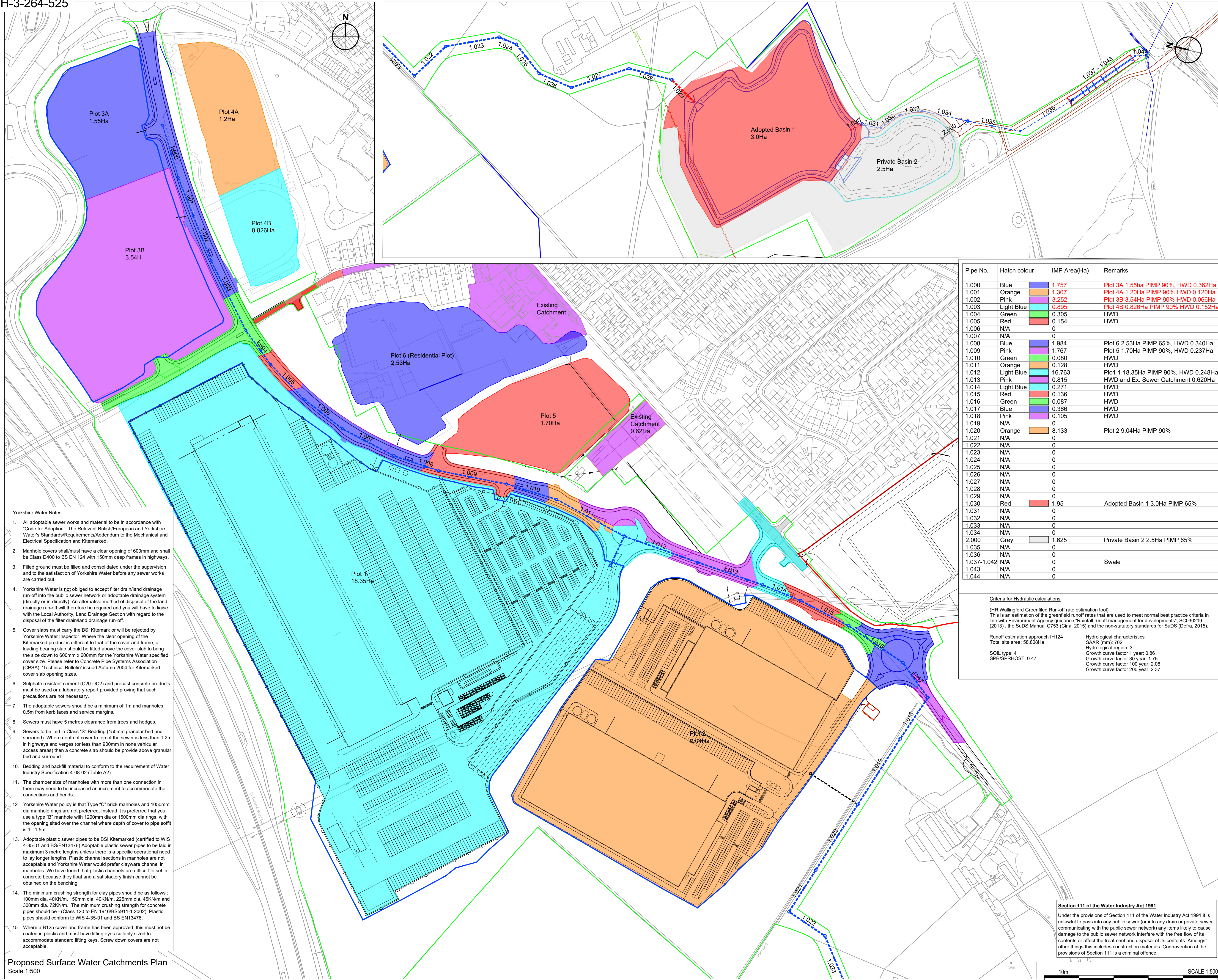


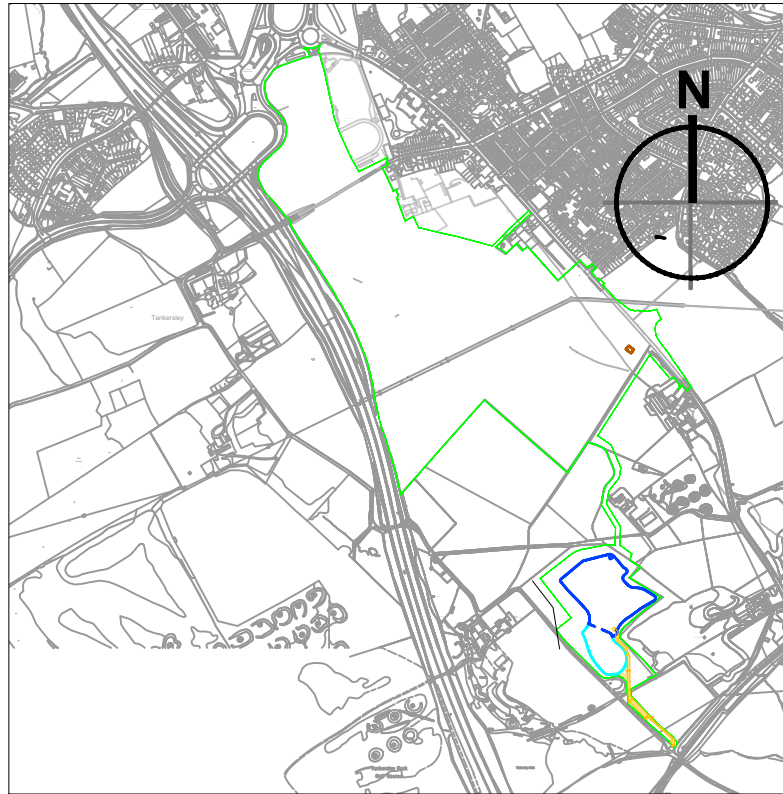


- Yorkshire Water Notes:
- All adoptable sewer works and material to be in accordance with "Code for Adoption". The Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
  - Manhole covers shall must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
  - Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.
  - 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.
  - 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.
  - Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
  - The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
  - Sewers must have 5 metres clearance from trees and hedges.
  - 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.
  - Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.

Proposed Surface Water Catchments Plan  
Scale 1:500

- © 2020 RPS Group
- Notes - For more Detailed notes refer to Drawing 020040-RPS-SI-XX-DR-D-Notes
- This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
  - If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.
  - This drawing should be read in conjunction with all other relevant drawings and specifications.
  - Masterplan taken from PHP drawing 4400-001 Rev P30, received 02/11/2020.
  - All works to be carried out in accordance with the Specification for Highway Works, the South Yorkshire Residential Design Guide and the requirements of Barnsley Metropolitan Borough Council and Sewer Sector Guidance.
  - All information shown on this drawing is subject to Technical Approval from BMBC and Yorkshire Water.

- Key
- Planning Boundary
  - Proposed Surface Water Sewer
  - Proposed Highway Surface Water Drainage
  - Proposed Private Surface Water Drainage



Key Plan Not to Scale

| Rev | Description                                        | By  | Ckd | Date     |
|-----|----------------------------------------------------|-----|-----|----------|
| P14 | Plot 2 layout amended                              | SMC | ANT | 26.10.21 |
| P13 | Highway Drainage Amended Catchments                | SMC | ANT | 14.07.21 |
| P12 | Catchments broken down as agreed in call           | SMC | ANT | 14.05.21 |
| P11 | Catchments broken down further                     | JNB | SMC | 10.05.21 |
| P10 | Drawing areas revised to areas per pipe            | JNB | SMC | 26.04.21 |
| P09 | Extra Notes added                                  | ANT | SMC | 01.04.21 |
| P08 | Update to Attenuation Basin Boundary               | ANT | SMC | 15.03.21 |
| P07 | Update to foul pump station layout, Verges amended | MWF | SMC | 29.01.21 |
| P06 | Updated for S104 Approval following YWS Comments   | JNB | SMC | 26.11.20 |
| P05 | Updated following revised boundaries               | JNB | SMC | 09.11.20 |
| P04 | Updated following YWS Comments                     | JNB | SMC | 06.11.20 |
| P03 | Added Design flow rates                            | JNB | SMC | 23.09.20 |
| P02 | S104 Approval - Plateau levels added               | JNB | SMC | 09.09.20 |
| P01 | Issued for S104 Approval                           | JNB | SMC | 19.08.20 |

| Pipe No.    | Hatch colour | IMP Area(Ha) | Remarks                              |
|-------------|--------------|--------------|--------------------------------------|
| 1.000       | Blue         | 1.757        | Plot 3A 1.55Ha PIMP 90%, HWD 0.362Ha |
| 1.001       | Orange       | 1.307        | Plot 4A 1.20Ha PIMP 90% HWD 0.120Ha  |
| 1.002       | Pink         | 3.252        | Plot 3B 3.54Ha PIMP 90% HWD 0.066Ha  |
| 1.003       | Light Blue   | 0.895        | Plot 4B 0.826Ha PIMP 90% HWD 0.152Ha |
| 1.004       | Green        | 0.305        | HWD                                  |
| 1.005       | Red          | 0.154        | HWD                                  |
| 1.006       | N/A          | 0            |                                      |
| 1.007       | N/A          | 0            |                                      |
| 1.008       | Blue         | 1.984        | Plot 6 2.53Ha PIMP 65%, HWD 0.340Ha  |
| 1.009       | Pink         | 1.767        | Plot 5 1.70Ha PIMP 90%, HWD 0.237Ha  |
| 1.010       | Green        | 0.080        | HWD                                  |
| 1.011       | Orange       | 0.128        | HWD                                  |
| 1.012       | Light Blue   | 16.763       | Plot 1 18.35Ha PIMP 90%, HWD 0.248Ha |
| 1.013       | Pink         | 0.815        | HWD and Ex. Sewer Catchment 0.620Ha  |
| 1.014       | Light Blue   | 0.271        | HWD                                  |
| 1.015       | Red          | 0.136        | HWD                                  |
| 1.016       | Green        | 0.087        | HWD                                  |
| 1.017       | Blue         | 0.366        | HWD                                  |
| 1.018       | Pink         | 0.105        | HWD                                  |
| 1.019       | N/A          | 0            |                                      |
| 1.020       | Orange       | 8.133        | Plot 2 9.04Ha PIMP 90%               |
| 1.021       | N/A          | 0            |                                      |
| 1.022       | N/A          | 0            |                                      |
| 1.023       | N/A          | 0            |                                      |
| 1.024       | N/A          | 0            |                                      |
| 1.025       | N/A          | 0            |                                      |
| 1.026       | N/A          | 0            |                                      |
| 1.027       | N/A          | 0            |                                      |
| 1.028       | N/A          | 0            |                                      |
| 1.029       | N/A          | 0            |                                      |
| 1.030       | Red          | 1.95         | Adopted Basin 1 3.0Ha PIMP 65%       |
| 1.031       | N/A          | 0            |                                      |
| 1.032       | N/A          | 0            |                                      |
| 1.033       | N/A          | 0            |                                      |
| 1.034       | N/A          | 0            |                                      |
| 2.000       | Grey         | 1.625        | Private Basin 2 2.5Ha PIMP 65%       |
| 1.035       | N/A          | 0            |                                      |
| 1.036       | N/A          | 0            |                                      |
| 1.037-1.042 | N/A          | 0            | Swale                                |
| 1.043       | N/A          | 0            |                                      |
| 1.044       | N/A          | 0            |                                      |

Criteria for Hydraulic calculations

(HR Wallingford Greenfield Run-off rate estimation tool)  
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013), the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015).

Runoff estimation approach IH124  
Total site area: 58.808Ha

SOIL type: 4  
SPR/SPRHOST: 0.47

Hydrological characteristics  
SAAR (mm): 702  
Hydrological region: 3  
Growth curve factor 1 year: 0.86  
Growth curve factor 30 year: 1.75  
Growth curve factor 100 year: 2.08  
Growth curve factor 200 year: 2.37

Section 111 of the Water Industry Act 1991

Under the provisions of Section 111 of the Water Industry Act 1991 it is unlawful to pass into any public sewer (or into any drain or private sewer communicating with the public sewer network) any items likely to cause damage to the public sewer network or interfere with the free flow of its contents or affect the treatment and disposal of its contents. Amongst other things this includes construction materials. Contravention of the provisions of Section 111 is a criminal offence.

10m SCALE 1:500



Sherwood House, Sherwood Avenue,  
Newark, Nottinghamshire, NG24 1QQ  
T:01636 605 700 E: rpsnewark@rpsgroup.com



Project Hoyland Common

Title Proposed Site Plan & Catchment Plan

|                                                                                         |                                             |                                 |
|-----------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------|
| RPS Project Number<br>NK020040                                                          | Scale @ A1<br>1:500                         | Date Created<br>18.08.2020      |
| Task Team Manager<br>SG                                                                 | Information Author<br>JNB                   | Task Information Manager<br>SMC |
| Status<br>S4 (Suitable for Stage Approval)                                              | Document Number<br>HOYLA-RPS-SI-XX-DR-D-330 | Revision<br>P14                 |
| Project Code - Originator - Zone - Level - Type - Role - Drawing Number<br>rpsgroup.com |                                             |                                 |