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.

FILTER DRAIN TO CONNECT INTO MH S7.6 SUBJECT TO RECEIPT OF DETAILED EXTERNAL LEVELS. TOTAL LENGTH 52.5m

PROPOSED PERMEABLE PAVEMENT OUTLET CONSISTING OF PERMAVOID RAINWATER DIFFUSER UNITS POSITIONED WITHIN OPEN GRADED SUB-BASE WITH CONNECTION TO SEL FLOW CONTROL CHAMBER FITTED WITH 75mmØ GUARDED ORIFICE

MUGA PERMEABLE ASPHALT SURFACE 0.35m DEEP SUB-BASE STORAGE LAYER CIRCA 50m³ STORAGE, 30% VOID RATIO

FLOW CONTROL CHAMBER WITH INTEGRAL HYDROBRAKE. DISCHARGE RESTRICTED TO 105.0 l/s AS AGREED WITH UNITED UTILITIES. REF: MD-SHE-0378-1050-2900-1050

SURFACE WATER SEWER DIVERSION

FOUL WATER DRAINAGE DIVERSION

MUGA PERMEABLE ASPHALT SURFACE 0.25m DEEP SUB-BASE STORAGE LAYER CIRCA 50m³ STORAGE, 30% VOID RATIO

PROPOSED PERMEABLE PAVEMENT OUTLET CONSISTING OF PERMAVOID RAINWATER DIFFUSER UNITS POSITIONED WITHIN OPEN GRADED SUB-BASE WITH CONNECTION TO SEL FLOW CONTROL CHAMBER FITTED WITH 75mmØ GUARDED ORIFICE

SEL ENVIRONMENTAL FLOW CONTROL CHAMBER FITTED WITH ORIFICE PLATE TO RESTRICT DISCHARGE TO 5.0 l/S

EXISTING DRAINAGE TO BE RETAINED, DIVERTED OR CLOSED IN ACCORDANCE WITH EXISTING DRAINAGE DRAWINGS

TO MEET THE REQUIREMENTS OF UNITED UTILITIES, SPORTS PITCHES THAT ARE TO SPORT ENGLAND STANDARDS AND CONTRIBUTE TO THE MAIN SURFACE WATER DRAINAGE NETWORK ARE TO BE DRAINED AT A RESTRICTED RATE, WITH SUITABLE SILT TRAPS AND CATCHPITS PROVIDED, PRIOR TO CONNECTION TO THE WIDER ONSITE DRAINAGE NETWORK. GRASSED SPORTS PITCHES ARE ALSO TO BE FULLY WRAPPED AND SEALED WITH AN APPROPRIATELY GAUGED IMPERMEABLE MEMBRANE, TO FULLY ISOLATE AND PROTECT FROM THE INGRESS OF GROUND WATER. DETAILS ARE TO BE PROVIDED BY THE SPECIALIST SPORTS PITCH CONTRACTORS.)

EXISTING MANHOLE S28 TO BE OMITTED. EXISTING PIPEWORK TO CONTINUE WITHOUT SIGNIFICANT DROPS IN INVERT LEVEL. SMOOTH TRANSITION TO BE PROVIDED. ALTERNATIVE PROPOSAL WOULD BE TO PROVIDE DIVERSION TO THE PERIMETER OF THE SPORTS PITCH. RETENTION OF EXISTING DRAINAGE SUBJECT TO DETAILED LEVELS STRATEGY.

CCTV SURVEY INDICATES ENCRUSTATION AT 8.44m AND 38.53m AND AN OPEN JOINT AT 23.99m. REMEDIATION MAY BE REQUIRED ON EXISTING RUN.

CCTV SURVEY INDICATES ENCRUSTATION AT JOINTS AT 21.38m, 33.74m AND 48.43m AND ATTACHED DEPOSITS. REMEDIATION MAY BE REQUIRED ON EXISTING RUN.

EXISTING MANHOLE TO BE RELOCATED. COVER LEVELS FOR DIVERSION ARE INDICATIVE AND SUBJECT TO DETAILED LEVELS DESIGN. INVERT LEVELS ARE SUBJECT T CONFIRMATION OF EXISTING DRAINAGE INVERTS ON-SITE

PITCH TO SPORT ENGLAND STANDARD DRAINAGE SHOWN INDICATIVELY DESIGNED AND DETAILED BY OTHERS DISCHARGE RESTRICTED TO 5l/s AREA 6000m² 0.3m DEEP STORAGE LAYER STORAGE 540m³ (30% VOID RATIO)

BINGO HALL
FOLLOWING THE TRANSFERS OF SEWERS IN 2011, AND CONFIRMATION FROM UU, THE EXISTING BINGO HALL DRAINAGE BECOME UU ASSETS WHEN IT ENTERS THIS SCHOOL SITE. ANY DIVERSION AND CLOSURE / ABANDONMENT WORKS ARE SUBJECT TO AGREEMENT WITH UU AND RELEVANT APPLICATIONS ARE TO BE SUBMITTED AND APPROVED BY UU PRIOR TO THE COMMENCEMENT OF ANY WORKS.

EXISTING MANHOLE AND INCOMING CONNECTIONS RETAINED. COVER AND CHAMBER ADJUSTED TO SUIT NEW FINISHED LEVEL

AS ADVISED BY SRM, TEMPORARY DRAINAGE WILL BE IMPLEMENTED TO REPLACE EXISTING ROAD GULLY AND MITIGATE ANY POTENTIAL SURFACE WATER FLOWS INTO THE SITE.

AREA 2 - SOUTHEAST
EXISTING OFF-SITE DRAINAGE FROM THIS AREA, CROSSING INTO SITE, IS TO BE MAINTAINED AND/OR DIVERTED ACCORDINGLY TO RETAIN ITS CONNECTION TO THE ADOPTED NETWORK AT ITS EXISTING DISCHARGE RATE, AS AGREED WITH UU.

EXISTING ROAD TO BE RETAINED INTO SITE, SUBJECT TO CONDITION AND SUITABLE TESTING TO CONFIRM EXISTING CONSTRUCTION DEPTHS.

Ex SWMH (S26)
Ex SWMH (S27) CL IL 59.26
Ex SWMH (S28)
Ex SWMH (S29)
Ex SWMH (S31)
Ex FWMH (F8.1) CL 61.48 IL 58.48

S16.1 CL 61.72 IL 59.22
S16.000 450Ø 1:283
S16.001 450Ø 1:283
S16.0 CL 61.68 IL 59.236

S7.2 CL 62.20 IL 60.02
S7.001 150Ø 1:125
S7.1 CL 61.90 IL 60.20
S7.000 150Ø 1:125
S7.0 CL 61.80 IL 60.30

DSW2 CL 60.80 IL 58.74
DSW3 CL 60.70 IL 58.46

S11.0 CL 60.80 IL 59.80
S12.0 CL 60.60 IL 59.60
S10.0 CL 60.90 IL 59.90
S9.0 CL 61.00 IL 60.00
S8.0 CL 61.25 IL 60.25
S7.4 CL 60.95 IL 59.36
S7.3 CL 61.25 IL 59.57
S11.1 CL 60.60 IL 57.34
S13.1 CL 60.60 IL 59.38
S13.0 CL 60.60 IL 59.60
F1.15 CL 60.65 IL 59.25
F1.16 CL 60.60 IL 57.93
F1.17 CL 60.75 IL 57.69
S3.0 CL 60.70 IL 58.11

RG
RWP
SVP

SITE BOUNDARY (5.3ha)
PROPOSED PRIVATE SURFACE WATER DRAINAGE
S185 (UU) SURFACE WATER SEWER DIVERSION
PROPOSED RAINWATER PIPE (RWP)
PROPOSED PRIVATE FOUL WATER DRAINAGE
S185 (UU) FOUL WATER SEWER DIVERSION
PROPOSED FLOOR GULLY (FG) / SOIL VENT PIPE (SVP)
EXISTING PUBLIC SURFACE WATER NETWORK
EXISTING PUBLIC FOUL WATER NETWORK
EXISTING PRIVATE SURFACE WATER NETWORK
EXISTING PRIVATE FOUL WATER NETWORK
PITCH DRAINAGE BY SPECIALIST
PROPOSED FILTER DRAIN / RAIN GARDEN
PROPOSED ACO / HAURATON CHANNEL
PROPOSED ATTENUATION TANK
PROPOSED PERMEABLE CAR PARK WITH SUB-BASE STORAGE
PROPOSED PERMEABLE MUGA SURFACE WITH SUB-BASE STORAGE
UNITED UTILITIES SEWER EASEMENT ZONE
SPORTS PITCHES & MUGA CONTRIBUTING AREAS
PROPOSED ROAD GULLY (FINAL LOCATIONS TO BE CONFIRMED FOLLOWING RECEIPT OF DETAILED LEVELS DRAWINGS)

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS AND SPECIFICATIONS.
2. THIS DRAWING IS BASED ON:
   2.1. TOPOGRAPHICAL SURVEY DWG FILE REF. 20D0510-001 TO 004 DATED JULY 2020 BY SURVEY OPERATIONS
   2.2. FULL UTILITIES SURVEY DWG FILE REF. 0620-ARC-13319 DATED 06/07/2020 BY SITE VISION SURVEYS
   2.3. PROPOSED SITE PLAN DWG FILE REF. "009433-SPA-01-XX-DR-L-910001" REVISION P02. RECEIVED ON 17/03/2021 BY SPACE ARCHITECTS
   2.4. LEVEL 00 GA DWG FILE REF. "009433-SPA-01-00-DR-A-010001" REVISION P06. RECEIVED ON 17/03/2021 BY SPACE ARCHITECTS
   2.5. UNITED UTILITIES RECORD MAP, UU REF. UUPS-ORD-175605 DATED 22/07/2020 (pdf)
3. BEFORE STARTING ANY WORKS, CONTRACTOR TO CHECK INVERT LEVELS AND POSITIONS OF EXISTING DRAINS, SEWERS, INSPECTIONS CHAMBERS AND MANHOLES AGAINST INFORMATION SHOWN ON THIS DRAWING. ENGINEER TO BE INFORMED IF FOUND DIFFERENT TO NOTED.
4. ROCKER PIPES ARE TO BE PROVIDED AT ALL CONCRETE CASED INTERFACES.
5. ALL DRAIN POINTS AND MANHOLE LOCATIONS/INVERT LEVELS/DIMENSIONS ARE TO BE CONFIRMED, SUBJECT TO DESIGN DEVELOPMENT.
6. EXTERNAL DRAINAGE OUTSIDE BUILDING FOOTPRINT: CLASS Z CONCRETE SURROUND TO BE PROVIDED FOR PIPES WITH COVER LESS THAN 1.2 m ABOVE THE CROWN OF THE PIPE FOR ROADS AND 0.6 m FOR SOFT AND PEDESTRIAN AREAS ONLY AND UNDER ALL FOUNDATIONS AND WHERE PIPES LAID WITHIN 1 m OF FOUNDATIONS.
7. SURFACE WATER: DESIGNED TO ACCOMMODATE 1in1, 1in30 AND 1in100 + 40% CC CRITICAL STORM EVENTS. SURFACE.
8. DESIGN SUBJECT TO CHANGE FOLLOWING:
   8.1. APPROVAL PROCESS WITH LOCAL AUTHORITIES AND WATER COMPANY
   8.2. RECEIPT OF DETAILED EXTERNAL LEVELS DESIGN
9. CONNECTIONS TO EXISTING PUBLIC SEWER IN ACCORDANCE WITH UNITED UTILITIES REQUIREMENTS, TO BE APPROVED / AGREED WITH THE WATER AUTHORITY. ALL EXISTING DRAINAGE LEVELS, ESPECIALLY WHERE NEW MANHOLES ON EXISTING RUNS OR NEW CONNECTIONS TO EXISTING MANHOLES ARE PROPOSED, ARE TO BE CONFIRMED PRIOR TO THE COMMENCEMENT OF ANY WORKS ON SITE.
10. INFILTRATION: THE SITE IS UNSUITABLE FOR INFILTRATION TECHNIQUES FOR SURFACE WATER MANAGEMENT DUE TO HIGH PERCHED GROUNDWATER, SOIL CONDITION AND PRESENCE OF MADE GROUND.
11. SURFACE WATER RUNOFF TREATMENT SUCH AS OIL SEPARATOR OR HYDRODYNAMIC VORTEX SEPARATOR (DOWNSTREAM DEFENDER) IS NOT DEEMED NECESSARY AT THIS STAGE BUT MAY BE REQUIRED BY THE LOCAL FLOOD AUTHORITY / UNITED UTILITIES.
12. DRAWING TO BE READ IN CONJUNCTION WITH EXISTING DRAINAGE DRAWING 009433-BDP-01-ZZ-DR-C-520010.

THIS DRAWING HAS BEEN DEVELOPED BASED ON THE INFORMATION CURRENTLY AVAILABLE AND IS SUBJECT TO CHANGE FOLLOWING RECEIPT /CONFIRMATION OF FURTHER INFORMATION, AS FOLLOWS:-

1. POP-UP LOCATIONS ARE BASED ON PRELIMINARY MEP INFORMATION. FINAL POP UP POSITIONS AND RAINWATER PIPE POSITIONS SUBJECT TO FINAL ARCHITECTURAL AND MEP LAYOUTS.
2. SPORTS PITCH BUILD UPS ARE INDICATIVE ONLY AND ARE TO BE CONFIRMED BY THE SPECIALIST CONTRACTOR.
3. RECEIPT OF FINAL LANDSCAPE PROPOSALS, INCLUDING A DETAILED LEVELS STRATEGY HAS BEEN RECEIVED.

REVISION	DESCRIPTION	DRAWN	CHECKED	DATE
C02	Minor corrections	ARJ	DN	23/07/21
C01	Issued for Construction	ARJ	DN	14/07/21

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PROJECT TITLE: BELLE VUE CO-OP ACADEMY

JOB NUMBER	STATUS
P3001502	COMMERCIAL IN CONFIDENCE

DRAWING TITLE: SITE WIDE DRAINAGE STRATEGY GENERAL ARRANGEMENT SHEET 3 OF 3

SCALE	DATE
1:200 @ A0	07/04/21

DRAWING NUMBER: 009433-BDP-01-ZZ-DR-C-520003 REVISION: C02

K:\01 TYPE\1MSD\PROJECT\THYDE ROAD SCHOOLS_DRAWINGS\ACTIVE\DRAWINGS\009433-BDP-01-ZZ-DR-C-520001_S3D3.DWG