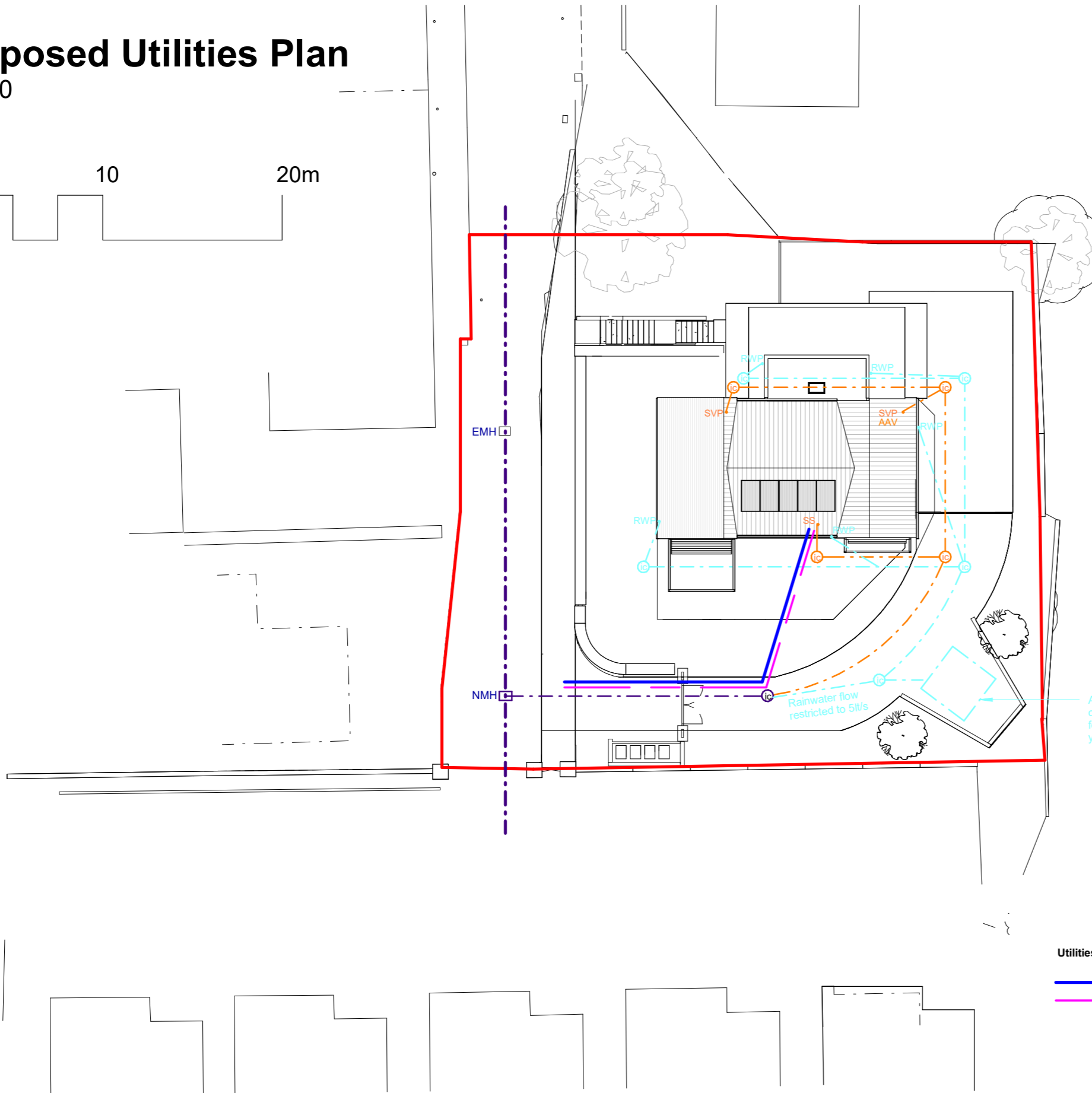
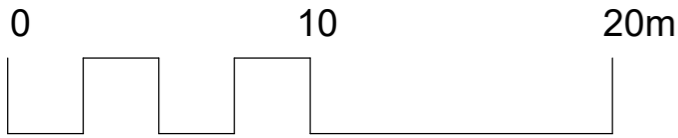


Proposed Utilities Plan

1 : 250



- Below Ground Drainage Key**
- Existing Combined Sewer
 - New combined drain
 - Existing Manhole
 - New Manhole
 - Proposed Rainwater Drainage
100mm dia pipe min 1 in 80 fall
 - RWP Rainwater pipe (nominal 76mm dia) All RWPs discharge into a Back inlet gully
 - IC New Inspection Chamber
 - Proposed Foul Drainage
110mm dia pipe min 1 in 80 fall
1 in 40 where no WC
 - SVP New Soil and Vent Pipe (nominal 110 mm dia)
 - SS New Stub Stack (nominal 110 mm dia)
 - AAV Air admittance valve to interior SVP to avoid roof penetration.

- NOTES:**
1. All drainage works to BS 8301 1985 code of practice for building drainage & to the Building Regulations approved document H & to be in accordance with the manufacturer's specifications.
 2. All new drains to be Hepworth 100 mm or 150 mm supersleve all to BS EN 295 1991 & laid to falls of 1 in 40 for 100 pipe & 1 in 60 for 150 pipe unless otherwise stated or as ground levels dictate. Drains laid on granular bed & with granular surround Class B or concrete as stated below, or in accordance with the manufacturer's specifications. Where drain passes through load bearing walls, a concrete lintel is to be provided.
 3. Where drains are laid under buildings they shall be bedded and surrounded on compacted granular bedding, if top of pipe is within 150 mm of the underside of the floor slab the drains shall be surrounded in 150 mm concrete with flexible joints to maintain the flexibility of the system.
 4. Where any drain is located within 900 mm of the foundation & below the thrust line of the foundations the trench is to be backfilled to the level of the footing in weak mix concrete. Flexibility is to be introduced where drains are in concrete to correspond with flexible pipe joints.
 5. All pipework with a depth of less than 300 mm below buildings, 900 under footways & 1200 under drives to soffit of pipe to have concrete laid & surround minimum 150 thick. St 4 concrete with flexibility built in to correspond to pipe joints.
 6. Back inlet and yard gullies are to be roddable & sealed in the case of back inlet gullies on foul drains.
 7. New inspection chambers to be Hepworth PPIC. Covers in planted or path areas to be CI grade B' medium duty, grade 'A' CI heavy duty to driveways. Covers & frames to comply with EN 124 class E 600 ductile iron.
 8. New Manholes to be in accordance with BS EN 1917:2002. Manhole covers are to be in accordance with BS EN 124. Step irons to be provided to chambers deeper than 900 in accordance with British Standards of the Building Regulations.
 9. Where existing drains are retained these are to be verified as being suitable for use & all necessary repairs and connections are to be carried out.
 10. **Soakaways.** Percolation test to be carried out by contractor to establish size of soakaways. Soakaways to be in accordance with Building Regulations AD H
 11. All external cover levels and invert levels to be confirmed.
 12. The contractor is to submit details for the proposed manhole to the engineer and architect for review prior to installation. The drainage design, layout and details are all subject to approval by the Utilities company and the Building Inspector.
 13. The contractor is to keep a record set of the as built drawings on site and provide a set to the architect and engineer upon completion.
 14. Upon completion of the drainage works, all below ground drainage is to be cleaned and CCTV surveyed. Any defects are to be rectified before handover to the client.
 15. Any alterations to the proposed drainage design to be communicated to the architect and engineer.

- Utilities**
- New Water supply
 - New Electricity supply

NOTES
The contractor is responsible for checking dimensions, tolerances and references. Verify any discrepancies with the architect before proceeding with the work. Where an item is covered by drawings of different scales the larger scale drawing is to be worked to. Construct to figured dimensions only.

Date	Rev	Revision / author/ checker
6.02.24	A	Issued for planning. JNBP/SD

Purpose of Issue	Planning	Drwg. no	23-122-112	Rev	A
Project	Tower Street, Barnsley	Drawn	JNBP	Checked	SD
Drawing	Drainage and Utility Connections	Scale	1 : 250 @A3	Date	01/29/24