

Before the Independent Hearing Commissioner

Appointed by the Christchurch City Council

Under the Resource Management Act 1991

In the matter of Plan Change 18 (Hendersons Residential Rezoning) to the Christchurch District Plan

Cashmere Fields

Applicant

Evidence of Gregory Mark Whyte

14 August 2026

Applicant's solicitors:

Sarah Eveleigh | Sarah Schulte

Anderson Lloyd

Floor 2, The Regent Building, 33 Cathedral Square, Christchurch 8011

PO Box 13831, Christchurch 8141; or

DX Box WX10009 Christchurch

p + 64 3 379 0037

sarah.eveleigh@al.nz | sarah.schulte@al.nz

**anderson
lloyd.**

Introduction

- 1 My name is Gregory Mark Whyte.
- 2 I hold a Bachelor of Civil Engineering degree from the University of Canterbury, which I gained in 1996. I am also a Chartered Professional Engineer with the Engineering New Zealand, which I have held since 2003.
- 3 I hold the position of Managing Director at DHI Water & Environment (DHI). I have been in this position since February 2020 and with DHI since March 2008.
- 4 I have over 30 years of experience in urban water and water resources engineering and modelling. I have experience within both local government and consulting environments. I have led studies and been involved in hydrological and hydraulic modelling across New Zealand, Australia and the United Kingdom. My current role involves managing and running DHI New Zealand, with small teams in Australia and the United States, with various roles, including project director, project manager, modelling technical expert, hydrological and hydraulic investigations, peer reviewing, and strategic advice on modelling and modelling training.
- 5 I have a long history of stormwater modelling with Christchurch City Council (**CCC**). I began my career in 1996 working for CCC for 6 months doing some basic stormwater modelling. I returned to CCC and worked for them as a stormwater engineer from 1999 – 2003, carrying out modelling investigations and stormwater design. From 2006 to the present day, I have continued to be involved in CCC's stormwater modelling and have provided services as a consultant. We (DHI) have been closely involved in the Avon and Heathcote models as model custodians, but we have also provided peer reviews and been an expert witness for CCC several times. We are currently model custodians for the Heathcote City Wide model.
- 6 DHI has prepared a flood risk assessment supporting a private plan change request (PC18) by Cashmere Fields, seeking to rezone the below sites (the **Site**) from Residential New Neighbourhood (**RNN**) and Rural Urban Fringe (**RUUF**) zones to RNN, excluding the stormwater management areas which will remain RUUF (**the Proposal**):
 - (a) 126 Sparks Road (Lot 1 DP 412488)
 - (b) 17 Northaw Street (Lot 2 DP 412488)
 - (c) 36 Leistrella Road (Lot 3 DP 412488)
 - (d) 240 Cashmere Road (Lot 23 DP 3217)
 - (e) 236 Cashmere Road (RS 41613)

- (f) 200 Cashmere Road (Lot 1 DP 547021)
 - (g) 60 Leistrella Road, Part of Lot 406 DP 561520 (Balance Lot 349 as per RMA20213829)
- 7 DHI's assessments are contained in two reports (memoranda):
- (a) Cashmere Park Extension modelling November 2023 – dated 21 March 2025. This memorandum was provided as Appendix D to the PC18 Request; and
 - (b) Cashmere Field Flood Modelling – 10 August 2026. This memorandum is attached as **Appendix 1**.
- 8 The modelling and memoranda writing was undertaken by others under my supervision. I reviewed and approved both memoranda.
- 9 I undertook a site visit, together with my colleague Antoinette Tan, on 8 September 2023.

Code of Conduct for Expert Witnesses

- 10 While this is not a hearing before the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing my evidence. Other than when I state I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope of evidence

- 11 I have prepared evidence in relation to Cashmere Fields Stormwater modelling (the Modelling), used to assess the flooding pre and post development of the Site.

Stormwater system for the proposed development

- 12 The stormwater system in the proposed development area is described in the evidence of Jenny Bull. Key components, shown in Figure 1 below, include:
- (a) Construction of a new stream (Cashmere Park Stream) to replace Timber Lined Drain (part of Stillwells Drain), and diversion pipe from Timber Lined Drain to this new stream. Timber Lined Drain is blocked from taking flow south.
 - (b) Added pipe drainage between Cashmere Park Stream and the west wetland, and between the first flush detention basin and the downstream detention basin.

- (c) Filled and lowered land levels at 126 Sparks Road, 17 Northaw Street and 36 Leistrella Street
- (d) Two detention basins on 240 Cashmere Road, one at the north-west end and one at the south-west end.
- (e) A small detention basin located on the land immediately east of 240 Cashmere Road, at 236 Cashmere Road.

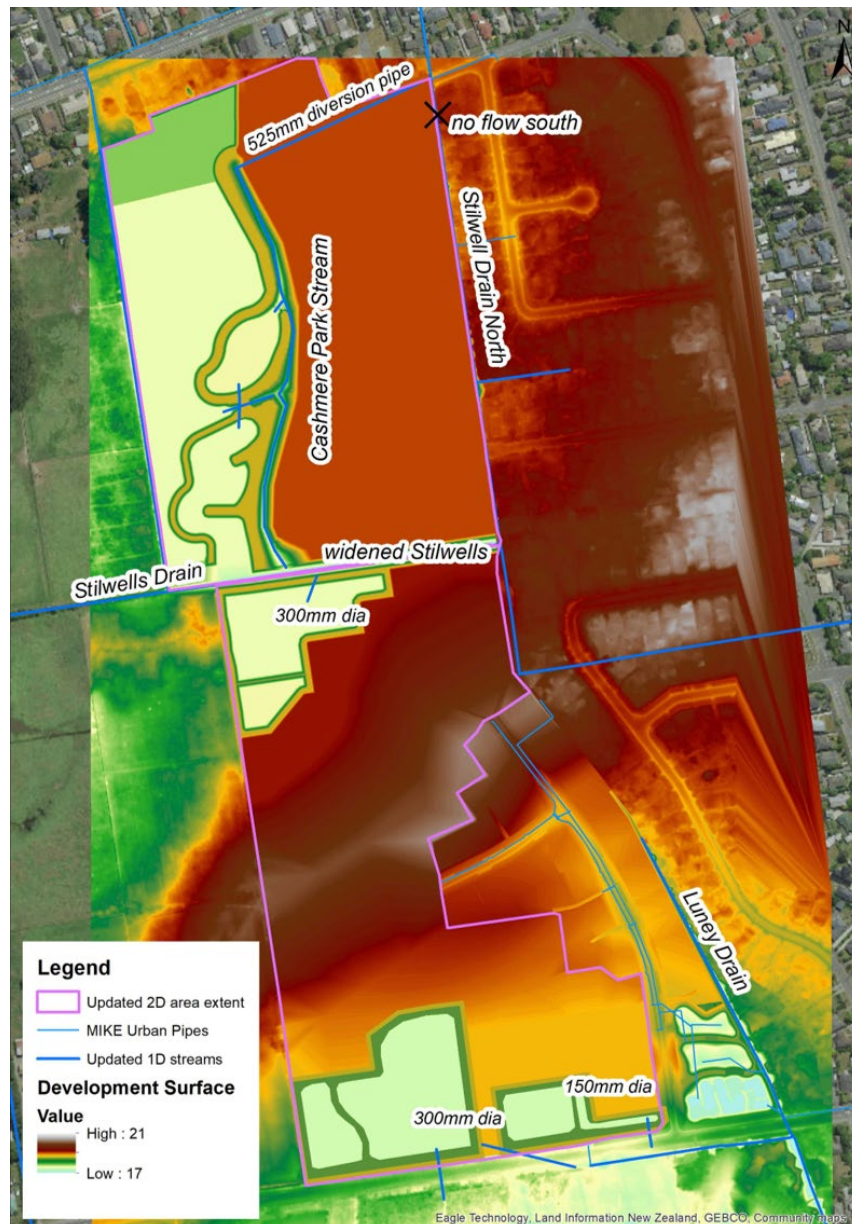


Figure 1: 1D features in the Development Model

- 13 In summary, surface water that is generated from the PC18 Site during rainfall events will be directed by pipes and swales to detention basins / wetlands within the development site. From there, water will discharge to ground and via a new

stream and diversion pipes to Cashmere Stream (which flows into the Heathcote River), or directly to the Heathcote River, see **Figure 2**. 'Ferniehurst' is the location of a rated river stage gauge on the Heathcote River at Ferniehurst Street, downstream of the Site and of the confluence with the Cashmere Stream, which produces river stage and flow records. This is a compliance site for CCC.



Figure 2: Key catchment features location map

Modelling

- 14 DHI has undertaken two versions of modelling:
 - (a) Base Model/ Phase 3 Model – The Base Model includes the ground levels of the existing Cashmere Park development.
 - (b) Development Model – Includes the residential development of the Site as proposed by PC18.
- 15 Modelling was carried out in March 2023 using the present day design rainfall for climate change and the results of this modelling were summarised in DHI's March 2025 memorandum, appended as Appendix D to the PC18 request. Following engagement with CCC staff regarding the potential impacts of climate change, further modelling was undertaken in August 2026, using the 2074 and 2123 design rainfall for climate change data. These reflect the most recent design rainfall horizons for climate change used by CCC in their modelling. In all cases, the modelling used the Heathcote City Wide model version 26, which is also referred to as the Base model or the Phase 3 model.

- 16 The Phase 3 model is a MIKE FLOOD¹ model that has three main components, MIKE 11 for rivers and open channels, MIKE URBAN for pipes and sumps and MIKE 21 for floodplain areas. It is commonly referred to as a 3-way coupled model that represents all key elements of a stormwater network.
- 17 The Phase 3 model is an independently peer-reviewed model. This model was built based on CCC's Model Schematisation – Avon/Estuary, Heathcote and Sumner – Rev 7 Report. This report is a specification for modelling. Any changes made to the Phase 3, such as including the proposed development model follow the Model Schematisation specification.
- 18 The Phase 3 model includes the existing Cashmere Park development and its associated stormwater detention ponds to the south, and accordingly provides a current baseline model of the stormwater system in this area.
- 19 A further version of the model has been created to compare to the Phase 3 model, by including the proposed development on the Site (the Development model). Comparisons were then made between the maximum water level results of the Phase 3 model and the Development model.
- 20 In note that the stormwater system components within the proposed development are conceptual and it is expected that they would need to be remodelled during the detailed design stage.
- 21 A number of assumptions have been made within the modelling, as identified in the DHI August 2026 report. I consider the assumptions are appropriate and do not compromise the model accuracy.
- 22 I summarise the results of the modelling below for relevant floodplain areas (Cashmere Fields area, Hendersons Basin) and rivers and open channels (Heathcote River, Cashmere Stream, Stillwell's Pipe).

¹ MIKE is the brand name of the hydraulic modelling software developed by DHI

1 in 200-year return period modelling

- 23 The 1 in 200-year design rainfall event for future climate conditions for the year 2124 of 24-hour duration was simulated for both the Baseline/Phase 3 model and Development model setups, and maximum water level results were compared. The 24-hour and 48-hour duration events were tested for the baseline model, and it was found that a 24-hour duration storm represents the critical duration for the Cashmere Fields area and at Ferniehurst on the Heathcote River.
- 24 The model results show that the proposed development has a minimal impact on the surrounding flood levels. A comparison of the Base Model and Development Model maximum water level differences is shown below in **Figure 3**.

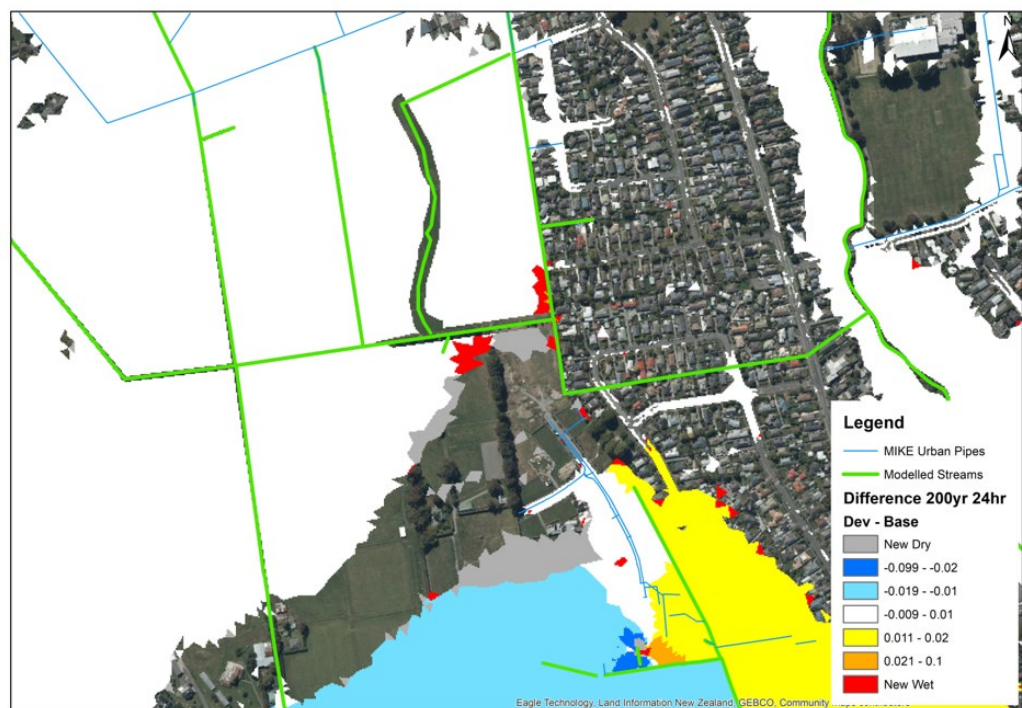


Figure 3 – Maximum water level difference, Development – Base, 1 in 200 year 24 hour event, 2124 climate

- 25 Water levels outside of the proposed developed land area benefit by a reduction in flood levels of up to 10 millimetres, across the wider Henderson's Basin area (identified in white in Figure 2). The red colour signifies where the flood extent has increased when compared to the existing, with the grey colour a decrease in flood extent when compared to existing. The yellow and orange colours indicate an increase in water level due to development, and the blue indicates a decrease in flood level. As described in the memorandum, this yellow/orange/light blue area is a model anomaly, and the 2D results above should be ignored and the 1D results used instead. This results in no increase in these areas of more than 10 millimetres.

- 26 Flood flows into Cashmere Stream increase by 70 l/s and Stillwell's Pipe (which discharges into the Heathcote) by 90 l/s due to the proposed development. However an increased Stillwell's Pipe discharge does not affect the peak water levels in the Heathcote River, due to being after the Heathcote peak.
- 27 Any increases in downstream water level, specifically at Fernihurst, due to increased discharges, are less than 10 millimetres. As noted in the DHI August 2026 Report, these increases are negligible and within the inherent inaccuracy and numerical tolerance of the model, and could be described as resulting in no discernible increase in modelled results. Further, the small increase in maximum water level at Ferniehurst Street recorder is expected to be able to be mitigated at detailed design by increasing compensatory storage and adjusting the flow rates out of the system.

1 in 50-year return period modelling

- 28 The 1 in 50-year design rainfall event for future climate conditions for the year 2074 of 24-hour duration and 48-hour duration was simulated for both the Baseline/Phase 3 model and Development model setups, and maximum water level results were compared. The 24-hour and 48-hour duration events were tested for the baseline model, and it was found that a 48-hour duration storm represents the critical duration for the Cashmere Fields area, but a 24-hour duration storm is critical at Ferniehurst on the Heathcote River.
- 29 The model results show that the proposed development has a minimal impact on the surrounding flood levels. A comparison of the Base Model and Development Model maximum water level differences is shown below in **Figure 4**.



Figure 4 – Maximum water level difference, Development – Base, 1 in 50 year 48 hour event, 2074 climate

- 30 Water levels outside of the proposed developed land area benefit by a reduction in flood levels of up to 30 millimetres (dark blue area), across the wider Henderson's Basin area. Once again the red colour signifies where the flood extent has increased when compared to the existing, with the grey colour a decrease in flood extent when compared to existing.
- 31 Flood flows into Cashmere Stream decrease by 160 l/s and Stillwell's Pipe (which discharges into the Heathcote) by 340 l/s due to the proposed development. As noted above, an increased Stillwell's Pipe discharge does not affect the peak water levels in the Heathcote River, due to being after the Heathcote peak. There is no increase in downstream water level, specifically at Fernihurst, for the 1 in 50 year 24-hour (2074 climate) event.

Response to matters raised in submissions

- 32 I have reviewed the detailed responses to submissions provided by Mr Norton and agree with his comments. In the interests of avoiding repetition, I have not repeated those responses here.
 - (a) However, in response to submission 57, relating to 150 Sparks Road: I confirm that whether 150 Sparks Road remains undeveloped, or is developed in the future, will not materially affect the PC18 flood modelling results or the flood neutrality conclusions.

- (b) The pre- and post-development flood levels at the boundary of 150 Sparks Road and the PC18 site, for the 1 in 50 year 48-hour (2074 climate) design rainfall event are RL18.68 m and RL18.65 m, respectively. For the 1 in 200 year 24-hour (2124 climate) design rainfall event, the pre- and post-development flood levels at the northern boundary of 150 Sparks Road are RL19.17 m and RL19.16 m, respectively.

Response to matters raised in the s42A report

- 33 There is broad agreement between Mr Norton² and I regarding flood modelling. Mr Norton records that:

40. While additional detailed design will be required at time of subdivision, I agree with DHI's findings that the development is unlikely to provide a measurable increase in flood levels affecting other properties and, in some cases, may result in flood level decreases. Further, the modelling results indicate that the development will not negatively impact the Council's ability to achieve its peak floodwater level requirements at Ferniehurst Street.

- 34 Mr Norton recommends "a condition requiring the final engineering design be tested again in the Heathcote model, using the Council's standard 50 and 200-year future development scenarios including climate change to confirm the predicted effects".³ As signalled at paragraph [20] above, it is anticipated that further modelling will be undertaken during the detailed design phase of the stormwater system. However, I also note that the DHI August 2026 report provides additional modelling incorporating future climate scenarios, and this confirms the level of effects (as detailed above).

Conclusion

- 35 I am satisfied that the proposed development of the Site will provide a better outcome than the status quo for managing floodwater in the wider Hendersons Basin area.
- 36 The proposed residential development of the Site, which will introduce an effective stormwater storage system, will decrease flood levels for the 1 in 50 year and 1 in 200 year design rainfall events, in the wider Henderson's Basin area, by 30 to 10 millimetres respectively.
- 37 At the location of the Ferniehurst Street river stage gauge there is a less than 10 millimetres increase in water level for the 1 in 200 year design rainfall event. There is no change in maximum water level for the 1 in 50 year design rainfall event.

² Statement of Primary Evidence of Robert Brian Norton on behalf of Christchurch City Council, 5 August 2026

³ At paragraph [41]

- 38 The small increase in maximum water level at Ferniehurst Street recorder is expected to be able to be mitigated at detailed design by increasing compensatory storage and adjusting the flow rates out of the system.

Gregory Mark Whyte

Dated 14 August 2026

Appendix 1

DHI Memorandum - Cashmere Field Flood Modelling (10 August 2026)

MEMO

To: Warren Lewis, Geoff Ward, Robert Brown

Cc: Bryan McGillan, Eliot Sinclair

From: Antoinette Tan, DHI

Project 44801992

Date: 10th August 2026

Subject: Cashmere Fields Flood Modelling

This memo details the flood modelling, of the Cashmere Fields proposed development, completed by DHI in August 2026. This modelling follows the work completed between 2022-2025 on the same development. The Cashmere Fields development encompasses a group of proposed developments at the eastern edge of the Henderson's Basin, in Christchurch. The Christchurch City Council (CCC) Heathcote City Wide model has been used to assess the flooding pre and post development. This modelling will support a private plan change application for the area.

The modelling work follows on from concerns about the flood events modelled for the proposed development. The previous work was run using the 200-year ARI Existing climate model, while this current work looks at the effects of the development for both the 50-year 2074 climate and the 200-year 2124 climate. These reflect the most recent design horizons for climate change applied by Christchurch City Council in their modelling.

Modelling

The Heathcote City Wide model version 26, also referred to as the Phase 3 model, was used in this investigation as the baseline. The Phase 3 model was completed mid-2023 and represents the most up to date CCC model of the Heathcote catchment. Although a more recent interim version of the model is available, this was not used for this study because: 1) the timeframe to complete the modelling was short and it was more efficient to continue using the V26 model, 2) the interim model is not a completed version and does not reflect the version currently being used for the CCC online flood viewer (these use the v26 results), 3) the interim model and v26 produce similar results. The only difference made to the previous modelling was to use the most recent design rainfall inputs. These use a slightly later climate horizon, i.e. 2074 vs 2060 and 2124 vs 2100. This means that the rainfall used in the model is larger than that used in the online maps, but more in line with what future modelling will use.

Base model

The base model reflects the catchment prior to the proposed development. The only changes made to the base model were to adjust the MIKE 11 hotstart file, to maintain consistency between the base and developed model and to prevent false positives in the water level difference mapping, and to resolve instabilities up near Hayton's stream and in Woolston, which were creating issues with the simulations.

Development model

The development model includes the proposed developments to the Northwest of the existing Cashmere Park Development, the 2D extent of the development area is indicated in Figure 1. A proposed surface for the development area was provided by Eliot Sinclair and used to define the areas in the model. The development design includes several stormwater ponds that act as compensatory storage, to offset the impact of the development. Where these ponds will both act as storage and allow for the slower release of flood water, reducing peak flows into the downstream environment.

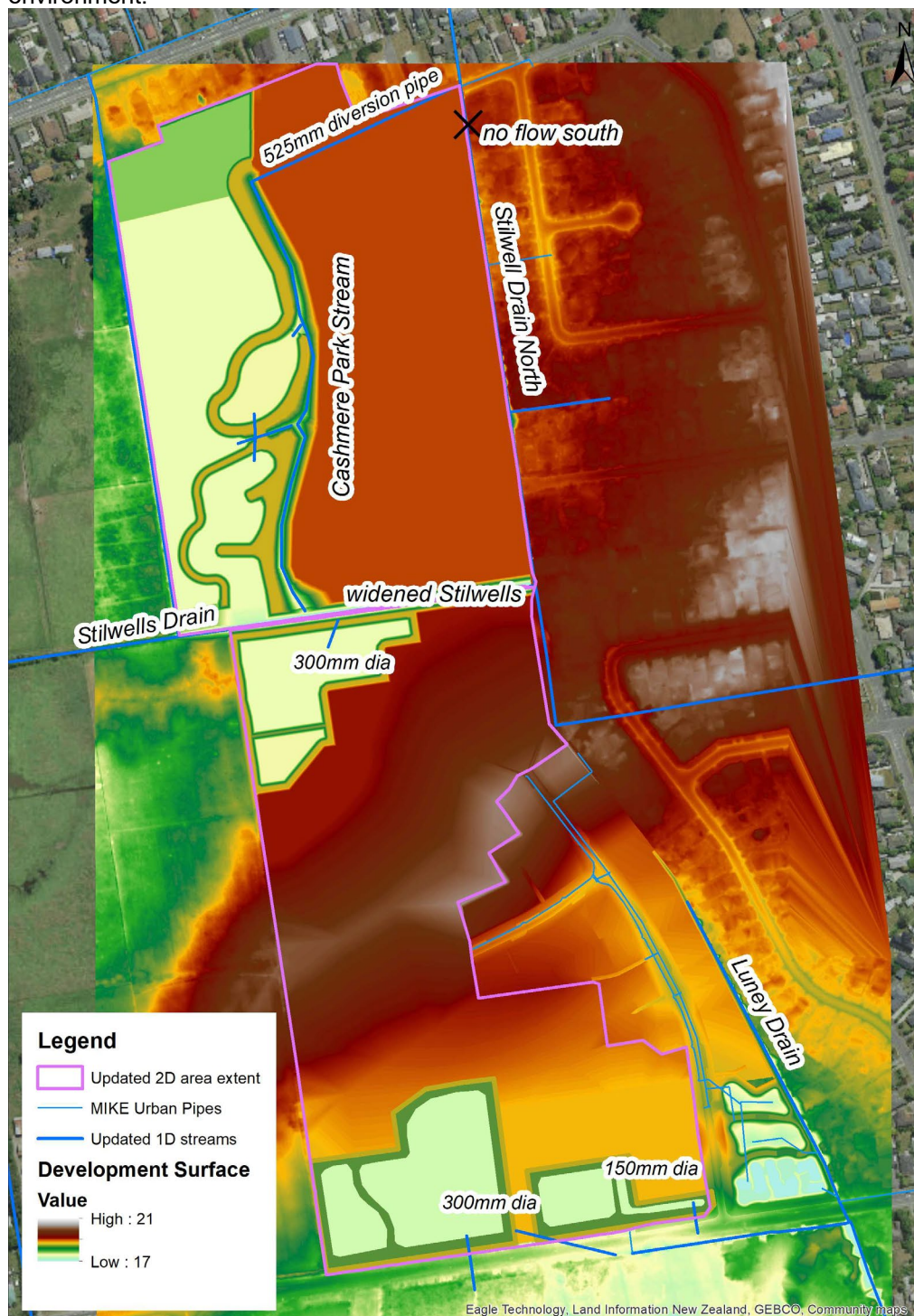


Figure 1: Proposed development

The following updates were made to the development model, Figure 1.

- Used base model as a starting point
- Added new stream and diversion pipe from the north Stilwell's drain, used cross sections extracted from the development surface. Included backflow prevention on diversion pipe.
- Added pipe structures between the Cashmere Park Stream and the west wetland, and between the first flush basin and downstream pond.
- Blocked the North section of Stilwell's drain from taking flow south
- Updated cross sections along Stilwell's drain within the development area
- Updated mesh to include basin outlines and stream blackout
- Updated mesh levels to reflect the proposed design levels
- Added dummy outlet pipes from basins as indicated in Figure 1. Backflow prevention is included in all basin outflow pipes, except the inter basin pipes in the northwest wetland.
- Updated 1D and 2D roughness definition
- Updated infiltration based on land use type, area marked as residential development set to 50% of the base infiltration rate, road area set to 0 infiltration rate.
- Updated groundwater depth based on new levels.
- Added 2D dike structures to represent basin overflow levels where applicable
- Added a culvert beneath Cashmere Road to allow the southern floodplain water to enter into the large southern pond. This culvert is one way into the pond.

Assumptions

The following assumptions and simplifications were made in the modelling to account for the limited data available at this stage of the design process and to allow for an efficient model build without compromising model accuracy.

1. The stormwater pipe network was not included for the proposed development area, as this has not yet been designed.
2. Basin outlet sizes were all assumed; these outlets were included to allow the basins to drain and would need to be updated in detailed design.
3. Additional roads within the development areas were not included in the mesh structure, this will have minimal impact since the terrain provided does not include detail on the roads.
4. No bridge was included on Stilwells drain to represent the proposed road crossing. The road is currently modelled to be flush with the development levels, i.e. all levels at RL 19m, which means the road is not acting as an explicit overland flow path in the current surface design. This is less important because the water depth on the site is less than 50mm.

Determining Critical Duration

A critical duration assessment in the previous 2025 modelling indicated that for the 1 in 200-year Existing Climate scenario the critical duration was the 48-hour event in Henderson's Basin and the 24-hour event at Ferniehurst on the Heathcote River, downstream. Both durations have been assessed for the 200-year and 50-year future climate, where the 50-year future climate scenario produced a similar trend to the above, and the 200-year future climate showed the 24-hr event as critical at both key locations.

Model simulations

The model was simulated for

- the 1 in 200-year return period event, using the future climate conditions for the year 2124 and accounting for future development throughout the catchment, and
- the 1 in 50-year return period event, using the future climate conditions for the year 2074 and accounting for future development throughout the catchment.

Results

The model results show that the proposed development has no negative impacts on the surrounding properties in Henderson's basin. With a reduction in flood levels, of up to 25mm depending on the scenario modelled.

However, in the larger 200-year future climate flood event, a small increase in flood levels is observed in the downstream receiving environment, i.e. from Cashmere Stream and along the Heathcote River down to St Martins. These increases are negligible, and can be interpreted as less than 10mm, which is within the inherent inaccuracy and numerical tolerance of the model. In the 1 in 50-year future climate event there is no discernible increase in the model results throughout the model domain. The results at two key locations, Ferniehurst Bridge (a key monitoring point), and at Hendersons Basin, are shown in Table 1. The 2D results are presented in Figure 5 to Figure 16 at the end of this document.

Table 1: Water Levels at key locations

Water Level (m RL CCD)		
M11 location	HETH.STILDRBR 463.8	HETH.HEATHCOT 9907.95
Event-Scenario/Location	Cashmere Fields	Ferniehurst
24hr2%CC Existing	18.60	18.12
24hr2%CCDev	18.58	18.12
48hr2%CC Existing	18.65	17.94
48hr2%CCDev	18.62	17.95
24hr0.5%CC Existing	19.16	18.78
24hr0.5%CCDev	19.15	18.79
48hr0.5%CC Existing	19.15	18.59

The results show a clear trend that the larger event (1 in 200-year future development) is less effective at mitigating the impact of the development than the smaller event (1 in 50-year future development). This is primarily due to a reduction in the effectiveness of the compensatory storage, included in the development design. This is as expected, due to the base model flood extent extending further into the raised development area. It is anticipated that, although the results are showing a negative impact downstream, this impact will be able to be mitigated in detailed design by increasing the compensatory storage and adjusting the flow rates out of the system.

A couple of key points to come out of the results analysis are highlighted below:

The design for the development enables runoff to enter into the north wetland via Henderson's basin from the west. In the south, water can cross Cashmere Road and enter the larger basin via the culvert. Allowing flow to enter this basin from the south results in essentially no change in the south floodplain. Earlier modelling has shown that if the flow was not able to enter this area, a slight increase in flood levels would be expected south of the development.

In the 1 in 200-year result, the flood maps show a larger than 10 mm increase in flood level at the basin on the left bank of Cashmere Stream, either side of Luney's Drain. We believe this level increase is misleading because the model has a known limitation around areas with small 1D channels in situations where floodwater is significantly deeper than the drain. This issue results in an overestimation of the losses across the flood couplings creating a discontinuity in what should be a level floodplain. In these situations, it is standard practice to use the 1D stream level instead of the 2D surface levels to determine the representative flood level. Using this approach the increase becomes less than 10mm in this area.

The diversion in North Stilwell's Drain into the proposed Cashmere Park Stream allows all flow to be diverted into this new stream. This indicates that the pipe size is sufficient for the events modelled.

The change in flow out of the site has been assessed at two locations. The first is in the Stilwells pipe which outlets directly in the Heathcote River, and the second is at the Cashmere Stream bridge on Worsley's Road. The model results show that in the outflow through Stilwell's pipe increases for the development for both events, however the timing is such that the peak occurs after the peak flow in the Heathcote River. This negates any impact the increased flow may have downstream on the peak water levels. At Cashmere Stream the 50-year event shows a reduction in flow downstream while the 200- year shows an increase. If we compare this increase at the time of the peak at Ferniehurst the increase is even higher, in the order of 0.7m³/s. This increase in flow is reflected by the increase in water levels observed downstream in the development scenario.

Table 2: Peak outflows from system

24 hr events (discharges m ³ /s)	Stillwell's Pipe	Cashmere Stream
Base 50 yr	1.15	13.21
Dev 50yr	1.49	13.05
Difference 50yr	0.34	-0.16
Base 200yr	2.06	20.87
Dev 200yr	2.15	20.94
Difference 200yr	0.09	0.07

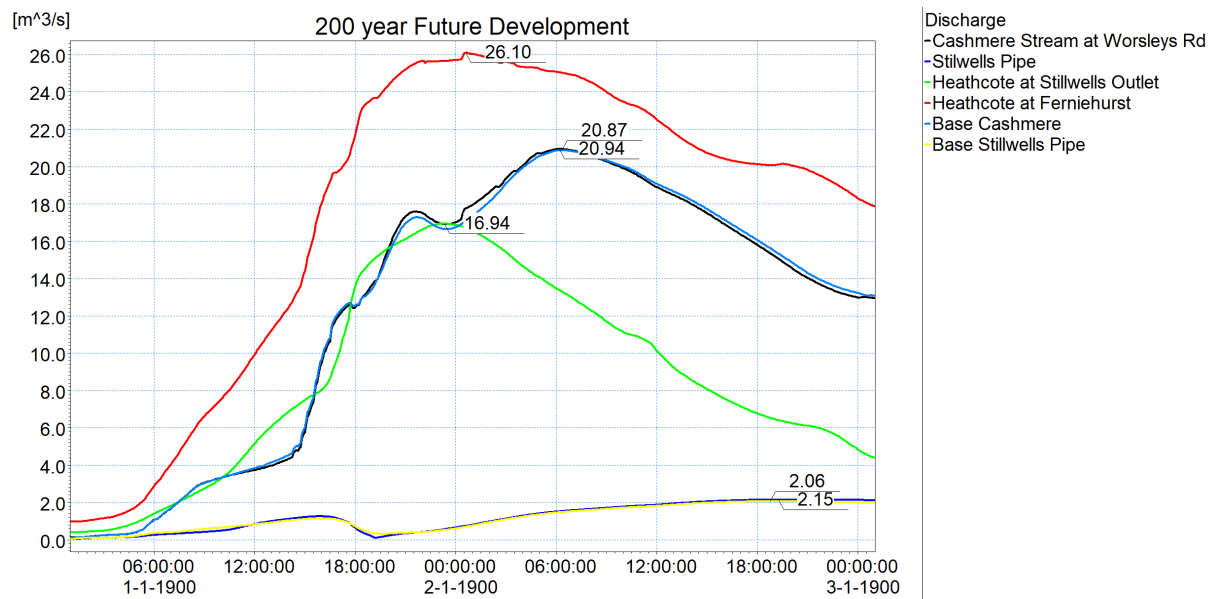


Figure 2: Flow timing between site runoff and the Heathcote River (200-year 24hr)

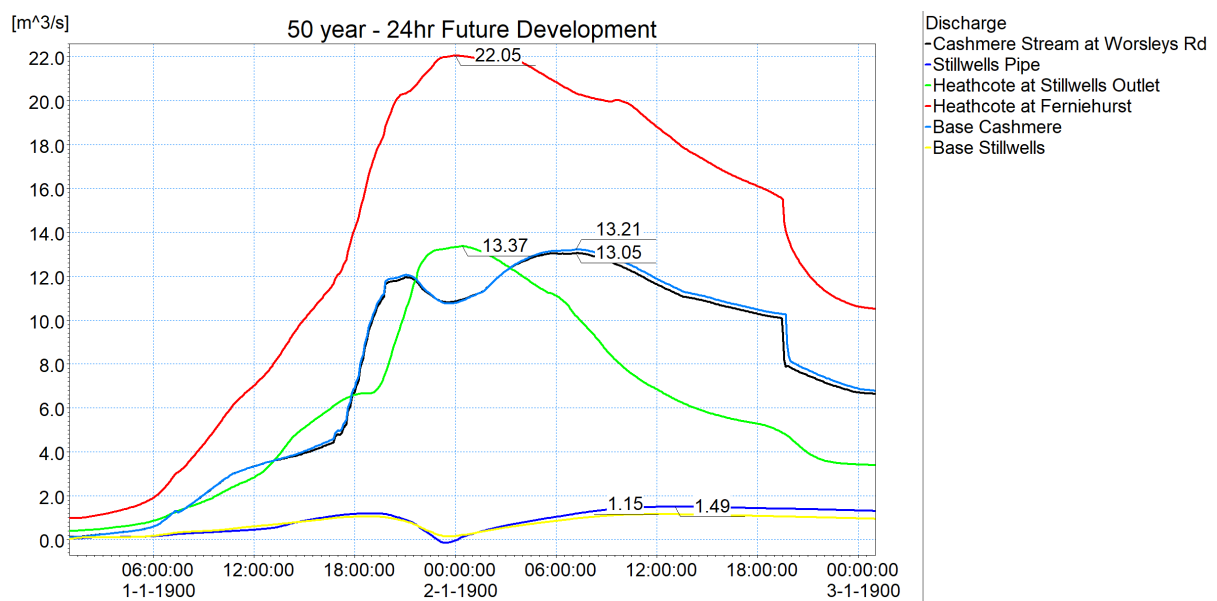


Figure 3: Flow timing between site runoff and the Heathcote River (50-year 24hr)

Within Henderson's basin, there is a neighbouring property of interest at 150 Sparks Road which borders the northwest section of the proposed development, Figure 4. The model results at this location are presented in Table 3. The model consistently shows a reduction in flood level at this location due to the proposed development.

Table 3: Water Level results at 150 Sparks Road

Event	Water Level Base (m RL CCD)	Water Level Development (m RL CCD)	Difference (mm) Development minus Base
50FD year 24hr	18.63	18.61	-20 mm
50FD year 48hr	18.68	18.65	-25 mm
200FD year 24hr	19.17	19.16	Slight decrease

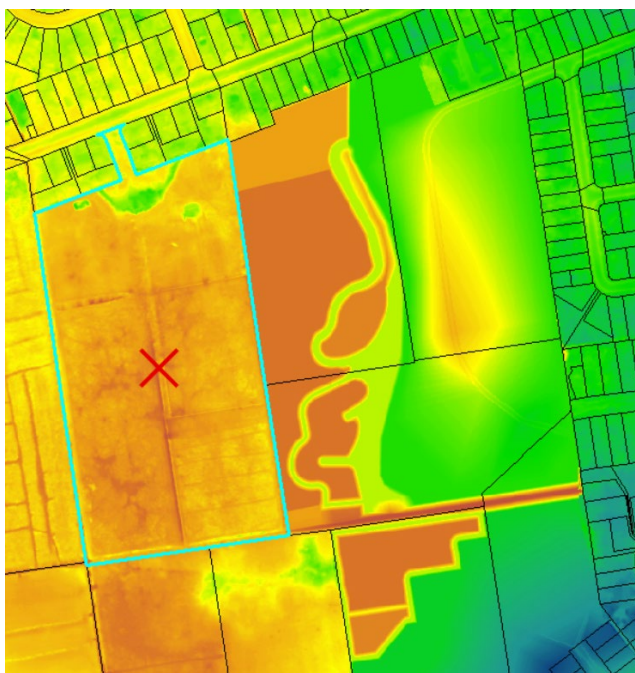


Figure 4: Location of 150 Sparks Road. Parcel highlighted in blue, and red x indicating area where water levels were sampled.

Comment on numerical accuracy

The water level differences discussed in this memo are within a small margin, i.e. less than 10mm. Complex flood models such as these have inherent numerical error, and while this error has been minimised, there is a limit to the absolute accuracy of the results. For this reason, difference +/-10mm or in that order should be assumed to be no difference and have not been specifically reported on in this memo.

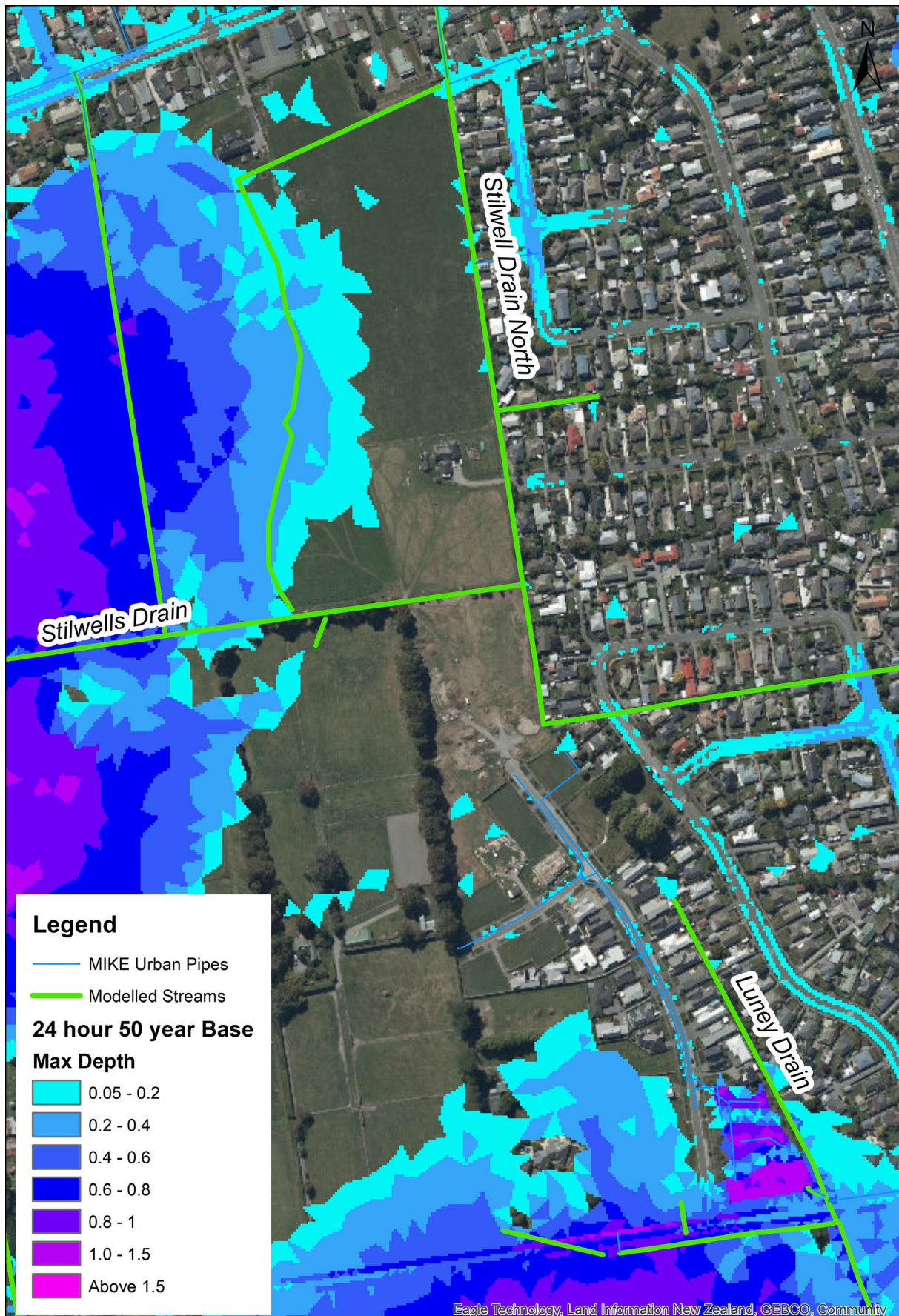


Figure 5: 50-year 24-hour base model maximum depth

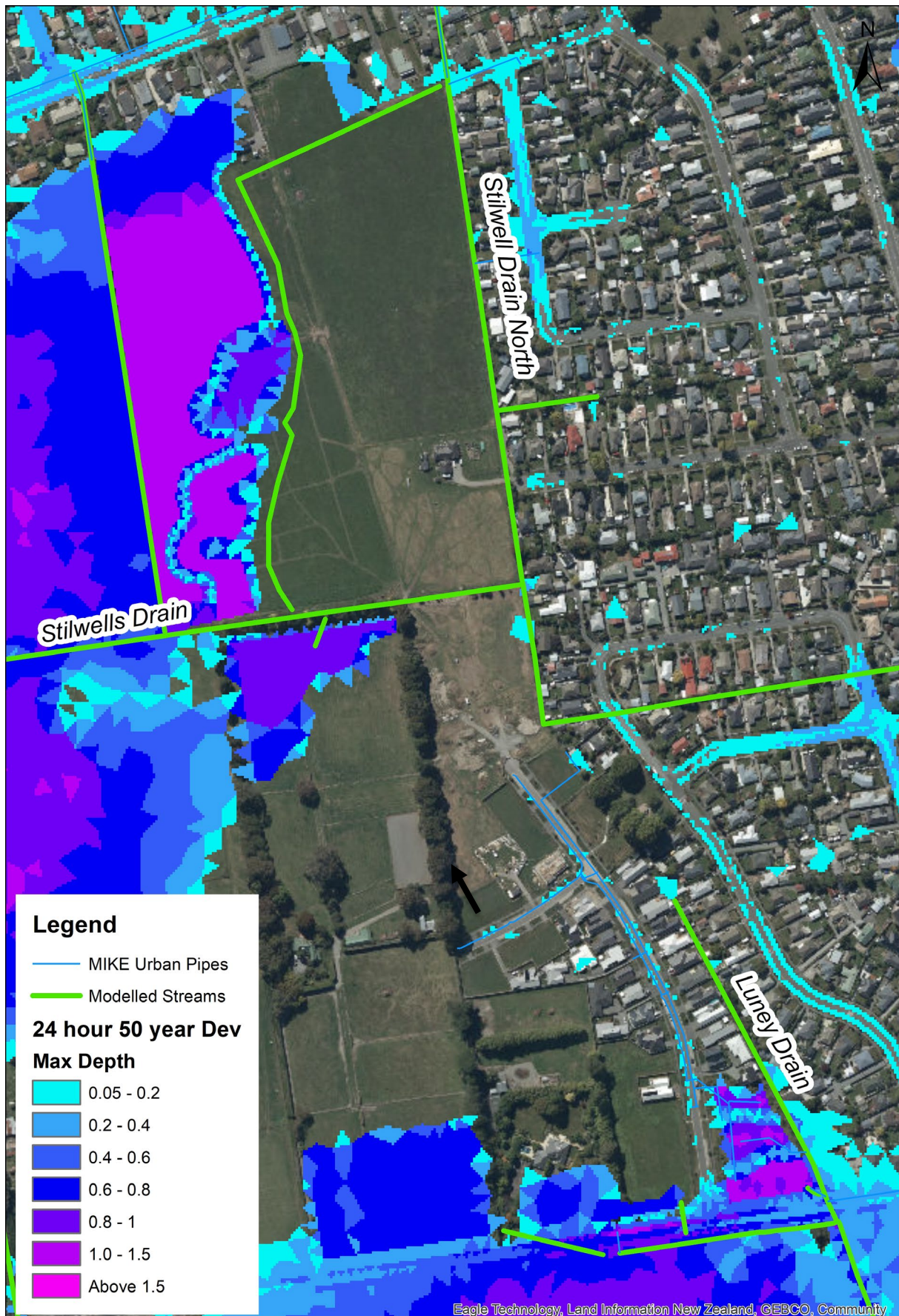


Figure 6: 50-year 24-hour development model maximum depth

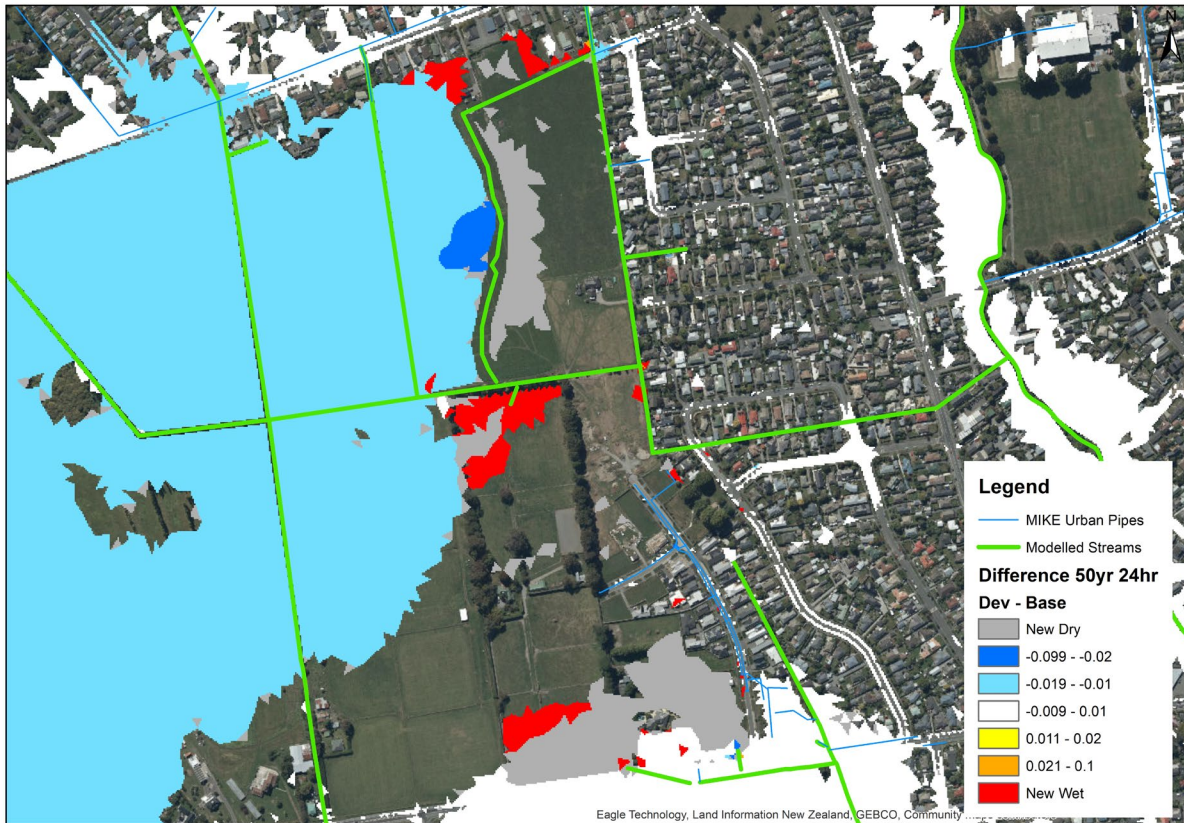


Figure 7: Development - Base, Max Water Level Difference, 50-year 24-hr storm

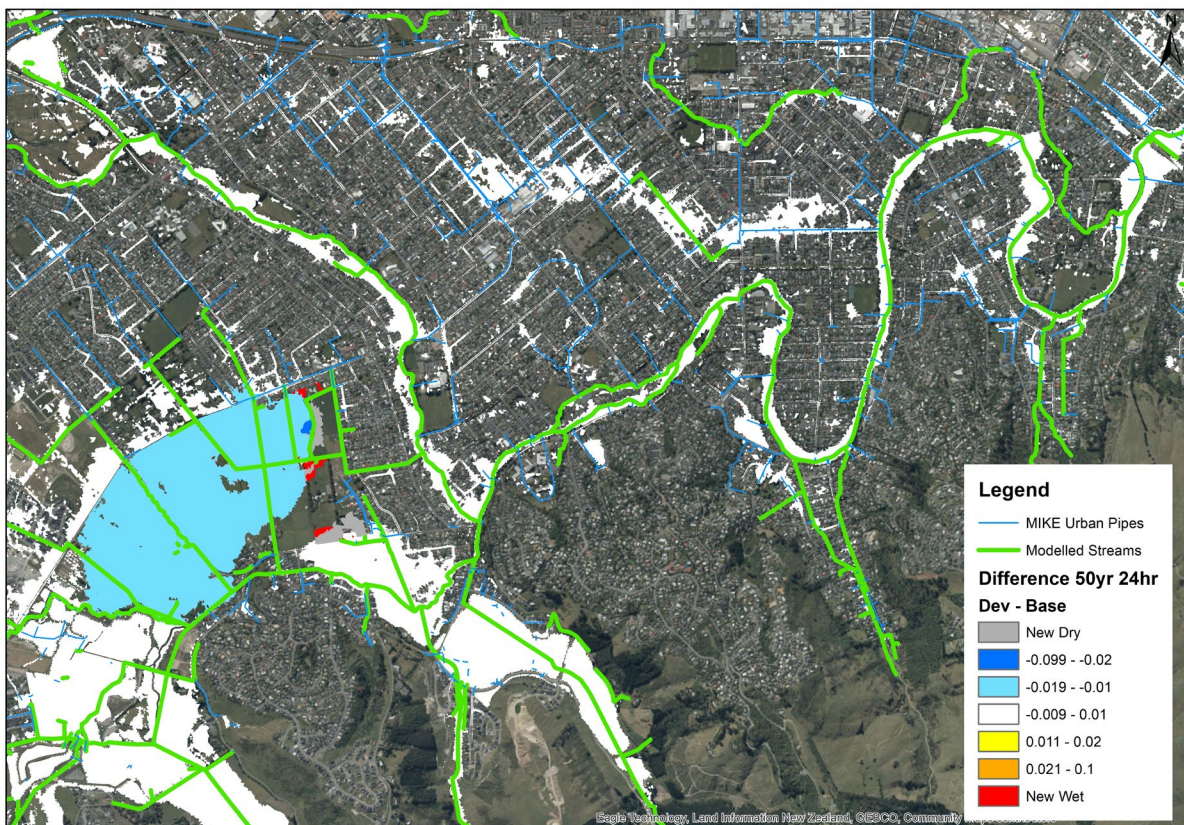


Figure 8: Development - Base, Max Water Level Difference, 50-year 24-hr storm – zoomed out

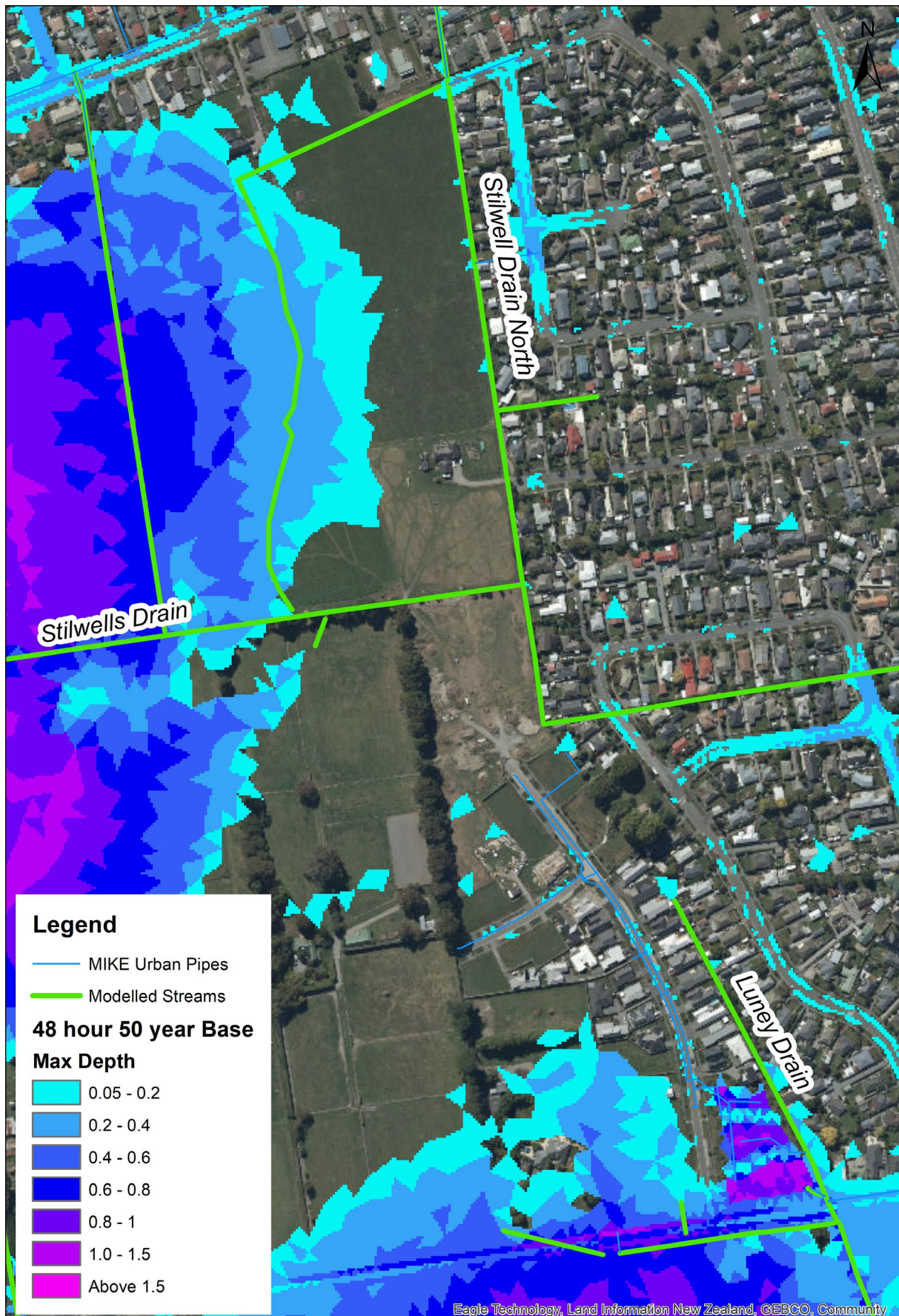


Figure 9: 50-year 48-hour base model maximum depth

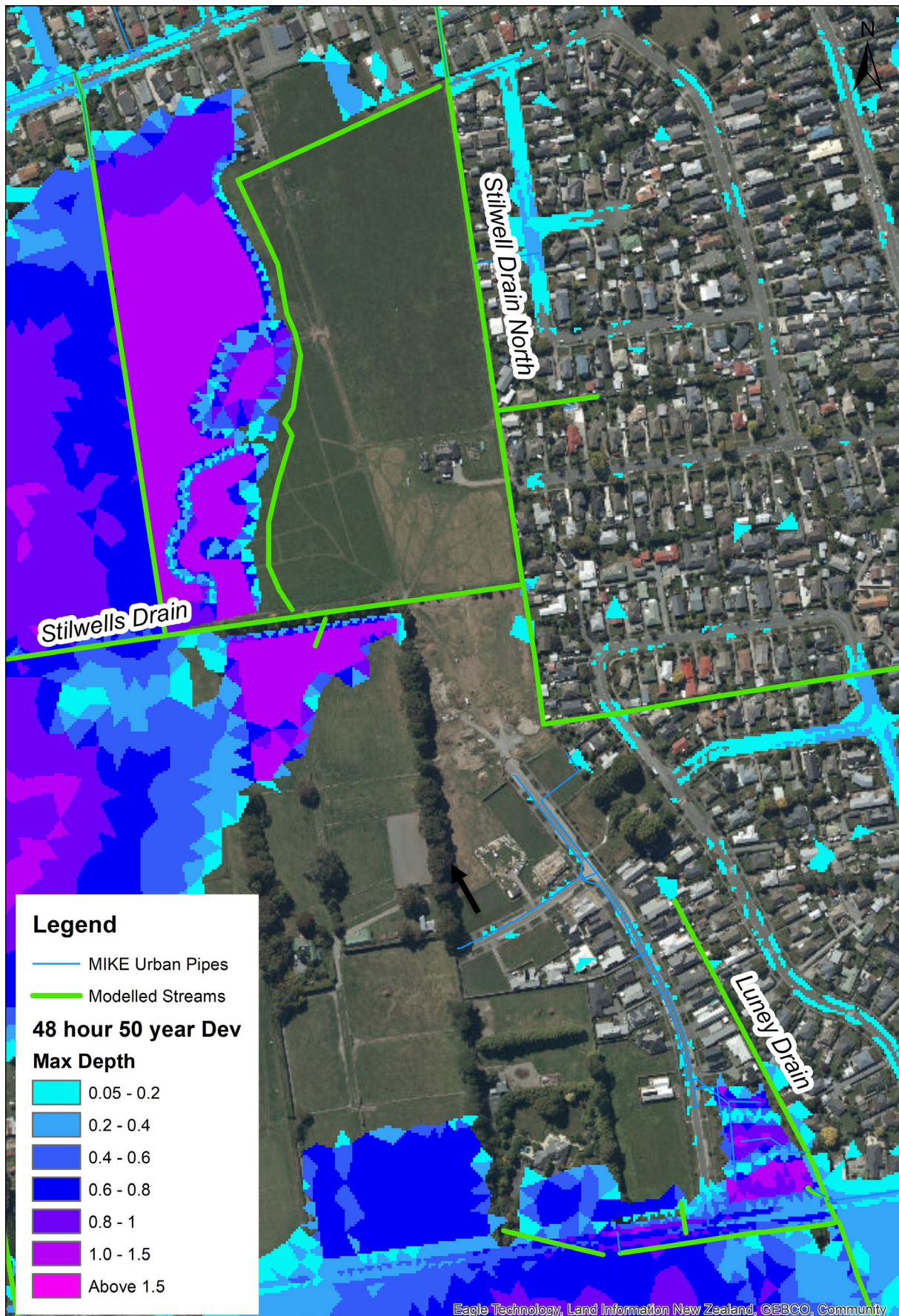


Figure 10: 50-year 48-hour development model maximum depth

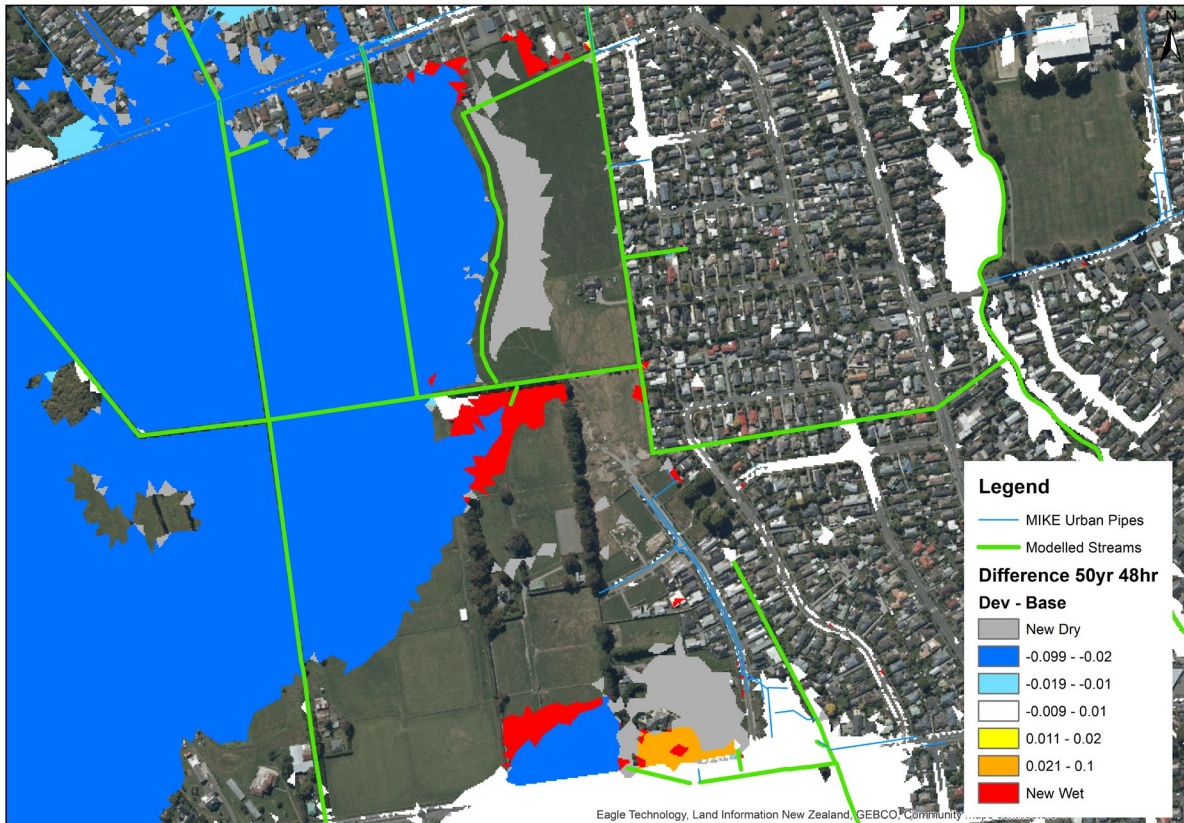


Figure 11: Development - Base, Max Water Level Difference, 50-year 48-hr storm

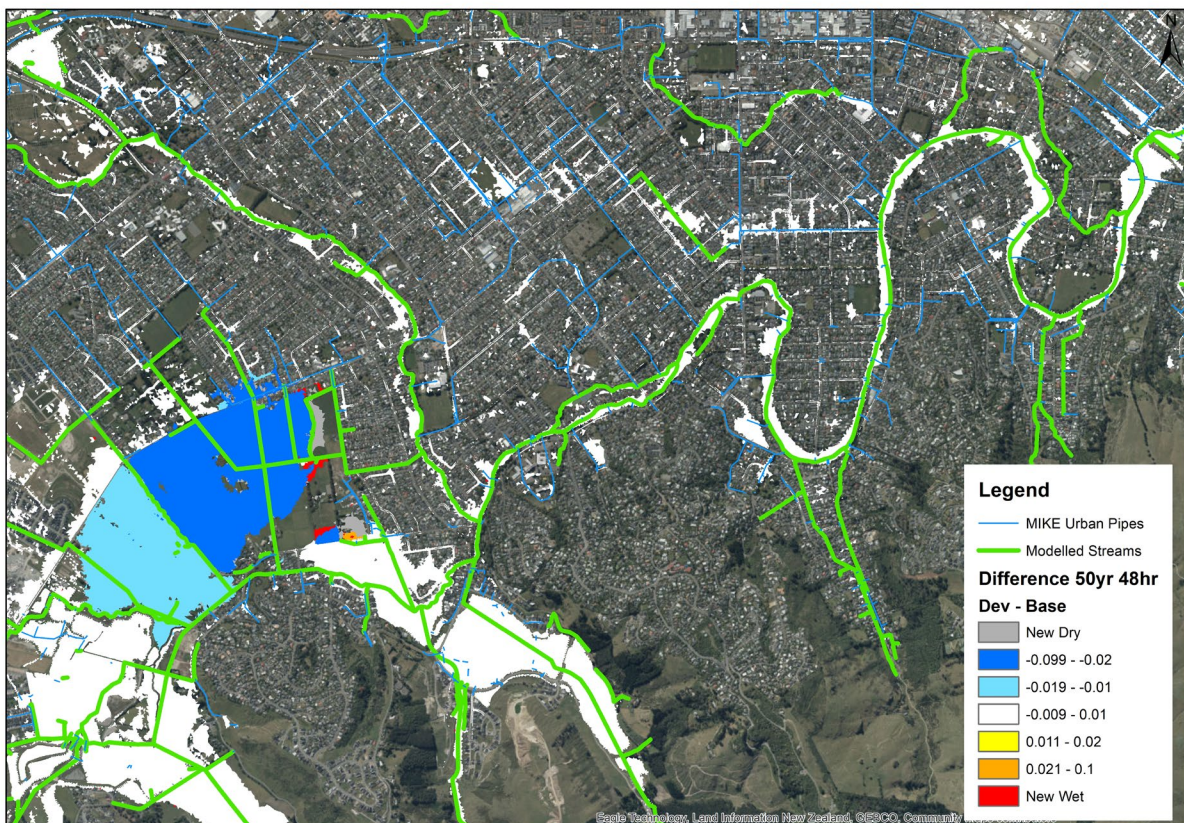


Figure 12: Development - Base, Max Water Level Difference, 50-year 48-hr storm – zoomed out

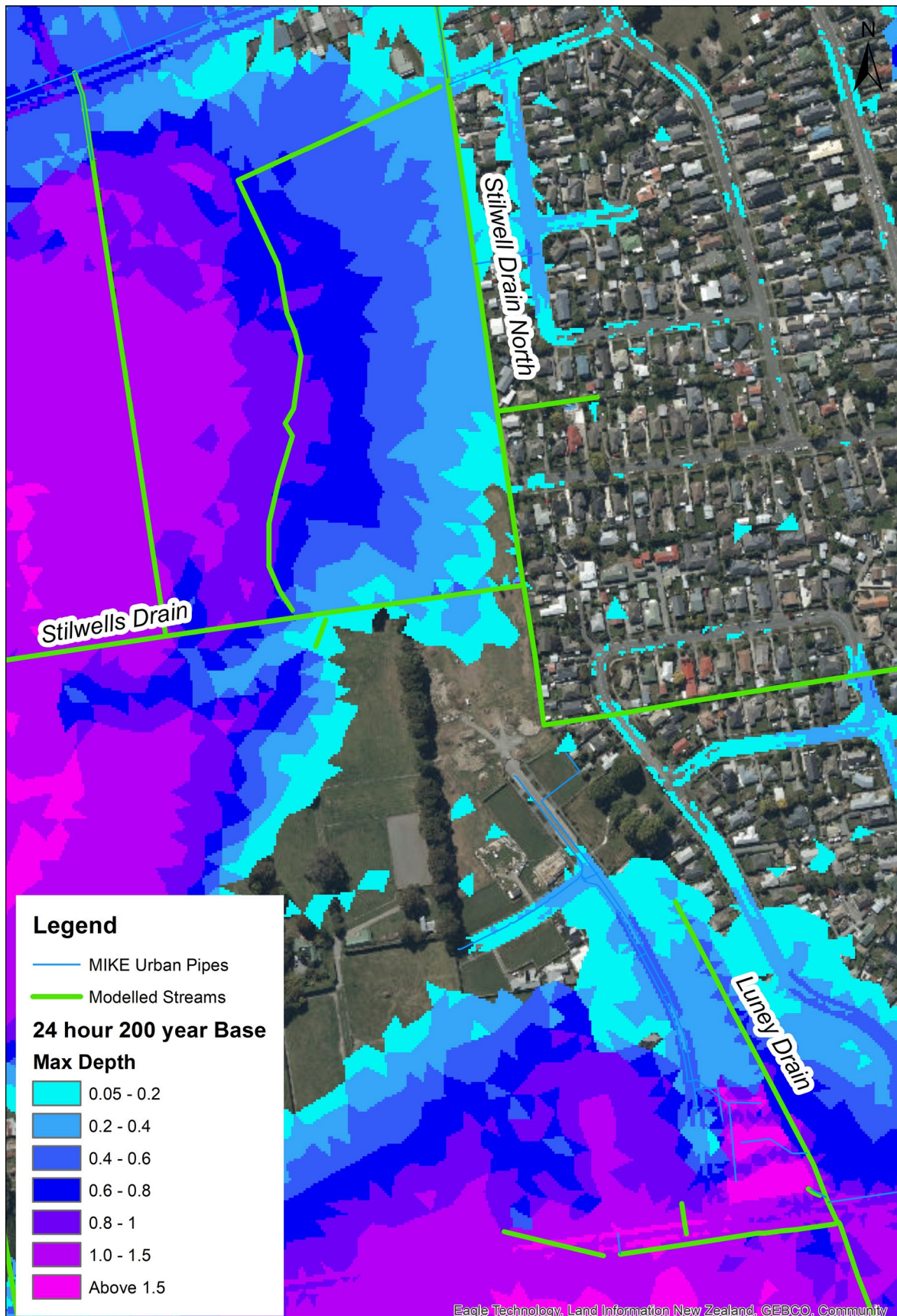


Figure 13: 200-year 24-hour base model maximum depth



Figure 14: 200-year 24-hour development model maximum depth

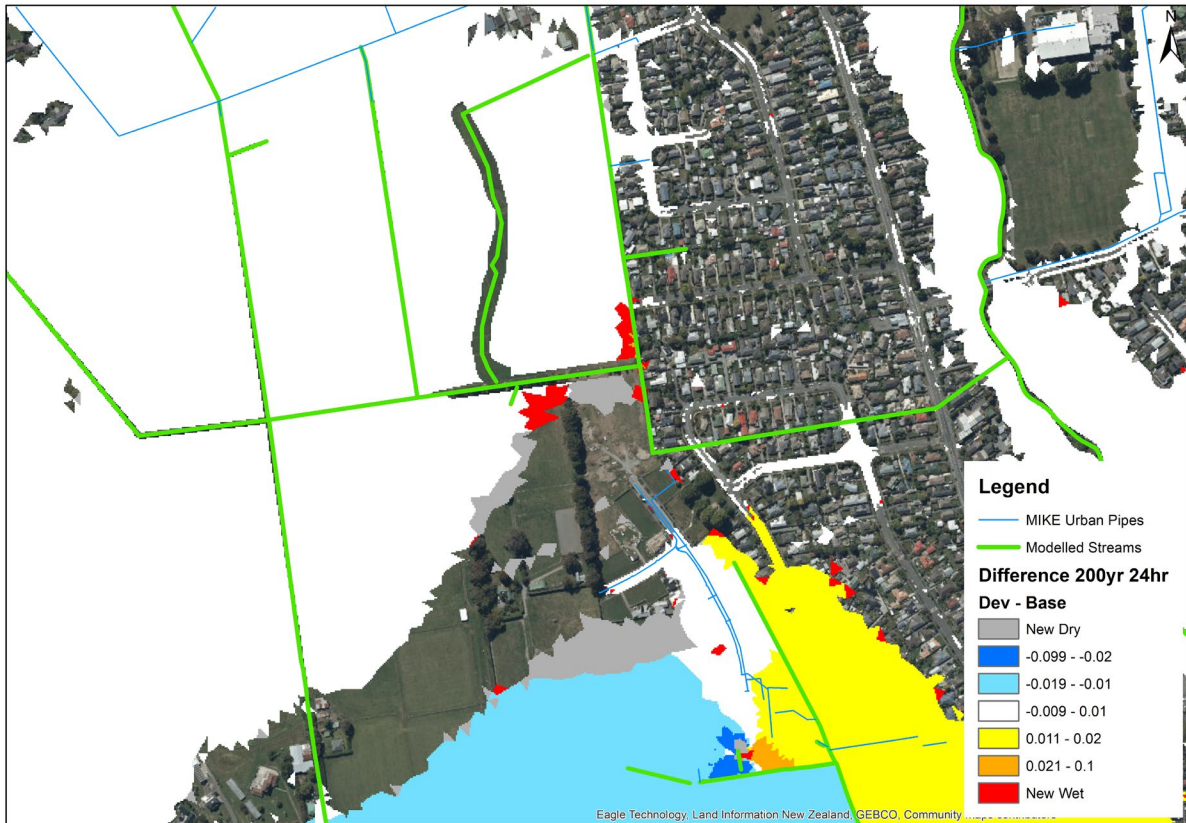


Figure 15: Development - Base, Max Water Level Difference, 200-year 24-hr storm

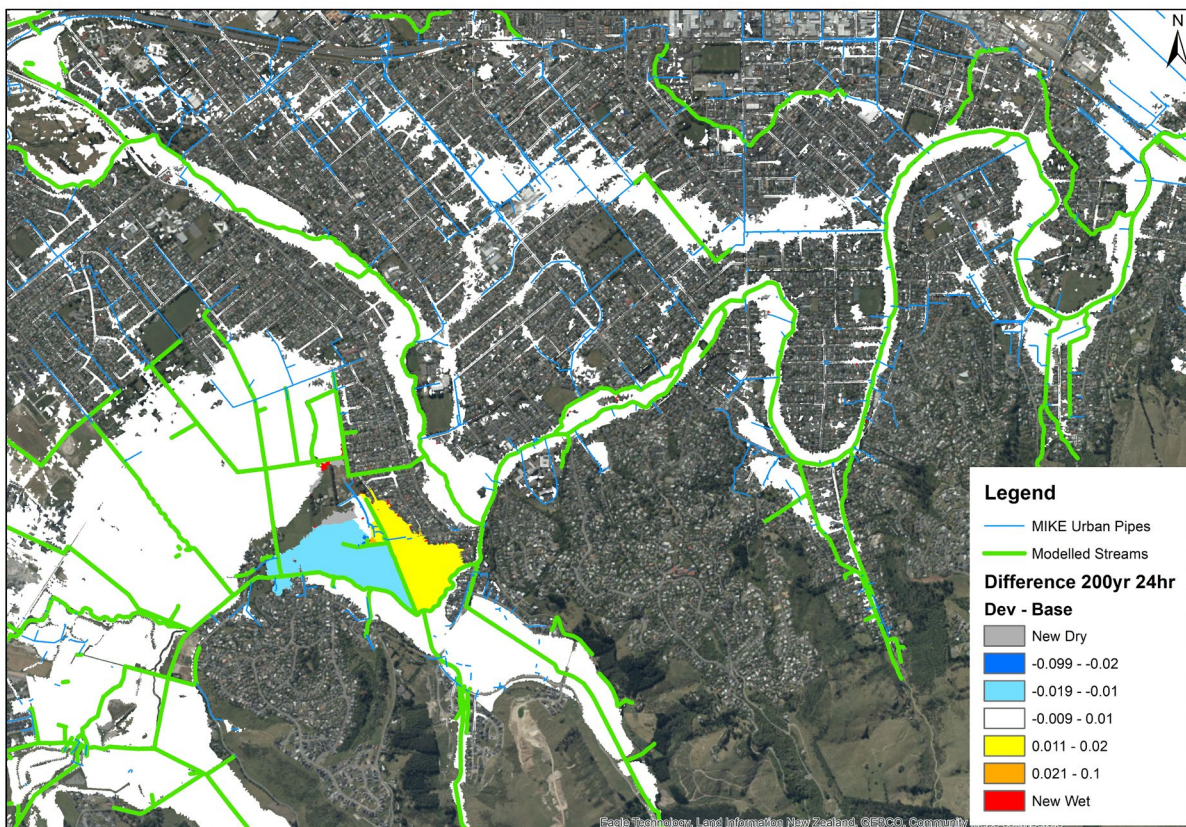


Figure 16: Development - Base, Max Water Level Difference, 200-year 24-hr storm – zoomed out