

LEGEND

- EXISTING PRIVATE SURFACE WATER SEWER
- EXISTING PRIVATE FOUL SEWER
- EXISTING PUBLIC SURFACE WATER SEWER
- EXISTING PUBLIC FOUL SEWER
- EXISTING PUBLIC COMBINED SEWER
- EXISTING PUBLIC RISING MAIN
- EXISTING SEWER TO BE ABANDONED
- PROPOSED SURFACE WATER SEWER
- PROPOSED FOUL WATER SEWER
- PROPOSED ATTENUATION TANK
- PROPOSED CONVEYANCE CHANNEL
- APPLICATION A BOUNDARY
- APPLICATION B (SCHOOL) BOUNDARY

- NOTES**
- 1) EXISTING DRAINAGE LAYOUT BASED ON THAMES WATER SEWER RECORDS AND PENBORN TECHNICAL SERVICES DRAWING (REF: P97907031).
 - 2) THE PART OF THE DEVELOPMENT WEST OF SHIP LANE IS SUBMITTED AS AN OUTLINE APPLICATION. THE BASEMENT PLAN PROVIDED (REF: 18019_C645_Z2_P_B1_001 - RECEIVED FROM SQUIRE & PARTNERS 29.01.2018) IS INDICATIVE ONLY AND SUBJECT TO THE PARAMETER PLANS SUBMITTED.
 - 3) DRAINAGE SUBJECT TO DETAILED DESIGN.

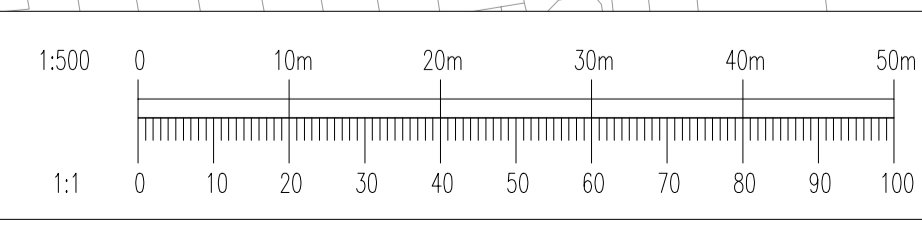


| Rev | Date | Description | By |
|-----|----------|-----------------------------------|-----|
| A05 | 13.02.18 | UPDATED APPLICATION BOUNDARY | NB |
| A04 | 29.01.18 | UPDATED ARCHITECT LAYOUT | NB |
| A03 | 01.11.17 | TEAM ISSUE | NB |
| A02 | 23.10.17 | SURFACE WATER ATTENUATION AMENDED | NB |
| A01 | 29.09.17 | PRELIMINARY ISSUE | MAC |

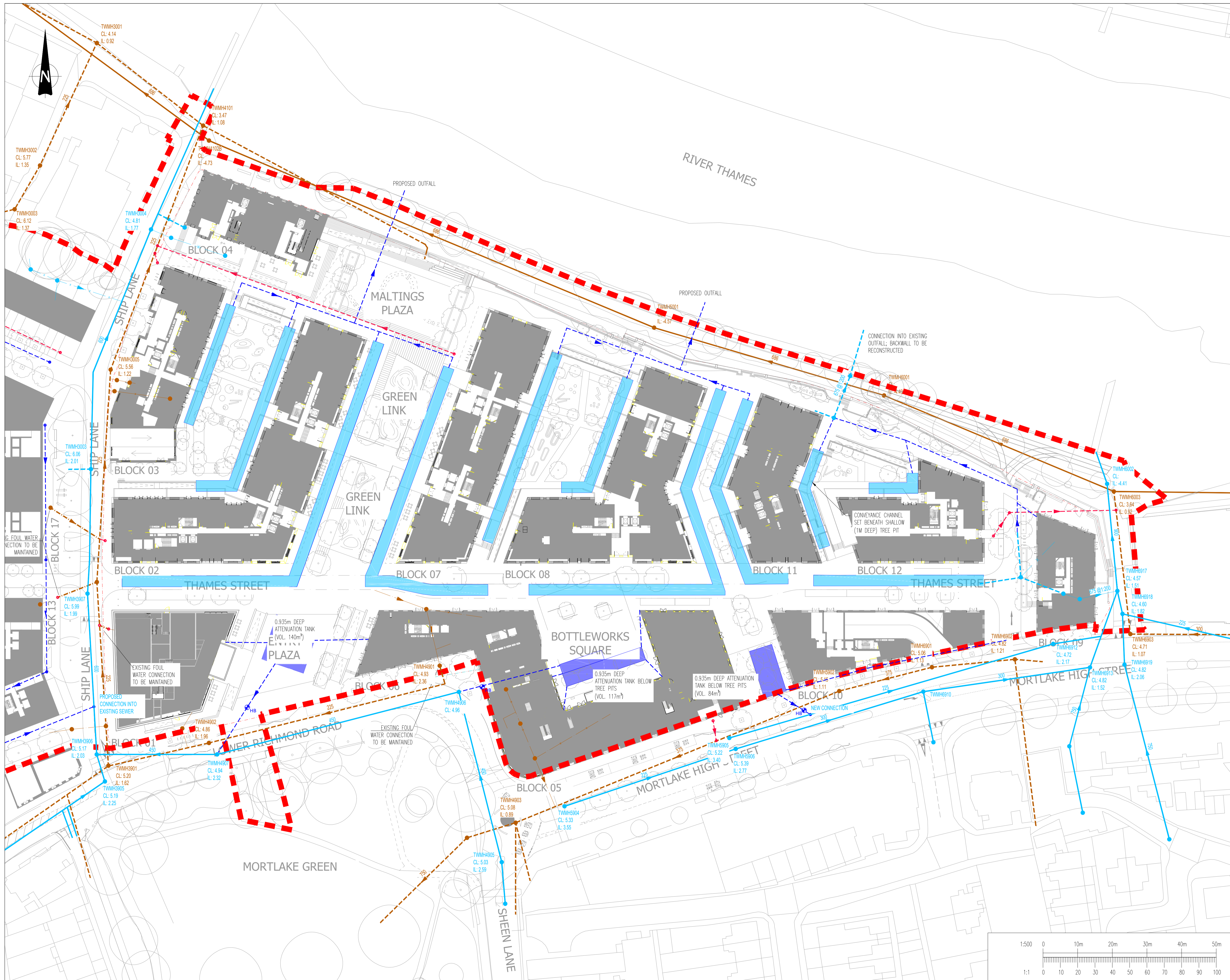
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|---|--|
| STAG BREWERY | |
| Title | |
| PROPOSED FOUL AND SURFACE WATER DRAINAGE LAYOUT SHEET 2 OF 4 | |
| Client | |
| RESELTON PROPERTIES LIMITED | |



| Drawing Status | | | | |
|--------------------|------|---------------------------------------|----------------|------------|
| PRELIMINARY | | | | |
| Designed by | NB | Checked by | DO | Project No |
| Drawn by | MAC | Date | SEPTEMBER 2017 | WIE10667 |
| Scales @ A1 | | work to figured dimensions only 1:500 | | |
| Publisher | Zone | Category | Number | Revision |
| WIE | SA | 92 | 0005 | A05 |



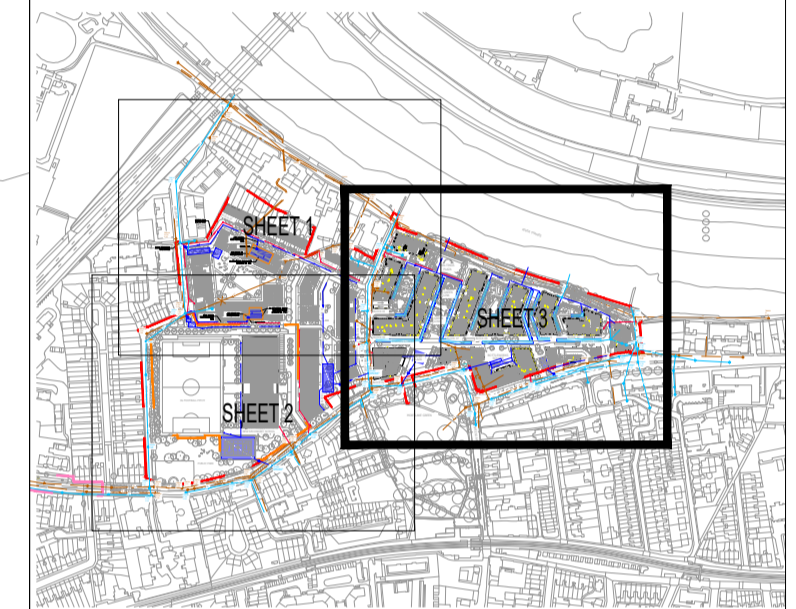
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- EXISTING PUBLIC RISING MAIN
- - - EXISTING SEWER TO BE ABANDONED
- PROPOSED FOUL WATER SEWER
- PROPOSED SURFACE WATER SEWER
- PROPOSED ATTENUATION TANK
- ▭ PROPOSED CONVEYANCE CHANNEL
- APPLICATION A BOUNDARY
- APPLICATION B (SCHOOL) BOUNDARY

- NOTES**
- 1) EXISTING DRAINAGE LAYOUT BASED ON THAMES WATER SEWER RECORDS AND PENBORN TECHNICAL SERVICES DRAWING (REF: P97907031).
 - 2) THE PART OF THE DEVELOPMENT WEST OF SHIP LANE IS SUBMITTED AS AN OUTLINE APPLICATION. THE BASEMENT PLAN PROVIDED (REF: 18019_C645_Z2_P_B1_001 - RECEIVED FROM SQUIRE & PARTNERS 29.01.2018) IS INDICATIVE ONLY AND SUBJECT TO THE PARAMETER PLANS SUBMITTED.
 - 3) DRAINAGE SUBJECT TO DETAILED DESIGN.



| Rev | Date | Description | By |
|-----|----------|-----------------------------------|-----|
| A05 | 13.02.18 | UPDATED APPLICATION BOUNDARY | NB |
| A04 | 29.01.18 | UPDATED ARCHITECT LAYOUT | NB |
| A03 | 01.11.17 | TEAM ISSUE | NB |
| A02 | 23.10.17 | SURFACE WATER ATTENUATION AMENDED | NB |
| A01 | 29.09.17 | PRELIMINARY ISSUE | MAC |

Project
STAG BREWERY

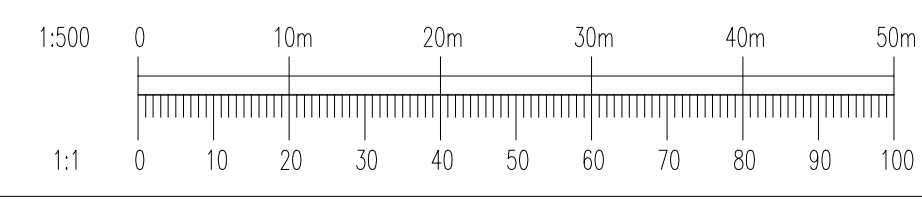
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PROPOSED FOUL AND SURFACE WATER DRAINAGE LAYOUT SHEET 3 OF 4

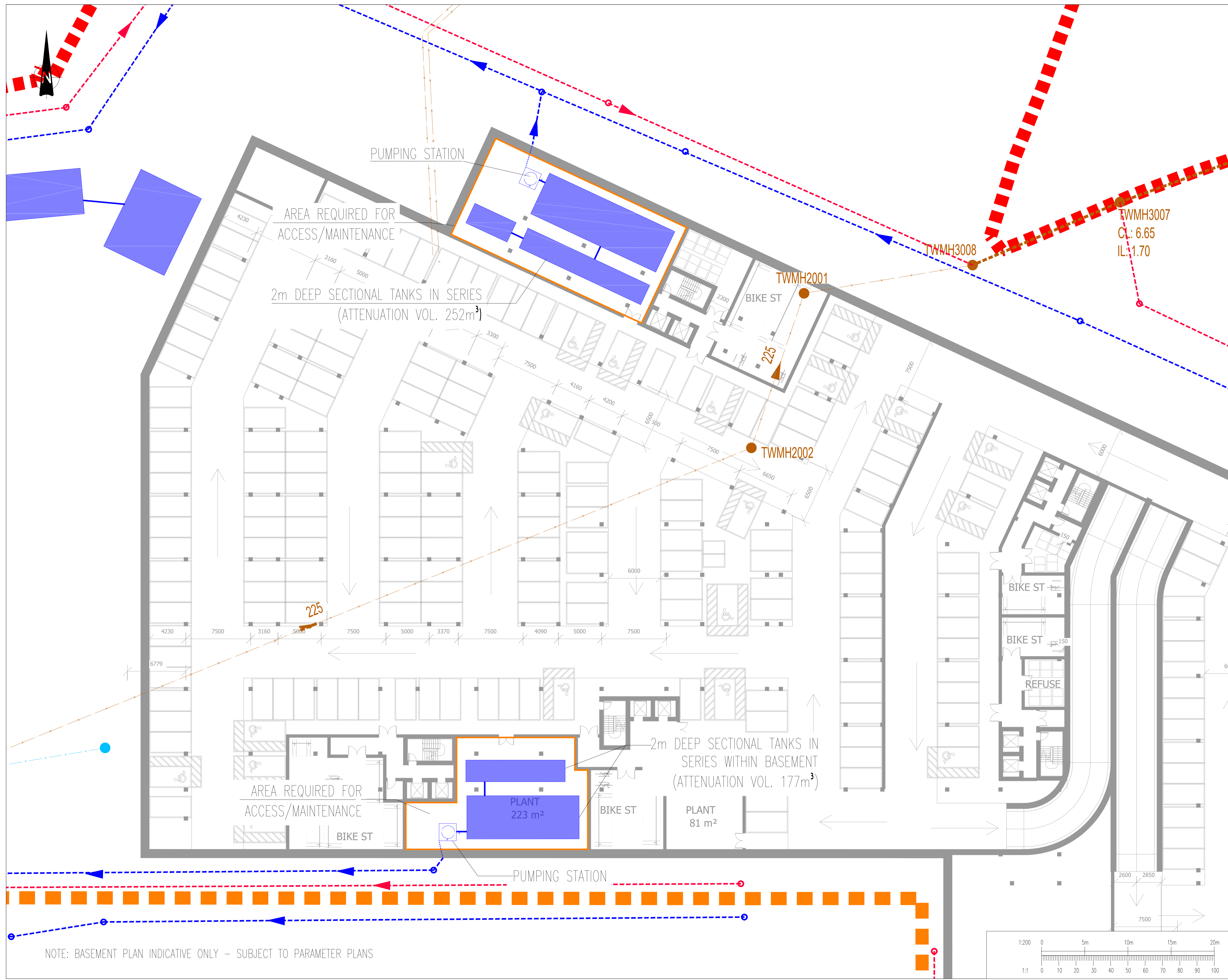
Client
RESELTON PROPERTIES LIMITED



Drawing Status
PRELIMINARY

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| Drawn by | MAC | Date | SEPTEMBER 2017 | Computer File No | WIE10667CSA020006.dwg |
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| Publisher | Zone | Category | Number | Revision | |
| WIE | SA | 92 | 0006 | A05 | |

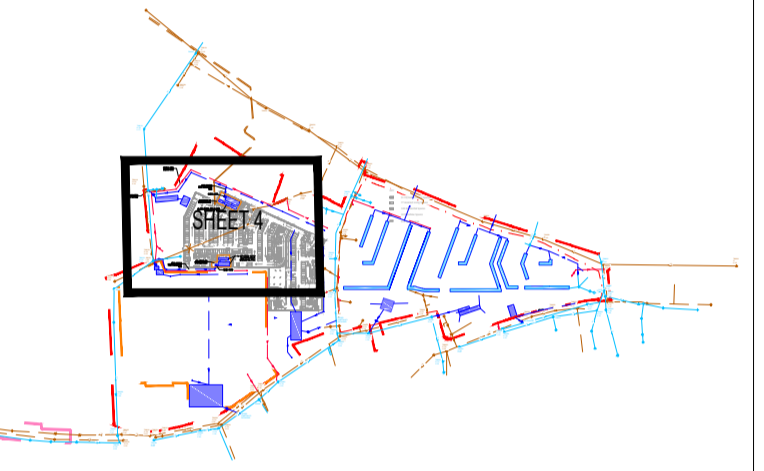




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- █ PROPOSED ATTENUATION TANK
- PROPOSED CONVEYANCE CHANNEL
- APPLICATION A BOUNDARY
- APPLICATION B (SCHOOL) BOUNDARY

- NOTES**
- 1) EXISTING DRAINAGE LAYOUT BASED ON THAMES WATER SEWER RECORDS AND PENBORN TECHNICAL SERVICES DRAWING (REF: P97970731).
 - 2) THE PART OF THE DEVELOPMENT WEST OF SHIP LANE IS SUBMITTED AS AN OUTLINE APPLICATION. THE BASEMENT PLAN PROVIDED (REF: 16019_C645_ZZ_P_B1_001 - RECEIVED FROM SQUIRE & PARTNERS 29.01.2018) IS INDICATIVE ONLY AND SUBJECT TO THE PARAMETER PLANS SUBMITTED.
 - 3) DRAINAGE SUBJECT TO DETAILED DESIGN.



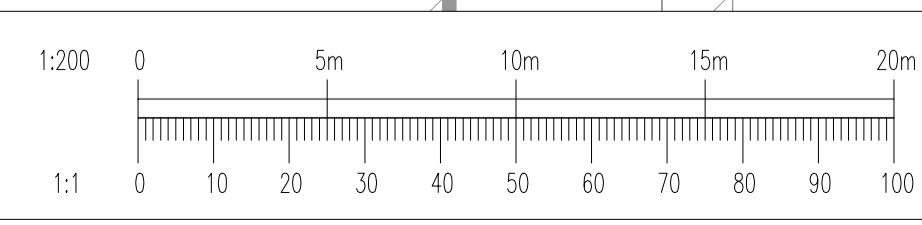
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|-----|----------|------------------------------|----|
| A04 | 13.02.18 | UPDATED APPLICATION BOUNDARY | NB |
| A03 | 29.01.18 | UPDATE TO ARCHITECT LAYOUT | NB |
| A02 | 01.11.17 | TEAM ISSUE | NB |
| A01 | 23.10.17 | DRAFT ISSUE | NB |

| | | | |
|------------|---|--|--|
| Amendments | | | |
| Project | STAG BREWERY | | |
| Title | PROPOSED FOUL AND SURFACE WATER DRAINAGE LAYOUT SHEET 4 OF 4 | | |
| Client | RESELTON PROPERTIES LIMITED | | |

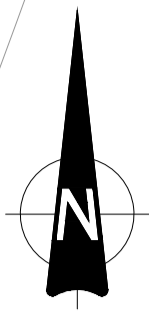


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| PRELIMINARY | | | | |
| Designed by | NB | Checked by | DO | Project No |
| Drawn by | NB | Date | OCTOBER 2017 | WIE10667 |
| Scales @ A1 | | Computer File No | | |
| work to figured dimensions only | | WIE10667CSA02007.dwg | | |
| Publisher | Zone | Category | Number | Revision |
| WIE | SA | 92 | 0007 | A04 |

NOTE: BASEMENT PLAN INDICATIVE ONLY - SUBJECT TO PARAMETER PLANS



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 - APPLICATION A BOUNDARY
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 - SURFACE WATER DRAINAGE CATCHMENT

- NOTES**
- 1) EXISTING DRAINAGE LAYOUT BASED ON THAMES WATER SEWER RECORDS AND PENBORN TECHNICAL SERVICES DRAWING (REF: P9790731).
 - 2) THE PART OF THE DEVELOPMENT WEST OF SHIP LANE IS SUBMITTED AS AN OUTLINE APPLICATION. THE BASEMENT PLAN PROVIDED (REF: 16019_C645_ZZ_P_B1_001 - RECEIVED FROM SQUIRE & PARTNERS 29.01.2018) IS INDICATIVE ONLY AND SUBJECT TO THE PARAMETER PLANS SUBMITTED.
 - 3) DRAINAGE SUBJECT TO DETAILED DESIGN.

| | | | |
|-----|----------|------------------------------|----|
| Rev | Date | Description | By |
| A02 | 13.02.18 | UPDATED APPLICATION BOUNDARY | NB |
| A01 | 30.01.18 | PLANNING ISSUE | NB |

Project: **STAG BREWERY**

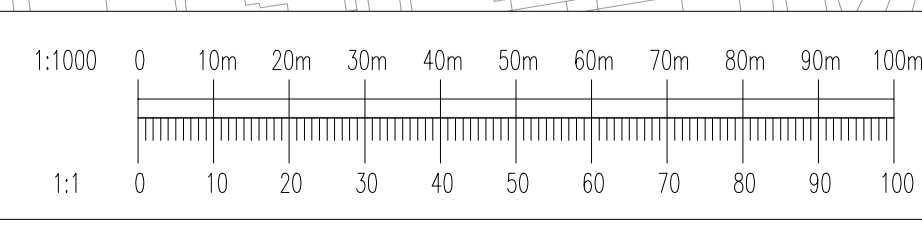
Title: **SURFACE WATER DRAINAGE CATCHMENT PLAN**

Client: **RESELTON PROPERTIES LIMITED**



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 mail@watermangroup.com www.watermangroup.com

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| Drawing Status: PRELIMINARY | | | | |
| Designed by | NB | Checked by | DO | Project No |
| Drawn by | NB | Date | JANUARY 2018 | WIE10667 |
| Scales @ A1 | | work to figured dimensions only 1:1000 | | |
| Computer File No | WIE10667CSA02008.dwg | | | |
| Publisher | Zone | Category | Number | Revision |
| WIE | SA | 92 | 0008 | A02 |





J. Foul Water Drainage Estimate Calculations

Appendices

Former Stag Brewery, Mortlake
Project Number: WIE10667
Document Reference: WIE10667-101-R-9-5-1-DS



Project Title: **Stag Brewery**
 Calculations Title: **Existing Foul Flow Estimate**

Sheet No: 1 of 2 Project No: WIE10667
 By: N Balboni Date: 23/10/2017
 Checked: D O'Donovan Date: 23/10/2017

| | Dry Weather Flow Rate (per day) | Source | Number of | Factor | Profile (hours) | Peak Flow Rate (litres/second) |
|---|------------------------------------|--------------------------------|----------------------|--------|-----------------|--------------------------------|
| Residential | | | | 2.12 | 24 | |
| Existing property = 160 litres/person/day | 368.0 litres per unit | Thames Water Guidelines (2016) | 0 existing units | | | 0.0 |
| New property = 125 litres/person/day | 287.5 litres per unit | Thames Water Guidelines (2016) | 0 proposed units | | | 0.0 |
| Occupancy = 2.3 persons | | | | | | |
| Hotel | 500.0 litres per room | British Water (2013) | 15 rooms | 3 | 24 | 0.3 |
| Student Accommodation | 200.0 litres per bed | Thames Water Guidelines (2016) | 0 beds | 3 | 24 | 0.0 |
| Offices | 750.0 litres per 100m ² | Jones (1992) | 2318 m ² | 3 | 10 | 1.4 |
| Retail | 400.0 litres per 100m ² | Jones (1992) | 0 m ² | 3 | 12 | 0.0 |
| Cinema | 10.0 litres per seat | Jones (1992) | 0 seats* | 3 | 8 | 0.0 |
| Health Club/Sports Centre | 50.0 litres per customer | British Water (2013) | 168 customers** | 3 | 16 | 0.4 |
| Day School | 90.0 litres per pupil | British Water (2013) | 0 pupils | 3 | 10 | 0.0 |
| Boarding School | 175.0 litres per pupil | British Water (2013) | 0 pupils | 3 | 24 | 0.0 |
| Hospital | 625.0 litres per bed | Jones (1992) | 0 beds | 3 | 24 | 0.0 |
| Nursing Home | 350.0 litres per bed | British Water (2013) | 0 beds | 3 | 24 | 0.0 |
| Restaurant | 30.0 litres per cover | British Water (2013) | 0 covers | 3 | 8 | 0.0 |
| Pub/Club | 15.0 litres per customer | Butler and Davies (2004) | 0 customers*** | 3 | 12 | 0.0 |
| Warehouse | 150.0 litres per 100m ² | Jones (1992) | 0 m ² | 3 | 12 | 0.0 |
| Manufacturing | 550.0 litres per 100m ² | Jones (1992) | 28671 m ² | 3 | 12 | 11.0 |
| Commercial | 300.0 litres per 100m ² | Jones (1992) | 0 m ² | 3 | 12 | 0.0 |
| SUB TOTAL | | | | | | 13.1 |
| Infiltration percentage 10% | | | | | | 1.3 |
| TOTAL | | | | | | 14.4 |

* Foul flow rate needs to be calculated based on number of seats. An allowance of 4m² has been made for each seat.

Floor area = 0 m² 4 m² per person

** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 672 m² 4 m² per person

*** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 0 m² 4 m² per person



Project Title: **Stag Brewery**
 Calculations Title: **Proposed Foul Flow Estimate**

Sheet No: 2 of 2 Project No: WIE10667
 By: N Balboni Date: 25/01/2018
 Checked: D O'Donovan Date: 25/01/2018

| | Dry Weather Flow Rate (per day) | Source | Number of | Factor | Profile (hours) | Peak Flow Rate (litres/second) |
|---|------------------------------------|--------------------------------|---------------------|--------|-----------------|--------------------------------|
| Residential | | | | 2.12 | 24 | |
| Existing property = 160 litres/person/day | 400.0 litres per unit | Thames Water Guidelines (2016) | 0 existing units | | | 0.0 |
| New property = 125 litres/person/day | 312.5 litres per unit | Thames Water Guidelines (2016) | 667 proposed units | | | 5.1 |
| Occupancy = 2.5 persons | | | | | | |
| Hotel | 500.0 litres per room | British Water (2013) | 16 rooms | 3 | 24 | 0.3 |
| Student Accommodation | 200.0 litres per bed | Thames Water Guidelines (2016) | 0 beds | 3 | 24 | 0.0 |
| Offices | 750.0 litres per 100m ² | Jones (1992) | 7121 m ² | 3 | 10 | 4.5 |
| Retail | 400.0 litres per 100m ² | Jones (1992) | 0 m ² | 3 | 12 | 0.0 |
| Cinema | 10.0 litres per seat | Jones (1992) | 530 seats* | 3 | 8 | 0.6 |
| Health Club/Sports Centre | 50.0 litres per customer | British Water (2013) | 185 customers** | 3 | 16 | 0.5 |
| Day School | 90.0 litres per pupil | British Water (2013) | 1200 pupils | 3 | 10 | 9.0 |
| Boarding School | 175.0 litres per pupil | British Water (2013) | 0 pupils | 3 | 24 | 0.0 |
| Hospital | 625.0 litres per bed | Jones (1992) | 4 beds | 3 | 24 | 0.1 |
| Nursing Home | 350.0 litres per bed | British Water (2013) | 230 beds | 3 | 24 | 2.8 |
| Restaurant | 30.0 litres per cover | British Water (2013) | 0 covers | 3 | 8 | 0.0 |
| Pub/Club | 15.0 litres per customer | Butler and Davies (2004) | 0 customers*** | 3 | 12 | 0.0 |
| Warehouse | 150.0 litres per 100m ² | Jones (1992) | 4493 m ² | 3 | 12 | 0.5 |
| Manufacturing | 550.0 litres per 100m ² | Jones (1992) | 0 m ² | 3 | 12 | 0.0 |
| Commercial | 300.0 litres per 100m ² | Jones (1992) | 0 m ² | 3 | 12 | 0.0 |
| SUB TOTAL | | | | | | 23.2 |
| Infiltration percentage 10% | | | | | | 2.3 |
| TOTAL | | | | | | 25.5 |

* Foul flow rate needs to be calculated based on number of seats. An allowance of 4m² has been made for each seat.

Floor area = 2120 m² 4 m² per person

** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 740 m² 4 m² per person

*** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 0 m² 4 m² per person

UK and Ireland Office Locations

