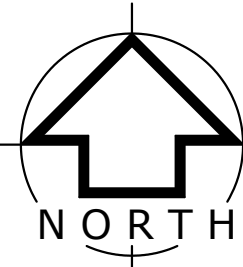




Yorkshire Water Notes

3. Filled ground must be built and consolidated under the supervision and to the satisfaction of Yorkshire Water before commencing work.
4. Yorkshire Water is not obliged to accept filter drain/land drainage runoff into the public sewer network or adaptable to the public sewer network. If the filter drain/land drainage is not adaptable to the public sewer network, the disposal of the land drainage runoff will therefore require a separate drainage system to be installed. The separate drainage system with regard to the disposal of the filter drain/land drainage runoff.
5. Cover slabs must carry the BS 81K norm and will be rejected by the contractor if they are not. Where the clear openings of the Kiermatex product is different to that of the cover and frame, a load must be fitted above the cover slab to bring the size down to 600mm x 600mm for the Yorkshire Water standard. The cover must be made to the standards of the Systems Association (CPSA), "Technical Bulletin" issued January 2004 for Kiermatex cover slab spigot sizes.
6. Sulphate resistant cement (C20-C25) and precast concrete must be used in a laboratory report must provide proof that these precautions are not necessary.
7. Sewers must have 5 metres clearance from trees and adjacent buildings and a minimum of 1.5 metres clearance for adoption. There are limitations for restrictions on tree planting adjacent to sewers.
8. Sewers to be installed in Class D/S bedding (1500mm granular bed and 150mm bedding) shall dig down to the top of the sewer to be less than 1.2m in highways and verges, or less than 900mm in non highway areas. The bedding must be compacted to 1500mm deep, with the bedding sloped and surround, (Ref. S.F.A. TABLE 2.4).
9. The chamber size of manholes with more than one connection in them may need to be increased an increment to allow for the extra connection and access.
10. Yorkshire Water policy is not to accept Type "C" brick manholes and 1500mm dia. manhole rings. Instead it is preferred that manholes are constructed using 1500mm dia. 1500mm dia. rings, with the opening sized over the channel where the depth of cover is specified is 1.5m.
11. The minimum crushing strength for Clay pipes should be as follows:
 - 150mm dia. 40kN/m²
 - 225mm dia. 40kN/m²
 - 300mm dia. 54kN/m²
 - 375mm dia. 72kN/m²
12. The minimum crushing strength for concrete pipes should be Class 120 minimum strength 74kN/m².
13. Pipes up to and including 300mm to be clay and pipes greater than 300mm to be concrete with bed and surround as detailed on the drawings.



CONSTRUCTION RISKS		
CONSTRUCTION RISKS	MAINTENANCE RISKS	DEMOLITION RISKS
Deep excavations/collapse of excavations.	Caution should be exercised when working in and adjacent to the surface water storage tanks.	No future abnormal demolition risks associated with Roads and Sewers.
Un-charted buried existing services		
Working on live sewers.		
Working in and adjacent to the public highway.		
In addition to the hazards/risks normally associated with this type of work detailed on this drawing take note of the above. ID Civils Design are only required to provide information about any significant risks associated with the design.		

In addition to the hazards/risks normally associated with this type of work detailed on this drawing take note of the above. iD Civils Design are only required to provide information about any significant risks associated with the design.

In line with the above regulations we are obliged to inform the Contractor of the abnormal risks that may be encountered in the construction of these works. As part of the design process all the salient health & safety aspects are given full consideration and these are observed within the designs viewed on this document. Although considerable effort is undertaken to eliminate risks, the very nature of the project gives rise to some hazards and risks.

Significant risks that cannot be eliminated by design and could not be foreseen by a competent contractor are noted in the risk assessment boxes on the drawings.

NOTES

3. No work should commence on site until written approval is received from Yorkshire Water/Adopting Highway Authority or the Local Authority. Any work on the highway, or any works at the Developers risk and ID Civils Design will not be held in force until the necessary approvals, remedial costs or construction programme details.
2. All sewer works to be adopted to be in accordance with "Sewers for Adoption" (2015) and "Sewers for Adoption and Yorkshire Water's Standards/Requirements/Addendum and "Kitemarked".
3. Manhole covers shall have a minimum clear opening of 500 x 500 mm and shall be fitted with BS EN 124 or EN 12401 deep frames in highways.
4. Bedding and Bascfill material should conform to the requirement of BS EN 12469 for manhole bedding.
5. Plastic pipes on adoptable sewers should conform to BS 4570-1.
6. The maximum length of pipe work to not be exceed 3 m.
7. Sewers in the road to have 1.0m minimum clearance and manholes 0.5m minimum clearance from kerbs and service margins.
8. Sewers must have 5 metres clearance from trees and hedgerows (refer to Figure 2.3 in Class "3" Sewers for Adoption" 6th Edition for minimum clearance from trees and hedgerows).
9. Sewers to be laid in Class "3" Sewers for Adoption (150mm granular bed and surround). Where depth of cover to top of the sewer is less than 1.0m (2m for Class "3" Sewers for Adoption) then 100mm (non vehicular access areas) then a concrete slab should be provided to protect the granular bed and surround. See drawing No 3887-C-D4-01 for details.
10. Prior to the commencement of on site works the contractor is to submit a list of all existing and proposed manholes, pipes, drains, manholes, pipes, and any ditches or watercourses in which it is proposed to install or adopt sewers. This list is to be reported immediately to ID Civils Design.
11. Prior to construction the actual position and depth of services likely to be affected by the work should be established by a competent person in close liaison with the statutory service authorities. The contractor shall immediately inform ID Civils Design of any services encountered on site.
12. The Local Authority and statutory service providers are to be notified prior to the commencement of work on site.
13. All highway works to be carried out in accordance with Barnesley

LEGEND

-
- Existing combined public sewer.
- Existing combined public sewer (to be removed/grouted up).
- Proposed combined manhole and sewer.
- Proposed foul water manhole and sewer.
- Proposed foul water rising main.
- Proposed surface water manhole and sewer.
- Proposed surface water rising main.
- Proposed surface water lateral and demarcation manhole.
- Proposed foul water lateral and demarcation manhole.
- Protected strip or easement.

All pipe joints between manhole S20 and the surface water outfall to be sealed with Denso tape to be prevent root ingress from the surrounding trees.

All existing trees within the extents of the 6.0m easement shown to be removed.

Street Lighting Arrangement

Denotes 6M galvanised steel column with OrangeTec
AriaLED 20LED NRL complete with electronic PEC.

All materials to comply fully with current BMBC Street Lighting Specification.

It is the responsibility of the developer to advise their clients of the location of street lighting columns relative to their property and to programme column installation works commensurate with property occupation.

Column positions may be adjusted slightly to suit site conditions and services, but must not normally be erected within 500mm of defined driveway boundaries.

BMBC will not enter into third party discussion on column positions, any such discussions will be carried out between BMBC and the developer.

The street lighting columns and lanterns and their maintenance remain the responsibility of the developer until completion of the adoption process.

All lighting columns are to be provided with an unmetered single phase electricity supply via the REC cable network. It is expected that the developer will coordinate with the REC regarding the installation of any cable ducts they may require.

J	RA 7801-Habitat alterations Limited 8 and service margin relocated on Route Extended.	DL	27.03.11
J	RA 7801-Habitat moved.	DL	04.08.11
H	Access covers levels raised on Carlow precast design, cover levels raised on manholes 521 and 522. F15 and access covers levels raised to hydrobrake chamber. Pumping station manholes levels raised.	DL	08.07.11
G	Off-site sewer route amended between manholes 521 and 522 (3m off to the south).	DL	21.04.11
G	Off-site sewer main design amended between manholes 521 and 522 (3m off to the north).	DL	21.04.11
E	Off-site sewer route amended between manholes 521 and 522 (3m off to the north).	DL	26.02.11
E	Off-site sewer route amended between manholes 521 and 522 (3m off to the north).	DL	17.03.11
D	Barrow Island 12.01.11. Barrow Island amended with Barbara Wilson following meeting at 12.01.11. Barrow Island amended, drainage and external works added.	DL	05.02.11
C	Interim issue for Carlow Precast design.	DL	23.01.11
B	Pond and surface water discharge rates added to notes.	DL	11.11.11
A	Manhole structures removed, foul and surface water manholes amended to include manholes pumping station and demarcation chambers added.	DL	10.05.11
Rev	Description	By	Date

Persimmon Homes
West Yorkshire

Project Title:

Wombwell

Drawing Title:

1:500 Engineering Layout
Sheet 1

Scale		Date	
1:500 @ A0		28/04/14	
Drawing No		Revision	Status
3882-C-D1-01		J	Approval



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