

Trevor Henson Associates

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5/1/22

CIVIL ENGINEERING BUILDING and STRUCTURAL DESIGN CONSULTANTS
LINDEN HOUSE MAIN STREET EWERBY SLEAFORD LINCOLNSHIRE

Scheme Plot 11. Chatterton Old Road. Date 5/1/22

Foul and Surface Water Discharge

1. Foul: allows 150 l/person/day.
and 3.5 persons. = $150 \times 3.5 = 525$ l/day.

Design flow = $6 \times$ dry weather flow
= $525 \times 6 = 3150$ l/day.

$3150 = \frac{3150}{24 \times 60 \times 60}$ l/s = 0.037 l/s. Say 0.04 l/s

2. Surface Water

Plot size = 21×31 m. imp area 50%
 $\therefore A_p = 0.5 \times 21 \times 31 = 326 \text{ m}^2$
= 0.0326 ha

From CP 2005 ceiling of design flow
is 25 - 38 mm/lr to prevent
over design.
use 38 mm/lr

$Q = 2.78 A_p \times R = 2.78 \times 0.0326 \times 38$
= 3.44 l/s.

allows 30% increase for Global Warming,

$Q = 1.3 \times 3.44 = 4.472$ l/s

Scheme No. _____

Date. _____

$$\begin{aligned} \text{Total flow} &= 4.472 + 0.04 \\ &= 4.512 \text{ l/s} \end{aligned}$$

This is less than max of 5.0 l/s that U. U. will accept.

∴ OK to discharge foul and surface water drainage to the combined sewer in old road.

