

DO NOT SCALE

FOR THE AVOIDANCE OF DOUBT, NO APPROVALS, REVIEWS, COMMENTS OR INDICATION OF SATISFACTION GIVEN BY ARC ENGINEERS IN TERMS OF SUBCONTRACT DRAWINGS, PRODUCTS OR PROPOSED MATERIALS SHALL REDUCE OR EXTINGUISH THE OBLIGATION OF THE SUB-CONTRACTOR OR SUPPLIER TO ADHERE TO THE SPECIFICATION, GENERAL ARRANGEMENT DRAWINGS, STATUTORY REQUIREMENTS AND GOOD WORKING PRACTICE. ARC ENGINEERS ACCEPT NO LIABILITY FOR THE SELECTION OF MATERIALS OR WORKMANSHIP IN THE EXECUTION OF THE WORKS.

GENERAL NOTES

- 1. THESE NOTES ARE INTENDED TO AUGMENT DRAWINGS AND SPECIFICATIONS. WHERE CONFLICT OF REQUIREMENTS EXISTS THE ORDER OF PRECEDENCE SHALL BE AS SHOWN IN THE SPECIFICATIONS. OTHERWISE THE STRICTEST PROVISION SHALL GOVERN.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS AND ARCHITECTS DRAWINGS.
3. DRAWINGS NOT TO BE SCALED.
4. ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER/ARCHITECT AND FURTHER INSTRUCTIONS OBTAINED BEFORE WORK IS COMMENCED.
5. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETE. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE AND ENSURE THAT THE BUILDING AND ITS COMPONENTS ARE SAFE DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS WHICH MAY BE NECESSARY, SUCH MATERIAL REMAINING THE PROPERTY OF THE CONTRACTOR UPON COMPLETION.
6. ALL WORK TO COMPLY TO CURRENT BUILDING REGULATIONS AND TO BE IN ACCORDANCE WITH THE RELEVANT BRITISH STANDARDS AND APPROPRIATE CODES OF PRACTICE.
7. FOR FURTHER NOTES REFER TO PROJECT SPECIFICATIONS.

SAFETY, HEALTH & ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive. Refer to Risk Assessment Register: XXXXXXX

Construction:

ADD PROJECT NOTES HERE

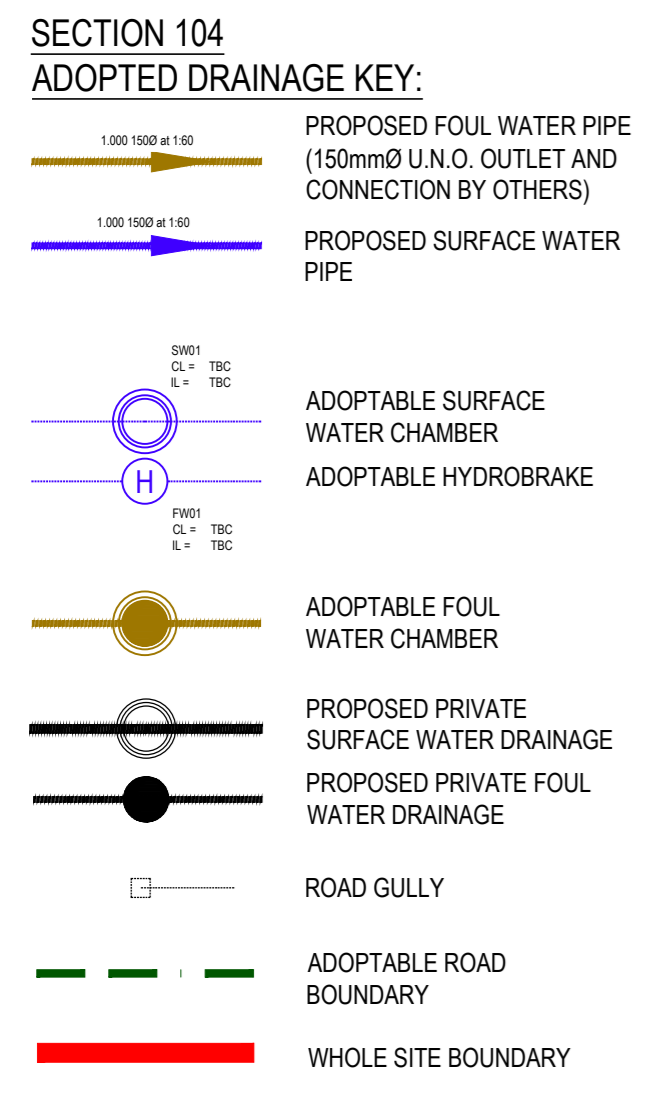
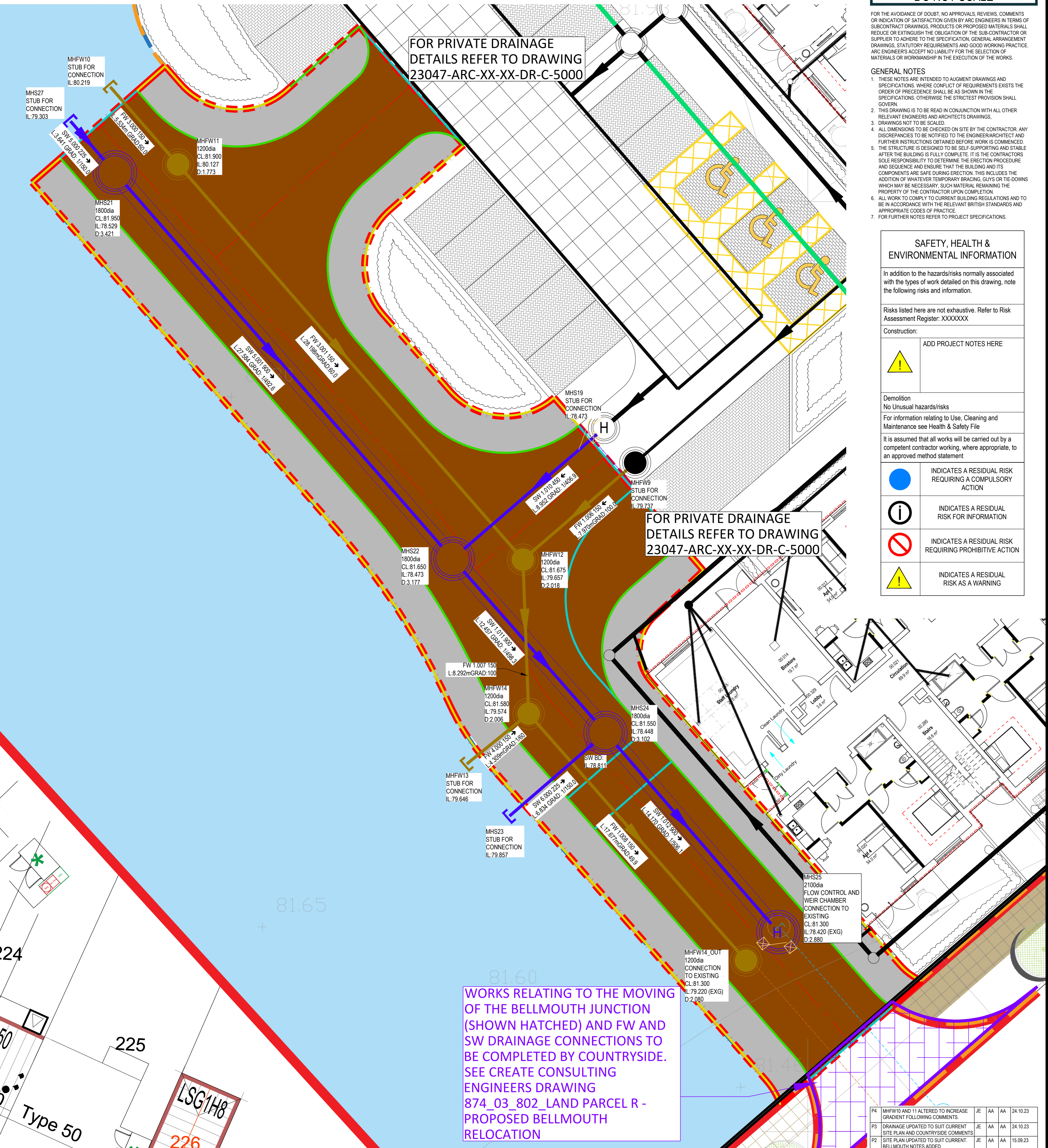
Demolition
No Unusual hazards/risks
For information relating to Use, Cleaning and Maintenance see Health & Safety File
It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

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

FOR PRIVATE DRAINAGE DETAILS REFER TO DRAWING 23047-ARC-XX-XX-DR-C-5000

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WORKS RELATING TO THE MOVING OF THE BELLMOUTH JUNCTION (SHOWN HATCHED) AND FW AND SW DRAINAGE CONNECTIONS TO BE COMPLETED BY COUNTRYSIDE. SEE CREATE CONSULTING ENGINEERS DRAWING 874_03_802_LAND PARCEL R - PROPOSED BELLMOUTH RELOCATION



FLOW CONTROL CHAMBER DETAILS

MHS25
2100dia
FLOW CONTROL
HYDROBRAKE CTL-SHE-0086-3500-1200-3500
DESIGN HEAD = 1.20m
DESIGN FLOW = 3.5 l/s
DESIGN FLOW UP TO 1 IN 10 YEAR STORM EVENT WATER LEVEL = 79.527m
WEIR:
DESIGN WIDTH = 0.45m
DESIGN DEPTH = 0.45m
LEVEL = 79.650m
FOR FLOWS ABOVE 1 IN 10 YEAR STORM EVENT UP TO 1 IN 100 YEAR STORM + CLIMATE CHANGE.
CL.81.300
IL.78.420
D.2.880

DRAINAGE NOTES

- 1. All drainage works shall be carried out in accordance with the Sewer Sector Guidance, Appendix C - Design and Construction Guidance requirements/addendums to the Mechanical & Electrical Specification title marked.
2. Position size & depth of all existing sewers & services shall be established prior to commencement on site.
3. The Contractor shall allow for the protection, temporary & permanent support, & temporary & permanent diversion works, as necessary to all existing services.
4. The Contractor shall allow for all traffic management in connection with road & sewer works.
5. The Contractor shall allow for keeping sewer trenches & excavations as dry as practicable by pumping from temporary sumps & de-watering as appropriate. The point & method of discharge to be agreed with the drainage authority.
6. Concrete pipes to be Class S unless noted otherwise. The min crushing strength for concrete pipes should be Class 120 to EN1916/BS5911-1:2002.
7. Vitrified clay pipes & fittings shall comply with the relevant provisions of BS EN295 & BS 65 respectively & be kitemarked. All pipes shall be extra strength to BS 65 or equivalent BS EN295 pipe crushing strength. The min crushing strength for clay pipes should be as follows: 100mm dia 40kNm, 150mm dia 40kNm, 225mm dia 45kNm & 300mm dia 72kNm.
8. Manhole covers & frames shall comply with the relevant provisions of BS EN124, have minimum 600 x 600 clear openings with 150 deep frames unless otherwise specified. Manhole covers & frames to be of a non-rocking design without cushion inserts & be kitemarked. Load class D400 in vehicular trafficked areas & load class B125 in footways & pedestrian areas.
9. Gully grates & frames shall comply with the relevant provisions of BS EN124 & be of a non-rocking design with captive hinge access & be kitemarked. Load Class D400 for roads regularly carrying fast moving heavy vehicles. Class C250 to be used in lesser trafficked areas eg. Estate roads, cul-de-sacs, residential car parking areas etc.
10. Cover slabs shall be provided where cover to the pipe barrel is less than 1.2m in vehicular trafficked areas & 0.9m elsewhere, to all road gully connections & within areas of deep roofing vegetation.
11. Selected backfill material shall consist of uniform material free from stones larger than 40mm, clay lumps larger than 75mm, tree roots, organic matter & frozen soil. Selected backfill material shall be placed in layers not exceeding 225mm, each layer compacted to form a stable trench backfill.
12. General backfill material to be free from stones larger than 40mm. General backfill material is to be placed in layers not exceeding 150mm thickness & each layer compacted by hand. No mechanical compaction of fill material shall be permitted within 300mm above the crown/barrel of the pipe.
13. Backfilling & reinstatement to trenches in public highways shall be in accordance with the requirements & specifications of the adopting authority, or, in the absence of such, in accordance with the requirements of "The Street Works Regulations 1992" & relevant provisions of H.A.U.C. "Specification for the Reinstatement of Openings in Highways" June 1992, both under section 71 of the New Roads & Street Works Act 1991.
14. Filled ground must be filled & consolidated under the supervision & satisfaction of Building Control/Local Authority before any sewer works are carried out.

- 15. Contractor to take measures to protect his operatives with respect to the presence of gas in sewer trenches & manholes through the use of gas monitoring equipment & breathing apparatus as required.
16. Contractor to apply for sewer permits & road opening permits as necessary from the appropriate authorities, prior to commencing works.
17. Statutory Undertaker / Utilities Provider is not obligated to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of land drainage run-off will therefore be required & you will have to liaise with the local authority, land drainage section with regards to the disposal of filter drain/land drainage run off.
18. Cover slabs must carry BSI Kitemark or will be rejected by Statutory Undertaker / Utilities Provider inspector. Where the clear opening of the kitemarked product is different to that of the cover & frame a load bearing slab should be fitted above the cover slab to bring down the size to 600mm x 600mm for Statutory Undertaker / Utilities Provider specified cover size. Please refer to Concrete Pipeline Systems Association (CPSA), Technical Bulletin for kitemarked cover slab opening sizes.
19. Sulphate resistant cement (C20-DC2) & precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
20. The adopted sewers should be a minimum of 1m & manholes 0.5m from kerb faces & service margins.
21. Sewers must have 5m clearance from trees & hedges (please also refer to figure BS.1.10 in the "Sewer Sector Guidance, Appendix C - Design and Construction Guidance planting adjacent to sewers).
22. The chamber size of manholes with more than one connection in them may need to be increased an increment to accommodate the connections & bends.
23. Sewers to be laid in Class "S" bedding (150mm granular bed & surround). Where depth of cover to top of sewer is less than 1.2m in highways & verges (or less 900mm in private vehicle areas or 750mm in landscaping areas) then a concrete slab should be provided above the granular surround. Bedding & backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2).

Revision table with columns for P4, P3, P2, P1, REV, INITIAL ISSUE, DETAIL, and columns for JE, AA, AA, DATE.

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PREFERRED HOMES

PROPOSED EXTRA CARE DEVELOPMENT, KINGSMERE, BICESTER

SECTION 104 ADOPTED DRAINAGE GA

PRELIMINARY

Table with columns for DRAWN, DATE, CHECKED, DATE, APPROVED, DATE.

CONTRACT No: 23047 SCALE @ 1:100

PROJECT No: 23047-ARC-XX-XX-DR-C-5200-P4