



PERMEABLE PAVING :
SURFACE WATER FROM CAR PARK TO PERCOLATE THROUGH PERMEABLE PAVING IN PARKING BAYS, AND INTO 300mm DEEP SUB-BASE, FORMED OF 20mm NO FINES AGGREGATE (0.30 POROSITY). SURFACE WATER TO BE CONVEYED TO MAIN DRAINAGE NETWORK VIA A 150mm Ø PERFORATED PIPE WITHIN SUB-BASE MATERIAL

FILTER DRAIN :
SURFACE WATER RUN-OFF FROM PEDESTRIAN AREA TO DISCHARGE TO 300 x 300mm GRANULAR TRENCH FILLED WITH 20mm NO FINES AGGREGATE. SURFACE WATER TO BE CONVEYED TO MAIN DRAINAGE BY 100mm Ø PERFORATED PIPE

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SURFACE WATER RUN-OFF FROM PEDESTRIAN AREA TO DISCHARGE TO 300 x 300mm GRANULAR TRENCH FILLED WITH 20mm NO FINES AGGREGATE. SURFACE WATER TO BE CONVEYED TO MAIN DRAINAGE BY 100mm Ø PERFORATED PIPE

EXISTING 225mm Ø SURFACE WATER PIPE ASSUMED TO DISCHARGE TO 825 x 1200mm SURFACE WATER SEWER WITHIN BURTON ROAD

PROPOSED FOUL WATER CONNECTION TO EXISTING 100mm Ø FOUL WATER NETWORK

FLOW CONTROL CHAMBER :
CONTROL - HYDRO-BRAKE
DESIGN HEAD - 1.205m
DESIGN FLOW - 3.50 l/s
DIAMETER - 80mm
UNIT REFERENCE : MD-SHE-0086-3500-1205-3500

MAX. SW DISCHARGE RATES :
Q1 - 3.20 l/s
Q30 - 3.50 l/s
Q100 + CC - 3.50 l/s

SW ATTENUATION - CELLULAR UNITS :
TANK LENGTH - 15.00m
TANK WIDTH - 10.00m
TANK AREA - 150.00m²
TANK DEPTH - 1.20m
TANK VOLUME - 180.00m³
TANK INVERT - 31.550m
TANK SOFFIT - 32.750m

NOTE :
ATTENUATION TANK OUTLINE SHOWN IS INDICATIVE ONLY. CELLULAR UNITS MAY BE ARRANGED IN ANY SHAPE TO SUIT ECOLOGIST'S REQUIREMENTS / UNINTERRUPTED SCRUB AREAS. HOWEVER THE TANK AREA, VOLUME, DEPTH AND INVERTS SHOWN ABOVE **MUST** BE MAINTAINED

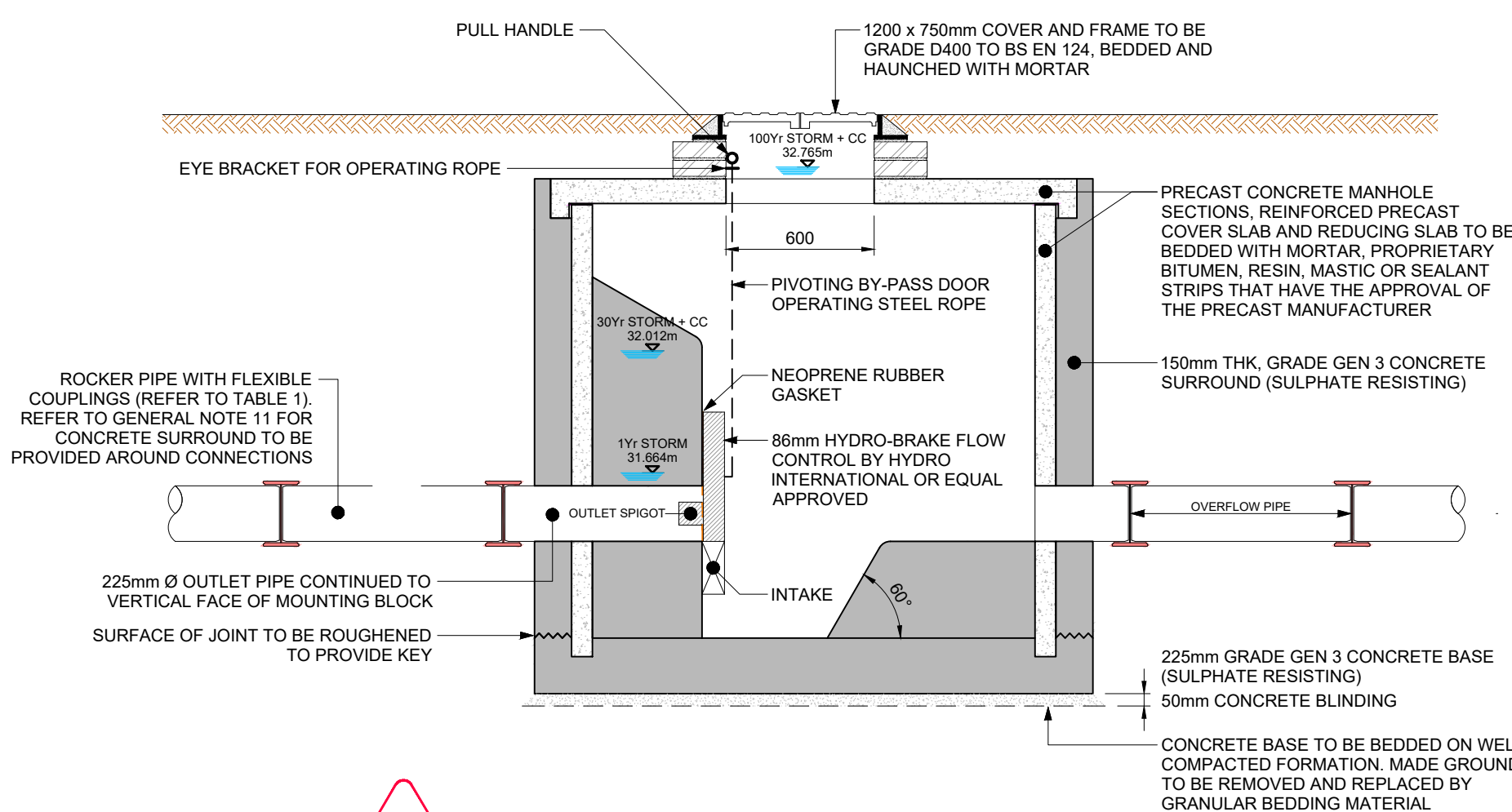
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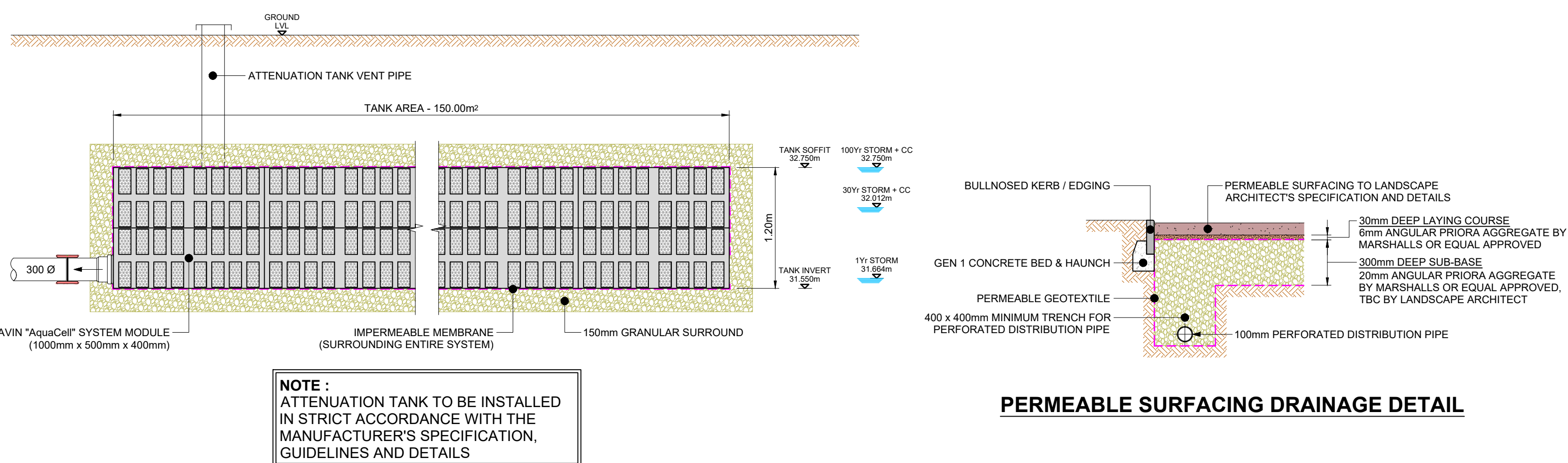
SURFACE WATER DESIGN EXCEEDANCE :

IN THE UNLIKELY EVENT OF AN EXTREME STORM GREATER THAN 100-YEAR + 45% CLIMATE CHANGE, OR POOR MAINTENANCE OF THE SUDS FEATURES AND / OR PIPEWORK, POTENTIAL FLOODING OF THE DRAINAGE NETWORK COULD OCCUR. SURFACE WATER FLOW PATHS TO FOLLOW EXISTING AND PROPOSED GROUND TOPOGRAPHY, WHERE WATER WILL FLOW TOWARDS THE DEVELOPMENT BOUNDARIES, AND INTO BURTON AND FIELDEN ROAD.

FLOOD WATER WILL FLOW AWAY FROM THE PROPOSED BUILDING, AND WILL NOT FLOW DIRECTLY TOWARDS EXISTING DWELLINGS / PROPERTIES OUTSIDE THE DEVELOPMENT BOUNDARY. THE FLOOD WATER WITHIN THE ROADS WILL BE CONTAINED DUE TO THE ROAD HAVING A GRADIENT (WATER TO FLOW ALONG ROAD) AND UPSTAND KERBS.



FLOW CONTROL CHAMBER DETAIL



TYPICAL ATTENUATION TANK (CELLULAR UNITS) DETAIL

PERMEABLE SURFACING DRAINAGE DETAIL

NOTES :

- IF THIS DRAWING HAS BEEN RECEIVED ELECTRONICALLY IT IS THE RECIPIENTS RESPONSIBILITY TO PRINT THE DOCUMENT TO THE CORRECT SCALE.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE. IT IS RECOMMENDED THAT INFORMATION IS NOT SCALED OFF THIS DRAWING.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
- ANY DISCREPANCIES NOTED ON SITE ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

LEGEND :

- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED FOUL WATER DRAINAGE
- EXISTING SURFACE WATER SEWER
- EXISTING FOUL WATER SEWER
- FILTER DRAIN
- PERMEABLE PAVING
- EXCEEDANCE FLOW ROUTES
- DEVELOPMENT BOUNDARY

THIS DRAWING IS TO BE USED FOR **PRELIMINARY INFORMATION ONLY** AND **MUST NOT** BE READ AS A CONSTRUCTION ISSUE. IT INDICATES DESIGN INTENT ONLY AND IS SUBJECT TO AMENDMENT DURING FINAL DESIGN DEVELOPMENT

PRELIMINARY DRAWING ISSUE

P.05	FLOW CONTROL CHAMBER DETAIL REVISED	20.11.23	MDS
P.04	WATER LEVELS ADDED TO HYDRO-BRAKE & ATTENUATION TANK DETAILS	02.11.23	SR
P.03	DRAINAGE AMENDED TO SUIT NEW SITE PLAN	05.10.23	MDS
P.02	ATTENUATION TANK RESIZED. SWALE / SHALLOW POND REMOVED	28.09.23	SR
P.01	PRELIMINARY ISSUE	20.01.23	MDS
Rev	Description	Date	Drawn



Manchester University
NHS Foundation Trust

Appointed Party Logo / Information :



Project :

MFT WITHINGTON CDC

Title :

PROPOSED BELOW GROUND DRAINAGE LAYOUT

Status :	Purpose of Issue :	
S2	ISSUED FOR INFORMATION	
Drawn By :	Checked By :	Date :
MS	YA	JAN '23
Scale @ A1 :	CCS Project Number :	
1:200	22-2357	
Project Number Originator Volume Level Type Role Sheet Number :	Rev :	
22182-CCS-WCH006-XX-DR-S-93100	P.05	