

General Notes:

- DO NOT USE THIS DRAWING IN EXISTENCE. This drawing has been prepared as part of a fee and must therefore be used in accordance with all other drawings. Any discrepancies must be reported to the engineer prior to commencing work.
- The party responsible for the design of the proposed drainage system is the engineer. The engineer has carried out a preliminary investigation of the site and has provided a preliminary drainage layout. The engineer does not accept any liability for the design of the drainage system prior to commencing work. The contractor is responsible for the design of the drainage system and for the construction of the drainage system.
- Drawings showing drainage are to be used in conjunction with the job setting out drawings.
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- The contractor is required to provide appropriate construction method statements for all aspects of approved work. This should include any temporary protection works.
- Land drainage is not permitted to discharge into the public sewer network. Any need for land drainage should be assessed by the engineer and approved by the local authority. The contractor is responsible for the design of the drainage system and for the construction of the drainage system.
- The contractor is required to cross check all drainage inverts prior to commencing work. The new drainage inverts must be at least 100mm above the existing drainage inverts.

Highways:

- All highways works to be carried out in accordance with the current local authority design guide and standards.
- All excavations take proper and existing highways to be back filled with granular Type 1 sub-base and compacted layers not exceeding 100mm unless otherwise agreed.
- Highway authority to be notified by the contractor prior to the commencement of works.

Adoptable Drainage:

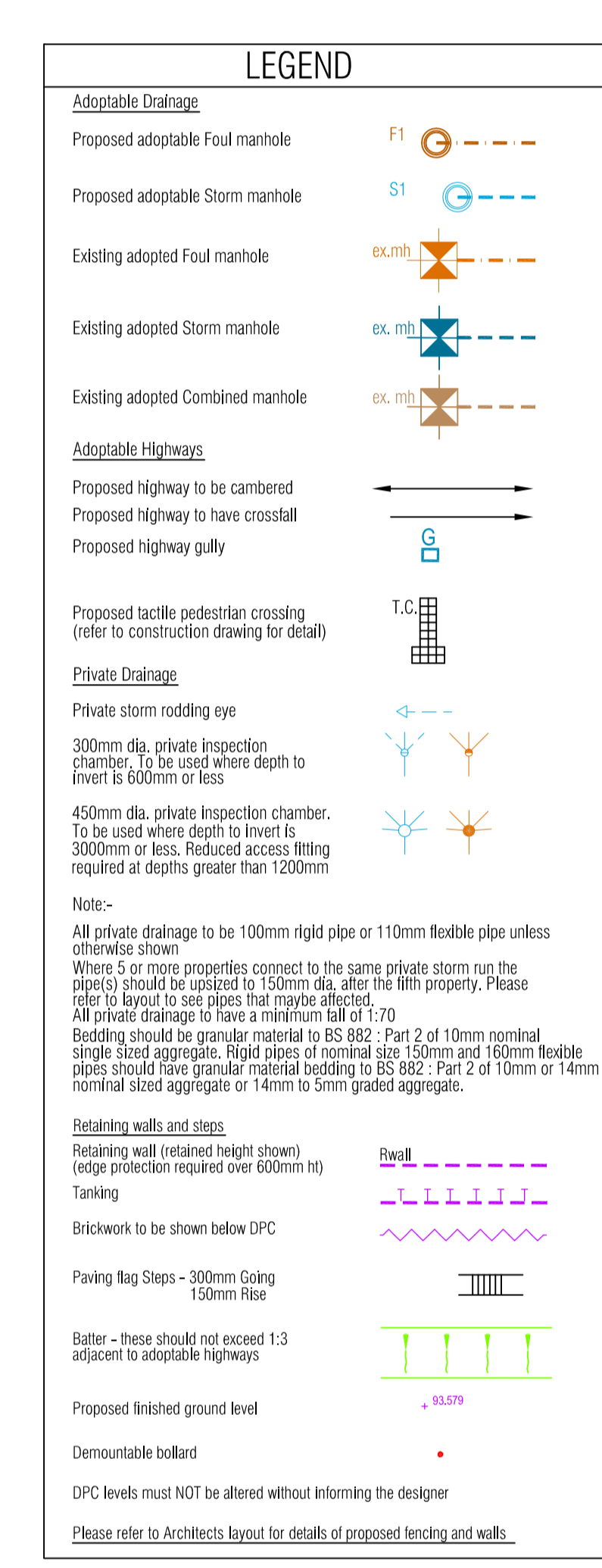
- All adoptable drainage works to be in accordance with the water authorities publication - 'Towers For Adopted Drain' issued as the approved drawings.
- Proposed concrete manhole rings to comply with the relevant provisions of BS811: Part 2.
- All manholes to be Class B engineering complying with the relevant provisions of BS 3011. Concrete blocks must be used if their classification is the same as Class B engineering blocks. Please refer to the relevant provisions of BS 3011 for further details.
- Manhole covers and frames shall comply with the relevant provisions of BS EN 124 and be of a non-slip, non-splintering design.
- Ladders that are required in 'Type A' manholes are to comply with 'Towers For Adopted Drain'.
- Covers must be either G20 cast-iron or equivalent with high strength concrete facing to the kerbside or G20 primary Portland cement.
- 150mm concrete surround to be provided around all manholes where the depth from finished surface to top of pipe is less than 1200mm. This may be reduced to 900mm within open areas.
- The location of existing drainage that is within close proximity to the proposed site works, which is not to be disturbed, should be notified to the contractor and reported to the relevant authority. The contractor is responsible for the design of the drainage system and for the construction of the drainage system.

The position, line and diameter of all existing drainage apparatus should be confirmed on site prior to the commencement of the works. Any discrepancies must be reported to the engineer immediately.

The contractor of the drainage system shall be responsible for the design of the drainage system and for the construction of the drainage system.

As Constructed Information:

- The contractor is responsible to provide the following as constructed drawings to the developer and the contractor of the works covered by the contract:
- Position and cover levels of all adoptable manholes.
- Position and cover levels of all adoptable manholes.
- Position and depth of manhole shafts for water, gas, electric, BT, cable and street lighting, using size and number of shafts.



Existing Services:

Please check any existing service information shown on the drawings is interpolated from existing records and is meant for reference only. Please refer to the individual service providers existing main records for full information and health and safety guidance for locating apparatus.

Symbol	Column Height	Notes
⊕	6m MOUNTING HEIGHT TUBULAR STEEL COLUMN TO S.T.C. CURRENT PRIVATE DEVELOPMENT SPECIFICATION LANTERN: LANTERN OPTIC; Total 25 TILT: 5 DEGREES LAMP: CLO / 2.41km / 12LED 4000K(NW) 700mA, 29watts PEC/DIMMING: PHILIPS STARSENSE "OLC" NODE	EXISTING LIGHTING COLUMN TO REMAIN. EXISTING LIGHTING COLUMN TO BE REMOVED.
⊕	6m MOUNTING HEIGHT TUBULAR STEEL MID-HINGED RAISE & LOWER COLUMN TO S.T.C. CURRENT PRIVATE DEVELOPMENT SPECIFICATION LANTERN: LANTERN OPTIC; Total 14 TILT: 5 DEGREES LAMP: CLO / 2.41km / 12LED 4000K(NW) 700mA, 29watts PEC/DIMMING: PHILIPS STARSENSE "OLC" NODE	
⊕	6m MOUNTING HEIGHT TUBULAR STEEL COLUMN TO S.T.C. CURRENT PRIVATE DEVELOPMENT SPECIFICATION LANTERN: LANTERN OPTIC; Total 1 TILT: 5 DEGREES LAMP: CLO / 2.41km / 12LED 4000K(NW) 700mA, 29watts PEC/DIMMING: PHILIPS STARSENSE "OLC" NODE	
⊕	6m MOUNTING HEIGHT TUBULAR STEEL COLUMN TO S.T.C. CURRENT PRIVATE DEVELOPMENT SPECIFICATION LANTERN: LANTERN OPTIC; Total 8 TILT: 5 DEGREES LAMP: CLO / 4.72km / 24LED 4000K(NW) 500mA, 34watts PEC/DIMMING: PHILIPS STARSENSE "OLC" NODE	
⊕	6m MOUNTING HEIGHT TUBULAR STEEL COLUMN TO S.T.C. CURRENT PRIVATE DEVELOPMENT SPECIFICATION LANTERN: LANTERN OPTIC; Total 52 TILT: 5 DEGREES LAMP: CLO / 3.57km / 24LED 4000K(NW) 500mA, 34watts PEC/DIMMING: PHILIPS STARSENSE "OLC" NODE	
⊕	6m MOUNTING HEIGHT TUBULAR STEEL MID-HINGED RAISE & LOWER COLUMN TO S.T.C. CURRENT PRIVATE DEVELOPMENT SPECIFICATION LANTERN: LANTERN OPTIC; Total 14 TILT: 5 DEGREES LAMP: CLO / 2.41km / 12LED 4000K(NW) 700mA, 29watts PEC/DIMMING: PHILIPS STARSENSE "OLC" NODE	
⊕	6m MOUNTING HEIGHT TUBULAR STEEL COLUMN TO S.T.C. CURRENT PRIVATE DEVELOPMENT SPECIFICATION LANTERN: LANTERN OPTIC; Total 1 TILT: 5 DEGREES LAMP: CLO / 2.41km / 12LED 4000K(NW) 700mA, 29watts PEC/DIMMING: PHILIPS STARSENSE "OLC" NODE	
⊕	6m MOUNTING HEIGHT TUBULAR STEEL COLUMN TO S.T.C. CURRENT PRIVATE DEVELOPMENT SPECIFICATION LANTERN: LANTERN OPTIC; Total 8 TILT: 5 DEGREES LAMP: CLO / 4.72km / 24LED 4000K(NW) 500mA, 34watts PEC/DIMMING: PHILIPS STARSENSE "OLC" NODE	
⊕	10m MOUNTING HEIGHT TUBULAR STEEL COLUMN TO S.T.C. CURRENT PRIVATE DEVELOPMENT SPECIFICATION LANTERN: LANTERN OPTIC; Total 18 TILT: 5 DEGREES LAMP: CLO / 9.18km / 60LED 4000K(NW) 500mA, 36watts PEC/DIMMING: PHILIPS STARSENSE "OLC" NODE	

Street lighting design provided by Balfour Beatty Ltd. For further information please refer to Balfour Beatty design drawings BBLP6012-0642 V1 & BBLP6012-0642 V2

Rev E: Drawing amended to reflect new planning layout, KJH 22 08 15
 Rev D: Drawing amended to reflect new planning layout, KJH 20 08 15
 Rev C: Garages 36, 109, 116 & 133 external amended, KJH 19 08 15
 Rev B: Drawing amended to suit architects layout changes. Street lighting design added, KJH 17 08 15
 Rev A: Gully positions amended, main foul run levels amended, Hydro Break note changed, KJH 30 07 15

PRELIMINARY

Title: **Barratt Homes & Taylor Wimpey Luke's Lane, Monkton Phase 2 Engineering Layout**

Scale: 1:500@A0 Date: July 2015

Drawn by: KJH email: ken.horn@queensberrydesign.co.uk

Revision: QD1081-03-01 E Checked by: -

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