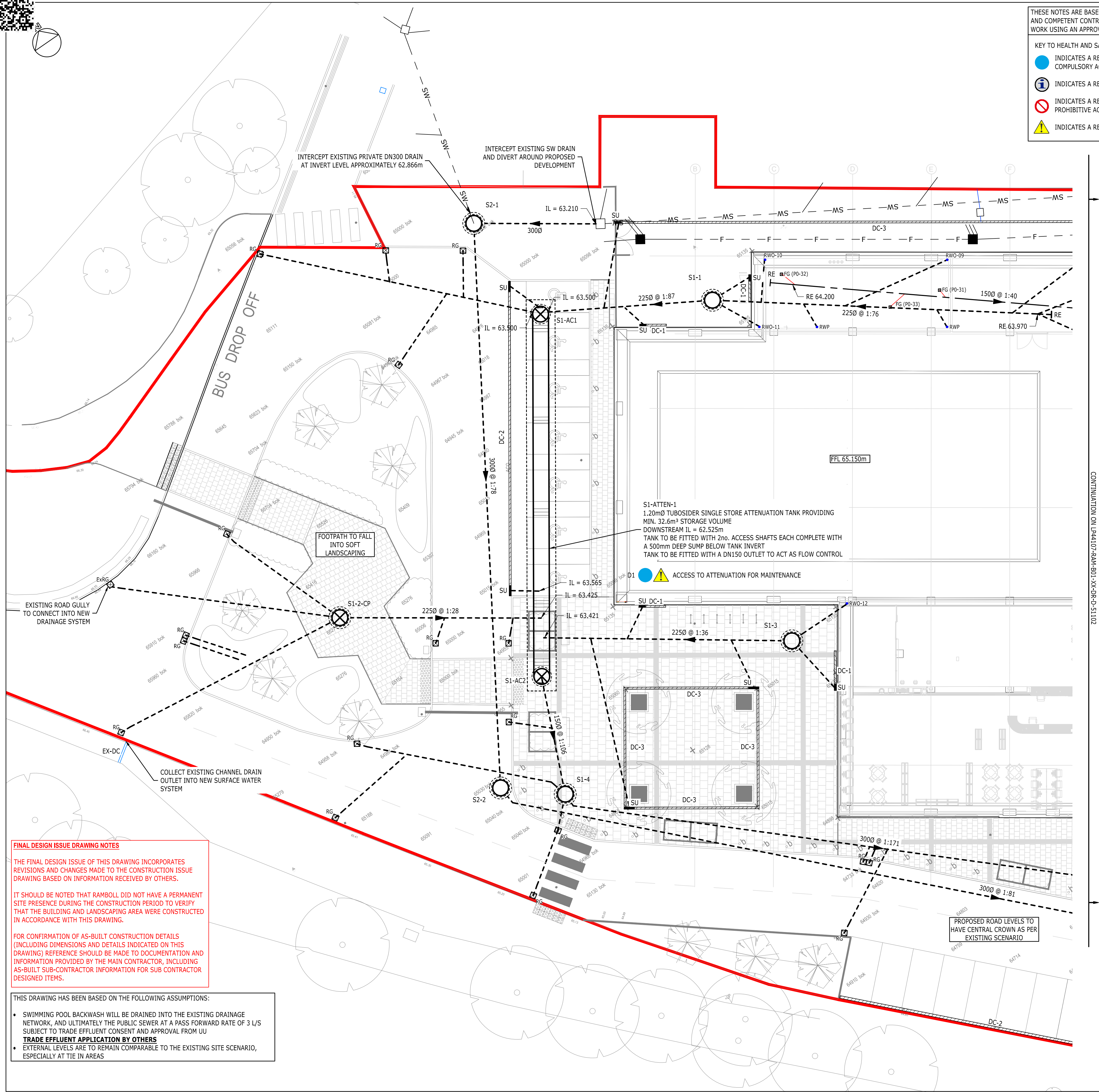




THESE NOTES ARE BASED ON THE USE OF EXPERIENCED AND COMPETENT CONTRACTORS CARRYING OUT THE WORK USING AN APPROVED SAFE METHOD OF WORKING

KEY TO HEALTH AND SAFETY SYMBOLS

- INDICATES A RESIDUAL RISK REQUIRING A COMPULSORY ACTION
- INDICATES A RESIDUAL RISK FOR INFORMATION
- INDICATES A RESIDUAL RISK REQUIRING A PROHIBITIVE ACTION
- INDICATES A RESIDUAL RISK AS A WARNING

- IT IS ASSUMED ANY EXISTING SERVICES CAN BE DIVERTED TEMPORARILY OR PERMANENTLY TO ALLOW INSTALLATION OF DRAINAGE AS REQUIRED. REFER TO MEP CONTRACTORS DRAWINGS FOR EXTERNAL SERVICES
- ROOT PROTECTION REQUIRED TO ALL DRAINAGE LOCATED WITHIN 5m OF EXISTING OR PROPOSED TREES. SUBJECT TO CONFIRMATION BY ARBORICULTURAL SPECIALIST
- PIPES ARE NOT DESIGNED FOR CONSTRUCTION TRAFFIC. CONTRACTOR WILL TAKE NECESSARY PRECAUTIONS TO PROTECT PIPES DURING CONSTRUCTION. EXISTING DRAINAGE WHICH IS TO REMAIN IN THE PROPOSED WORKS TO BE PROTECTED AT ALL
- MANHOLE COVERS TO BE SET SQUARE TO THE BUILDING. REFER TO SCHEDULES FOR LOAD CLASS AND SIZING
- NO ALLOWANCE HAS BEEN MADE FOR THE REPAIR OR REPLACEMENT OF EXISTING SITE WIDE DRAINAGE OUTSIDE THE IMMEDIATE DEVELOPMENT BOUNDARY. HOWEVER, THERE MAY BE A FUTURE REQUIREMENT FOR REPAIRS TO BE UNDERTAKEN BY THE END USER UNDER A SEPARATE SCHEME

KEY

EXISTING SURFACE WATER DRAIN AND MANHOLE

EXISTING FOUL WATER DRAIN AND MANHOLE

EXISTING COMBINED DRAIN AND MANHOLE

ASSUMED EXISTING DRAINS

EXISTING ROAD GULLY

PROPOSED SURFACE WATER DRAINAGE AND MANHOLE

PROPOSED FOUL WATER DRAINAGE AND MANHOLE

PROPOSED DRAINAGE CHANNEL WITH SUMP

PROPOSED ROAD GULLY

PROPOSED ATTENUATION TANK

PROPOSED FLOW CONTROL UNITS

PROPOSED NON RETURN VALVE

PROPOSED CATCH PIT MANHOLE

RAINWATER PIPE

SOIL VENT PIPE

SOIL STACK

WASTE PIPE

RODDING EYE

OIL SEPARATOR

INDICATIVE MANHOLE COVER LOCATION - INTERNAL MH

DRAIN CAST IN STRUCTURE

SW

F

C

SW

F

C

EX-RG

SU

DC

RG

RWP

SVP

SS

WP

FG

VP

BD

RG

FG

VP

BD

#

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- Notes
- DO NOT SCALE FROM THIS DRAWING.
 - ALL DIMENSIONS ARE MILLIMETRES U.N.O.
 - ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
 - THIS DRAWING HAS BEEN DEVELOPED USING THE FOLLOWING INFORMATION:
 - EWA-L LANDSCAPE PLAN
 - EWA-GROUND FLOOR DRAINAGE SETTING OUT PLAN
 - EWA-B01-GF-DR-A-52000 [C04 08/11/2021]
 - UK FOUNDATION MODEL
 - RAM-B01-ZZ-M3-S-SUBSTRUCTURE [Exported 22/04/2021]
 - EXISTING UTILITIES SURVEY
 - 52907 Utility survey [Issued 15/04/2019]
 - EXISTING TOPOGRAPHICAL SURVEY WITH LINK BRIDGE
 - 52907 Topo 3D [Received 18/06/2021]
 - UNITED UTILITIES PUBLIC SEWER RECORDS [RECEIVED 02/04/2019]
 - FOR EXISTING DRAINAGE REFER TO DRAWINGS RAM-ZZZ-XX-DR-D-51011, 51012 & 51013
 - FOR PROPOSED DRAINAGE REFER TO DRAWING RAM-B01-XX-DR-D-51102
 - FOR MANHOLE SCHEDULES REFER TO DRAWINGS RAM-B01-XX-DR-D-51200 & 51201
 - FOR TYPICAL DRAINAGE DETAILS REFER TO DRAWINGS RAM-B01-XX-DR-D-51400 SERIES
 - ALL SURFACE WATER PIPES (UP TO 600mm DIA) TO BE STRUCTURED WALL HDPE TO BS EN 13476-1 AND -3, KITEMARKED, AGREEMENT CERTIFIED OR CE MARKED U.N.O.
 - ALL FOUL WATER PIPES TO BE uPVC SOLID WALL TYPE B, TO BS EN 13476-1 AND -3, KITEMARK OR AGREEMENT CERTIFIED
 - ANY PIPEWORK WHICH IS CAST INTO FOUNDATIONS OR THROUGH GROUND BEAMS TO BE DUCTILE CAST IRON
 - PRECAST CONCRETE MANHOLES IN ACCORDANCE WITH BS 5911 - 3:2002, BS EN 1917:2002 AND TO BE KITEMARKED OR CE MARKED
 - ALL INTERNAL FOUL BRANCH CONNECTIONS TO BE DN100 AT 1:40 MINIMUM GRADIENT U.N.O. HEAD OF BRANCH **IL=64.250** U.N.O.
 - ALL INTERNAL SURFACE WATER BRANCHES FROM RAINWATER DOWNPIPES TO BE DN150 AT 1:60 MINIMUM GRADIENT U.N.O. HEAD OF BRANCH **IL=64.250** U.N.O.
 - IT IS ASSUMED THAT ALL ABOVE GROUND DRAINAGE CONNECTIONS ARE RODDABLE AND VENTED FROM ABOVE GROUND. ABOVE GROUND DRAINAGE ENGINEER TO CONFIRM ABOVE GROUND VENTING.
 - UNDERGROUND DRAINAGE PIPES TO HAVE THE FOLLOWING BEDDING IN ACCORDANCE WITH BUILDING REGULATIONS DOCUMENT H:
 - GREATER THAN 1200mm TO CROWN: CLASS 5
 - LESS THAN 1200mm TO CROWN: CLASS 2 OR LOAD RELIEVING SLAB
 - LESS THAN 300mm BENEATH SLAB: CLASS Y (modified)

FINAL DESIGN ISSUE DRAWING NOTES

THE FINAL DESIGN ISSUE OF THIS DRAWING INCORPORATES REVISIONS AND CHANGES MADE TO THE CONSTRUCTION ISSUE DRAWING BASED ON INFORMATION RECEIVED BY OTHERS.

IT SHOULD BE NOTED THAT RAMBOLL DID NOT HAVE A PERMANENT SITE PRESENCE DURING THE CONSTRUCTION PERIOD TO VERIFY THAT THE BUILDING AND LANDSCAPING AREA WERE CONSTRUCTED IN ACCORDANCE WITH THIS DRAWING.

FOR CONFIRMATION OF AS-BUILT CONSTRUCTION DETAILS (INCLUDING DIMENSIONS AND DETAILS INDICATED ON THIS DRAWING) REFERENCE SHOULD BE MADE TO DOCUMENTATION AND INFORMATION PROVIDED BY THE MAIN CONTRACTOR, INCLUDING AS-BUILT SUB-CONTRACTOR INFORMATION FOR SUB CONTRACTOR DESIGNED ITEMS.

THIS DRAWING HAS BEEN BASED ON THE FOLLOWING ASSUMPTIONS:

- SWIMMING POOL BACKWASH WILL BE DRAINED INTO THE EXISTING DRAINAGE NETWORK, AND ULTIMATELY THE PUBLIC SEWER AT A PASS FORWARD RATE OF 3 L/S SUBJECT TO TRADE EFFLUENT CONSENT AND APPROVAL FROM UU
- TRADE EFFLUENT APPLICATION BY OTHERS
- EXTERNAL LEVELS ARE TO REMAIN COMPARABLE TO THE EXISTING SITE SCENARIO, ESPECIALLY AT TIE IN AREAS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

NOTES BELOW ARE ADDITIONAL TO HAZARDS/RISKS NORMALLY ASSOCIATED WITH THIS TYPE OF WORK. FOR DETAILS REFER TO: LP44107-RAM-B01-XX-RR-D-10000

CONSTRUCTION (INCLUDING DEMOLITION AND REMOVAL OF EXISTING STRUCTURAL COMPONENTS)

- A3 HIGH GROUND WATER
- B1 DEEP EXCAVATIONS
- B2 CONTACT WITH LIVE SEWAGE
- B3 CLOSE PROXIMITY TO EXISTING STRUCTURES

OPERATIONS, MAINTENANCE

- D1 ACCESS TO ATTENUATION FOR MAINTENANCE
- D2 MAINTENANCE OF POOL BACKWASH TANK
- D3 MAINTENANCE OF INTERNAL DRAINAGE

DISMANTLING / DEMOLITION (FUTURE)

NO SIGNIFICANT RESIDUAL RISK IDENTIFIED

REFER TO GENERAL NOTES AND THE PRINCIPAL CONTRACTOR FOR MORE INFORMATION ABOUT THE RISKS ASSOCIATED WITH THIS WORK.

F01	FINAL DESIGN INTENT	06/07/2023	SG	NM
Rev	Description	Date	By	App
			Chk	

FINAL DESIGN INTENT

ABRAHAM MOSS
LIBRARY AND
LEISURE CENTRE

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PROPOSED BELOW GROUND DRAINAGE SHEET 1

Project No:	Scale (@A1):	Drawn:	Date:
1620005164	1:150	CO	JUN 19
Drawing No:	Rev:		
LP44107-RAM-B01-XX-DR-D-51101	F01		