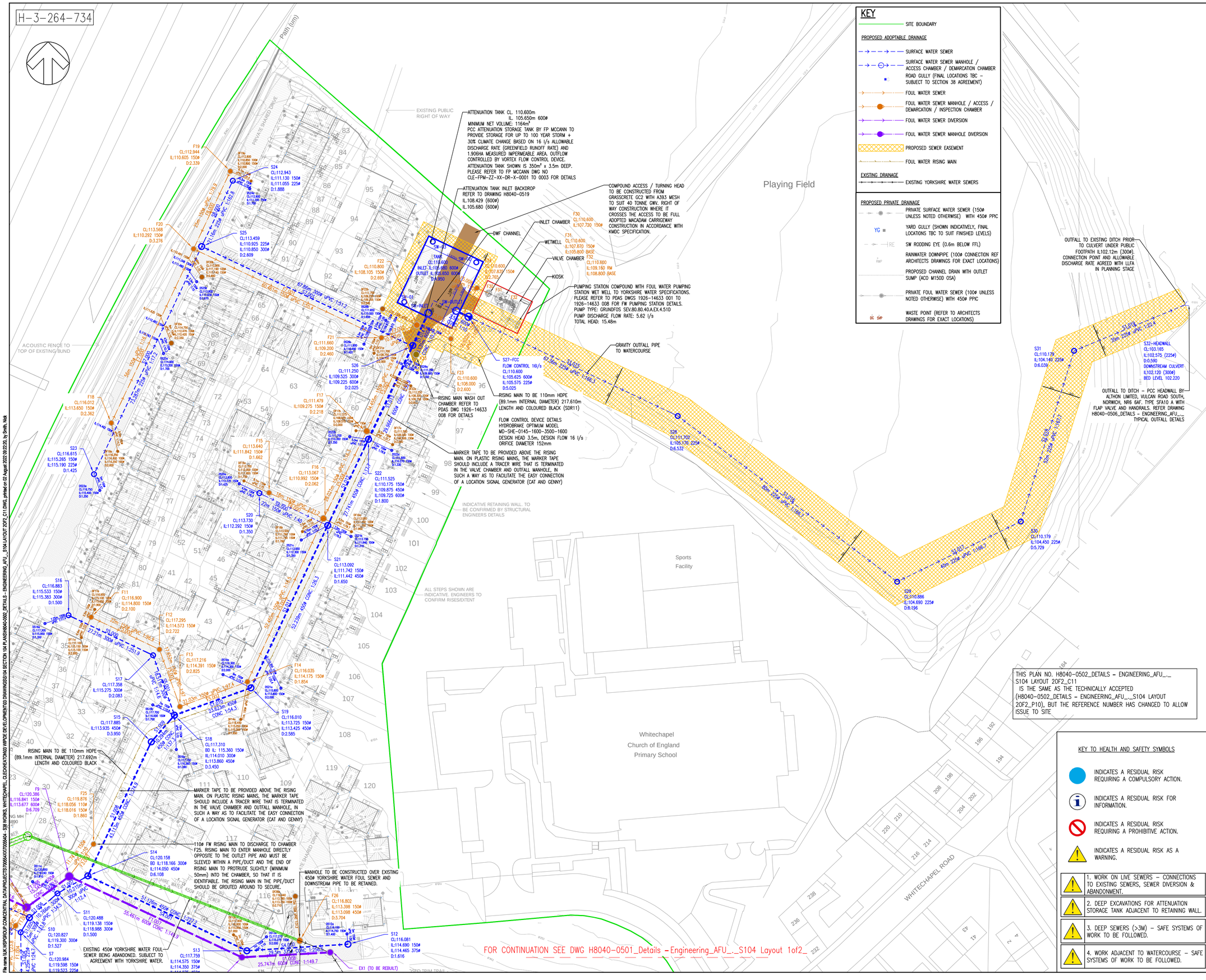
H-3-264-734



KEY

- SITE BOUNDARY

PROPOSED ADOPTABLE DRAINAGE

- SURFACE WATER SEWER
- SURFACE WATER SEWER MANHOLE / ACCESS CHAMBER / DEMARCATION CHAMBER
- ROAD GULLY (FINAL LOCATIONS TBC - SUBJECT TO SECTION 38 AGREEMENT)
- FOUL WATER SEWER
- FOUL WATER SEWER MANHOLE / ACCESS / DEMARCATION / INSPECTION CHAMBER
- FOUL WATER SEWER DIVERSION
- FOUL WATER SEWER MANHOLE DIVERSION
- PROPOSED SEWER EASEMENT
- FOUL WATER RISING MAIN

EXISTING DRAINAGE

- EXISTING YORKSHIRE WATER SEWERS

PROPOSED PRIVATE DRAINAGE

- PRIVATE SURFACE WATER SEWER (150ø UNLESS NOTED OTHERWISE) WITH 450ø PPIC
- YG - YARD GULLY (SHOWN INDICATIVELY, FINAL LOCATIONS TBC TO SUIT FINISHED LEVELS)
- RE - SW RODDING EYE (0.6m BELOW FFL)
- RWP - RAINWATER DOWNPIPE (100ø CONNECTION REF ARCHITECTS DRAWINGS FOR EXACT LOCATIONS)
- PROPOSED CHANNEL DRAIN WITH OUTLET SUMP (ACO M150D OSA)
- PRIVATE FOUL WATER SEWER (100ø UNLESS NOTED OTHERWISE) WITH 450ø PPIC
- DC SWP - WASTE POINT (REFER TO ARCHITECTS DRAWINGS FOR EXACT LOCATIONS)

DO NOT SCALE

YORKSHIRE WATER NOTES

1. ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH 'CODE FOR ADOPTION'. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
2. MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
3. FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
4. YORKSHIRE WATER IS **NOT** OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (**DIRECTLY OR IN-DIRECTLY**). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION WITH REGARD TO THE DISPOSAL OF THE FILTER DRAIN/LAND DRAINAGE RUN-OFF.
5. COVER SLABS MUST CARRY THE BSI KITEMARK OR WILL BE REJECTED BY YORKSHIRE WATER INSPECTOR. WHERE THE CLEAR OPENING OF THE KITEMARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME, A LOADING BEARING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 600mm X 600mm FOR THE YORKSHIRE WATER SPECIFIED COVER SIZE. PLEASE REFER TO CONCRETE PIPE SYSTEMS ASSOCIATION (**CPSA**), 'TECHNICAL BULLETIN' ISSUED AUTUMN 2004 FOR KITEMARKED COVER SLAB OPENING SIZES.
6. SULPHATE RESISTANT CEMENT (**C20-DC2**) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
7. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.
8. SEWERS MUST HAVE 5 METRES CLEARANCE FROM TREES AND HEDGES.
9. SEWERS TO BE LAID IN CLASS 'S' BEDDING (**150mm GRANULAR BED AND SURROUND**). WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES (**OR LESS THAN 900mm IN NONE VEHICULAR ACCESS AREAS**) THEN A CONCRETE SLAB SHOULD BE PROVIDE ABOVE GRANULAR BED AND SURROUND.
10. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (**TABLE A2**).
11. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
12. YORKSHIRE WATER POLICY IS THAT TYPE "C" BRICK MANHOLES AND 1050mm DIA MANHOLE RINGS ARE NOT PREFERRED. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mm DIA OR 1500mm DIA RINGS, WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1 - 1.5m.
13. ADOPTABLE PLASTIC SEWER PIPES TO BE BSI KITEMARKED (**CERTIFIED TO WIS 4-35-01** AND BS/EN13476). ADOPTABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD PREFER CLAYWARE CHANNEL IN MANHOLES. WE HAVE FOUND THAT PLASTIC CHANNELS ARE DIFFICULT TO SET IN CONCRETE BECAUSE THEY FLOAT AND A SATISFACTORY FINISH CANNOT BE OBTAINED ON THE BENCHING.
14. THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100mm DIA. 40KN/m, 150mm DIA. 40KN/m, 225mm DIA. 45KN/m AND 300mm DIA. 72KN/m. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - (CLASS 120 TO EN 1916/BS5911-1 2002). PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN13476.
15. WHERE A B125 COVER AND FRAME HAS BEEN APPROVED, THIS **MUST NOT** BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.
16. THERE SHOULD BE ENOUGH CLEARANCE AT CROSSOVERS TO ACCOMMODATE BEDDING TO BOTH PIPES, APPROX. 300MM : IF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY BE INCREASED.

REV.	DATE	BY	DESCRIPTION	CHK	APP
C11	28/07/2022	MW	FOR CONSTRUCTION	NS	NS
P10	14/06/2022	NS	KMDC REQUIREMENTS INCORPORTATED	NS	NS
P09	12/05/2022	NS	KMDC REQUIREMENTS INCORPORTATED	NS	NS
P08	21/04/2022	NS	HEADWALL REFERENCE REVISED	NS	NS
P07	25/03/2022	DP	DRAINAGE LAYOUT AND REFERENCES UPDATED	NS	NS
P06	13/01/2022	DV	HATCH ADDED TO PUMPING STATION ACCESS	DV	NS
P05	12/01/2022	MW	YW COMMENTS DATED 21.12.21 AND 12.01.2022 ADDRESSED	DV	NS
P04	03/12/2021	GW	YW COMMENTS DATED 18.11.21 ADDRESSED	DV	NS
P03	03/11/2021	MW/DP	YW COMMENTS DATED 13.10.21 ADDRESSED	DV	NS
P02	10/09/2021	GW	FIRST ISSUE	DV	DB
P01	21/05/2021	GW	FIRST ISSUE	DV	DB

DRAWING STATUS: A - FIT FOR CONSTRUCTION

THIS PLAN NO. H8040-0502_DETAILS - ENGINEERING_AFU_-_ S104 LAYOUT 2OF2_C11 IS THE SAME AS THE TECHNICALLY ACCEPTED (H8040-0502_DETAILS - ENGINEERING_AFU_-_S104 LAYOUT 2OF2_P10), BUT THE REFERENCE NUMBER HAS CHANGED TO ALLOW ISSUE TO SITE

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.

1. WORK ON LIVE SEWERS - CONNECTIONS TO EXISTING SEWERS, SEWER DIVERSION & ABANDONMENT.
2. DEEP EXCAVATIONS FOR ATTENUATION STORAGE TANK ADJACENT TO RETAINING WALL.
3. DEEP SEWERS (>3M) - SAFE SYSTEMS OF WORK TO BE FOLLOWED.
4. WORK ADJACENT TO WATERCOURSE - SAFE SYSTEMS OF WORK TO BE FOLLOWED.

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CLIENT: BDW HOMES WEST YORKSHIRE

ARCHITECT: JRP ARCHITECTURE

SITE/PROJECT: WHITECHAPEL ROAD, CLECKHEATON RESIDENTIAL DEVELOPMENT

TITLE: PROPOSED SECTION 104 DRAINAGE AGREEMENT PLAN SHEET 2 OF 2

SCALE @ A1:	CHECKED:		APPROVED:
1:500	DV		DB
PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70055404	DV	GW	July 22

DRAWING No: H8040-0502_DETAILS - ENGINEERING_AFU_-_ S104 LAYOUT 2OF2_ REV: C11

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