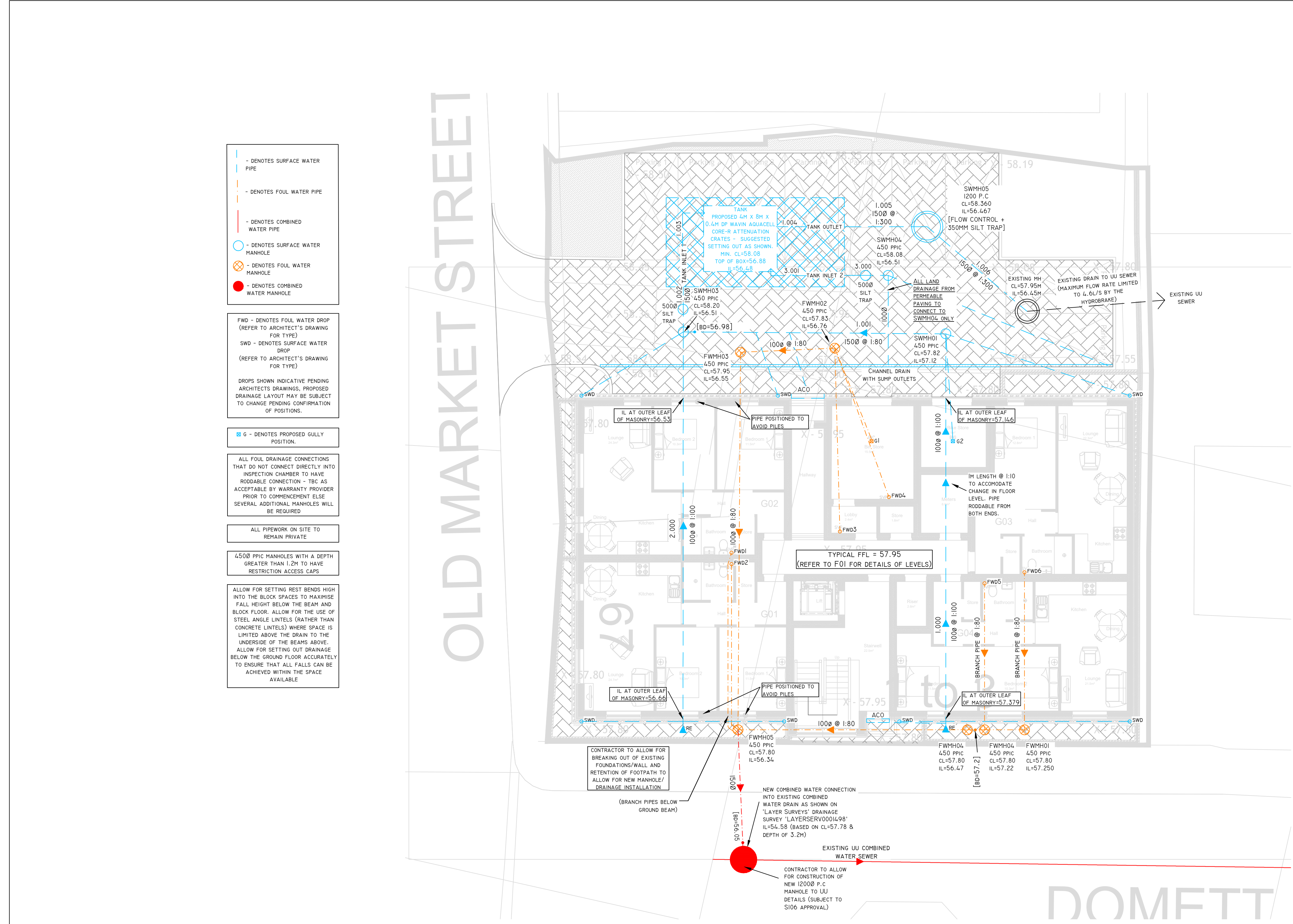




- DENOTES SURFACE WATER PIPE
- DENOTES FOUL WATER PIPE
- DENOTES COMBINED WATER PIPE
○ DENOTES SURFACE WATER MANHOLE
⊗ DENOTES FOUL WATER MANHOLE
● DENOTES COMBINED WATER MANHOLE
- FWD - DENOTES FOUL WATER DROP (REFER TO ARCHITECT'S DRAWING FOR TYPE)
SWD - DENOTES SURFACE WATER DROP (REFER TO ARCHITECT'S DRAWING FOR TYPE)
DROPS SHOWN INDICATIVE PENDING ARCHITECT'S DRAWINGS, PROPOSED DRAINAGE LAYOUT MAY BE SUBJECT TO CHANGE PENDING CONFIRMATION OF POSITIONS.
- Ⓜ G - DENOTES PROPOSED GULLY POSITION.
- ALL FOUL DRAINAGE CONNECTIONS THAT DO NOT CONNECT DIRECTLY INTO INSPECTION CHAMBER TO HAVE RODDABLE CONNECTION - TBC AS ACCEPTABLE BY WARRANTY PROVIDER PRIOR TO COMMENCEMENT ELSE SEVERAL ADDITIONAL MANHOLES WILL BE REQUIRED
- ALL PIPEWORK ON SITE TO REMAIN PRIVATE
- 4500 PPIC MANHOLES WITH A DEPTH GREATER THAN 1.2M TO HAVE RESTRICTION ACCESS CAPS
- ALLOW FOR SETTING REST BENDS HIGH INTO THE BLOCK SPACES TO MAXIMISE FALL HEIGHT BELOW THE BEAM AND BLOCK FLOOR. ALLOW FOR THE USE OF STEEL ANGLE LINTELS (RATHER THAN CONCRETE LINTELS) WHERE SPACE IS LIMITED ABOVE THE DRAIN TO THE UNDERSIDE OF THE BEAMS ABOVE. ALLOW FOR SETTING OUT DRAINAGE BELOW THE GROUND FLOOR ACCURATELY TO ENSURE THAT ALL FALLS CAN BE ACHIEVED WITHIN THE SPACE AVAILABLE

- NOTES:
- THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF BELL MUNRO CONSULTING LTD. THE DRAWING MUST NOT BE REPRODUCED IN PART OR IN WHOLE WITHOUT PRIOR WRITTEN AUTHORITY.
 - THIS DRAWING MUST NOT BE SCALED BY EITHER CONTRACTORS OR OTHER CONSULTANTS ANY DIMENSIONAL OR SETTING - OUT DISCREPANCIES ARE TO BE REPORTED TO BELL MUNRO CONSULTING PRIOR TO CONSTRUCTION / FABRICATION COMMENCING.
 - ALL EXISTING DRAINAGE TO BE CONFIRMED PRIOR TO CONSTRUCTION COMMENCING.
 - ALL NEW PIPEWORK TO BE WOVIN OSMADRAIN OR WOVIN ULTRARIB UPVC UNLESS NOTED OTHERWISE
 - ALL EXTERNAL MANHOLE COVERS TO BE TO EN124:1991 - TRAFFICKED AREAS GRADE D4/00 AND OTHER AREAS GRADE A14.
 - ANY UNLABELLED STORM WATER BRANCH PIPEWORK TO BE 1500 AT MINIMUM 1:80 FALL.
 - ALL TEMPORARY WORKS DESIGN AND DETAILS TO BE BY CONTRACTOR AND SUBMITTED TO BMC FOR REVIEW PRIOR TO COMMENCING WORKS.
 - ANY UNLABELLED FOUL BRANCH PIPEWORK TO BE 1500 PIPEWORK AT MINIMUM 1:80 FALL.
 - ALL GULLYS TO HAVE 1500 PIPES
 - PIPEWORK PASSING THROUGH BUILDING WALLS TO BE FITTED WITH ROCKER PIPES AS PER STANDARD DETAIL
 - ALL PIPEWORK AT COVER LEVELS LESS THAN 900MM IN TRAFFICKED AREAS AND 400MM IN OTHER AREAS SHALL BE ENCASED IN CONCRETE (CLASS Z BEDDING). NOTE, IF PIPEWORK IS IN ADOPTED HIGHWAY, IF COVER LEVEL IS LESS THAN 1200MM SHALL BE ENCASED IN CONCRETE.
 - ALL OTHER PIPEWORK TO BE IN CLASS S BEDDING
 - ALL RWP AND THRESHOLD DRAIN LOCATIONS AND NUMBERS ARE TO BE CONFIRMED BY ARCHITECT PRIOR TO COMMENCING CONSTRUCTION.
 - EXACT SVP AND GULLY LOCATIONS TO BE CONFIRMED FROM SERVICES ENGINEERS' DRAWINGS AND DETAILS.
 - ALL INTERNAL MANHOLES TO BE SAINT-GOBAIN BRADSTEL TRIPLE SEALED RECESSED COVERS.

PUBLIC OR PRIVATE UTILITY NOTES

THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO VERIFY LOCATION AND EXTENT OF THEIR APPARATUS AND HAVE IT MARKED OUT ON SITE PRIOR TO COMMENCING ON SITE. DETAILS AND COSTS TO BE PROVIDED BY CONTRACTOR.

TRIAL HOLES SHALL BE UNDERTAKEN BY HAND TO LOCATE ANY BURIED APPARATUS IF EXCAVATION WORKS OR LEVEL REDUCTIONS ARE TO BE UNDERTAKEN IN THE GENERAL AREA.

CONTRACTORS OWN RISK ASSESSMENTS AND SAFE METHODS OF WORKING ADJACENT TO UTILITIES SHALL BE EMPLOYED AT EVERY STAGE OF THE WORK.

NO RESPONSIBILITY AS TO THE ACCURACY OF THIS PLAN IS GIVEN BY BELL MUNRO CONSULTING LIMITED AND NO LIABILITY WHAT SO EVER IS ACCEPTED BY THE COMPANY FOR THE USE OF THE INFORMATION ON THIS PLAN. IT IS INTENDED FOR GENERAL REFERENCE ONLY.

CONTRACTOR SHALL UPDATE THIS PLAN UP WITH SITE INFORMATION WHEN APPARATUS CAN BE ACCURATELY LOCATED ON SITE AND RETURNED TO BELL MUNRO CONSULTING LIMITED FOR THE DRAWING TO BE UPDATED AND RE-ISSUED.

FLOW CONTROL SPECIFICATION
HYDROBRAKE REF.: MD-SHE-0101-4600-1000-4600
HEAD: 1.0M
DESIGN FLOW: 4.6L/s
TO BE INSTALLED TO MANUFACTURERS SPECIFICATION AND DETAILS

DENOTES PERMEABLE AREA WITH STONE LAY ON GEOMEMBRANE, TO BE POSITIVELY DRAINED INTO SURFACE WATER SYSTEM VIA PERFORATED LAND DRAINS' TO AVOID DRAINING THROUGH MADE GROUND.

SUDS FEATURES
FULL CONSIDERATION OF SUDS RESULTS IN CONCLUSION THAT THERE IS NO SPACE ON-SITE TO PROVIDE LARGE SCALE SUDS FEATURES SUCH AS PONDS OR SWALES. DOMESTIC SCALE SUDS FEATURES ARE THEREFORE PROPOSED:

- WATER BUTTS TO PROVIDE A DEGREE OF RAINWATER HARVESTING FROM ROOF WATER FROM THE DWELLING FOR IRRIGATION OF THE PRIVATE GARDEN SPACE
- ALL HARDSTANDING AREAS TO BE PERMEABLE PAVING (TYPE C, DRAINED) TO IMPROVE WATER QUALITY ENTERING THE SEWER SYSTEM

DESIGN PHILOSOPHY
SCHEME HAS BEEN DESIGNED TO PROVIDE A DISCHARGE RATE REDUCTION OF 50% FROM THE EXISTING BASED ON THE WORST CASE STORM IN A 1 IN 1 YEAR EVENT. THIS RATE OF 4.6L/s IS MAINTAINED FOR ALL STORMS UP TO AND INCLUDING THE 1 IN 100 YEAR EVENT PLUS 40% CLIMATE CHANGE WITHOUT CAUSING FLOODING ON THE SITE.

SUDS HIERARCHY IN ORDER OF PRIORITY (IN ACCORDANCE WITH BUILDING REGULATIONS)

- ON-SITE INFILTRATION - SOAKWAY IS NOT POSSIBLE FOLLOWING INFILTRATION TESTING AND AGREEMENT WITH THE LLFA
- DISCHARGE TO WATERCOURSE - NO VIABLE WATERCOURSE WITHIN THE VICINITY OF THE SITE
- DISCHARGE TO SURFACE WATER SEWER - NO SURFACE WATER SEWER IN THE VICINITY OF THE SITE
- DISCHARGE TO COMBINED SEWER - PROPOSED TO DISCHARGE TO EXISTING MANHOLE ON-SITE THAT COMMUNICATES WITH AN EXISTING COMBINED SEWER AT A RESTRICTED RATE OF 4.6L/s.

AS BUILT

E	INVERT LEVEL OF EXISTING MANHOLE CLARIFIED BY CLIENT	12/03/24	SB
D	DOHETT ST OUTFALL NOTE REMOVED, PIPE REFERENCES ADDED	01/11/23	SB
C	SW OUTFALL MANHOLE POSITION AS INSTRUCTED	01/11/23	SB
B	UPDATED FOLLOWING RP TEST RESULTS	17/07/23	SB
A	SW DRAINAGE PHOTOS, PHOTOS NOTED TO FRONT TO REDUCE PIPE LENGTHS, COORDINATION WITH FOUNDATIONS CLARIFIED	20/04/23	RH
REV	COMMENTS	DATE	BY

BMC

BELL MUNRO CONSULTING LTD

CONSULTING CIVIL & STRUCTURAL ENGINEERS
TURING HOUSE
5 ARCHWAY
MANCHESTER
M15 5RL
TEL: 0161 2094032
FAX: 0161 2094033
EMAIL: CONSULTING@BELLMUNRO.CO.UK
WWW.BELLMUNRO.CO.UK

CLIENT: VIA NICK HARDEN

PROJECT: OLD MARKET STREET, BLACKLEY

TITLE: PROPOSED DRAINAGE LAYOUT

DRAWN BY:	CHIEFED BY:	SCALE:	DATE:
RH	SB	AS NOTED	12/22
DRAWING NUMBER:	J7996/D01	REVISION:	E