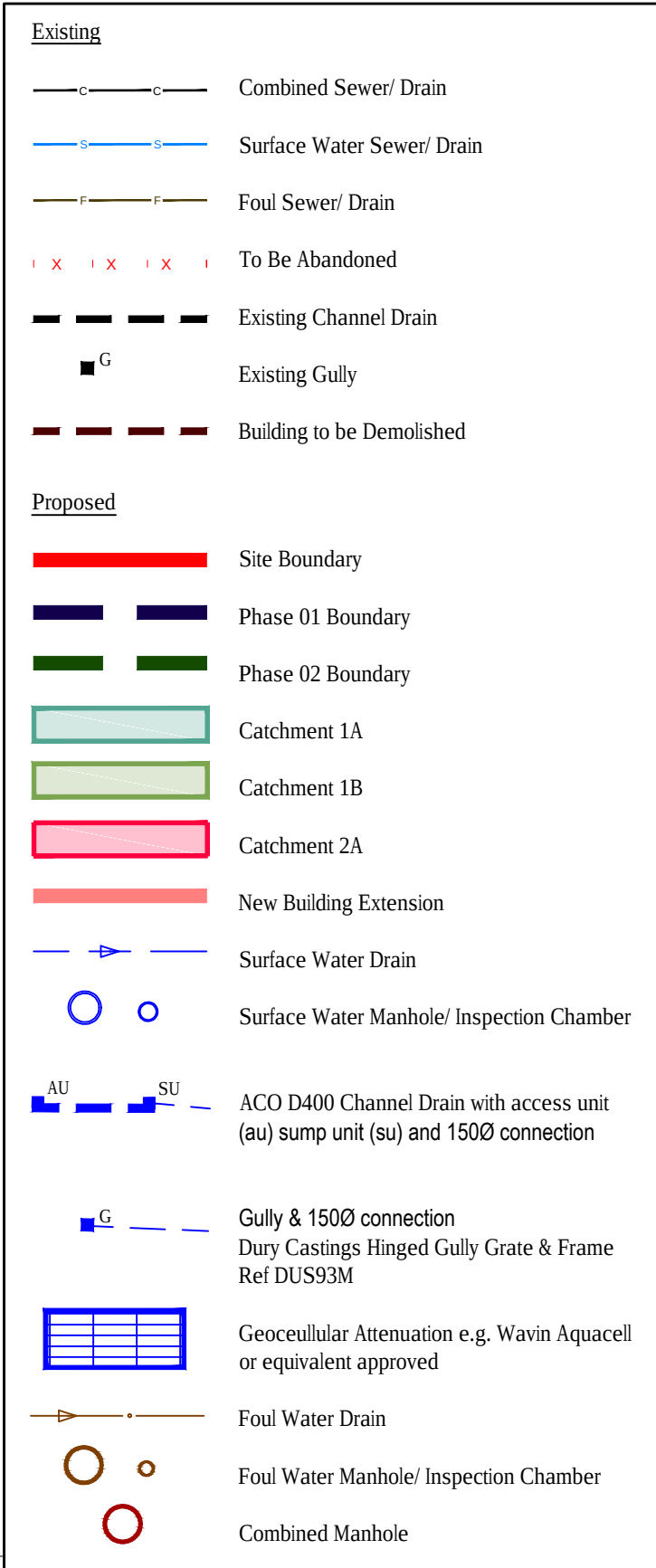




EXITING KERB OUTLETS REPLACED WITH NEW ROAD GULLIES. EXISTING CONNECTIONS TO BE RE-USED

PROPOSED GEOCELLULAR ATTENUATION TANK OR EQUIVALENT APPROVED WITH HYDROBRAKE MANHOLE DOWNSTREAM.
 Q_{MAX} : 9.5 (Q_2) & 30.0 ($Q_{100+40\%}$) l/s
 VOL_{MAX} : 35m³
ALL SUBJECT TO DETAILED DESIGN AND AGREEMENT WITH THE LLFA & UNITED UTILITIES.

PROPOSED FOOTBALL PITCH ASSUMED TO BE PROVIDED WITH DRAINAGE SYSTEM TO SPORTS ENGLAND STANDARD. LAYOUT SHOWN IS INDICATIVE. TO BE UNDERTAKEN BY SPECIALIST. ATTENUATION TO BE PROVIDED BELOW SPORTS PITCH.
 Q_{MAX} : 37.18 ($Q_{100+40\%}$) l/s; VOL_{MAX} : 205m³

INDICATIVE OUTFALL MANHOLE FROM PROPOSED SPORTS PITCH

PROPOSED DISCHARGE TO EXISTING PUBLIC SURFACE WATER SEWER AT MAXIMUM DISCHARGE OF 120.0 l/s AS REQUIRED BY UNITED UTILITIES. CONNECTION TO BE CONSTRUCTED BELOW EXISTING RETAINING WALL. ALL DETAILS TO BE CONFIRMED PENDING DETAILED DESIGN AND FURTHER INTRUSIVE INVESTIGATIONS.

APPROXIMATE 5m DEEP MANHOLE (SUBJECT TO FURTHER SURVEY WORK) TO RUN BENEATH EXISTING RETAINING WALL

INDICATIVE ALIGNMENT OF EXISTING UNITED UTILITIES COMBINED SEWER BASED ON RECORD INFORMATION. ASSUMED 6.0m EASEMENT. DETAILS TO BE CONFIRMED.

ALIGNMENT OF DRAIN THROUGH PHASE 2 WORKS SUBJECT TO FURTHER CO-ORDINATION AND DETAILED DESIGN

PROPOSED GEOCELLULAR ATTENUATION TANK OR EQUIVALENT APPROVED WITH HYDROBRAKE MANHOLE DOWNSTREAM.
 Q_{MAX} : 5.90 (Q_2) & 18.62 ($Q_{100+40\%}$) l/s
 VOL_{MAX} : 45m³
ALL SUBJECT TO DETAILED DESIGN AND AGREEMENT WITH THE LLFA & UNITED UTILITIES.

PROPOSED SW DRAIN TAKEN BELOW PROPOSED RETAINING WALL

EXISTING BUILDING TO DRAIN AS CURRENT SITE REGIME. FOUL AND SURFACE WATER CONNECTIONS AND DOWNSTREAM PIPED NETWORK TO BE MAINTAINED

NEW FOUL WATER CONNECTION INTO EXISTING COMBINED DRAIN. UPSTREAM PIPEWORK TO BE ABANDONED.

EXISTING CAR PARK TO DRAIN AS EXISTING REGIME WITH MINOR MODIFICATIONS TO DRAINAGE SYSTEM AS REQUIRED TO SUIT RECONFIGURATION OF LAYOUT. EXISTING DRAINAGE SYSTEM TO BE SURVEYED TO CONFIRM CONDITION AND REQUIREMENT FOR ANY REMEDIAL WORKS. NO INCREASE IN DRAINED AREA AS A RESULT OF THE DEVELOPMENT PROPOSALS

EXISTING DRAINAGE CHANNEL TO BE RETAINED AND MODIFIED AS NECESSARY TO SUIT REDUCED CAR PARK AREA

EXISTING SERVICE YARD TO DRAIN AS EXISTING REGIME WITH MINOR MODIFICATIONS TO DRAINAGE SYSTEM AS REQUIRED TO SUIT RECONFIGURATION OF LAYOUT. EXISTING DRAINAGE SYSTEM TO BE SURVEYED TO CONFIRM CONDITION AND REQUIREMENT FOR ANY REMEDIAL WORKS. NO INCREASE IN DRAINED AREA AS A RESULT OF THE DEVELOPMENT PROPOSALS

AREA ASSUMED TO BE RETAINED AS EXISTING WITH NO INCREASE IN DRAINED CATCHMENT. TO BE CONFIRMED AT DETAILED DESIGN STAGE

EXISTING FOUL & SURFACE WATER SERVING WHITWORTH HOUSE TO BE RETAINED AND INCORPORATED WITHIN NEW BUILD EXTENSION. POTENTIAL REQUIREMENT TO RE-ALIGN / RE-CONSTRUCT TO AVOID NEW SUB-STRUCTURE. FURTHER INVESTIGATIONS TO EXISTING DRAINAGE REQUIRED. DETAILS TO BE CONFIRMED AT DETAILED DESIGN STAGE

NEW FOUL DRAINAGE TO CONNECT INTO EXISTING FOUL SYSTEM. PENDING DETAILED DESIGN AND CONFIRMATION OF CAPACITY DOWNSTREAM

NEW FOUL DRAINAGE TO SERVE PROPOSED GROUND FLOOR SCIENCE LAB/ PREP ROOMS. SUBJECT TO DETAILED DESIGN PENDING RECEIPT OF MEP FOUL FLOW RATES & POP-UP POSITIONS

PROPOSED GEOCELLULAR ATTENUATION TANK OR EQUIVALENT APPROVED WITH HYDROBRAKE MANHOLE DOWNSTREAM.
 Q_{MAX} : 10.83 (Q_2) & 34.20 ($Q_{100+40\%}$) l/s
 VOL_{MAX} : 100m³
ALL SUBJECT TO DETAILED DESIGN AND AGREEMENT WITH THE LLFA & UNITED UTILITIES.

EXISTING ACCESS ROAD AND EXTERNAL PAVED AREAS TO DRAIN AS PER EXISTING REGIME. NO INCREASE IN DRAINED AREA AS A RESULT OF THE DEVELOPMENT PROPOSALS

BUILDING DESIGN PARTNERSHIP SHALL HAVE NO RESPONSIBILITY FOR ANY USE MADE OF THIS DOCUMENT OTHER THAN FOR THAT WHICH IT WAS PREPARED AND ISSUED.

ALL DIMENSIONS SHOULD BE CHECKED ON SITE.

DO NOT SCALE FROM THIS DRAWING.

ANY DRAWING ERRORS OR DIVERGENCES SHOULD BE BROUGHT TO THE ATTENTION OF BUILDING DESIGN PARTNERSHIP AT THE ADDRESS SHOWN BELOW.

NOTES

- ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DETAILS, DRAWINGS AND SPECIFICATIONS.
- EXISTING DRAINAGE, MANHOLE POSITIONS & LEVELS BASED ON UU RECORDS AND BELOW GROUND SERVICES GPR SURVEY
- SERVICES ARE PRESENT IN THE AREA. THE PRESENCE OF SERVICES ON SITE SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORK OR INTRUSIVE INVESTIGATIONS.
- ALL EXISTING CHAMBERS TO BE RETAINED SHALL BE AMENDED TO SUIT THE EXACT FINISHED SURFACE LEVELS.
- PROPOSED COVER LEVELS ARE APPROXIMATE AND ARE TO BE SET TO SUIT THE FINAL FINISHED SURFACE BY THE CONTRACTOR. ALL LEVELS TO LANDSCAPE ARCHITECTS DETAILS.
- THE GULLY AND CHANNEL POSITIONS SHOWN ARE APPROXIMATE BASED ON THE LANDSCAPE ARCHITECTS LEVELS AND SHALL BE CHECKED BY THE CONTRACTOR ON SITE TO SUIT THE EXACT FINISHED LEVEL AND GRADIENT.
- ALL INFORMATION SHOWN ON THIS DRAWING IS INDICATIVE ONLY AND SHOULD NOT BE RELIED UPON FOR CONTRACTUAL OR COST COMMITMENT PURPOSES.
- ATTENUATION CALCULATIONS INCLUDE AN ALLOWANCE OF 40% FOR CLIMATE CHANGE IN ACCORDANCE WITH CURRENT EA GUIDELINES AND PLANNING POLICY.
- FURTHER DRAINAGE SURVEY WORK REQUIRED TO ESTABLISH ROUTES OF ALL DRAINAGE TO BE RETAINED WITHIN THE PROPOSED SCHEME.

ALL DRAINAGE INFORMATION ON THIS DRAWING IS INDICATIVE ONLY AND SUBJECT TO CHANGE AS THE SCHEME IS DEVELOPED AS THE FOLLOWING INFORMATION IS EITHER YET TO BE FINALISED OR DETERMINED.

- DEVELOPMENT LEVELS
- EXISTING DRAINAGE DETAILS
- GROUND CONDITIONS
- RAINWATER PIPE POSITIONS & FLOW RATES
- SURFACE WATER DISCHARGE RATE & POINTS OF CONNECTION
- VOLUMES & EXTENTS OF SURFACE WATER ATTENUATION
- EXISTING UNITED UTILITIES COMBINED/ SURFACE WATER SEWER ALIGNMENT, LEVEL & CONDITION
- FOUL WATER POP-UP POSITIONS & FLOW RATES
- PROPOSED DRAINAGE INVERT & COVER LEVELS

DETAILS OF ALL EXISTING DRAINAGE IS BASED ON THIRD PARTY INFORMATION. DETAILS TO BE CONFIRMED PRIOR TO CONSTRUCTION

THE PROPOSED DRAINAGE STRATEGY IS SUBJECT TO APPROVAL WITH THE LEAD LOCAL FLOOD AUTHORITY AND UNITED UTILITIES.

(P1) SW OUTFALL & DISCHARGE UPDATED ARJ AW 12/07/19

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NOT PLAN

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PROJECT TITLE
THE MANCHESTER COLLEGE
OPENSRAW CAMPUS

DRAWING TITLE
RIBA STAGE 2
FOUL & SURFACE WATER DRAINAGE
GENERAL ARRANGEMENT

PROJECT NUMBER
P3000247

REVISION NO.
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REVISION
P1

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DATE
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