTECTED BY A CELL WEBB, THEY ARE TO BE SURROUNDED WITH 150mm OF CLASS STA CONCRETE WITH FLEXIBILITY OF JOINTS MAINTAINED AS STATED IN CLAUSE 5.2.26 OF THE WATER UK GUIDE.
 11. CONCRETE BED AND SURROUND TO PIPE WORK SHALL USE SULPHATE-RESISTING CEMENT UNLESS ADVISED OTHERWISE WITHIN THE SITE INVESTIGATION REPORT.

P03	11.09.23	FJ	UPDATED TO SUIT ARCHITECT'S LAYOUT
P02	17.06.22	CH	UPDATED FOR ARCHITECT COMMENTS
P01	10.06.22	CH	ISSUED FOR PLANNING
Rev.	Date	Made by	Amendments

PLANNING

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Job Title
BEECHES FARM, TRING

Drawing Title
PROPOSED DRAINAGE LAYOUT

Scales: 1:200 @ A1

Drawn	CH	Date	08.09.2023	Checked	
Job No	21026	Drawing No	510	Revision	P03