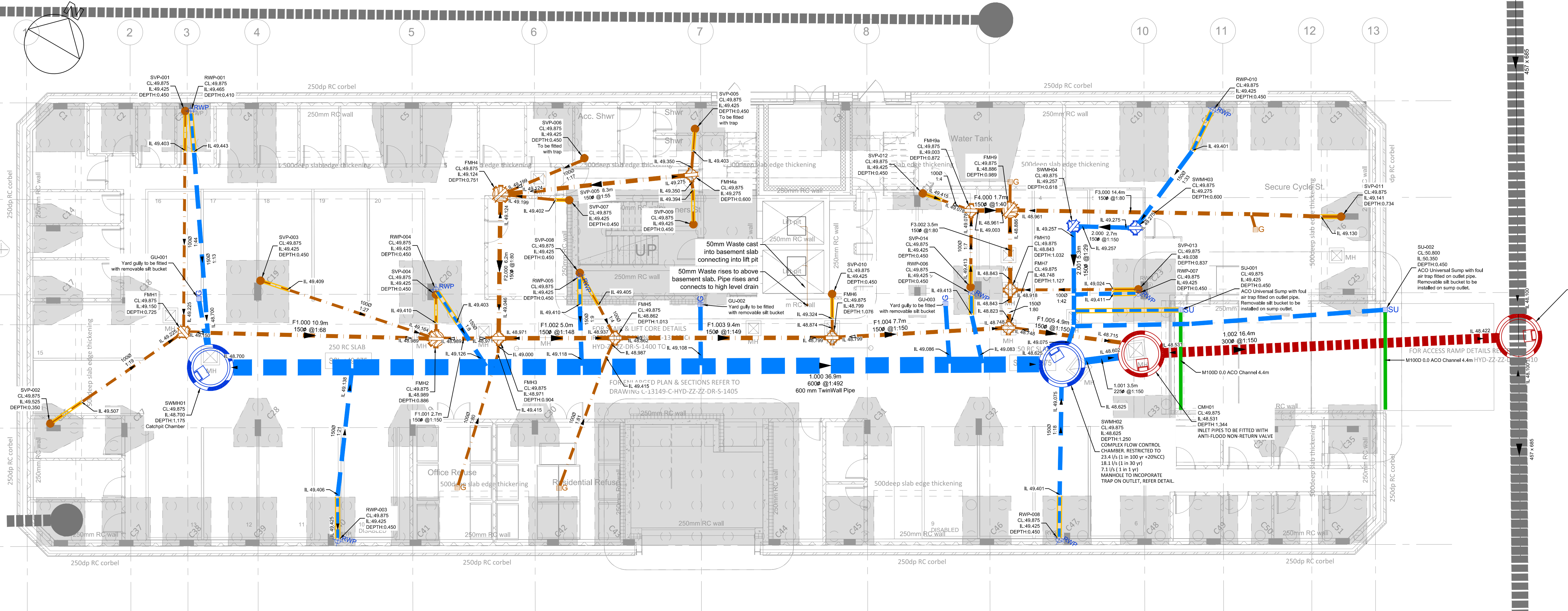


Structure Table						
Structure Name	Internal Diameter	Type	Cover Level	Invert Level	Depth	Cover Grade
CMH01	1200ø	Manhole Type B	49.875	48.531	1.344	C250
CMH02	1500ø	Type A	50.836	48.100	2.736	D400
FMH1	450ø	PPIC	49.875	49.150	0.725	C250
FMH2	600ø	PPIC	49.875	48.989	0.886	C250
FMH3	450ø	PPIC	49.875	48.971	0.904	C250
FMH4	600ø	PPIC	49.875	49.124	0.751	C250
FMH4a	450ø	PPIC	49.875	49.275	0.600	C250
FMH5	450ø	PPIC	49.875	48.862	1.013	C250
FMH6	450ø	PPIC	49.875	48.799	1.076	C250
FMH7	450ø	PPIC	49.875	48.748	1.127	C250
FMH9	600ø	PPIC	49.875	48.886	0.989	C250
FMH9a	450ø	PPIC	49.875	49.003	0.872	C250
FMH10	450ø	PPIC	49.875	48.843	1.032	C250
SWMH01	1500ø	Catchpit Chamber with 300mm Sump	49.875	48.700	1.175	C250
SWMH02	1500ø	Flow Control	49.875	48.625	1.250	C250
SWMH03	450ø	PPIC	49.875	49.275	0.600	C250
SWMH04	450ø	PPIC	49.875	49.257	0.618	C250



NOTE:

Information shown on this layout is based upon existing drainage depths and images provided by J.Reddington on 20.02.20.

RWP & SVP Pop up locations are taken from West Lancashire Group drawing "16082-WLC-ZZ-00-DR-M-5201" rev P6 received 24.02.20, and FCH Architects drawing "P16082-FCH-BA-B1-DR-DR-A-3030" dated 10.03.20.

- NOTES:**
- THIS DRAWING IS NOT TO BE SCALED.
 - THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.
 - 'MARKED UP' DRAWINGS ARE TO BE PROVIDED TO THE ENGINEER UPON COMPLETION TO ENABLE PRODUCTION OF 'AS BUILT' DRAWING IN ACCORDANCE WITH CONSTRUCTION (DESIGN & MANAGEMENT): 2015 REGULATIONS 22(i).
 - THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT AND DIVERSION WORKS AS NECESSARY, TO ALL EXISTING SERVICES TO THE SATISFACTION OF THE PUBLIC UTILITIES.
 - THE CONTRACTOR SHALL ALLOW FOR DEALING WITH SURFACE WATER RUN-OFF INTO EXCAVATION AND FROM GROUNDWATER BY MEANS OF SUMPS, PUMPING AND DE-WATERING AS APPROPRIATE, IN ORDER TO KEEP THE EXCAVATION AS REASONABLY DRY AS POSSIBLE DURING THE CONSTRUCTION OF THE WORKS.
 - ALL EXTERNAL DRAINAGE WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH 'CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY' 7th EDITION FOR ADOPTABLE DRAINAGE, AND TO THE RELEVANT PROJECT SPECIFICATION AS DIRECTED BY THE ENGINEER FOR PRIVATE DRAINAGE.
 - PIPE MATERIAL SHALL BE AS FOLLOWS:
1000 TO 2250 - CLAYWARE TO BS EN 295
3000 AND ABOVE - CONCRETE TO BS EN 1916
DRAINAGE PROPOSED FOR ADOPTION TO COMPLY WITH THE MATERIALS SPECIFIED ABOVE.
 - N.B PVCu PIPES TO BE EN 1401-1:1998 MAY BE USED SUBJECT TO THE APPROVAL OF THE ENGINEER. PIPES OF LESS THAN 400MM DIAMETER TO HAVE A RESISTANCE OF 270 BAR.
 - ALL FOUL PIPES ARE TO BE 1000 UNLESS STATED OTHERWISE OR TO SUIT ABOVE GROUND PIPEWORK. SURFACE WATER PIPE DIAMETERS ARE AS INDICATED
PIPE GRADIENTS UNLESS SHOWN ARE:
FOUL:
MINIMUM GRADIENT WITH W.C. TO BE 1:80.
 - UNLESS OTHERWISE NOTED INVERT LEVEL AT REST BEND TO BE 450mm BELOW FFL
 - CLAY AND CONCRETE PIPES SHALL BE BEDDED ON CLASS S BEDDING UNLESS COVER IS LESS THAN 1.2m IN TRAFFICKED AREAS, THEN CLASS Z BEDDING. DRAINAGE PROPOSED FOR ADOPTION TO COMPLY WITH THE BEDDINGS SPECIFIED ABOVE.
 - WHERE THE CROWN OF THE PIPE IS WITHIN 300MM OF THE UNDERSIDE OF THE SLAB, THE PIPEWORK SHOULD BE SURROUNDED WITH 150MM CONCRETE.
 - UPVC PIPES SHALL BE BEDDED ON CLASS P BEDDING UNLESS COVER IS LESS THAN 1.2m IN TRAFFICKED AREAS, THEN CLASS Q OR Z BEDDING.
 - BACKFILL TO TRENCHES MAY BE SUITABLE EXCAVATED MATERIAL IN LANDSCAPED AREAS & UNDER DRIVEWAYS, PATIOS ETC. TYPE 1 GRANULAR MATERIAL TO BE USED UNDER HARDSTANDINGS AND ROADS.
 - DESIGN OF THE DRAINAGE CHANNELS IS INDICATIVE ONLY. DETAILED DESIGN SHALL BE UNDERTAKEN BY THE CONTRACTOR'S PREFERRED CHANNEL MANUFACTURER/ SUPPLIER.
 - ALL MANHOLE AND DRAINAGE CHANNEL COVERS SHALL COMPLY WITH BS EN 124. FOR DETAILS OF COVER TYPE & LOCATION, PLEASE REFER TO THE MANHOLE SCHEDULE. ALL MANHOLE COVERS WITHIN BUILDING FOOTPRINT SHALL BE RECESSED & DOUBLE SEALED.
 - VENTILATION SHALL BE PROVIDED AT THE HEAD OF FOUL DRAINAGE RUNS. FOR SETTING OUT OF SOIL AND RAINWATER PIPES, SEE ARCHITECT'S LAYOUT "P16082-FCH-BA-B1-DR-A-3030" REV ""
 - ACCESS FOR RODDING/JETTING SHALL BE PROVIDED TO ALL SOIL AND RAINWATER DOWNPIPES ABOVE BASEMENT FLOOR LEVEL.
 - FOR DETAILS OF MANHOLE TYPES AND PIPE BEDDING ETC, SEE STANDARD DETAIL DRAWING(S).
 - COVER LEVELS SHOWN ARE APPROXIMATE. COVERS SHOULD BE ADJUSTED TO MATCH SURROUNDING FINISH LEVELS.
 - THE CONTRACTOR IS TO PROTECT EXISTING BURIED PIPES (PARTICULARLY SHALLOW PIPES) AND TREE ROOTS FROM DAMAGE CAUSED BY LOADS IMPOSED BY CONSTRUCTION.
 - ROCKERS PIPE REQUIRED WHERE DRAINAGE EXITS PAD FOUNDATION. REFER STANDARD DETAIL.
 - FOR DRAINAGE DETAILS REFER TO DRAWINGS
"BGS-HYD-XX-XX-DR-C-0010_0011- Standard details Sheet 1-2"

- LEGEND**
- Proposed Surface Water Drainage
 - Proposed Surface Water PPIC
 - Gully
 - Rain Water Pipe
 - Channel Drain SUMP
 - Channel Drain
 - Pipe through foundation
 - Proposed Foul Sewer Drainage
 - Foul Sewer Back Drop
 - Internal Gully
 - Foul Pop Up Position
 - Proposed Combined Sewer Drainage
 - Existing Foul Sewer Drainage

AMENDMENTS TO GRADIENTS AND LEVELS TO SUIT 75mm STEP AS PER JRL COMMENTS.				
P07	L. W. PILSBURY	08.04.20	J. HAYDEN	08.04.20
P06	L. W. PILSBURY	19.03.20	R. HENSHALL	19.03.20
P05	L. W. PILSBURY	17.03.20	R. HENSHALL	17.03.20
P04	L. W. PILSBURY	03.03.20	R. HENSHALL	03.03.20
P03	L. W. PILSBURY	26.02.20	J. HAYDEN	26.02.20
P02	J. HAYDEN	29.11.19	J. HAYDEN	29.11.19
P01	G. WARSAMA	11.10.19	J. HAYDEN	11.10.19
REVISION NOTES/COMMENTS				
DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY
2nd Floor 172 Edmund Street Birmingham B3 2HS t: +44(0)121 752 5197 e: birmingham@hydrock.com				
CLIENT				
PROJECT				
BENGAL STREET MANCHESTER				
TITLE				
DRAINAGE OUTFALL REVIEW				
HYDROCK PROJECT NO.				
C-13149				
STATUS				
INFORMATION				
DRAWING NO. (PROJECT CODE-ORIGINATOR ZONE-LEVEL-TYPE-REV-NUMBER)				
BGS-HYD-XX-XX-DR-C-0001				
REVISION				
P07				