

**Our Reference:** 19078

**Your Reference:**

30 April 2020

UPG 77 Pty Ltd  
137 Gilba Road,  
GIRRAWEE NSW 2145  
(by e-mail)

Dear Sirs / Madam,

### **Proposed Residential Subdivision - 51, 134 & 146 Station Lane, Lochinvar Preliminary Water and Sewer Servicing Advice**

We refer to recent discussions and provide the following preliminary water and sewer servicing advice for your proposed 3 into 855 Lot residential subdivision at these addresses.

GCA is a Hunter Water-Accredited Supplier for water & sewer reticulation, water pumping stations, sewer pumping stations, and trunk water / sewer infrastructure.

### **Background and Utility Authority Liaison**

The development site is located within the Maitland City Council Local Government Area and within Hunter Water's water and sewer servicing catchments.

An Application for Developer Services (Section 50 Compliance Certificate under *Hunter Water Act 1991*) has been lodged for the entire development site (3 into 855 lots) with Hunter Water Corporation. The Development Masterplan has also been stamped by Hunter Water.

A response to the S50 Application is expected by the end of May 2020. The initial application has been made to enable the formal water and sewer servicing strategies to proceed with Hunter Water, in parallel with Council's Development Application process.

Additional Stage S50 Compliance Certificate applications will be lodged in future at the Subdivision Works Certificate phase, in alignment with the staged subdivision approval.

In the meantime, we provide the preliminary water and sewer servicing advice based on:

- Our extensive knowledge of water and sewer servicing in the Lochinvar release area through our past involvement in servicing strategy, design and construction across the Lochinvar Urban Release Area; and
- detailed discussions with Hunter Water planning and developer services representatives.

Also refer to the attached "high-level" water and sewer plans.

## Water Servicing

The Lochinvar Urban Release Area is included in a broader regional water servicing strategy and capital works program being delivered by Hunter Water Corporation.

A DN375mm regional trunk watermain runs through the site along the northern boundary. It was constructed by Hunter Water in 2016 with the primary aims of servicing the Lochinvar Release Area and supplying water to the suction side of a new regional water pumping station at St Helena Close.

Our previous servicing investigations suggest the existing DN375 watermain is capable of supplying water pressures within Hunter Water's normal operating range (200 – 600kPA) for any lots located in the elevation range of 18m and 56m AHD (approximately). Final servicing elevations will be subject to detailed modelling of the proposed local watermains and associated head losses within the development site.

Based on existing surface data the lot elevations across the site vary between 38m and 58m AHD (approx). Taking into account local head losses in watermains it is possible that a local water pumping station will be required to service lots at the highest elevations. This will be assessed in conjunction with the water servicing strategy for Hunter Water approval.

## Sewer Servicing

The development site is located within the Lochinvar 1 Wastewater Pumping Station gravity sewerage catchment. Lochinvar 1 WWPS is located on the northern side of the New England Highway and was recently upgraded by Hunter Water and partially financed by the NSW Government's Housing Affordability Funding (HAF) scheme.

New major trunk gravity sewerage lines are currently being delivered from Lochinvar 1 WWPS, along part of Station Lane and heading due south-east to service various proposed and future developments. These are being delivered by developers but Hunter Water funded.

Another trunk sewer line is planned along Station Lane to service this development and others along Station Lane. It will also be delivered by the private sector developers, but Hunter Water funded.

It is possible that some pumped sewer solutions may be required for part of the site which cannot drain under gravity into the new trunk sewer scheme. This will be resolved as part of Hunter Water's sewer servicing strategy process.

## Summary

In summary, from our experience on water and sewer service planning within the Lochinvar Urban Release Area and discussions with Hunter Water, the site can be fully serviced by Hunter Water Corporation's water and sewerage networks. Additional and upgraded infrastructure will be required.

Further investigation, servicing strategies, and design will be required in accordance with the standard Hunter Water processes. These processes will run in parallel with Council's development approval processes, ultimately resulting in the S50 Compliance Certificates required prior to Council executing the subdivision certificates for each development stage.

Please don't hesitate to contact the undersigned if you need further information or clarification.

Yours sincerely,



**Adam Shaw**

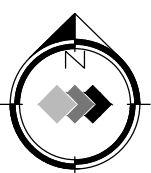
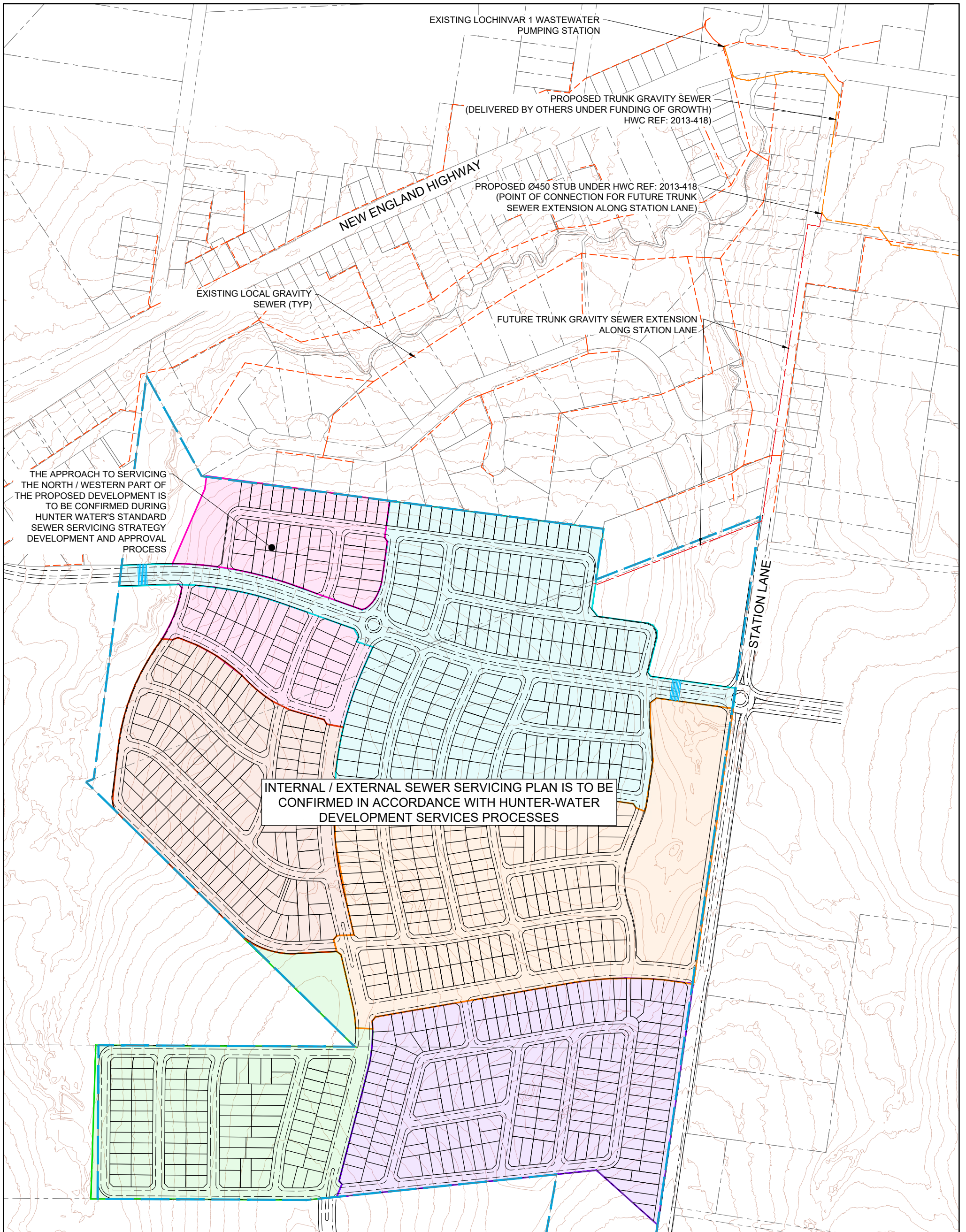
Principal Engineer / Director  
GCA Engineering

# ATTACHMENT 1:

## Preliminary / High-Level Sewer Plan







<span style="background-color: cyan; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> STAGE 1 (203 LOTS)	<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> STAGE 4 (83 LOTS)
<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> STAGE 2 (164 LOTS)	<span style="background-color: lightorange; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> STAGE 5 (125 LOTS)
<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> STAGE 3 (184 LOTS)	<span style="background-color: green; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> STAGE 6 (96 LOTS)

**TOTAL LOTS = 855**

**SKETCH ONLY**  
**PRELIMINARY / HIGH-LEVEL SEWER SERVICING PLAN**

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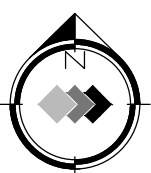
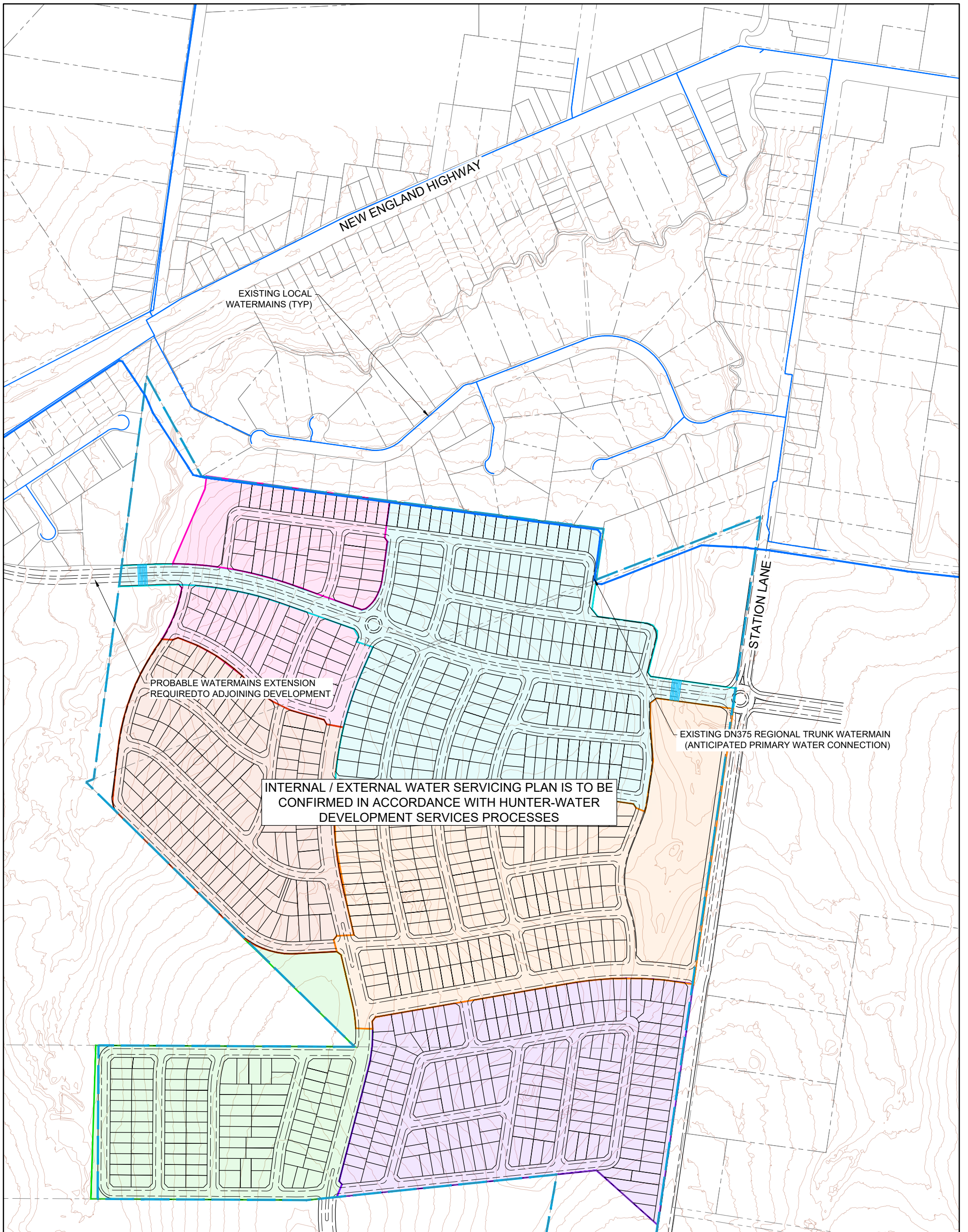
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## **ATTACHMENT 2:**

### **Preliminary / High-Level Water Plan**







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**TOTAL LOTS = 855**

**SKETCH ONLY**  
**PRELIMINARY / HIGH-LEVEL WATER SERVICING PLAN**

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DATE: 28.04.20