

File: 17/43G
Date: 13 February 2018

Niclin No. 1 Pty Ltd ATF the NCA Trust
c/- DTS Group Qld Pty Ltd
PO Box 3128
WEST END QLD 4101

Attention: Scott Entwistle / Melissa Lowe

Dear Sir/Madam

**Decision Notice –approval (with conditions)
Material Change of Use
Lot 90 on RP218861, 2-12 Cemetery Road, Goondiwindi**

We wish to advise that on 13 February 2018 a decision was made to approve the material change of use development application for "*Industrial activities*" – "*Service station*" at Lot 90 on RP218861, 2-12 Cemetery Road, Goondiwindi. In accordance with the *Planning Act 2016*, please find attached Council's Decision Notice for the application.

Please read the conditions carefully as these include actions which must be undertaken **prior to the commencement of the use** as well as requirements for the ongoing operation of the use.

All conditions are required to be either complied with or bonded prior to the commencement of the use. Please note **Condition 48**, which requires a letter to be submitted to Council prior to commencement of the use, outlining and demonstrating compliance with each condition.

The applicant is required to **notify Council in writing of the date of the commencement** of the use, within fourteen (14) business days of commencement.

If you require any further information, please contact Council's Manager of Planning Services, Mrs Ronnie McMahon, on (07) 4671 7400 or rmcmahon@grc.qld.gov.au, who will be pleased to assist.

Yours faithfully



Carl Manton
Chief Executive Officer
Goondiwindi Regional Council



Decision Notice approval

Planning Act 2016 section 63

Council File Reference: 17/43G
Council Contact: Mrs Ronnie McMahon: LMM
Council Contact Phone: (07) 4671 7400

13 February 2018

Applicant Details: Niclin No. 1 Pty Ltd ATF the NCA Trust
c/- DTS Group Qld Pty Ltd
PO Box 3128
WEST END QLD 4101

Attention: Scott Entwistle / Melissa Lowe

The development application described below was properly made to Goondiwindi Regional Council on 20 September 2017.

Applicant details

Applicant name: Niclin No. 1 Pty Ltd ATF The NCA Trust c/- DTS Group Qld Pty Ltd

Applicant contact details: PO Box 3128, West Ends Qld 4101
Scott Entwistle / Melissa Lowe
(07) 3118 0600
planning@dtsqld.com.au

Application details

Application number: 17/43G

Approval sought: Development Permit

Details of proposed development: *"Industrial activities" – "Service station"*

Location details

Street address: 2-12 Cemetery Road, Goondiwindi

Real property description: Lot 90 on RP218861

Decision

Date of decision: 13 February 2018

Decision details: Approved in full with conditions. These conditions are set out in Attachment 1 and are clearly identified to indicate whether the assessment manager or a concurrence agency imposed them.

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Details of the approval

Development permit Material Change of Use

Conditions

This approval is subject to the conditions in Attachment 1.

Further development permits

Please be advised that the following development permits are required to be obtained before the development can be carried out:

1. Approval for building works under the *Building Act 1975*.

Properly made submissions

Not applicable—No part of the application required public notification.

Rights of appeal

The rights of applicants to appeal to a tribunal or the Planning and Environment Court against decisions about a development application are set out in chapter 6, part 1 of the *Planning Act 2016*. For particular applications, there may also be a right to make an application for a declaration by a tribunal (see chapter 6, part 2 of the *Planning Act 2016*).

A copy of the relevant appeal provisions are attached.

Currency period for the approval

This development approval will lapse at the end of the period set out in section 85 of *Planning Act 2016* OR

- [For material change of use] This approval lapses if the first change of use does not happen within **6 years**.

Approved plans and specifications

Copies of the following plans, specifications and drawings are enclosed.

Drawing/report title	Prepared by	Date	Reference no.	Version/issue
Aspect of development: [material change of use]				
Overall Site Plan Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	Verve Building Design Co.	06/09/2017	17012-DA00	P1
Proposed Site Plan Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	Verve Building Design Co.	06/09/2017	17012-DA01	P3
Building Floor Plan Proposed Truckstop	Verve Building Design Co.	06/09/2017	17012-DA02	P1

Cnr Cunningham Highway & Cemetery Road, Goondiwindi				
Building Elevations & Perspectives Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	Verve Building Design Co.	06/09/2017	17012-DA03	P3
Building Elevations & Perspectives Proposed Truckstop Cnr Cunningham & Cemetery Road, Goondiwindi	Verve Building Design co.	06/09/2017	17012-DA04	P3
Building Elevations & Perspectives Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	Verve Building Design Co.	06/09/2017	17012-DA05	P2
Overall Site Perspectives Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	Verve Building Design Co.	06/09/2017	17012-DA06	P2
Landscape Master Plan	Seed Landscape Design	25/08/17	170102-02	A

Attachment 4 is a Notice about decision - Statement of reasons, in accordance with section 63 (5) of the *Planning Act 2016*.

Attachment 5 includes a Rights of Appeal waiver, which, if completed, will be used to process your request to waive your appeal rights to process your approval without unnecessary delay.

Attachment 6 is an extract from the *Planning Act 2016*, which details the applicant's appeal rights regarding this decision

If you wish to discuss this matter further, please contact Council's Manager of Planning Services, Mrs Ronnie McMahon, on 07 4671 7400.

Yours Sincerely



Carl Manton
Chief Executive Officer
Goondiwindi Regional Council

enc Attachment 1—Assessment manager and concurrence agency conditions
 Attachment 2—Approved Plans
 Attachment 3—Infrastructure Charges Notice
 Attachment 4—Notice about Decision – Statement of Reasons
 Attachment 5—Rights of Appeal Waiver
 Attachment 6—Appeal provisions



ATTACHMENTS

Attachment 1 – Assessment Manager’s Conditions

Part 1 – Assessment Managers Conditions

Part 2 – Department of State Development, Manufacturing, Infrastructure and Planning - Concurrence Agency Response

Attachment 2 – Approved Plans

Attachment 3 – Infrastructure Charges Notice

Attachment 4 – Notice about decision - Statement of reasons

Attachment 5 – Rights of Appeal waiver

Attachment 6 – *Planning Act 2016* Extracts

Planning Act 2016 appeal provisions

Planning Act 2016 lapse dates



Attachment 1 – Assessment Manager's Conditions



Assessment Manager's Conditions

Proposed Use:	<i>"Industrial activities"</i> • <i>"Service Station"</i>
Development:	Material Change of Use – Development Permit
Applicant:	Niclin No. 1 Pty Ltd ATF The NCA Trust c/- DTS Group Qld Pty Ltd
Address:	2-12 Cemetery Road, Goondiwindi
Real Property Description:	Lot 90 on RP218861
Council File Reference:	17/43G

GENERAL CONDITIONS																							
1.	Approval is granted for the purpose of a Material Change of Use for: • <i>"Industrial activities"</i> – <i>"Service Station"</i> <i>as defined in the 2006 Planning Scheme for the former Goondiwindi Town Council.</i>																						
2.	All conditions must be complied with or bonded prior to the commencement of the use, unless specified in an individual condition.																						
3.	The development shall be in accordance with supporting information supplied by the applicant with the development application including the following plans:																						
	<table> <tr> <th>Drawing Number</th><th>Title</th><th>Date</th></tr> <tr> <td>17012-DA00</td><td>Overall Site Plan Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi</td><td>06/09/2017</td></tr> <tr> <td>17012-DA01</td><td>Proposed Site Plan Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi</td><td>06/09/2017</td></tr> <tr> <td>17012-DA02</td><td>Building Floor Plan Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi</td><td>06/09/2017</td></tr> <tr> <td>17012-DA03</td><td>Building Elevations & Perspectives Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi</td><td>06/09/2017</td></tr> <tr> <td>17012-DA04</td><td>Building Elevations & Perspectives Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi</td><td>06/09/2017</td></tr> <tr> <td>17012-DA05</td><td>Building Elevations & Perspectives Proposed Truckstop</td><td>06/09/2017</td></tr> </table>	Drawing Number	Title	Date	17012-DA00	Overall Site Plan Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	06/09/2017	17012-DA01	Proposed Site Plan Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	06/09/2017	17012-DA02	Building Floor Plan Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	06/09/2017	17012-DA03	Building Elevations & Perspectives Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	06/09/2017	17012-DA04	Building Elevations & Perspectives Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	06/09/2017	17012-DA05	Building Elevations & Perspectives Proposed Truckstop	06/09/2017	
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		Cnr Cunningham Highway & Cemetery Road, Goondiwindi	
	17012-DA06	Overall Site Perspectives Proposed Truckstop Cnr Cunningham Highway & Cemetery Road, Goondiwindi	06/09/2017
	170102-02	Landscape Master Plan	25/08/17
	Please note the plans are not an approved Building Plans. The approved plans are included in Attachment 2 .		
4.	<p>Complete and maintain the approved development as follows:</p> <ul style="list-style-type: none"> (i) Generally in accordance with development approval documents; and (ii) Strictly in accordance with those parts of the approved development which have been specified in detail by the Council unless Council agrees in writing that those parts will be adequately complied with by amended specifications. <p>All development shall comply with any relevant provisions in the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i>, Council's standard designs for applicable work and any relevant Australian Standard that applies to that type of work.</p> <p>The development approval documents are the material contained in the development application, approved plans and supporting documentation including any written and electronic correspondence between applicant, Council or any relevant Agencies during all stages of the development application assessment processes.</p>		
5.	The developer shall contact Council's Engineering Department to ensure the correct specifications are obtained for all civil works prior to commencement of any works onsite.		
6.	No construction shall take place until detailed design plans of works required by the conditions of approval have been submitted to and endorsed by Council.		
7.	It is the developer responsibility to obtain all other statutory approvals required prior to commencement of any works on site.		
8.	Prior to construction works commencing on the site for the new Service Centre Facility, a Building Approval is to be issued by an Accredited Licensed Building Certifier.		

	ESSENTIAL SERVICES
9.	<p>Prior to the commencement of the use, the development shall be connected to Council's reticulated water supply system inclusive of appropriately designed and approved backflow prevention devices, in accordance with Schedule 1, Division 3: Standards for Water Supply, of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i>, to the satisfaction of and at no cost to Council.</p> <p>The developer shall provide all necessary water infrastructure to enable the development to be serviced to relevant engineering standards and to the satisfaction of Council.</p>
10.	<p>Prior to the commencement of the use, the development shall be connected to an onsite effluent disposal sewerage system, designed and approved in accordance with the <i>Queensland Plumbing and Wastewater Code</i>, to the satisfaction of and at no cost to Council. All sewer infrastructure (including effluent disposal areas) shall be fully located within site boundaries, to the satisfaction of and at no cost to Council.</p>
	PUBLIC UTILITIES
11.	<p>The development shall be connected to an adequate electricity and telecommunications supply system, at no cost to Council, when required.</p>
12.	<p>The developer is responsible for ensuring Queensland Fire Services requirements are met with respect to this development.</p>
	ROADS AND VEHICLES
13.	<p>Four (4) concrete industrial vehicle crossovers shall be provided to the subject site, generally shown on the plan "Proposed Site Plan 17012-DA01", prepared by Verve Building Design Co. The vehicle crossovers shall be designed and constructed in accordance with Schedule 1, Division 2: Standards for Roads, Car parking, Manoeuvring Areas and Access, Section 2.3(1) of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i> or in accordance with other relevant engineering standards to the satisfaction of Council.</p> <p>The applicant shall be responsible for contacting the relevant Council officer before works commence to ensure compliance with Council's standards and specifications are met.</p>
14.	<p>Engineering design plans showing details of all vehicle access and movements to and from Cemetery road shall be provided to Council for approval prior to commencement of construction. The engineering plans must be certified by a Registered Professional Engineer of Queensland (RPEQ).</p>

15.	<p>Vehicle access to the subject site from the Cunningham Highway, shall be constructed to comply with standards set by the Department of Transport and Main Roads.</p> <p>The intersection of Cemetery Road and the Cunningham Highway shall be upgraded to comply with standards set by the Department of Transport and Main Roads.</p>
16.	<p>Vehicle manoeuvring areas shall be provided so that all vehicles, including heavy vehicles, associated with the use can enter and leave the site in a forward direction.</p>
17.	<p>All areas where vehicles regularly manoeuvre and park shall be constructed to a sealed standard. The pavement and surfacing shall be designed and certified by a RPEQ.</p> <p>All sealed areas shall be designed in accordance with Schedule 1, Division 2: Standards for Roads, Car parking, Manoeuvring Areas of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i>.</p> <p>The applicant shall maintain this surface at all times to the satisfaction of Council.</p> <p>The developer shall contact Council's Department of Engineering Services to ensure the correct specifications are obtained for all civil works prior to the commencement of any works on site.</p>
18.	<p>Vehicle parking shall be provided on site in accordance with the approved plan "Proposed Site Plan, drawing number 17012-DA01, prepared by Verve Building Design Co.</p>
19.	<p>Traffic directional signage shall be erected to ensure the safe operation of the one-way vehicle crossovers.</p> <p>Traffic directional signage shall be in accordance with the Manual of Uniform Traffic Control Devices Parts 1, 2, 4, 10 and 11.</p>
20.	<p>Where material is spilled or carried onto existing roads, it is to be removed forthwith so as to restrict dust nuisance and ensure traffic and pedestrian safety.</p>
21.	<p>All works required by the conditions of approval for crossovers, water supply connections, stormwater drainage, earthworks and reticulation of electricity shall be completed prior to the commencement of the use, unless such works are bonded to the satisfaction of Council.</p>
22.	<p>Street lighting shall be provided on Cemetery Road for the extent of the development site to the satisfaction of Council and shall be in accordance with Schedule 1, Division 2: Standards for Roads, Car parking, Manoeuvring Areas and Access, Section 2.3(1) of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i> or in accordance with other relevant engineering standards to the satisfaction of Council.</p>

LANDSCAPING AND FENCING										
23.	A 1.8m high fence shall be erected along the site's southern boundary.									
24.	<p>Landscaping shall be provided in accordance with Schedule 3 – Landscaping Requirements of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i>, with a minimum of:</p> <ul style="list-style-type: none">• “Street frontage landscaping,” along the site’s Cunningham Highway frontage, excluding vehicle access points, in accordance with the approved plan, “Master Plan, Drawing Number 170102-02”, Issue A, dated 25/08/2017, prepared by Seed Landscape Design; and• “Street frontage landscaping,” along the site’s Cemetery Road frontage, excluding vehicle access points, in accordance with the approved plan, “Master Plan, Drawing Number 170102-02”, Issue A, dated 25/08/2017, prepared by Seed Landscape Design; and• Nine (9) shade trees shall be provided within the vehicle parking areas, at a rate of one (1) tree per six (6) parking spaces, in accordance with Schedule 3 – Landscaping Requirements of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i>. <p>All landscaping and tree plantings are to be planted and maintained to the satisfaction of a qualified Council Officer. A bond for the amount of \$42,980 is to be submitted prior to the commencement of the use for the maintenance of landscaping.</p> <p>The bond holding time starts from the acceptance of works. Council must be contacted by the applicant to request an inspection of the landscaping as soon as possible after completion of planting and payment of bond.</p> <p>If the landscaping complies with Schedule 3 – Landscaping Requirements of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i>, the applicant will be advised in writing that the bond is accepted.</p> <p>The bond shall be returned in accordance with the following schedule if the landscaping meets the criteria:</p> <table><tr><th>Time from acceptance of landscaping works</th><th>Criteria</th><th>Bond Refund / Reduction</th></tr><tr><td>9 months – From acceptance of works</td><td>Landscaping conforms to requirements, is established and maintained. Adequate provision for on-going watering and growth. Any/all replacement plants provided.</td><td>50%</td></tr><tr><td>18 months – From acceptance of works</td><td>Landscaping is well established (as a guide >50% full growth depending on species). All replacement plants are established.</td><td>25%</td></tr></table>	Time from acceptance of landscaping works	Criteria	Bond Refund / Reduction	9 months – From acceptance of works	Landscaping conforms to requirements, is established and maintained. Adequate provision for on-going watering and growth. Any/all replacement plants provided.	50%	18 months – From acceptance of works	Landscaping is well established (as a guide >50% full growth depending on species). All replacement plants are established.	25%
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		The landscaping intent is being achieved.	
	24 months – From acceptance of works	Landscaping is fully established, or within 80% depending on species.	25%
	<p>After the required bond holding time has passed, a refund of bond monies will only be considered upon a written request from the person who paid the bond once the required bond holding time has been completed.</p> <p>A qualified Council Officer may inspect landscaping plantings to ensure compliance with this condition and acceptance of the works.</p> <p>Council will hold the funds in trust for a maximum of three years, at which time should work not be carried out and maintained to Council's satisfaction, the bond will be used by Council to have the works performed unless an extension of time is requested by the land owner or applicant and approved by Council.</p> <p>To clarify, bonds can only be refunded upon a written request from the person who paid the bond upon the works being satisfactorily maintained for the required bond holding time.</p>		
	STORMWATER		
25.	On site stormwater detention shall be provided generally in accordance with the Site Based Stormwater Management Plan prepared by Morgan Consulting Engineers, dated 6 September 2017.		
26.	<p>The site shall be:</p> <ul style="list-style-type: none"> • Graded to ensure storm water is directed away from the concrete driveways, and • Adequately drained and all storm water shall be disposed of in accordance with Schedule 1, Division 5: Standards for Stormwater Drainage, Section 5.1 of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i> or in accordance with other relevant engineering standards to the satisfaction of Council. 		
27.	The site shall be provided with appropriately sized oily water interceptor pits, generally as shown in the Site Based Stormwater Management Plan prepared by Morgan Consulting Engineers, dated 6 September 2017. The oily water interceptor pits shall be designed and constructed to the relevant engineering and environmental standards.		
28.	<p>Stormwater shall not be allowed to pond on the site during the development process and after development has been completed unless the type and size of ponding has been agreed in writing by Council.</p> <p>No ponding, concentration or redirection of stormwater shall occur on adjoining properties unless specifically agreed to in writing by Council and the owners of any adjoining properties affected by these changes.</p>		

	EARTHWORKS AND EROSION CONTROL
29.	<p>Any filling or excavation shall be undertaken in accordance with Schedule 1, Division 1: Standards for Construction Activities of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i> or to other relevant engineering standards to the satisfaction of and at no cost to Council.</p> <p>Excavation or filling within 1.5 metres of any site boundary is battered or retained by a wall that does not exceed 1 metre in height.</p>
30.	<p>All works associated with the development must be carried out in a manner that minimises erosion and controls sediment. Best practice erosion and sediment control measures shall be in place at the location of all works prior to work commencing and remain until work is completed in accordance with Schedule 1, Division 1: Standards for Construction Activities of the <i>2006 Planning Scheme for the former Goondiwindi Town Council</i> or in accordance with other relevant engineering standards to the satisfaction of and at no cost to Council.</p> <p>Control procedures are to be established to ensure sediment from the site is not deposited off site. The developer shall ensure no increase in any silt loads or contaminants in overland flow from the site during the development process and after development has been completed.</p>
31.	<p>No construction shall take place until the appropriate erosion control and silt collection measures are in place as required by this decision notice. Such erosion control and silt collection measures shall remain on-site throughout the construction period.</p>
	ENVIRONMENTAL CONTROLS
32.	<p>Provision shall be made for on-site collection of liquids captured in the oily water interceptor pits by a licenced liquid waste management company. At all times while the use continues, records must be kept of oil collection relating to the following:</p> <ul style="list-style-type: none"> • The date and quantity removed; • The name of the waste transporter and/or disposal operator that removed the waste; and • The final destination of the waste.
33.	<p>Dust control measures are to be undertaken on site to avoid dust leaving the site during civil works stages of the development and build.</p>
34.	<p>Any petroleum spillages on the service station site are to be handled and treated in accordance with the Stormwater Management Plan and the Stormwater Quality Operation & Maintenance Guidelines developed by Morgan Consulting Engineers Pty Ltd (dated 06/09/2017).</p>

35.	Food premises component of the development is to be constructed in accordance with A&NZ Food Standards Code – Standard 3.2.3 & AS4674 – 2004 (Design, construction and fit-out of food premises).
36.	Prior to the commencement of construction of the food premises a Food Licence application is to be submitted along with plans of the Food premises fit-out and all associated food storage area. An approval is to be in place prior to the commencement of the fit-out.
AVOIDING NUISANCE	
37.	At all times while the use continues, provision must be made on site for the collection of general refuse in covered waste containers with a capacity sufficient for the use. Waste receptacles shall be placed in a screened area. The site must maintain a general tidy appearance.
38.	<p>During the construction program all waste is to be contained in suitable waste bins or skips with lids or covers to avoid windblown litter and access by animals.</p> <p>Ongoing operations waste is to be stored in suitable waste containers, serviced on a regular basis to avoid vermin and fly issues. All waste is to be disposed of to a licenced waste facility or serviced by a licenced contractor.</p>
39.	At all times while the use continues, the development shall be conducted in accordance with the provisions of the <i>Environmental Protection Act 1994</i> (the Act) and all relevant regulations and standards under that Act. All necessary licences, permits and approvals under the Act and all regulatory provisions and legislation shall be obtained and shall be maintained at all times while the use continues.
40.	<p>At all times while the use continues, lighting of the site, including any security lighting, shall be such that the lighting intensity does not exceed 8.0 lux at a distance of 1.5 metres from the site at any property boundary.</p> <p>All lighting shall be directed or shielded so as to ensure that no glare directly affects nearby properties, motorists or the operational safety of the surrounding road network.</p>
41.	At all times while the use continues it shall be operated in such a manner as to ensure that no nuisance shall arise to adjoining premises as a result of dust, noise, lighting, odour, vibration, rubbish, contaminants, stormwater discharge or siltation or any other potentially detrimental impact.
42.	The operator shall be responsible for mitigating any complaints arising from on-site operations.

43.	<p>Construction works must occur so they do not cause unreasonable interference with the amenity of adjoining premises.</p> <p>During construction the site must be kept in a clean and tidy state at all times.</p>
DEVELOPER'S RESPONSIBILITIES	
44.	Any alteration or damage to roads and/or public infrastructure that is attributable to the progress of works or associated with the use of the site shall be repaired to Council's satisfaction or the cost of repairs paid to Council.
45.	It is the developer's responsibility to ensure that any contractors and subcontractors have current, relevant and appropriate qualifications and insurances in place to carry out the works.
46.	The developer shall be responsible for meeting all costs reasonably associated with the approved development, unless there is specific agreement by other parties, including the Council, to meeting those costs.
47.	At all times while the use continues, all requirements of the conditions of the development approval must be maintained.
COMMENCEMENT OF USE	
48.	A letter outlining and demonstrating that conditions have been, or will be, complied with shall be submitted to Council and approved by a relevant Officer of Council prior to commencement of the use at each relevant stage. Council Officers may require a physical inspection to confirm that all conditions have been satisfied to relevant standards.
49.	<p>At its discretion, Council may accept bonds or other securities to ensure completion of specified development approval conditions or Council may accept cash payments for Council to undertake the necessary work to ensure completion of specified development approval conditions.</p> <p>It may be necessary for Council to use such bonds for the completion of outstanding works without a specific timeframe agreed.</p>
50.	<p>Council must be notified in writing of the date of the commencement of the use within 14 days of commencement.</p> <p>This approval will lapse if the use has not commenced within six years of the date the development approval takes effect, in accordance with the provisions contained in sections 85(i)(a) of the <i>Planning Act 2016</i>.</p> <p>Section 86 of the <i>Planning Act 2016</i> sets out how an extension to the period of approval can be requested.</p>

	PLEASE READ CAREFULLY - NOTES AND ADVICE
	<p>When approval takes effect</p> <p>This approval takes effect in accordance with section 85 of the <i>Planning Act 2016</i>.</p> <p>When approval lapses</p> <p>This approval will lapse if the change of use has not occurred within the following period, in accordance with the provisions contained in section 85(i)(a) of the <i>Planning Act 2016</i>.</p> <p>(a) If no period stated – 6 years after the approval starts to have effect.</p> <p>Section 86 of the <i>Planning Act 2016</i> sets out how an extension to the period of approval can be requested.</p>
	Infrastructure charges as outlined in the Infrastructure Charges Notice included in Attachment 3 shall be paid prior to the commencement of the use.
	It is the applicant's responsibility to obtain all statutory approvals prior to commencement of any works onsite.
	This approval in no way removes the duty of care responsibility of the applicant under the <i>Aboriginal Cultural Heritage Act 2003</i> . Pursuant to Section 23(1) of the <i>Aboriginal Cultural Heritage Act 2003</i> , a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage (the "cultural heritage duty of care").
	This approval in no way authorises the clearing of native vegetation protected under the <i>Vegetation Management Act 1999</i> .
	The approved development does not authorise any deviation from the applicable Australian Standards nor from the application of any laws, including laws covering work place health and safety.



Attachment 1 – Conditions of Approval

***Part 2 – Department State Development, Manufacturing,
Infrastructure and Planning - Concurrence Agency Response***





Department of
**State Development,
Manufacturing,
Infrastructure and Planning**

Our reference: 1709-1671 SRA
Your reference: 17/43G

12 February 2018

The Chief Executive Officer
Goondiwindi Regional Council
LMB 7
INGLEWOOD Qld 4387
Via email: mail@grc.qld.gov.au

Attention: Mrs Ronnie McMahon

Dear Ronnie

**Referral agency response—with conditions—development permit—material change of use—
industrial activities—service station**

(Given under section 56 of the *Planning Act 2016*)

The development application described below was properly referred to the Department of State Development, Manufacturing, Infrastructure and Planning (the department) on 11 October 2017.

Applicant details

Applicant name:	Niclin No. 1 Pty Ltd ATF The NCA Trust C/- DTS Group Qld Pty Ltd
Applicant contact details:	PO Box 3128 West End QLD 4101 Via email: planning@dtssql.com.au

Location details

Street address:	Cemetery Road, Goondiwindi QLD 4390
Real property description:	Lot 90 on RP218861
Local government area:	Goondiwindi Regional Council

Application details

Development permit	Material change of use for Service Station
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Referral triggers

The development application was referred to the department under the following provisions of the Planning Regulation 2017:

- 10.9.4.2.4.1 State transport corridors and future State transport corridors

Conditions

Under section 56(1)(b)(i) of the *Planning Act 2016* (the Act), the conditions set out in Attachment 1 must be attached to any development approval.

Reasons for decision to impose conditions

The department must provide reasons for the decision to impose conditions. These reasons are set out in Attachment 2.

Advice to the assessment manager

Under section 56(3) of the Act, the department offers advice about the application to the assessment manager—see Attachment 3.

Approved plans and specifications

The department requires that the plans and specifications set out below and enclosed must be attached to any development approval.

Drawing/report title	Prepared by	Date	Reference no.	Version/issue
Aspect of development: Material Change of Use				
Overall Site Plan - as amended in red	Verve Building Design Co	06/09/2017	17012-DA00	P1
Site Based Stormwater Management Plan	Morgan Consulting Engineers	15 November 2017	17131-SBSMP/2	2

A copy of this response has been sent to the applicant for their information.

For further information please contact Maria Johnson, Senior Planning Officer, on 46167307 or via email ToowoombaSARA@dlgp.qld.gov.au who will be pleased to assist.

Yours sincerely



Andrew Foley
Manager

cc Niclin No. 1 Pty Ltd ATF The NCA Trust C/- DTS Group Qld Pty Ltd, planning@dtseqld.com.au

enc Attachment 1—Conditions to be imposed
Attachment 2—Reasons for decision to impose conditions
Attachment 3—Advice to the assessment manager
Approved plans and specifications

Attachment 1—Conditions to be imposed

No.	Conditions	Condition timing
Material change of use		
10.9.4.2.4.1 - The chief executive administering the <i>Planning Act 2016</i> nominates the Director-General of Department of Transport and Main Roads (DTMR) to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:		
1.	<p>a) The following traffic mitigation measures must be provided at the applicant's expense, generally in accordance with the:</p> <ul style="list-style-type: none"> • Overall Site Plan, prepared by Verve Building Design Co, dated 06/09/2017, drawing number 17012-DA00 and revision P1 as amended in red: <ul style="list-style-type: none"> o RX-5 Railway crossing flashing signal assembly with signage indicating "no right turn on red signal" on the Cunningham Highway facing Cemetery Road at the Cemetery Road/Cunningham Highway intersection in accordance with section 2.3.1 of AS1742.7-2016 <i>Manual of uniform traffic control devices</i>, Part 7: Railway crossings and Standard Railway Crossing Flashing Light Signal, prepared by Queensland Rail, dated 1/11/95, drawing number B 205 and issue 8; AND o The RX-5 Railway crossing flashing signal assembly must be integrated with the flashing signal assembly at the Cunningham Highway level crossing (ID:797) of the South Western Line. <p>(b) Registered Professional Engineer of Queensland (RPEQ) certification with supporting documentation must be provided to the Program Delivery and Operations Unit, DTMR (Downs.South.West.IDAS@tmr.qld.gov.au) confirming that the development has been designed and constructed in accordance with part (a) of this condition.</p>	(a) & (b) Prior to the commencement of use and to be maintained at all times.
2.	<p>The development must be carried out generally in accordance with the:</p> <ul style="list-style-type: none"> • Site Based Stormwater Management Plan, prepared by Morgan Consulting Engineers, dated 15 November 2017, document reference 17131-SBSMP/2, revision 2; in particular: <ul style="list-style-type: none"> o Section 5.2 – Proposed Drainage Patterns o Section 5.3 – On-site Detention o Appendix D – Concept Drainage Plan. 	At all times.

3.	<p>(a) Road works and road access works comprising a southbound Auxiliary Left Turn Treatment (AUL)/deceleration lane to the site ingress, angled ingress, and angled egress/exit to the must be provided generally in accordance with the:</p> <ul style="list-style-type: none"> • Overall Site Plan, prepared by Verve Building Design Co, dated 06/09/2017, drawing number 17012-DA00 and revision P1 as amended in red. <p>(b) The road works must be designed and constructed in accordance with the relevant DTMR standards, to service the largest design vehicle legally able to access the site.</p>	<p>Prior to the commencement of use and to be maintained at all times.</p>
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Attachment 2—Reasons for decision to impose conditions

The reasons for this decision are:

- To ensure the development is carried out generally in accordance with the plans of development submitted with the application.
- To ensure that the impacts of stormwater events associated with development are minimised and managed to avoid creating any adverse impacts on the state-transport corridor.
- To ensure the road works on, or associated with, the state-controlled road network are undertaken in accordance with applicable standards.

Attachment 3—Advice to the assessment manager

General advice	
Ref	Railways
1.	<p>Memorandum of Understanding for Railway Level Crossings</p> <p>As per the <i>Memorandum of Understanding between the Local Government Association of Queensland and Queensland Rail and the DTMR with respect to the Management and Funding Responsibility for Level Crossing Safety</i>, the local government is responsible for any safety upgrades to a level crossing if the change in risk to the level crossing is due to changes in nearby land uses which have been authorised by local government.</p> <p>Goondiwindi Regional Council should continue to monitor the level of safety risk and number of reported level crossing issues at the Cunningham Highway level crossing of the South Western Line as further development in the area is approved. Consideration should also be given to implementing improved control and safety measures, as required. In particular, the proposed development will be likely to contribute to cumulative impacts on the safety of the railway level crossing.</p> <p>Goondiwindi Regional Council is recommended to install advance warning signage indicating that vehicles turning right at the Cemetery Road/Cunningham Highway intersection exceeding 19m in length are prohibited from using the railway level crossing of the South Western Line at the following location:</p> <ul style="list-style-type: none"> on the Cemetery Road approach (northbound) to the railway level crossing in accordance with drawing number TC1556 <i>Railway Level Crossing Warning Sign "Limited Clearance to Rails"</i> with a distance of '19m' stated on the sign and 'no right turn'.
2.	<p>Main Roads</p> <p>Road works approval: Under section 33 of the <i>Transport Infrastructure Act 1994</i>, written approval is required from DTMR to carry out road works on a state-controlled road. Please contact DTMR on 07 4639 0759 to make an application for road works approval. This approval must be obtained prior to commencing any works on the state-controlled road reserve. The approval process may require the approval of engineering designs of the proposed works, certified by a RPEQ. The road works approval process takes time – please contact DTMR as soon as possible to ensure that gaining approval does not delay construction.</p> <p>Road access works approval: Under sections 62 and 33 of the <i>Transport Infrastructure Act 1994</i>, written approval is required from DTMR to carry out road works that are road access works (including driveways) on a state-controlled road. Please contact DTMR on 07 4639 0759 to make an application for road works approval. This approval must be obtained prior to commencing any works on the state-controlled road reserve. The approval process may require the approval of engineering designs of the proposed works, certified by a RPEQ. The road access works approval process takes time – please contact DTMR as soon as possible to ensure that gaining approval does not delay construction.</p>

PLAN AMENDED IN RED
DATE: 29 JANUARY 2018

PRELIMINARY

- Traffic signal facing Cemetery Road is to be in accordance with:
- RX-5 Assembly, Section 2.3.1 of AS1742.7 -2016
 - Manual of uniform traffic control devices, Part 7: Railway crossings, and
 - Standard Railway Crossing Flashing Light Signal, prepared by Queensland Rail, dated 1/11/95, drawing number B 205 and issue 8

PLANS AND DOCUMENTS referred to in the REFERRAL AGENCY RESPONSE

SARA ref: 1712-1671 SRA
Date: 12 February 2018



- commercial / industrial / retail
- fast food restaurant design
- travel centre / service station
- project concept to completion

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Check all dimensions or site prior commencement of works

Revision and approval			
Rev	Date	By	For
1	12/02/2018		
Project description			
PROPOSED TRUCKSTOP			
ON CUNNINGHAM HWY & CEMETERY ROAD			
GOONDIWINDI QLD			
Scale	1:1000	Sheet	1 of 1
Drawn by	J. J. J. J.	Checked by	
Drawn		Checked	
Drawing Number		17012-DA00	
Drawing Title		OVERALL SITE PLAN	
Drawing Scale		P1	

PLANS AND DOCUMENTS
referred to in the REFERRAL
AGENCY RESPONSE



SARA ref:

1712-1671 SRA

Date:

12 February 2018

SITE BASED STORMWATER MANAGEMENT PLAN

PROPOSED COMMERCIAL DEVELOPMENT AT 2-12 CEMETERY ROAD GOONDIWINDI

Prepared for

Niclin Constructions Pty Ltd
Attention: Robert Alpe

Document Reference

17131 - SBSMP/2

Record of Issue:

Issue	Status	Author	Date	Checked	Date	Authorised	Date
0	For Review	Jesinthan Ketheeswaran	28 Aug 2017	Christopher Godwin	31 Aug 2017	Henry Morgan RPEQ 11950	1 Sept 2017
1	For Approval	Jesinthan Ketheeswaran	4 Sept 2017	Christopher Godwin	6 Sept 2017	Henry Morgan RPEQ 11950	6 Sept 2017
2	For Approval	Darren Yuen	14 Nov 2017	Henry Morgan RPEQ 11950	15 Nov 2017	Henry Morgan RPEQ 11950	15 Nov 2017



JAS-ANZ



This investigation and report has been authorised by Mr Henry Morgan, a Director of Morgan Consulting Engineers Pty Ltd.

H Morgan

Henry Morgan RPEQ 11950

Wednesday, 15 November 2017

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1 INTRODUCTION

This Site Based Stormwater Management Plan (SBSMP) has been prepared for the Proposed Commercial Development at 2-12 Cemetery Road, Goondiwindi.

This SBSMP has been prepared to investigate the effects the development will have on stormwater quantity and quality.

The objective of this SBSMP is to ensure that there is no adverse impact by the development on the environmental value of the receiving waters during the construction and operational phases of the development. This SBSMP will also provide recommendations to ensure that the post-development peak outflow conditions are not greater than the pre-development peak outflow conditions.

In order to achieve this objective, this SBSMP:

1. Describes the environmental setting of the development site and precinct;
2. Describes the nature of the proposed development as it relates to stormwater quality;
3. Calculates the peak flows for post-development conditions;
4. Identifies potential sources of contaminants and describes the management techniques designed to be employed on the site to achieve the water quality objectives; and
5. Assesses the surrounding catchment and potential flooding impacts.

The proposed development has been assessed against the following guidelines and planning documents:

1. State Planning Policy 2017 (SPP 2017) - Guidelines for Healthy Waterways;
2. Urban Stormwater Quality Planning Guidelines 2010;
3. The Queensland Urban Drainage Manual (QUDM); and,
4. The Goondiwindi Town Planning Scheme (2013).

2 EXISTING SITE

2.1 The Site

The subject site, comprised of Lot 90 RP 218861, is approximately 36,195m² (3.620ha) in area. The proposed development area (PDA) is approximately 24,724 m² (2.4724ha). The site is vacant with scattered vegetation and short grass.

The majority of the subject site gently slopes from the east (approximately 218m AHD) to the west (approximately 217m AHD) towards Cunningham Highway. The northeast corner of the subject site slopes northeast towards Cemetery Road, whilst the lower portion of the site generally slopes southwest. Cunningham Highway bounds the site to the west and Cemetery Road to the north. Access to the site is provided from the aforementioned roads.

Refer to Figure 2-1 for a locality plan and Appendix A for the site contour information.



Figure 2-1 - Locality Plan

2.2 Surrounding Area

The site is located within the limits of the GRC region and is classified as Industrial Zone. Industrial developments are located to the north and west of the site, with vacant land to the east. Serpentine Creek, which bounds the southern site property, provides detention storage for the Goondiwindi catchment. A railway track spanning from the west to the east is located to the north of the site.

3 PROPOSED DEVELOPMENT

The proposed service station development will involve the construction of:

1. A new service station building;
2. A new fast food court;
3. Dedicated car/truck petrol and fuel areas;
4. A new circulating driveway;
5. Car parking facilities in proximity of the new service station; and
6. Dedicated truck and bus parking facilities.

Refer to **Appendix B** for the Proposed Development Plans.

4 EXISTING STORMWATER DRAINAGE SYSTEM

4.1 Existing Infrastructure

The Detailed Site Survey indicates the following existing drainage infrastructure:

1. Rural swale drains are located within the verges of Cunningham Highway and Cemetery Road, adjacent to the north and west site boundaries;
2. Culverts are located under Cemetery Road and at the junction with Cunningham Highway; and
3. Serpentine Creek is located to the south of the development.

Refer to Figure 4-1 for an existing stormwater drainage schematic and Appendix A for the Detailed Site Survey.

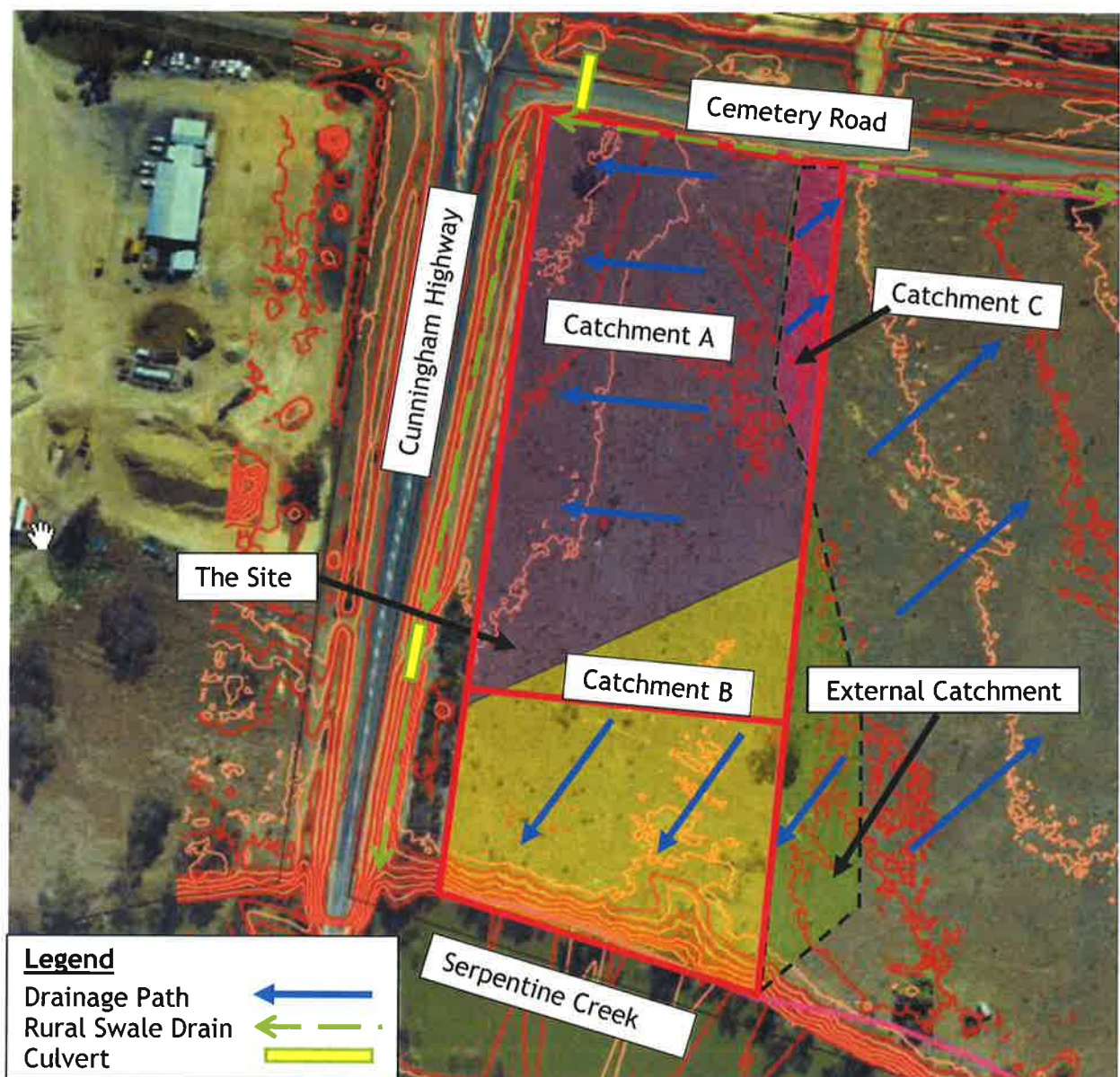


Figure 4-1 - Existing Stormwater Drainage Schematic

4.2 Existing Drainage Patterns

The Detailed Site Survey indicates the site has the following drainage patterns:

1. Catchment A - Surface Runoff

Surface runoff from the site sheet flows west to the rural swale drain fronting the site on the Cunningham Highway. Surface runoff captured by the swale along Cemetery Road is directed to the swale drain along Cunningham Highway. The runoff is ultimately discharged to Serpentine Creek.

2. Catchment B - Surface Runoff

Surface runoff from the site sheet flows south to Serpentine Creek.

3. Catchment C - Surface Runoff

Surface runoff from the site sheet flows northeast to the rural swale drain fronting the site on Cemetery Road. The swale drain conveys flow east along Cemetery Road.

4. External Catchment

A minor external catchment located to the east of the subject site conveys sheet flow into Catchments A and B.

4.3 Legal Point of Discharge

If existing drainage patterns are maintained, the legal point of discharge for the proposed development are the swale drains fronting the site and Serpentine Lagoon.

5 STORMWATER QUANTITY

A roof and allotment drainage system is to be designed to comply with:

1. AS/NZS 3500.3:2015 - Plumbing and Drainage Part 3: Stormwater Drainage;
2. The Queensland Urban Drainage Manual (QUDM); and
3. The Goondiwindi Regional Council (GRC) Planning Scheme (2013).

5.1 Rational Method Assessment

The Rational Method has been used to calculate the peak discharges from the site under the existing (pre-development) and proposed (post-development) conditions

5.1.1 Design Storms

As defined in the GRC Planning Scheme (2013) the following design storms were adopted:

1. Minor Drainage System: 10 year ARI statistical flood (Q_{10} storm);
2. Major Drainage System: 100 year ARI statistical flood (Q_{100} storm).

5.1.2 Rainfall Intensity

Rainfall intensities for this study were obtained from the Australian Bureau of Meteorology.

5.1.3 Times of Concentration

Times of concentration (t_c) were calculated as defined in Section 4.06 of the QUDM. Refer to Table 5-1 for the adopted t_c and **Appendix C** for t_c calculations.

Table 5-1 - Adopted t_c values

Pre Development t_c (mins)	Post Development t_c (mins)
16.5	8.3

5.1.4 Runoff Coefficients

The 10 year runoff coefficient's (C_{10}) were determined as defined in Section 4.05 of the QUDM. Refer to Table 5-2 below for the adopted C_{10} values.

Table 5-2 - Adopted C_{10} Values

Property State	C_{10}
Pre-development	0.60
Post-development	0.88

5.1.5 Peak Flows

Refer to Table 5-3 for a summary of the predicted discharge rates for the pre and post development conditions and **Appendix C** for the detailed Rational Method calculations.

Table 5-3 - Pre-Development and Post-Development Peak Flows

Property State	Q ₂ (m ³ /s)	Q ₅ (m ³ /s)	Q ₁₀ (m ³ /s)	Q ₂₀ (m ³ /s)	Q ₅₀ (m ³ /s)	Q ₁₀₀ (m ³ /s)
Pre-development	0.223	0.342	0.427	0.524	0.680	0.800
Post-development	0.444	0.681	0.852	1.040	1.339	1.504

The proposed development will result in an increase in impervious surface areas. Stormwater runoff peak flow rates will therefore increase as a consequence of development. On-site detention will be provided to maintain pre-development peak flow rates.

Preliminary site grading has minimised the total post development area discharging to the existing swale along the Cunningham Highway so that post development peak flows do not exceed pre development peak flows.

Refer to **Appendix C** for the Rational Method calculations and **Appendix D** for the Concept Drainage Plan.

5.2 Proposed Drainage Patterns

The proposed drainage patterns are as follows:

Roof Catchment:

1. Runoff from the future roof catchments will flow via downpipes to an internal drainage system.

Ground Catchment:

1. Surface runoff from the car fuel dispensing forecourt area will be collected by various stormwater pits connected to a stormwater quality treatment device. The treated flow will then discharge to the Legal Point of Discharge via an internal drainage system.
2. Surface runoff from the truck refuelling forecourt area will be collected by various stormwater pits connected to a stormwater quality treatment device. The treated flow will then be conveyed to a proposed bio-retention/detention basin located at the southeast corner of the proposed development, where it is then ultimately discharged to the Legal Point of Discharge via a drainage pit and the internal drainage system.
3. Surface runoff from the ground level hardstand and landscaping areas will sheet flow or be captured by stormwater pits and conveyed to proposed bio-retention basins. The treated flow will be collected by drainage pits and ultimately discharged to the Legal Point of Discharge via an internal drainage system.

Refer to **Appendix D** for the Concept Drainage Plan and to Section 6 for an assessment of the site's stormwater quality treatment measures.

5.3 On-site Detention

In order for the post-development stormwater discharge conditions to match the pre-development conditions it is proposed to incorporate OSD systems within each of the bio-retention areas comprising an extended detention depth above the surface of the bio-retention. The outlet will be controlled by an appropriately sized pipe or orifice plate.

The proposed OSD system for the south western bio-retention will have the following properties:

- Base area = 640m²;
- Battered 1 in 4 max. to surface;
- Maximum Surface Ponding Depth = 1.0m;
- Maximum Volume = 759kL;
- Orifice plate diameter (at low level outlet pipe) = 0.17m;
- Overflow weir depth = 0.2m;
- Overflow weir width = 10.0m.

The proposed OSD system for the north eastern bio-retention will have the following properties:

- Base area = 139m²;
- Battered 1 in 4 max. to surface;
- Maximum Surface Ponding Depth = 0.5m;
- Maximum Volume = 93kL;
- Outlet pipe diameter (low level) = 0.3m;
- Outlet pipe grade = 0.5%
- Overflow weir depth = 0.1m;
- Overflow weir width = 15.0m.

The proposed OSD system for the mid-eastern boundary bio-retention will have the following properties:

- Base area = 40m²;
- Battered 1 in 4 max. to surface;
- Maximum Surface Ponding Depth = 0.4m;
- Maximum Volume = 27kL;
- Orifice plate diameter (at low level outlet pipe) = 0.25m;
- Overflow weir depth = 0.13m;
- Overflow weir width = 15.0m.

The proposed OSD system for the south eastern bio-retention will have the following properties:

- Base area = 90m²;
- Battered 1 in 4 max. to surface;
- Maximum Surface Ponding Depth = 0.5m;
- Maximum Volume = 56kL;
- Orifice plate diameter (at low level outlet pipe) = 0.22m;
- Overflow weir depth = 0.15m;
- Overflow weir width = 8.0m.

Refer to **Appendix D** for the Concept Drainage Plan which details the proposed on-site detention system.

5.4 Comparison of Peak Flows at Legal Point of Discharge

The pre-development and post-development mitigated peak flow rates obtained from XP-RAFTS hydraulic modelling were compared and are shown in Table 5-4 below.

Table 5-4 - Comparison of Peak Flows at the LPD

ARI	XP-RAFTS Pre-developed Flows	XP-RAFTS Developed Flows (Mitigated)
(years)	(m ³ /s)	(m ³ /s)
2	0.171	0.164
5	0.234	0.195
10	0.275	0.220
20	0.332	0.288
50	0.406	0.341
100	0.470	0.463

The pre-development and post-development mitigated peak flow rates to Cunningham Highway swale obtained from XP-RAFTS hydraulic modelling were compared and are shown in Table 5-5 below.

Table 5-5 - Comparison of Peak Flows to Cunningham Highway swale

ARI	XP-RAFTS Pre-developed Flows	XP-RAFTS Developed Flows (Mitigated)
(years)	(m ³ /s)	(m ³ /s)
2	0.147	0.139
5	0.201	0.166
10	0.235	0.190
20	0.284	0.255
50	0.346	0.302
100	0.401	0.398

The XP-RAFTS hydraulic modelling has demonstrated that the proposed mitigation implemented will maintain pre-development flows (or less) for all design storms at the LPD and to Cunningham Highway swale.

Refer **Appendix F** for the pre-development XP-RAFTS hydrographs, **Appendix F** for the post-development XP-RAFTS hydrographs and **Appendix G** for the post-development mitigated hydrographs.

6 STORMWATER QUALITY

The following section of this report will outline the potential contaminants and proposed solutions to be incorporated during the construction and operational phases of the proposed development.

6.1 Construction Phase

Any sediment generated during the construction phase shall be dealt with in accordance with an Erosion and Sediment Control Plan to be prepared by Morgan Consulting Engineers and kept on site during the construction phase. Erosion and Sediment Control (ESC) measures such as silt fences, diversion drains, drainage structure protection and dust control (clearing) will be implemented.

Erosion and Sediment Control (ESC) Measures such as silt fences, diversion drains, drainage structure protection and dust control (clearing) will be implemented. Silt fences are to be erected along the boundary of the site and around the construction area. These fences are to be cleaned by the contractor when the capacity is reduced by 25%. Where possible, disturbance to the existing surface is to be limited to the immediate work area. The existing ground cover is not to be stripped until the contractor is ready for earthworks to begin.

All ESC measures are to be provided as soon as earthworks have commenced and staged to suit construction. The contractor is responsible for this action. A temporary construction exit is to be located at each entry point to the site and will be determined based on the stage of works being completed. The contractor is to ensure all dust tracked onto surrounding roads is immediately swept to remove silt/dust.

All new stormwater pits are to be protected from sediment infiltration by wrapping new pits and grates in geofabric or covering appropriately with timber board. Silt fences are to remain in place during the maintenance period until the site is established (80% ground cover) and accepted "Off Maintenance" by Goondiwindi Regional Council (GRC).

The proposed construction works will be undertaken in accordance with the Soil Erosion and Sediment Control: Engineering Guidelines for Queensland Construction Sites.

Potential sources of contaminants identified for the construction phase of the development are outlined in Table 6.1 together with proposed stormwater quality improvement devices (SQIDs), management and maintenance procedures.

Table 6.1 - Potential Contaminants and Proposed Treatments - Construction Phase

Pollutant	Potential Source	Management / Maintenance Procedures	Proposed Treatment Device and Maintenance Procedure
Sediment & Eroded material	Excavated material, fill material, exposed ground, Stockpiles of material.	Provision of sediment and silt barriers to the site drainage entry and exit points.	Sand filled filter socks. Removal of excess sand/silt build up at regular intervals and after every storm.
Dust	Stockpiles of material, exposed ground.	Covering the material or wetting it down at regular intervals.	Coverage of material with plastic, geotextile, surface binding agents or regular watering.
Litter	Refuse generated by staff.	Construction waste is to be cleaned off the site area and installed into an industrial bin then removed by a refuse collection contractor.	Industrial bin is to be provided within the construction area - to be emptied on at least a weekly basis.
Concrete	Washing of concrete trucks/tools to remove wet/unused concrete.	Provision of a closed area onsite for washing off of concrete slurries.	Liquids to be removed by a waste collection contractor. Solids to be placed into a refuse bin.
Surfactants (detergents)	Washing down operations on hardstand area using detergents.	No cleaning of vehicles will be permitted on site.	Monitoring & prevention
Chemical (Paints, thinners etc.)	Typically this may occur due to spillage of product.	Where spills occur, the containment area is to stop escape. The material is to be treated (as required) and removed and cleaned by a licensed contractor. Minor spillage outside this area shall be cleaned up with cloths and disposed of to waste via the industrial bin.	A temporary containment area. This is to be impermeable and of a size to permit mixing/transfer, and with a storage volume of twice the largest container used. Treatment of spills is to occur on site. No discharge of treated water to the stormwater system is to occur without council approval. Incidents are to be reported to the EPA.
Wastewater	Spillage from the relocation of the existing sewerage reticulation.	A licensed contractor shall remove any residue sewage from unused pipes and contaminated soils are to be disposed of via the industrial bin.	No leakage is to be permitted to enter the groundwater or discharge to the stormwater system.

6.2 Operational Phase

The development has been assessed against the latest *State Planning Policy 2017 (SPP 2017)*. The proposed development area will entail a material change of use for urban purposes, which will involve a land area greater than 2,500m². Consequently, *State Planning Policy 2017 (SPP 2017)* is triggered.

6.2.1 Water Quality Objectives

Water quality objectives (WQO's) for Central Queensland (South) as set out in *State Planning Policy 2017 (SPP 2017)* should be achieved by identifying and adopting best practise techniques in accordance with the abovementioned guidelines. Refer to Table 6.2 for to target WQO's.

Table 6.2 - Minimum Mean Annual Load Reductions

Contaminant	Minimum Mean Annual Load Reductions
Total Suspended Solids (TSS)	≥ 85%
Total Phosphorus (TP)	≥ 60%
Total Nitrogen (TN)	≥ 45%
Gross Pollutants (GP)	≥ 90%

6.2.2 Sources of Contaminants

Potential sources of contaminants and stormwater quality improvement devices identified for the operational phase of the development are outlined in Table 6.3.

Table 6.3 - Sources of Contaminants

Target Pollutant Type		Pollutant Size	Acceptable Treatment Examples
Primary Pollutants	Screening of gross pollutants	>5000um	Litter baskets, swales, buffer strips, GPT's, Bio-retention basins
Secondary Pollutants	Sedimentation of coarse to medium sediment	125um - 5000um	Swales, sedimentation basins, ponds
Tertiary Pollutants	Enhanced sedimentation of fine particulates	10um - 125um	Bio-retention basins, constructed wetland macrophyte zones, other bio technologies, proprietary tertiary stormwater treatment devices
	Adhesion and filtration of very fine / colloidal sediment	0.45um - 10um	Constructed wetland macrophyte zones, other bio technologies, proprietary tertiary stormwater treatment devices
	Biological uptake of dissolved particles	<0.45um	Constructed wetland macrophyte zones, other bio technologies

6.2.3 Proposed Treatment Train

The proposed treatment train has been modelled using the following methodology:

Roofwater Runoff

1. Roofwater from the car fueling canopy will be directed to a bio-retention basin located northwest of the site for treatment.
2. Roofwater from the service station will be directed to various pits connected to a SPEL Environmental Puraceptor spill containment device. The flow is then directed to a bio-retention basin located southeast of the site for treatment.

Surface Runoff

1. Surface runoff from the car refuelling forecourt, fuel dispensing areas and fuel transfer/fill points will be directed into various pits connected to a SPEL Environmental Puraceptor spill containment device.
2. Surface runoff from the truck refuelling forecourt and fuel transfer/fill points will be directed into various pits connected to a SPEL Environmental Puraceptor spill containment device. The flow is then directed to a bio-retention basin located southeast of the site for treatment.
3. Hardstand surface runoff will sheet flow or be captured by pits containing SPEL Environmental® Stormsack litter baskets and directed to proposed bio-retention basins for treatment.
4. Fuel dispensing areas and fuel transfer/fill points will be surfaced, bunded and covered to contain any fuel spills and to prevent external stormwater runoff flowing into the dispensing area.
5. Two Puraceptor devices are proposed to treatment fuel spill containment. The Puraceptor devices will remove hydrocarbons, gross pollutants and total suspended solids. The size, location and configuration of the devices will be confirmed during detailed design.

All runoff described above will then discharge to the legal point of discharge. A concept drainage layout of the proposed network detailing the treatment train assets is included in **Appendix D**. Refer to Table 6.3 for details of the treatment train assets.

Table 6.3 - Proposed Treatment Assets

Treatment Level	Treatment Asset	Description
Primary	9 x Litter Baskets	SPEL Stormsack litter baskets will be installed within the inlet pits in the private access road
Primary/ Secondary/ Tertiary	4 x Bio-retention Basins	<ol style="list-style-type: none"> 1. 325m² Total Filter Area 2. 0.4m Filter Media Depth 3. 0.2m Extended Detention Depth

The final sizes and configuration of the bio-retention basins are to be confirmed during detailed design. Refer to **Appendix H** for the Stormwater Quality Operation and Maintenance Guidelines and **Appendix I** for the SPEL Environmental® Operation and Maintenance Guidelines.

6.2.4 Pollutant Export Modelling

Following the definition of water quality objectives for the site and an assessment of the treatment options suitable for the development, the most appropriate treatment scheme for the site was identified. The impact of the stormwater management strategy on the quality of stormwater runoff discharged from the site has been assessed using the pollutant export model, *Model for Urban Stormwater Improvement Conceptualisation* (MUSIC).

6.2.5 MUSIC Modelling Parameters

The MUSIC model was set up in accordance with the Water By Design's *MUSIC Modelling Guidelines for South East Queensland* to the parameters listed in Table 6.4 and Table 6.5. Refer to Figure 6.1 for source node areas.

Table 6.4 - MUSIC Parameters

Parameter	Data Used
Rainfall Data	Rainfall Station 041521, GOONDIWINDI 1991 to 2010
Modelling Timestep	6 minutes
Routing	No routing drain links were adopted

Table 6.5 - Catchment Runoff Generation Parameters

Parameter	Industrial Catchment
Rainfall Threshold	1
Soil Storage Capacity (mm)	18
Initial Storage Capacity (% capacity)	10
Field Capacity (mm)	80
Infiltration Capacity Coefficient a	243
Infiltration Capacity Coefficient b	0.6
Initial Depth (mm)	50
Daily Recharge Rate (%)	0
Daily Baseflow Rate (%)	31
Daily Deep Seepage Rate (%)	0

6.2.6 MUSIC Modeling Results

Refer to Figure 6.1 for a print screen schematic of the MUSIC model for the proposed development the the annual pollutant loads that will be discharged from the site for the proposed development.

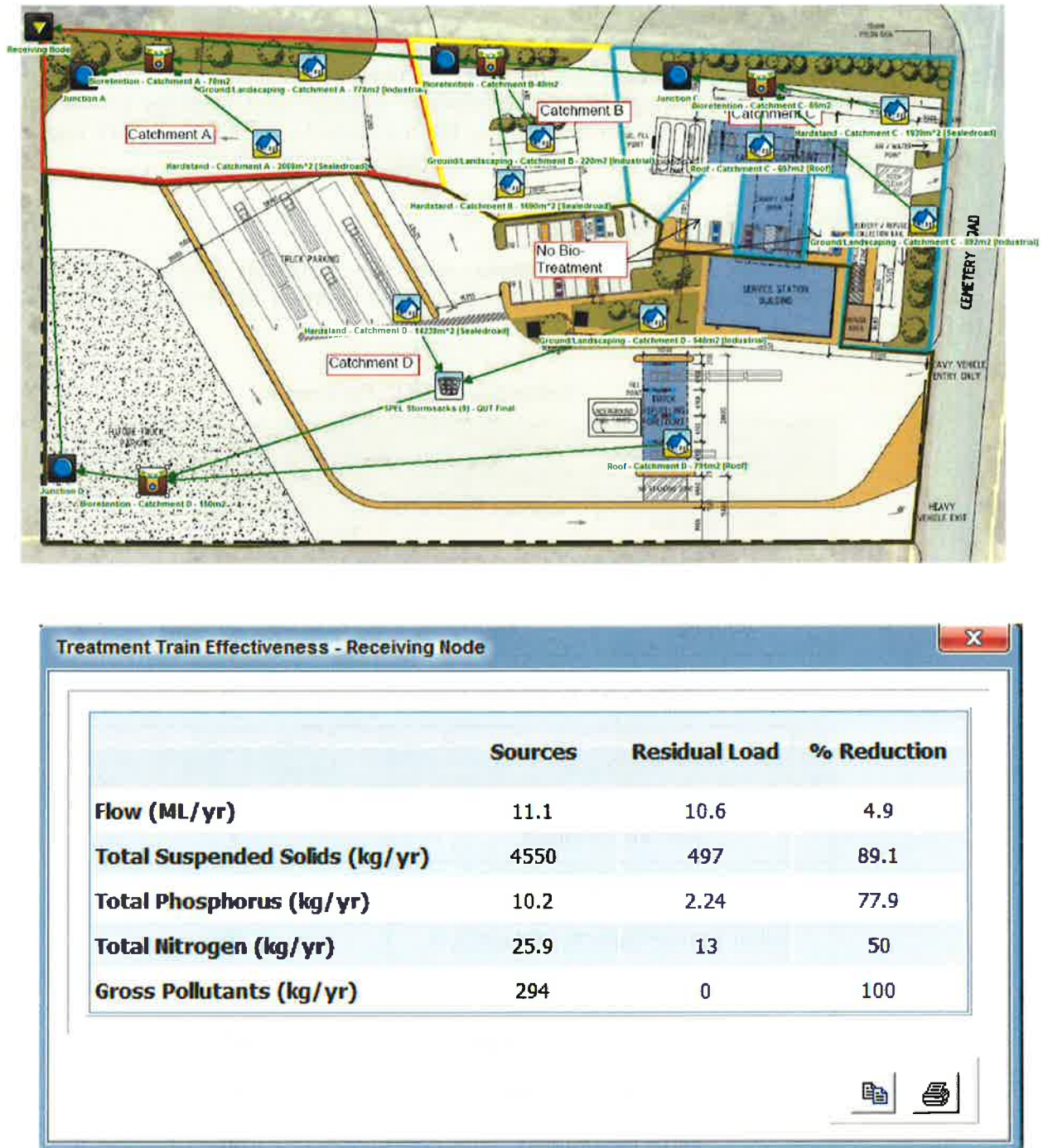


Figure 6.1 - MUSIC Model Print Screen Schematic and Modelling Results

The modelling results show that the pollutant reduction objectives are met for all contaminants given in Section 6.

Should operational requirements change, this plan is required to be amended to suit. Substantial changes may require resubmission to the local authority. Following completion of construction, this plan is to be incorporated into the total-site management practices.

7 FLOODING

The Goondiwindi Planning Scheme Flood Hazard Overlay obtained indicates that the site falls under the area of floodplain protected up to a 0.5% AEP Flood Event by the Council Town Levee and Council verified natural topographic features. No further consideration for flooding is required.

Refer to **Appendix G** for the GRC Flood Hazard Map.

8 CONCLUSION

The Proposed Commercial Development at 2-12 Cemetery Road, Goondiwindi has been assessed for its impact on the quantity and quality of stormwater drainage.

It has been established that the rural swale drains and Serpentine Creek are the legal point of discharge.

On-site detention is required as the proposed development will increase stormwater runoff peak flow rates.

Sediment generated during the construction phase shall be dealt with in accordance with an Erosion and Sediment Control Plan (ESC) to be kept onsite during the construction phase.

As the development entails a material change of use for urban purposes which will involve a land area greater than 2,500m², the *State Planning Policy 2017* (SPP 2017) is triggered. The water quality objectives (WQO's) have therefore been achieved by treating the roof and surface stormwater runoff via SPEL Environmental litter baskets and bio-retention basins prior to discharging to the Legal Point of Discharge.

It has been confirmed that the site isn't flood affected.

APPENDIX A

DETAILED SITE SURVEY

57
3.88
5.77
442

90
RP218861

Pt No 1453
E=19934.80
N=19789.68
RL=217.754
BM SP

34

* 217.46

217.50

* 217.54

* 217.62

* 217.68

* 217.73

* 217.78

* 217.70

* 217.71

* 217.71

* 217.72

* 217.72

* 217.80

* 217.76

* 217.83

* 217.83

* 217.78

* 217.75

* 217.80

* 217.86

* 217.91

* 217.90

* 217.82

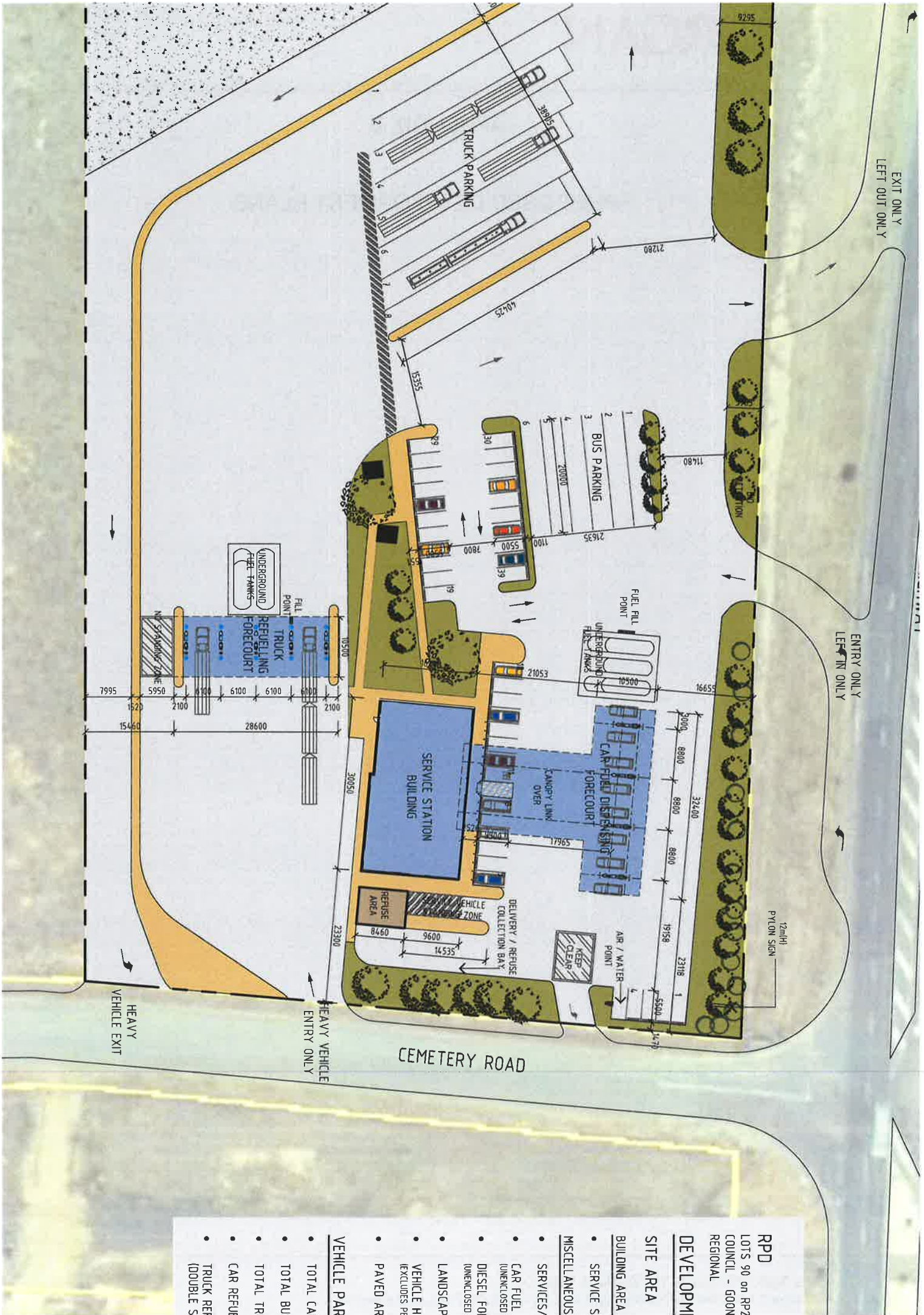
* 217.78

* 217.77

* 217

APPENDIX B

PROPOSED DEVELOPMENT PLANS



- RPD**
- LOTS 90 ON RPD**
- COUNCIL - GOON**
- REGIONAL**
- DEVELOPMENT**
- SITE AREA**
- BUILDING AREA**
- SERVICE S
- MISCELLANEOUS**
- SERVICES/I
 - CAR FUEL (UNENCLOSED)
 - DIESEL FUEL (UNENCLOSED)
 - LANDSCAPY
 - VEHICLE H/ (EXCLUDES PE
 - PAVED ARI
- VEHICLE PARKING**
- TOTAL CAR
 - TOTAL BUS
 - TOTAL TRUCK
 - CAR REFUE
 - TRUCK REF (DOUBLE SI

APPENDIX C

STORMWATER QUANTITY CALCULATIONS

Rational Method Peak Flow Calculations

Job No: 17131
 Job Type: Commercial Development
 Address: 2-12 Cemetery Road, Goondiwindi
 Council: GRC

MORGAN CONSULTING
 ENGINEERS PTY LTD
 1 GREAT GEORGE STREET
 PADDINGTON QLD 4064

IFD Data: Goondiwindi Regional Council
¹I₁₀ 47mm/hr

Minor Storm: Q10
 Major Storm: Q100

Designed: CG
 Checked: HM

Pre-Development

Time of Concentration

Standard Inlet Time

Standard Inlet Time mins QUDM 2007 4.06

Sheet Flow (Friends Equation)

QUDM 2007 - Table 4.06.3

Sheet flow length (L) m
 roughness (n) short grass
 Fall of NSL m
 Slope of Surface (S) %
 total mins

Concentrated Overland Flow

Flow distance m
 velocity m/s
 mins mins QUDM 2007 - Figure 4.09
 Surface type multiplier
 total mins

Total t_c mins

Post-Development

Standard Inlet Time

Standard Inlet Time mins QUDM 2007 4.06

Sheet Flow (Friends Equation)

QUDM 2007 - Table 4.06.3

Sheet flow length (L) m
 roughness (n) short grass
 Fall of NSL m
 Slope of Surface (S) %
 total mins

Pipe Flow

Flow distance m
 Fall of channel m
 Flow Velocity m/s
 total mins

Total t_c mins

Runoff Volume Calculations

Name	Area (ha)	t _c	f _i	C ₁₀
	2.47		0	0.60
Total	2.472	16.5		0.60

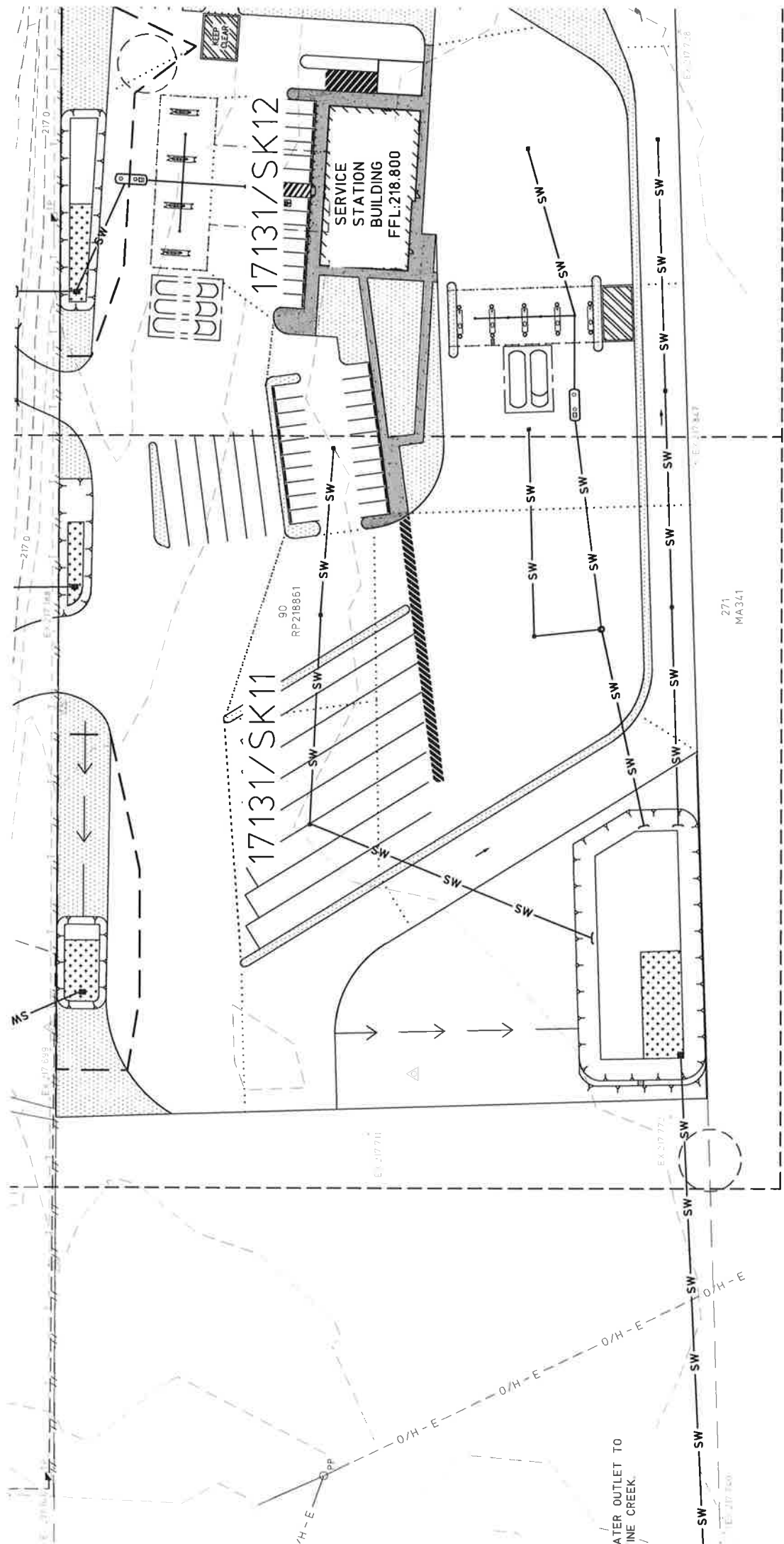
ARI (years)	Frequency Factor (F _y)	C _y (F _y *C ₁₀)	I _y (mm/h)	A (Ha)	Q _y (m ³ /s)
3 mth					0.093
1	0.800	0.480	56	2.472	0.186
2	0.850	0.510	64	2.472	0.223
5	0.950	0.570	87	2.472	0.342
10	1.000	0.600	104	2.472	0.427
20	1.050	0.630	121	2.472	0.524
50	1.150	0.690	143	2.472	0.680
100	1.200	0.720	162	2.472	0.800

Name	Area (ha)	t _c	f _i	C ₁₀
	2.47		0.9	0.88
Total	2.472	8.3		0.88

ARI (years)	Frequency Factor (F _y)	C _y (F _y *C ₁₀)	I _y (mm/h)	A (Ha)	Q _y (m ³ /s)
3 mth					0.185
1	0.800	0.701	77	2.472	0.370
2	0.850	0.745	87	2.472	0.444
5	0.950	0.832	119	2.472	0.681
10	1.000	0.876	142	2.472	0.852
20	1.050	0.920	165	2.472	1.040
50	1.150	1.000	195	2.472	1.339
100	1.200	1.000	219	2.472	1.504

APPENDIX D

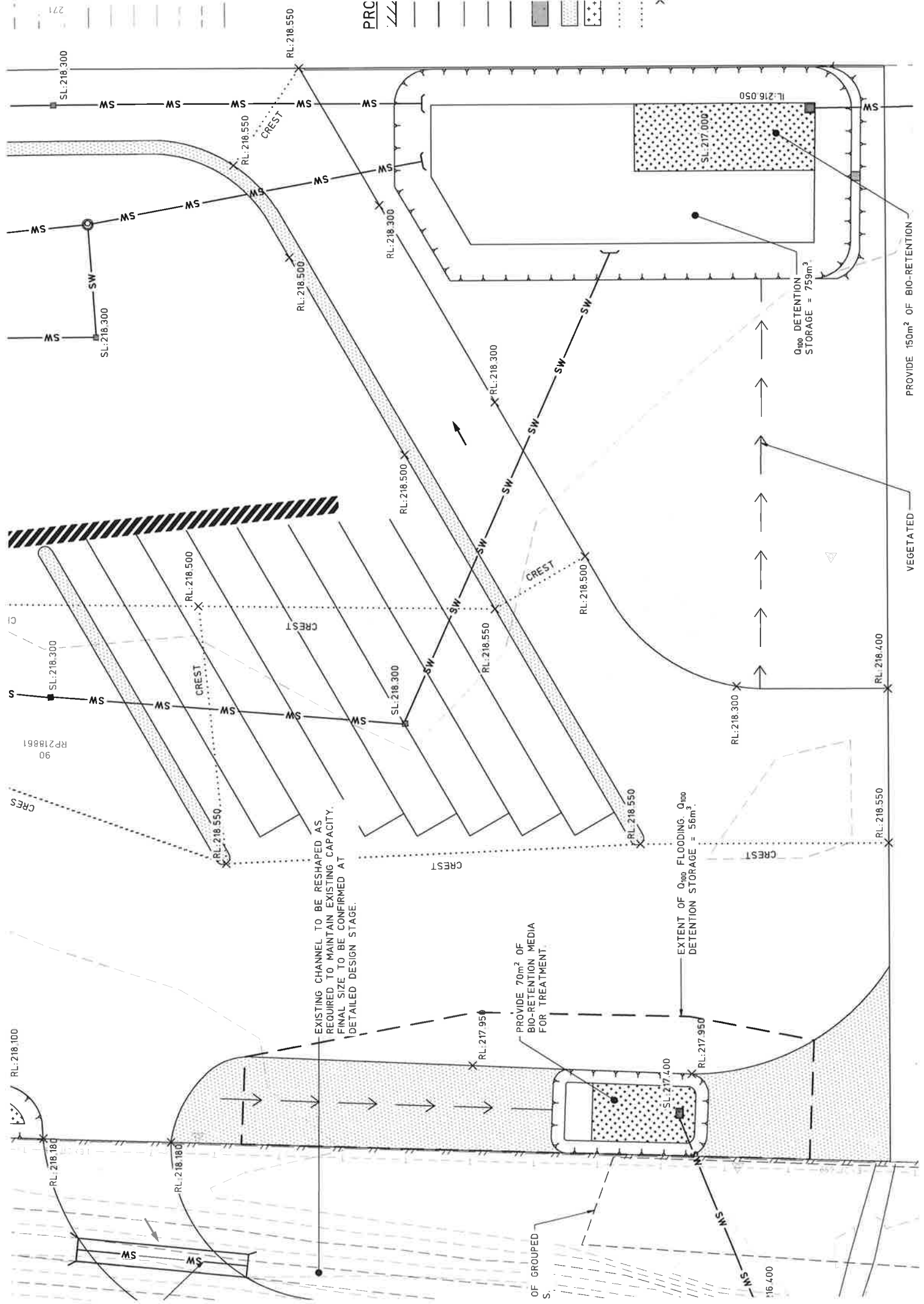
CONCEPT DRAINAGE PLAN



PROPOSED

KERB AND CHANNEL	BUILDING EXTENT
EDGE OF BITUMENT	LOT BOUNDARY
LOT BOUNDARY	CONTOUR MAJOR (1.00m INTERVAL)
CONTOUR MAJOR (1.00m INTERVAL)	CONTOUR MINOR (0.25m INTERVAL)
CONTOUR MINOR (0.25m INTERVAL)	SWALE
STORMWATER	STORMWATER
SEWER	CONCRETE FOOTPATH/CROSSOVER
WATER	LANDSCAPING
TELSTRA	BIO-DETENTION
INDEPENDENT ELECTRICALITY	

KEY PLAN SCALE 1:500



PRC

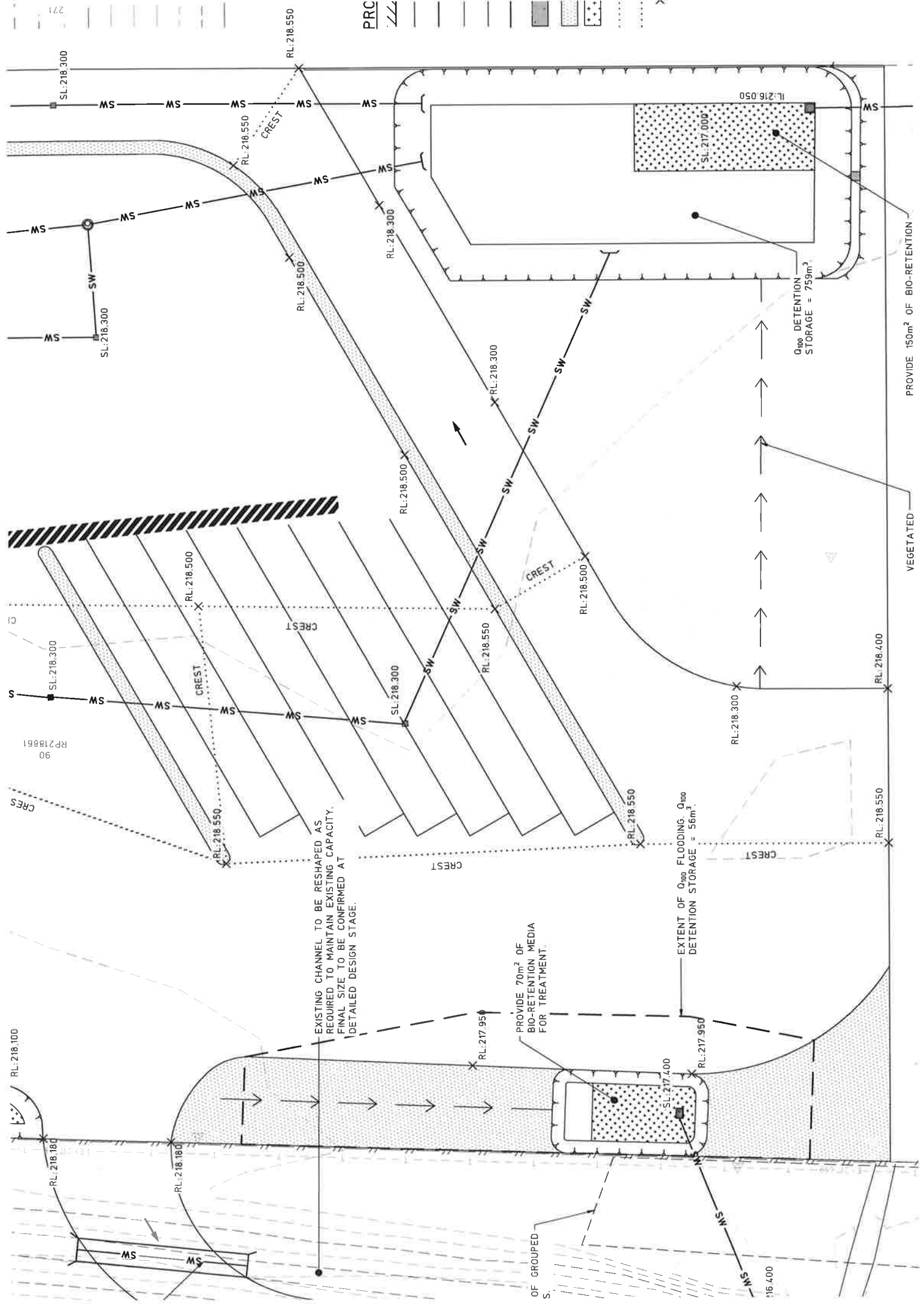
EXISTING CHANNEL TO BE RESHAPED AS
REQUIRED TO MAINTAIN EXISTING CAPACITY.
FINAL SIZE TO BE CONFIRMED AT
DETAILED DESIGN STAGE.

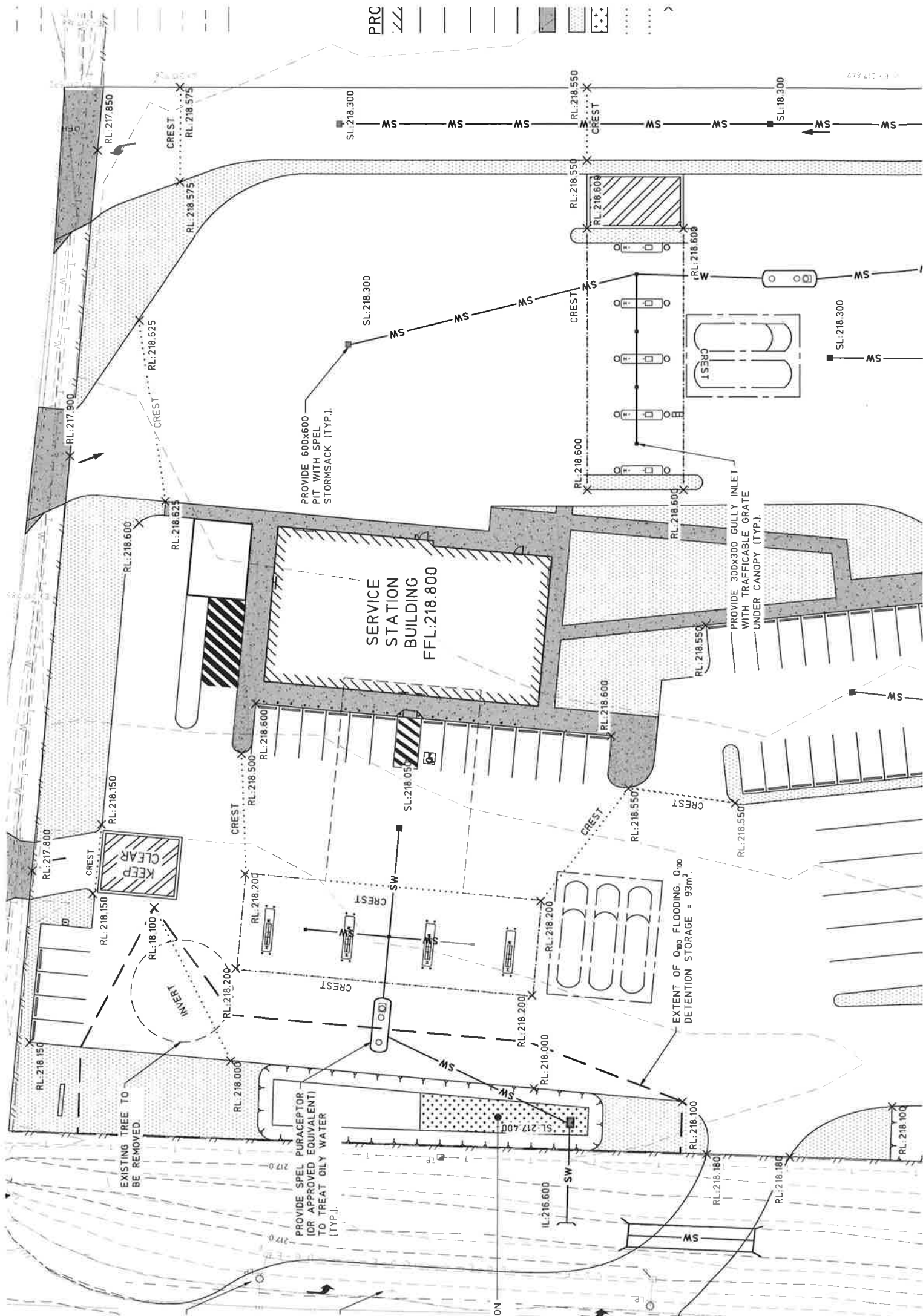
PROVIDE 70m² OF
BIO-RETENTION MEDIA
FOR TREATMENT

EXTENT OF Q₁₀₀ FLOODING. Q₁₀₀
DETENTION STORAGE = 56m³

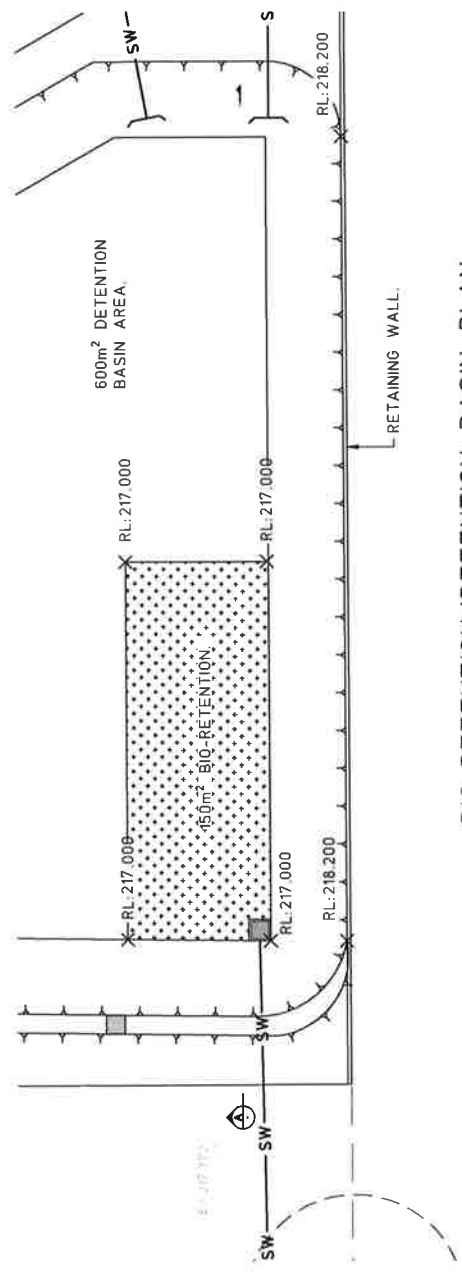
Q₁₀₀ DETENTION
STORAGE = 759m³

VEGETATED
PROVIDE 150m² OF BIO-RETENTION

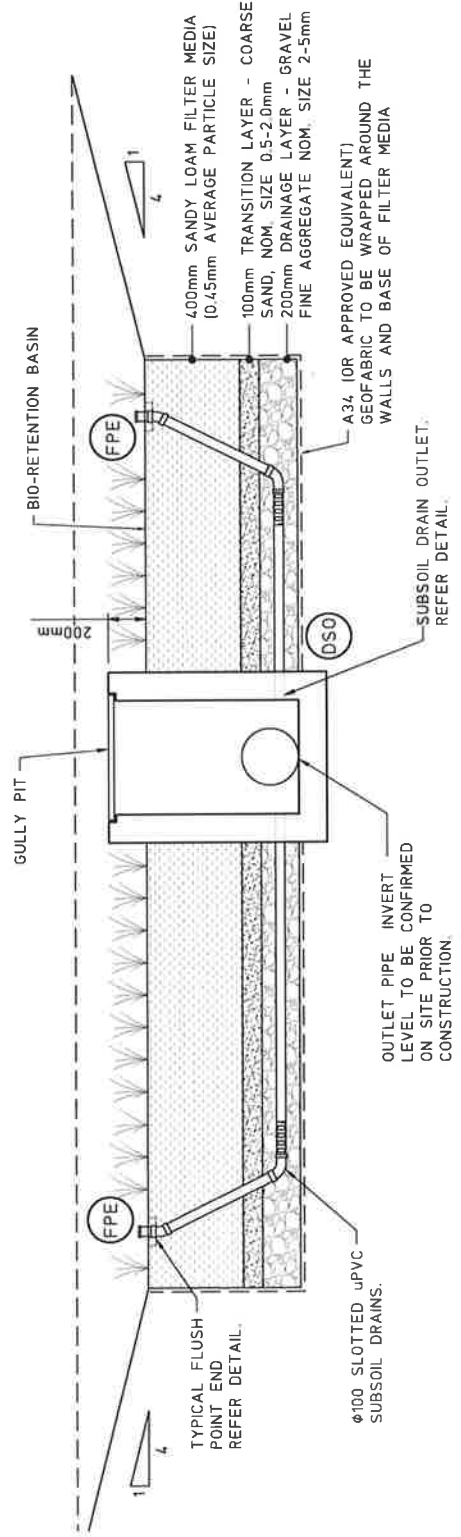




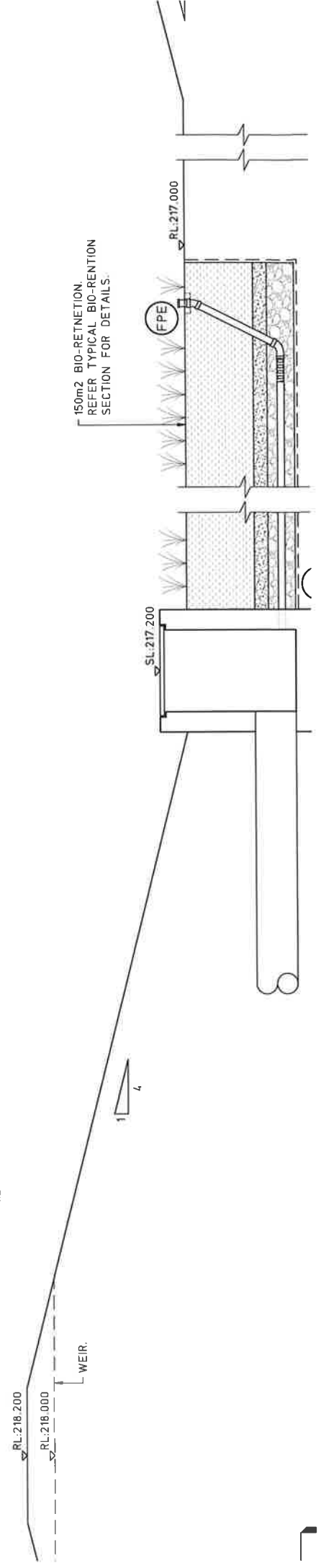
3. ALL LANDSCAPING 10 BIO-RETENTIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE WATER SENSITIVE URBAN DESIGN GUIDELINES BIORETENTION SWALE DESIGN ASSESSMENT. THE CONTRACTOR TO PROVIDE CERTIFICATION OF BIO-RETENTION TO THE SUPERENDANT AS IT BECOMES AVAILABLE. 'FACILITY FOR ADVANCING WATER BIOFILTRATION' REQUIREMENTS. SHOULD THE FILTER MEDIA FAIL AGREED CRITERIA, SUITABLE REMEDIAL MEASURES SHALL BE TAKEN TO BE TESTED ARE AS FOLLOWS:
- 4.A. HYDRAULIC CONDUCTIVITY;
- 4.B. PARTICLE SIZE DISTRIBUTION (PSD);
- 4.C. TOTAL NITROGEN (TN);
- 4.D. ORTHOPHOSPHATE CONTENT;
- 4.E. ORGANIC MATTER CONTENT;
- 4.F. pH = 5.5-7.5, AND;
- 4.G. ELECTRICAL CONDUCTIVITY (EC).
5. THE BASE OF THE BIO-RETENTION SYSTEM SHALL BE GULLY PIT. SLOTTED 'SH' CLASS PIPES ARE TO BE SPACING ON THIS GRADE IN TOTAL A 100mm FA AND WILL BE ACCOMMODATED IN THE DRAINAGE DESIGN GUIDELINES MUST BE ACHIEVED.



BIO-RETENTION/RETENTION BASIN PLAN
1:200



BIO-RETENTION TYPICAL SECTION
1:20



150m² BIO-RETENTION.
REFER TYPICAL BIO-RETENTION SECTION FOR DETAILS.

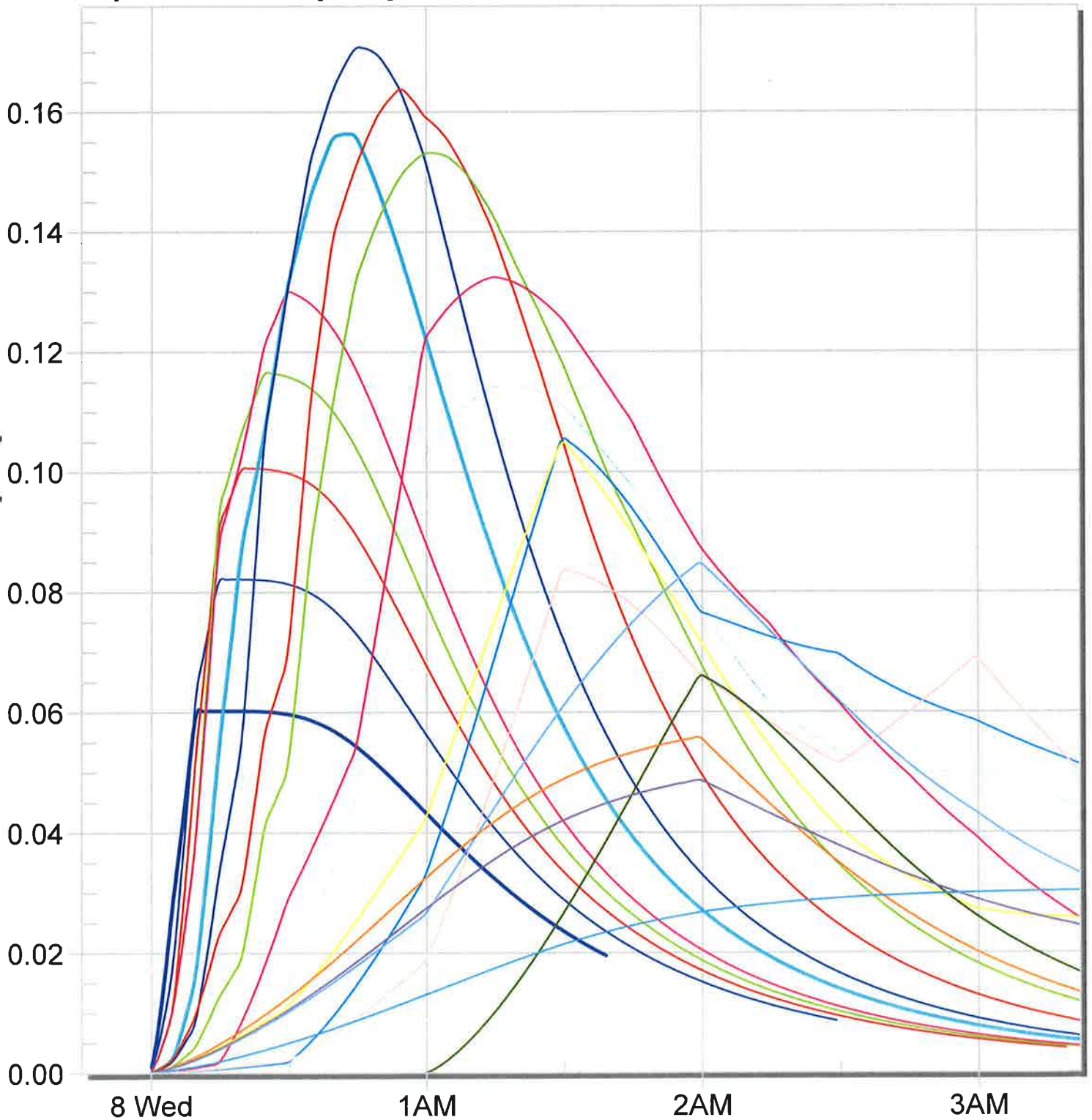
APPENDIX E

PRE-DEVELOPMENT XP-RAFTS HYDROGRAPHS
SITE DISCHARGE

STREET [ALL STORMS]

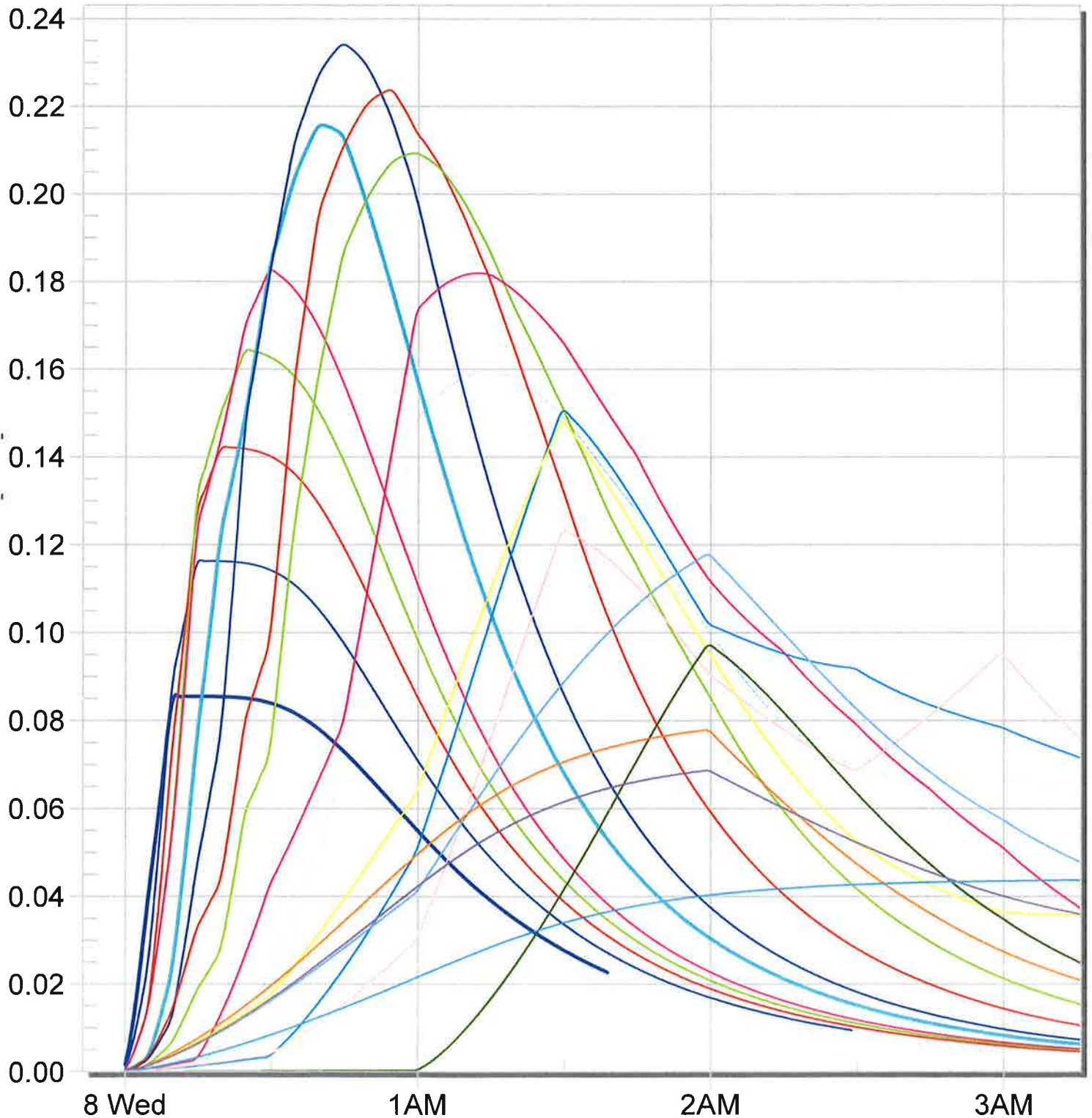
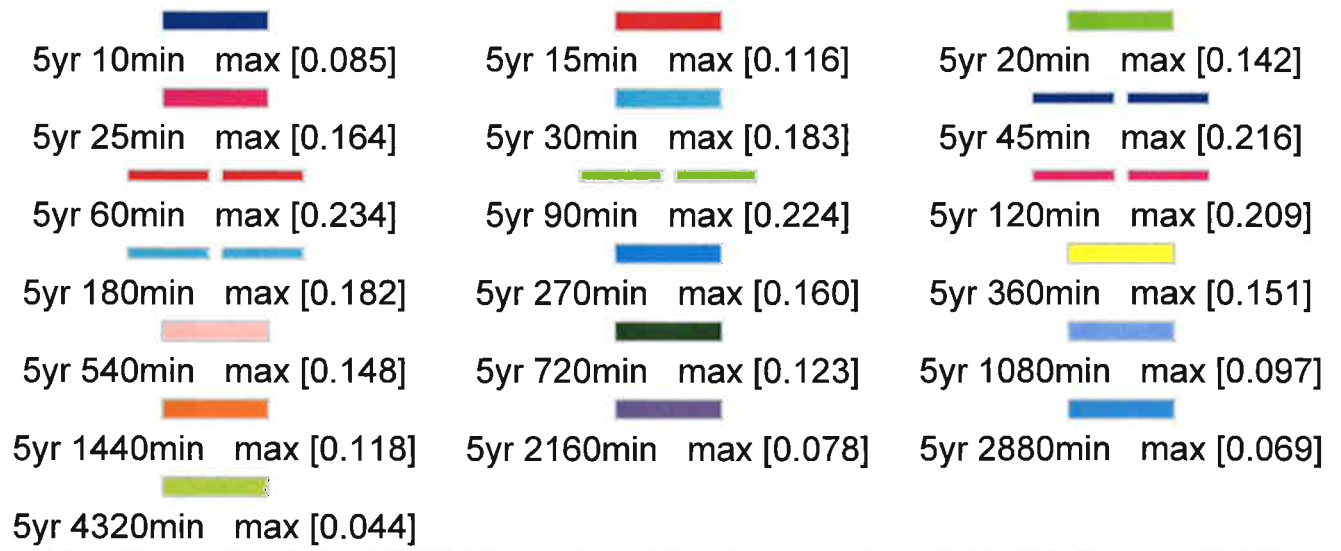
Total Flow

2yr 10min max [0.060]	2yr 15min max [0.082]	2yr 20min max [0.101]
2yr 25min max [0.117]	2yr 30min max [0.130]	2yr 45min max [0.156]
2yr 60min max [0.171]	2yr 90min max [0.164]	2yr 120min max [0.153]
2yr 180min max [0.132]	2yr 270min max [0.115]	2yr 360min max [0.106]
2yr 540min max [0.105]	2yr 720min max [0.084]	2yr 1080min max [0.066]
2yr 1440min max [0.085]	2yr 2160min max [0.056]	2yr 2880min max [0.049]
2yr 4320min max [0.030]		



SHOULDER [ALL STORMS]

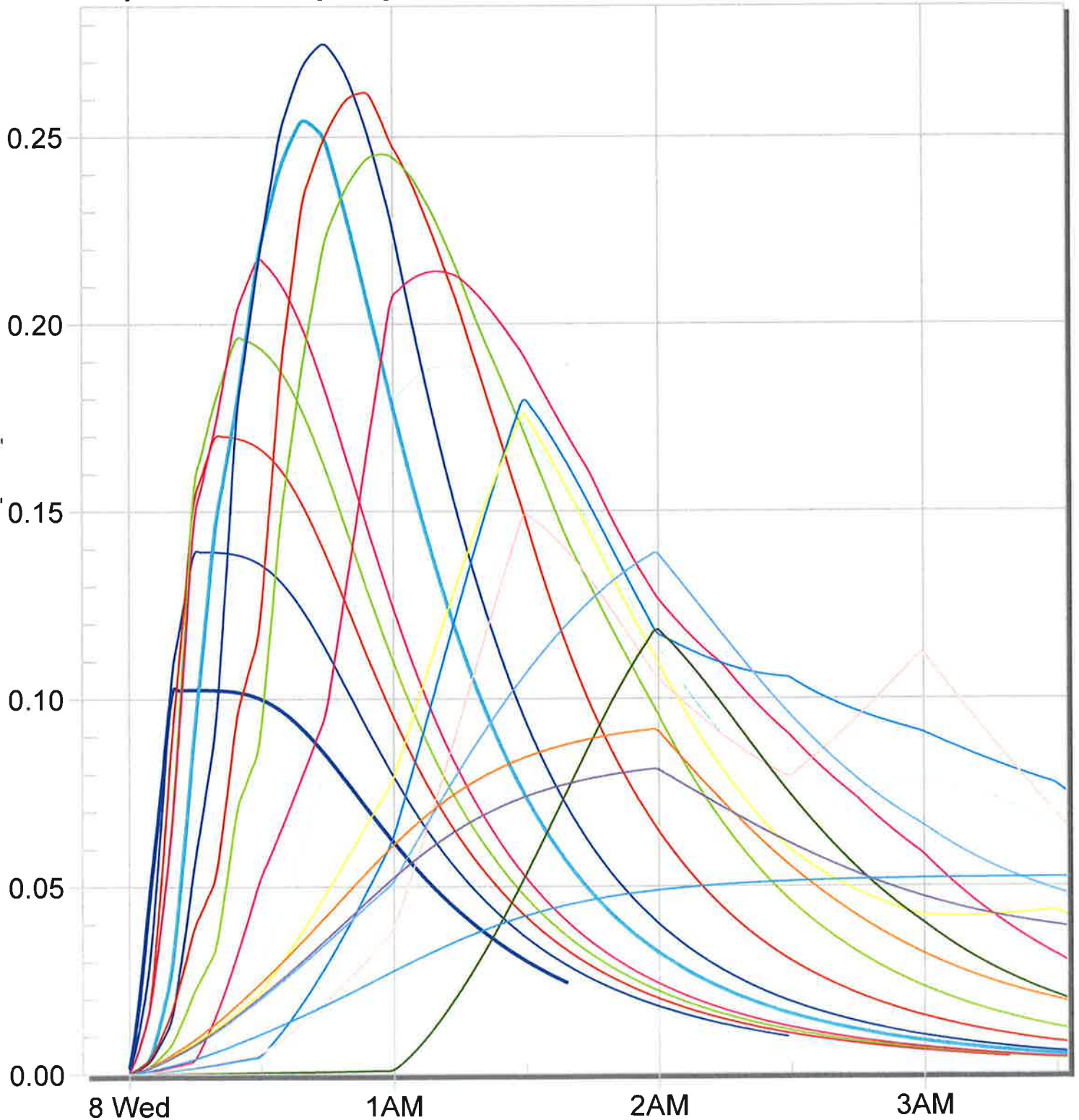
Total Flow



SHR-LED [ALL STORMS]

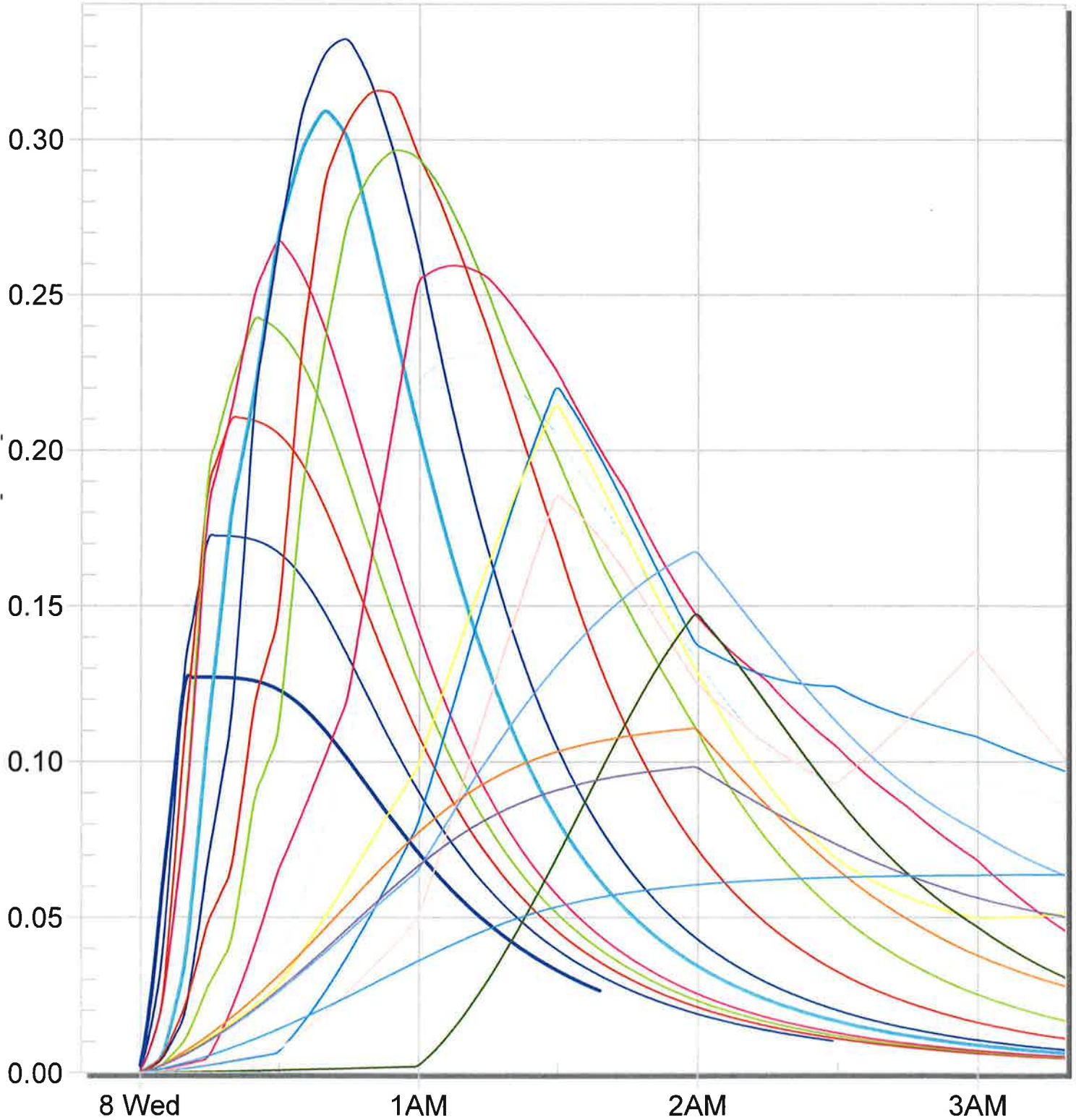
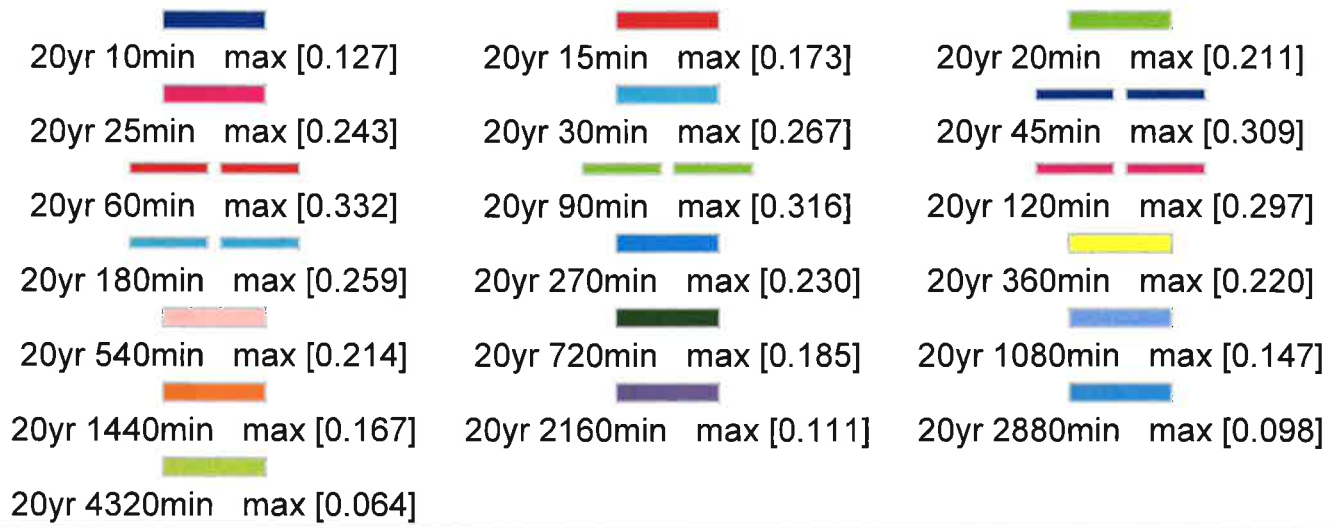
Total Flow

10yr 10min max [0.102]	10yr 15min max [0.139]	10yr 20min max [0.170]
10yr 25min max [0.196]	10yr 30min max [0.217]	10yr 45min max [0.254]
10yr 60min max [0.275]	10yr 90min max [0.262]	10yr 120min max [0.245]
10yr 180min max [0.214]	10yr 270min max [0.189]	10yr 360min max [0.180]
10yr 540min max [0.176]	10yr 720min max [0.149]	10yr 1080min max [0.118]
10yr 1440min max [0.139]	10yr 2160min max [0.092]	10yr 2880min max [0.081]
10yr 4320min max [0.052]		



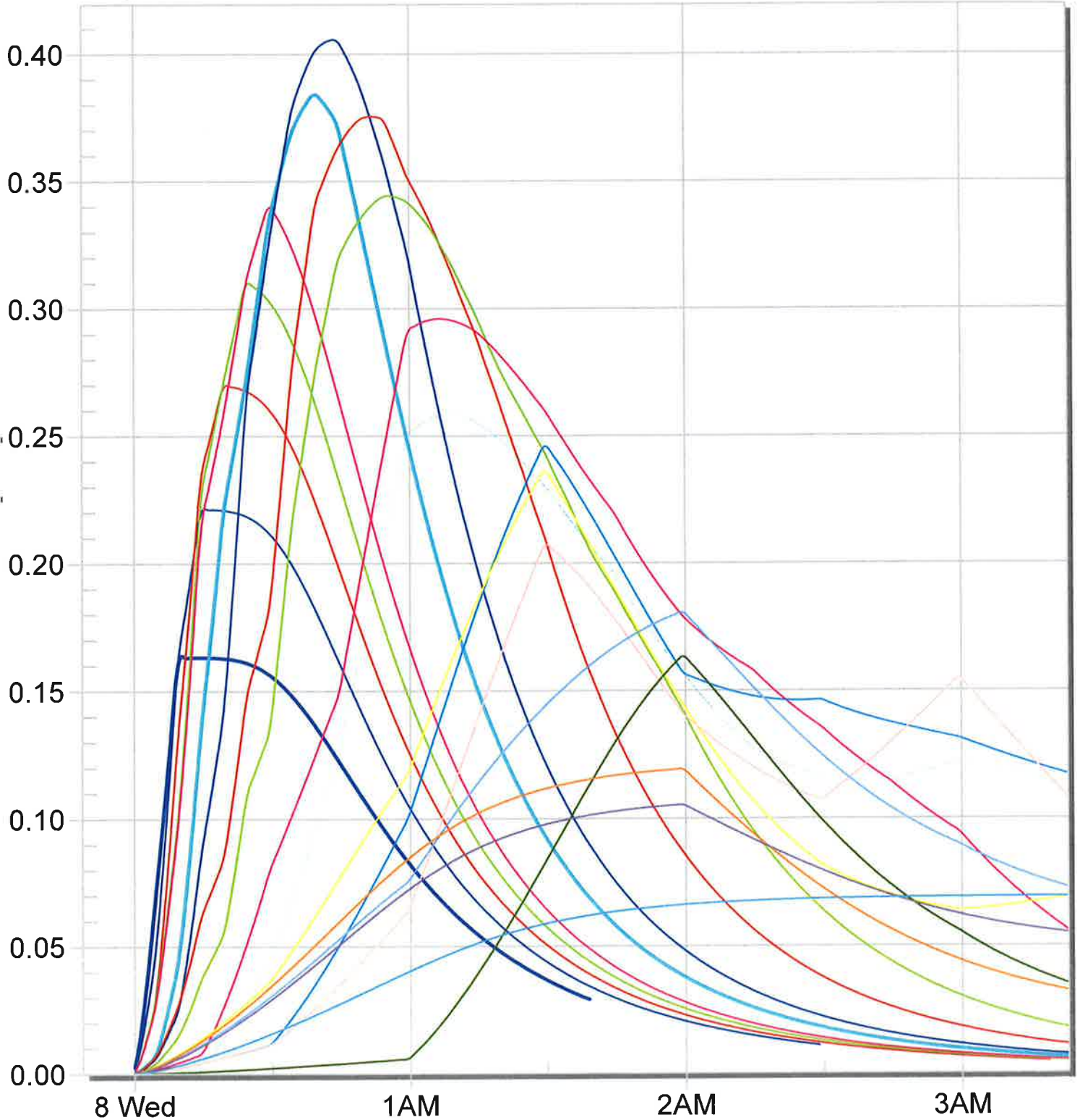
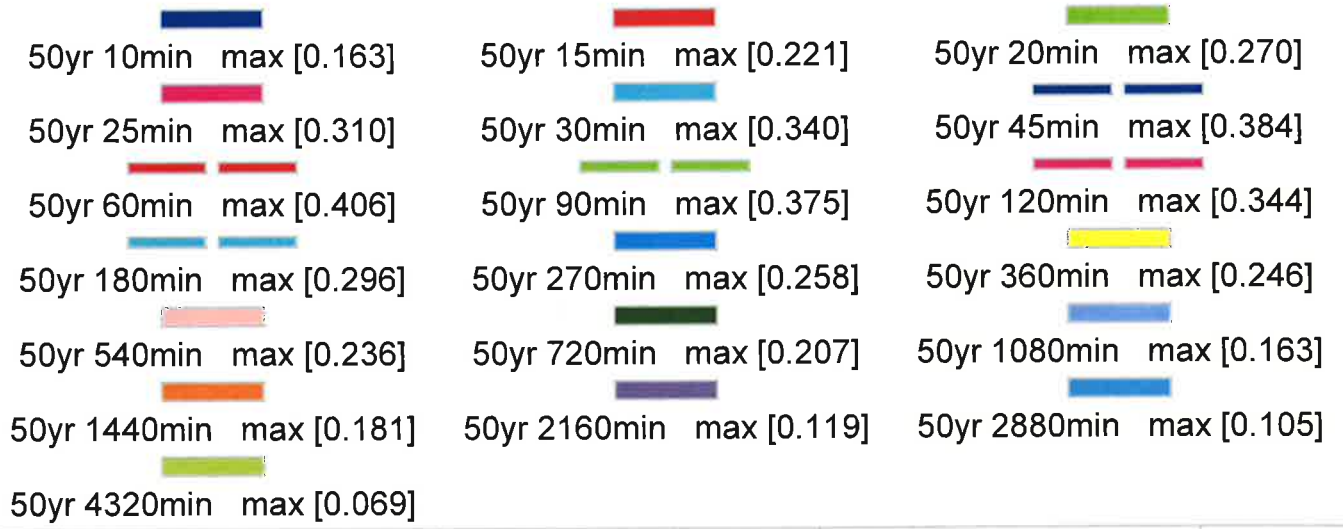
SHOULDER [ALL STORMS]

Total Flow



SHO-LED [ALL STORMS]

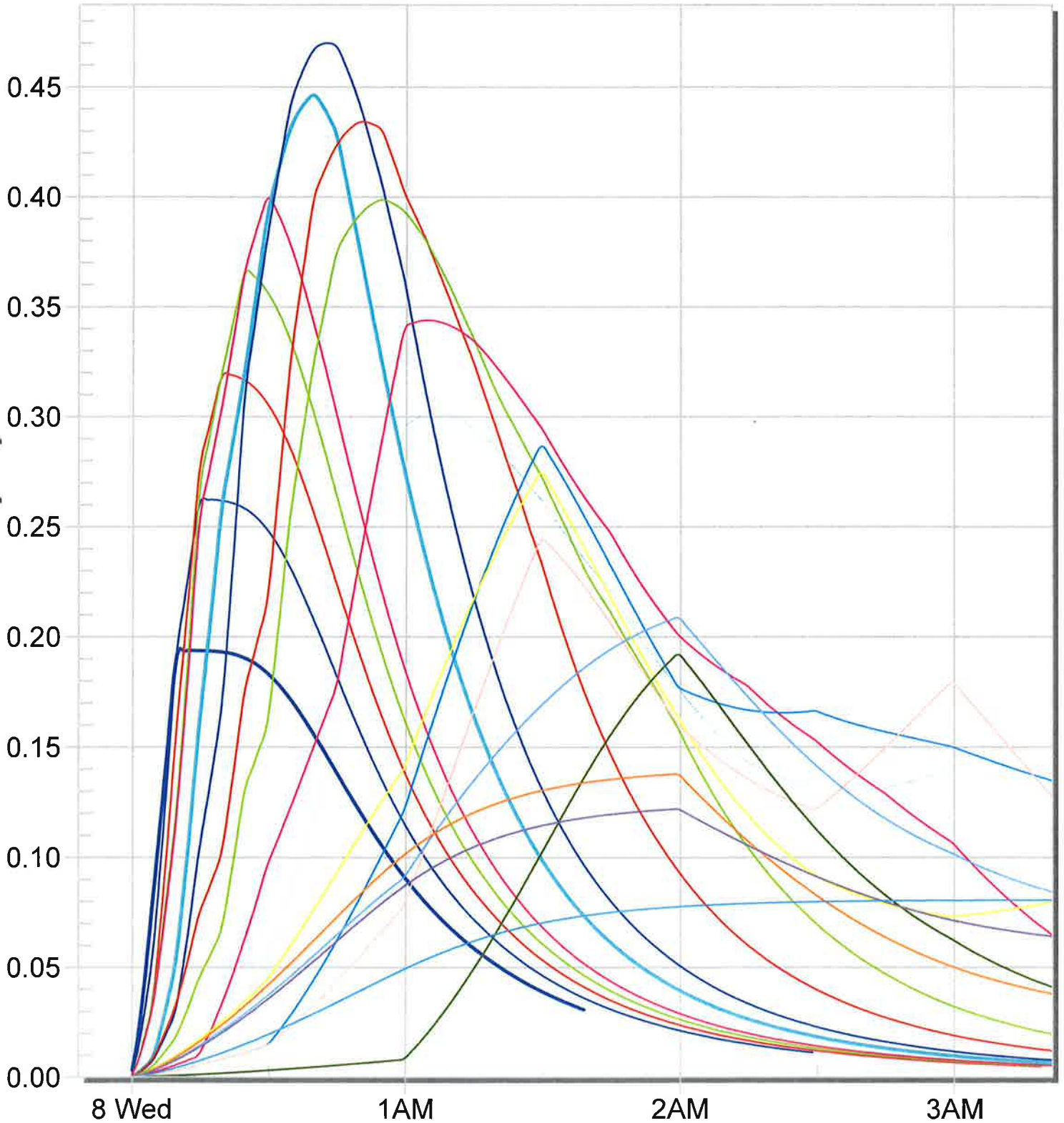
Total Flow



SHOULDER [ALL STORMS]

Total Flow

100yr 10min max [0.194]	100yr 15min max [0.262]	100yr 20min max [0.320]
100yr 25min max [0.366]	100yr 30min max [0.399]	100yr 45min max [0.446]
100yr 60min max [0.470]	100yr 90min max [0.434]	100yr 120min max [0.399]
100yr 180min max [0.344]	100yr 270min max [0.302]	100yr 360min max [0.286]
100yr 540min max [0.274]	100yr 720min max [0.244]	100yr 1080min max [0.192]
100yr 1440min max [0.209]	100yr 2160min max [0.138]	100yr 2880min max [0.122]
100yr 4320min max [0.081]		



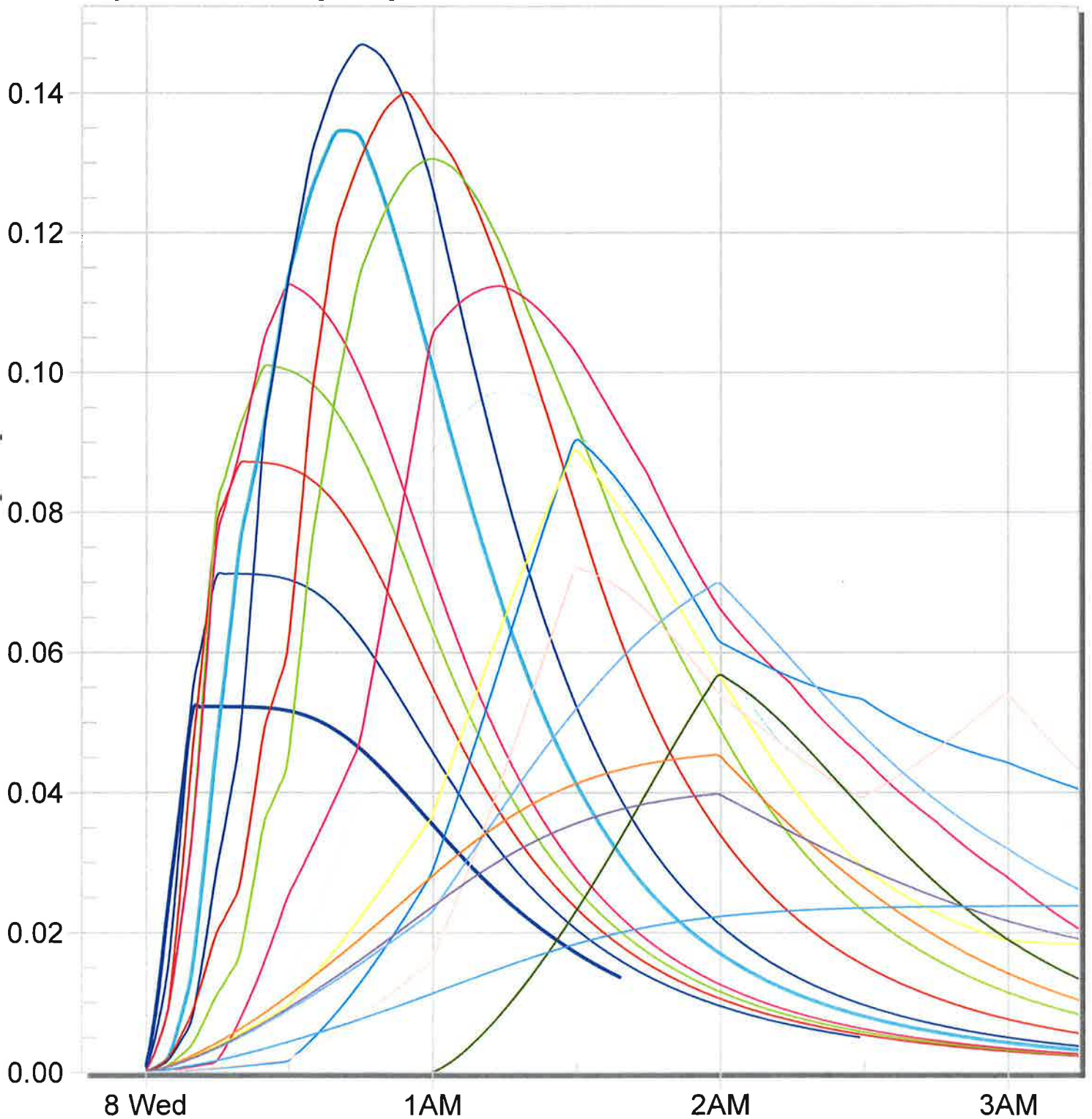
APPENDIX E

PRE-DEVELOPMENT XP-RAFTS HYDROGRAPHS CUNNINGHAM HIGHWAY DISCHARGE

CHIEF [ALL STORMS]

Total Flow

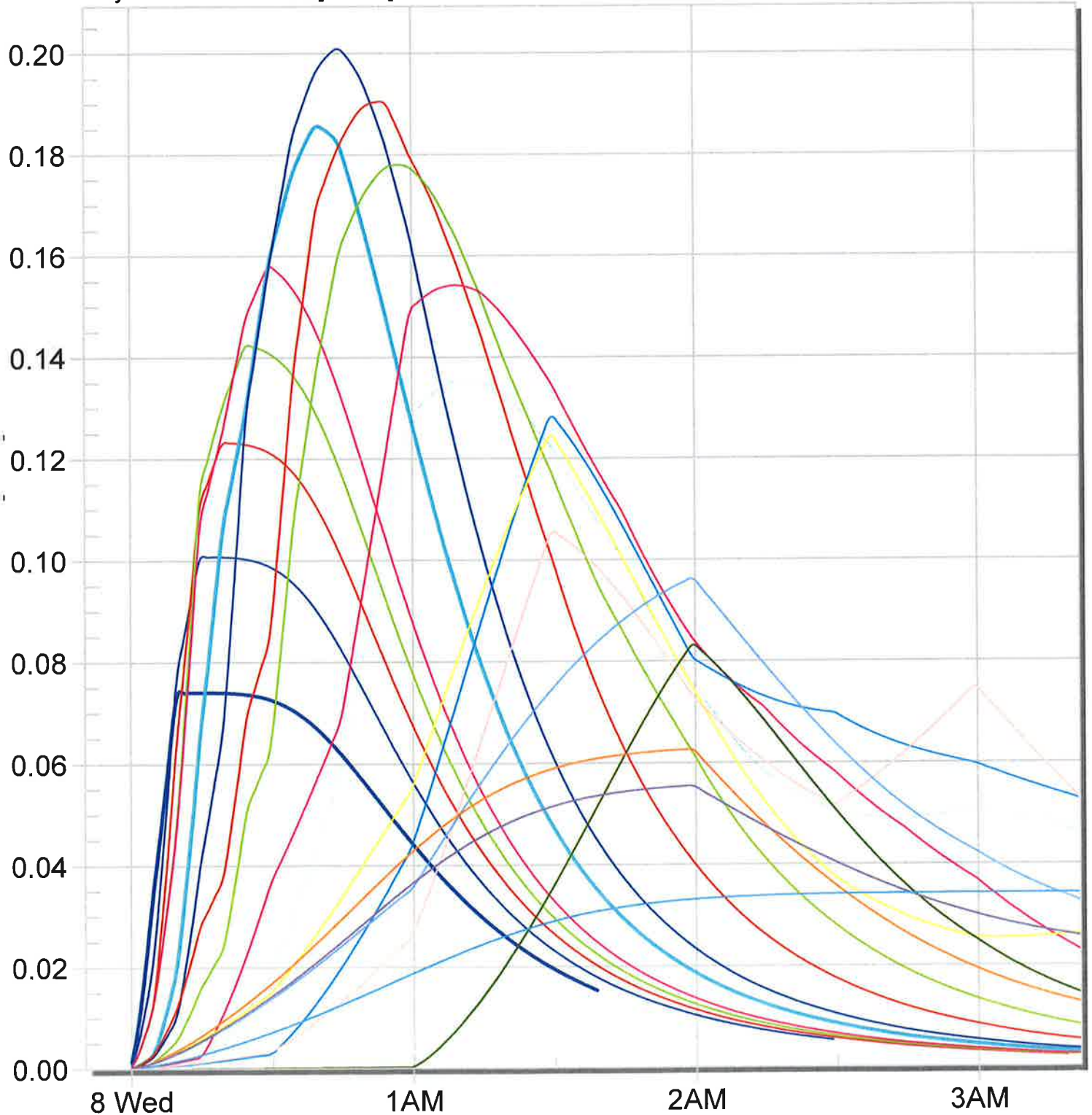
2yr 10min max [0.052]	2yr 15min max [0.071]	2yr 20min max [0.087]
2yr 25min max [0.101]	2yr 30min max [0.113]	2yr 45min max [0.135]
2yr 60min max [0.147]	2yr 90min max [0.140]	2yr 120min max [0.131]
2yr 180min max [0.112]	2yr 270min max [0.097]	2yr 360min max [0.090]
2yr 540min max [0.089]	2yr 720min max [0.072]	2yr 1080min max [0.057]
2yr 1440min max [0.070]	2yr 2160min max [0.045]	2yr 2880min max [0.040]
2yr 4320min max [0.024]		



CIPED [ALL STORMS]

Total Flow

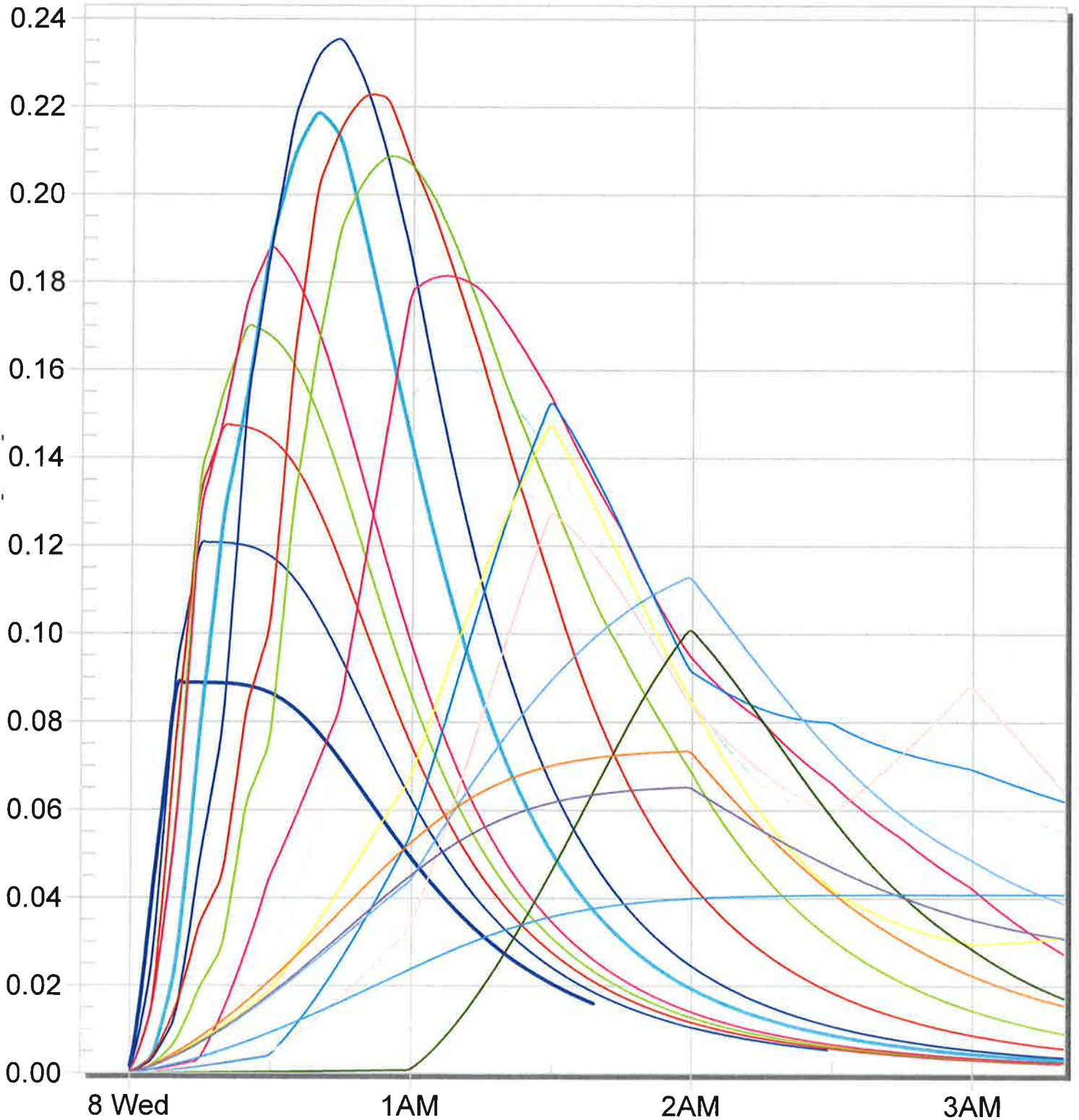
5yr 10min max [0.074]	5yr 15min max [0.101]	5yr 20min max [0.123]
5yr 25min max [0.142]	5yr 30min max [0.158]	5yr 45min max [0.186]
5yr 60min max [0.201]	5yr 90min max [0.190]	5yr 120min max [0.178]
5yr 180min max [0.154]	5yr 270min max [0.136]	5yr 360min max [0.128]
5yr 540min max [0.124]	5yr 720min max [0.105]	5yr 1080min max [0.083]
5yr 1440min max [0.096]	5yr 2160min max [0.063]	5yr 2880min max [0.055]
5yr 4320min max [0.034]		



CITY OF [ALL STORMS]

Total Flow

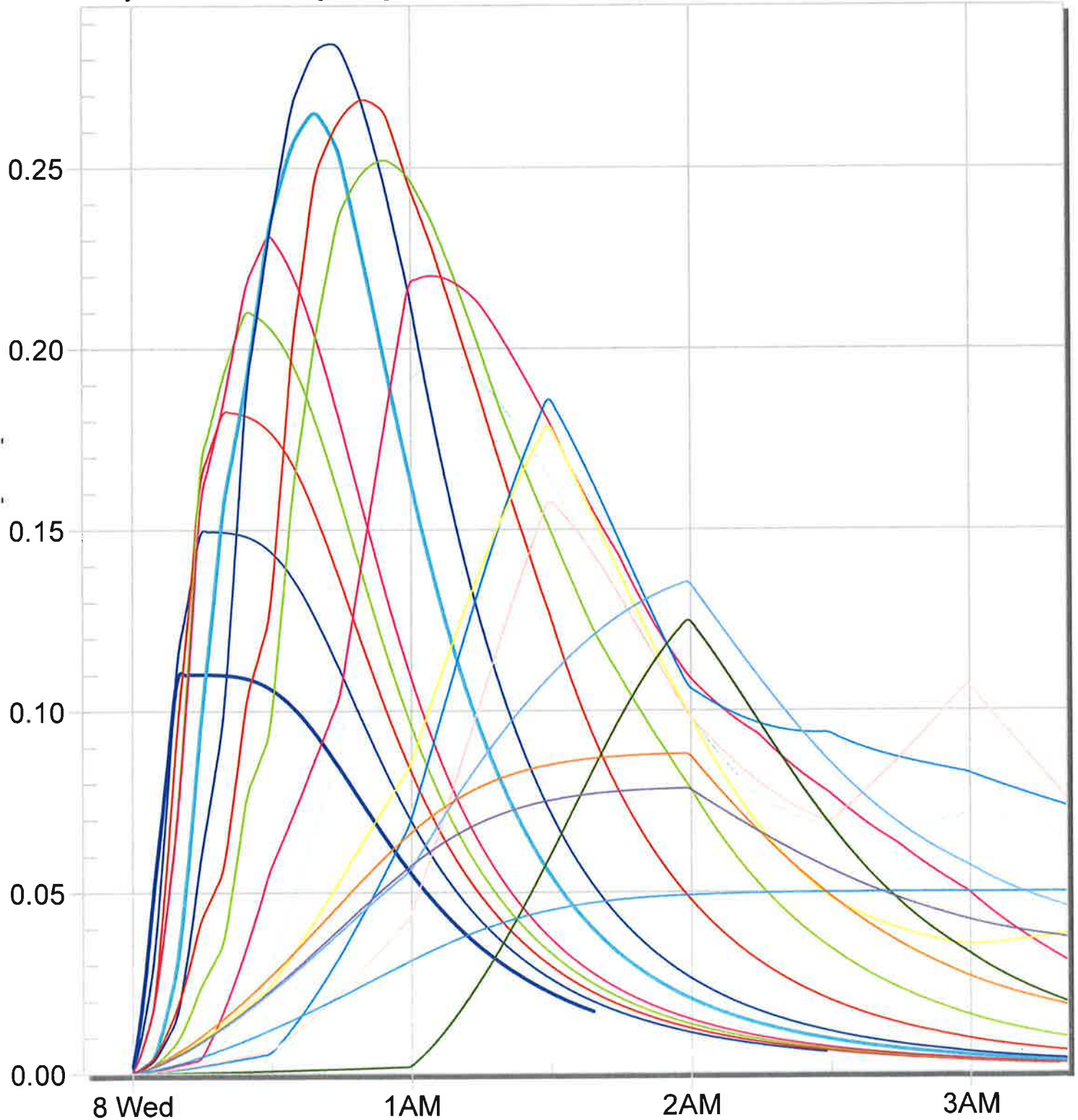
10yr 10min max [0.089]	10yr 15min max [0.121]	10yr 20min max [0.148]
10yr 25min max [0.170]	10yr 30min max [0.188]	10yr 45min max [0.219]
10yr 60min max [0.235]	10yr 90min max [0.223]	10yr 120min max [0.209]
10yr 180min max [0.182]	10yr 270min max [0.161]	10yr 360min max [0.152]
10yr 540min max [0.147]	10yr 720min max [0.127]	10yr 1080min max [0.101]
10yr 1440min max [0.113]	10yr 2160min max [0.073]	10yr 2880min max [0.065]
10yr 4320min max [0.041]		



CIPED [ALL STORMS]

Total Flow

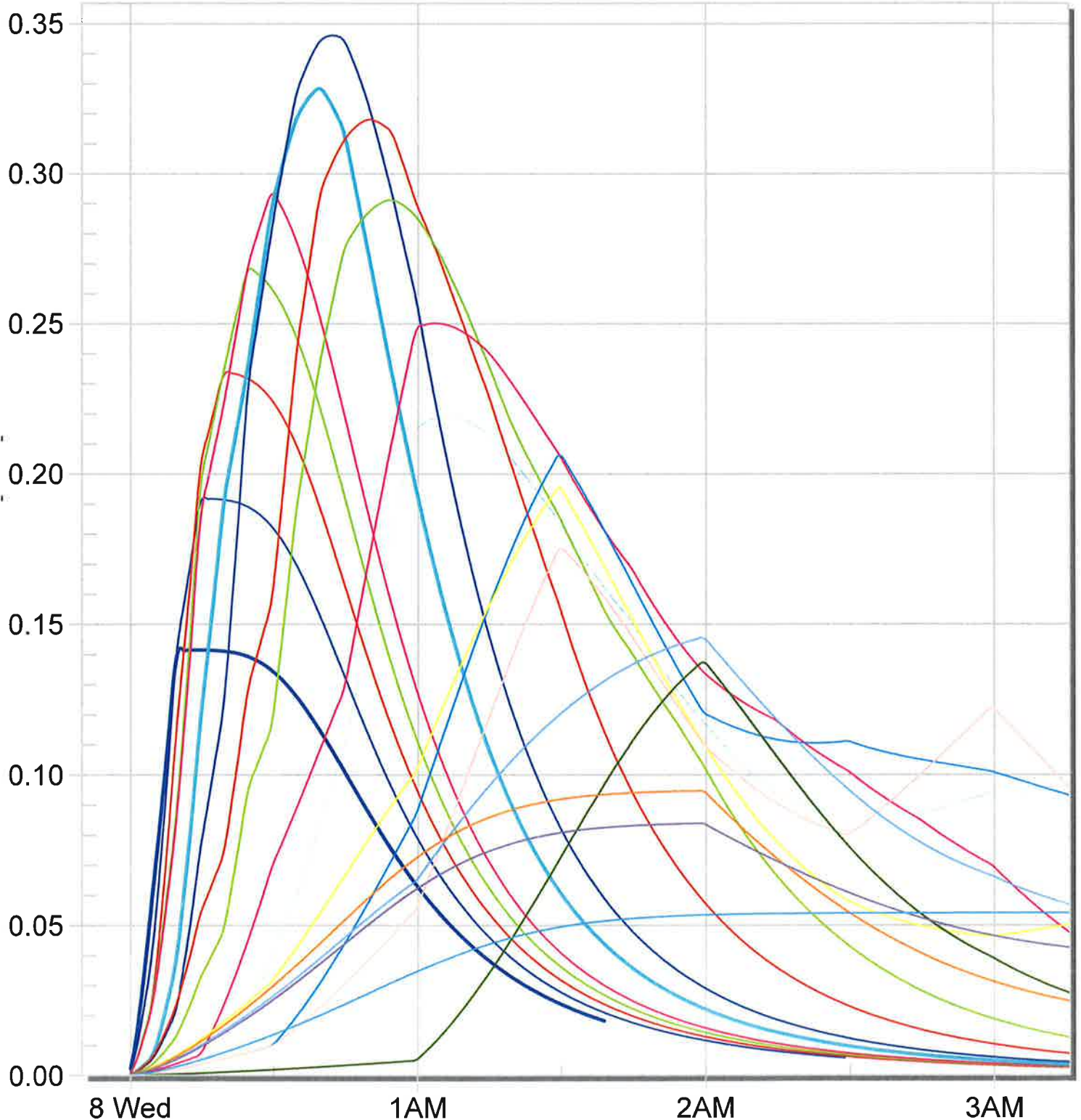
20yr 10min max [0.110]	20yr 15min max [0.150]	20yr 20min max [0.183]
20yr 25min max [0.210]	20yr 30min max [0.231]	20yr 45min max [0.265]
20yr 60min max [0.284]	20yr 90min max [0.269]	20yr 120min max [0.252]
20yr 180min max [0.220]	20yr 270min max [0.196]	20yr 360min max [0.186]
20yr 540min max [0.178]	20yr 720min max [0.158]	20yr 1080min max [0.125]
20yr 1440min max [0.135]	20yr 2160min max [0.088]	20yr 2880min max [0.079]
20yr 4320min max [0.050]		



CIPED [ALL STORMS]

Total Flow

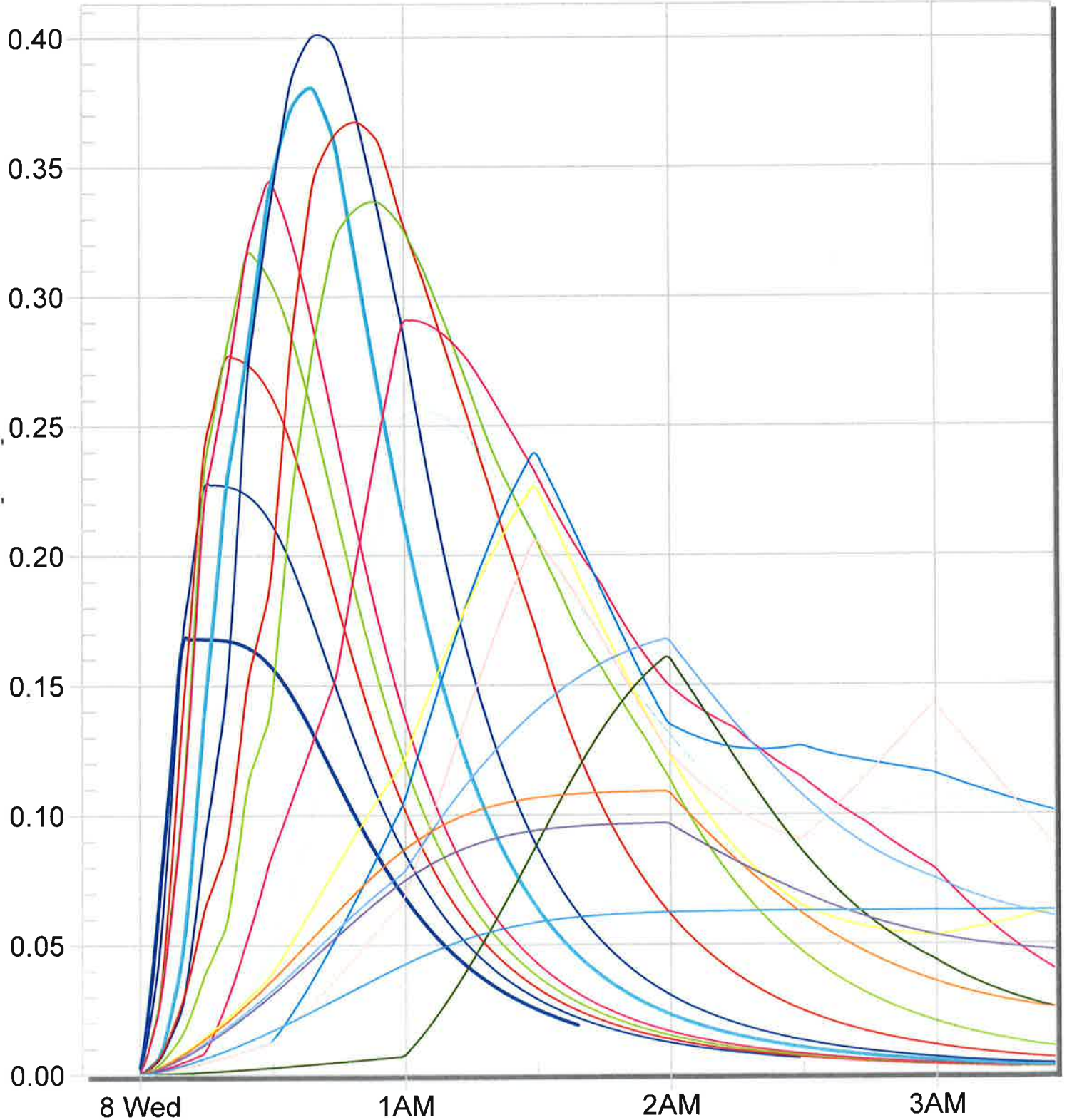
50yr 10min max [0.141]	50yr 15min max [0.192]	50yr 20min max [0.234]
50yr 25min max [0.268]	50yr 30min max [0.293]	50yr 45min max [0.328]
50yr 60min max [0.346]	50yr 90min max [0.318]	50yr 120min max [0.291]
50yr 180min max [0.250]	50yr 270min max [0.219]	50yr 360min max [0.206]
50yr 540min max [0.195]	50yr 720min max [0.175]	50yr 1080min max [0.137]
50yr 1440min max [0.146]	50yr 2160min max [0.095]	50yr 2880min max [0.084]
50yr 4320min max [0.054]		



CIPED [ALL STORMS]

Total Flow

100yr 10min max [0.168]	100yr 15min max [0.228]	100yr 20min max [0.277]
100yr 25min max [0.317]	100yr 30min max [0.344]	100yr 45min max [0.381]
100yr 60min max [0.401]	100yr 90min max [0.367]	100yr 120min max [0.337]
100yr 180min max [0.291]	100yr 270min max [0.256]	100yr 360min max [0.239]
100yr 540min max [0.226]	100yr 720min max [0.206]	100yr 1080min max [0.161]
100yr 1440min max [0.168]	100yr 2160min max [0.109]	100yr 2880min max [0.097]
100yr 4320min max [0.063]		



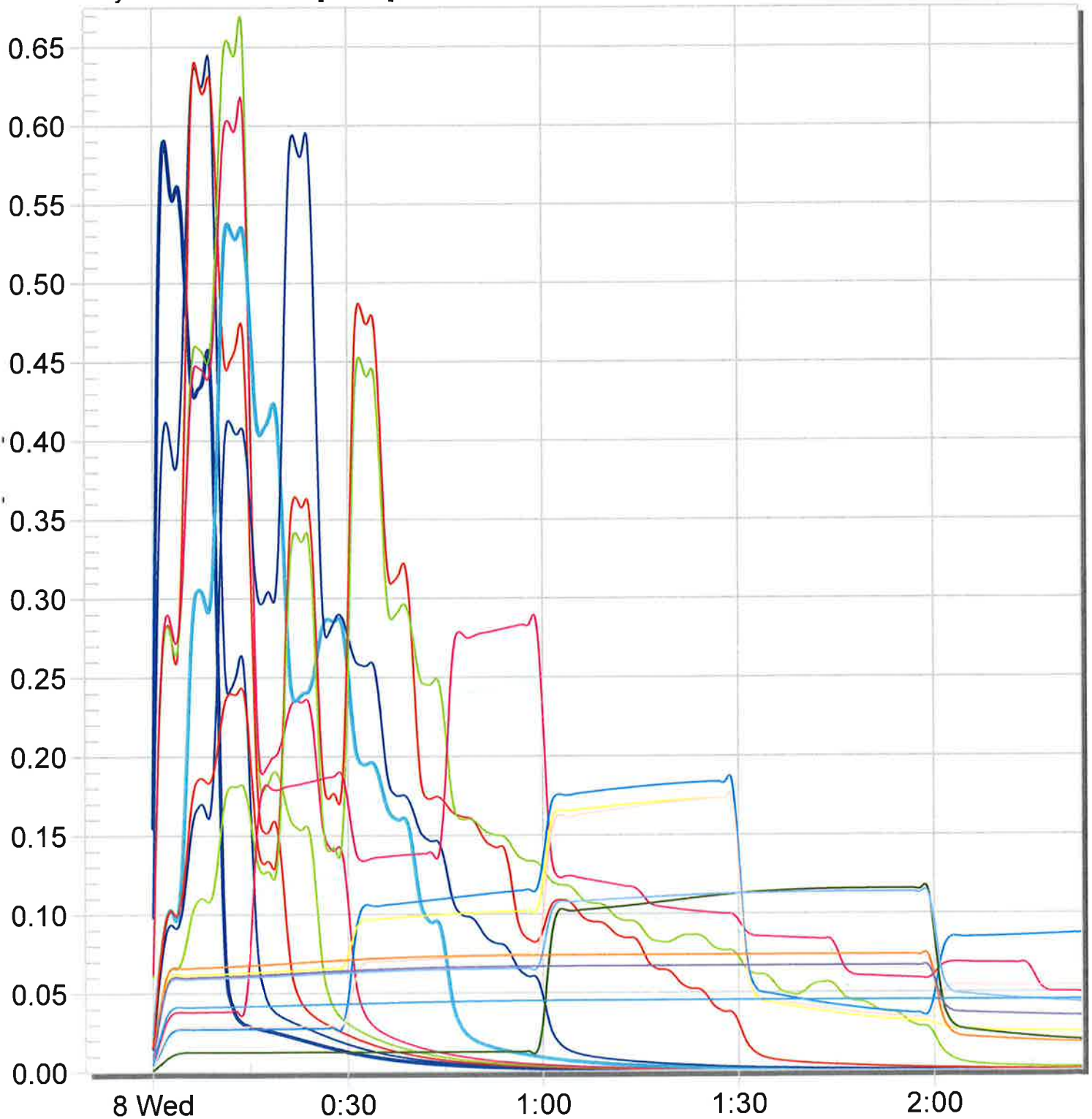
APPENDIX F

POST-DEVELOPMENT XP-RAFTS HYDROGRAPHS SITE DISCHARGE

SHIELD [ALL STORMS]

Total Flow

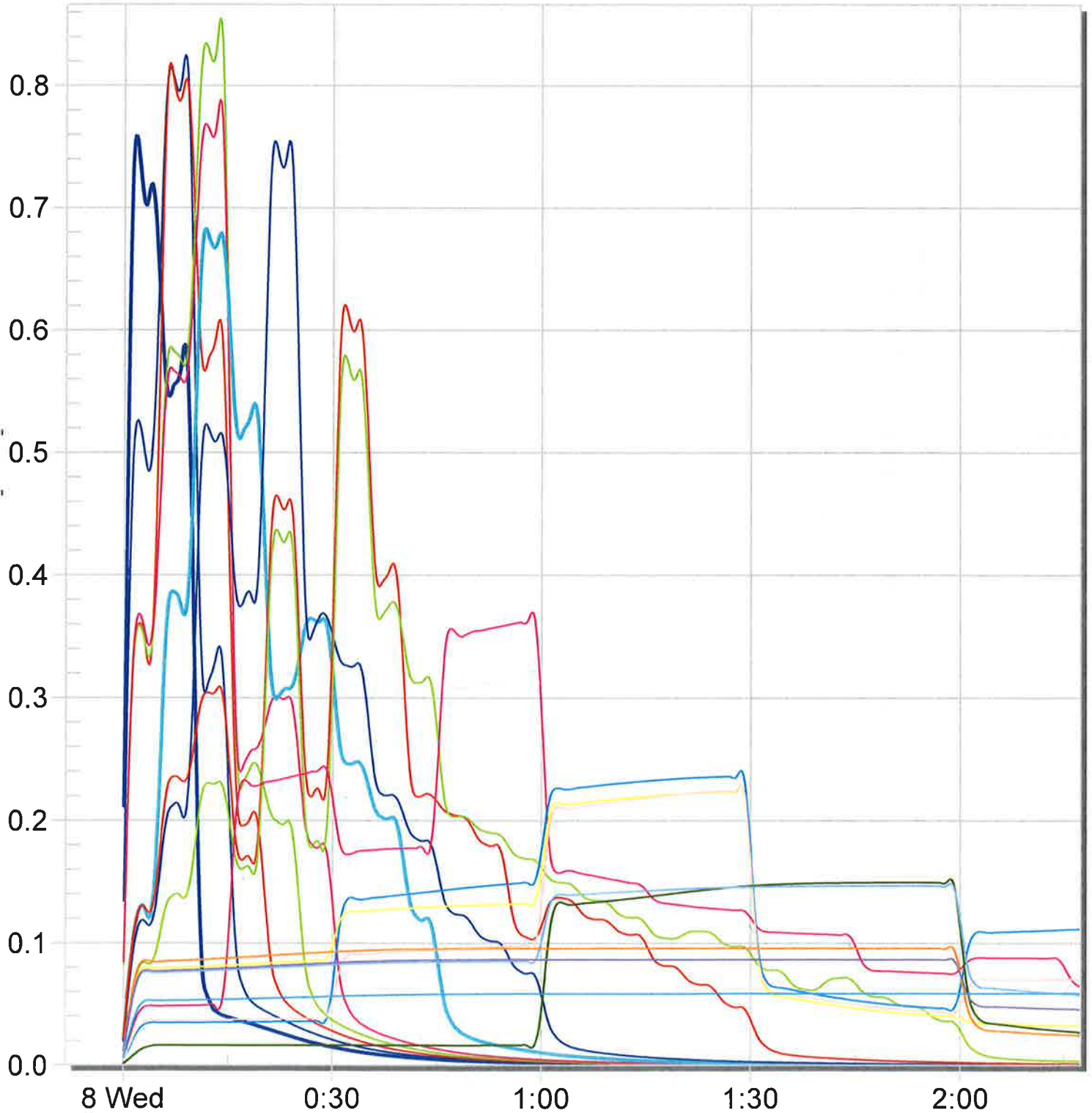
2yr 10min max [0.589]	2yr 15min max [0.634]	2yr 20min max [0.634]
2yr 25min max [0.656]	2yr 30min max [0.606]	2yr 45min max [0.535]
2yr 60min max [0.591]	2yr 90min max [0.486]	2yr 120min max [0.452]
2yr 180min max [0.285]	2yr 270min max [0.247]	2yr 360min max [0.184]
2yr 540min max [0.173]	2yr 720min max [0.174]	2yr 1080min max [0.116]
2yr 1440min max [0.114]	2yr 2160min max [0.074]	2yr 2880min max [0.067]
2yr 4320min max [0.045]		



STORM [ALL STORMS]

Total Flow

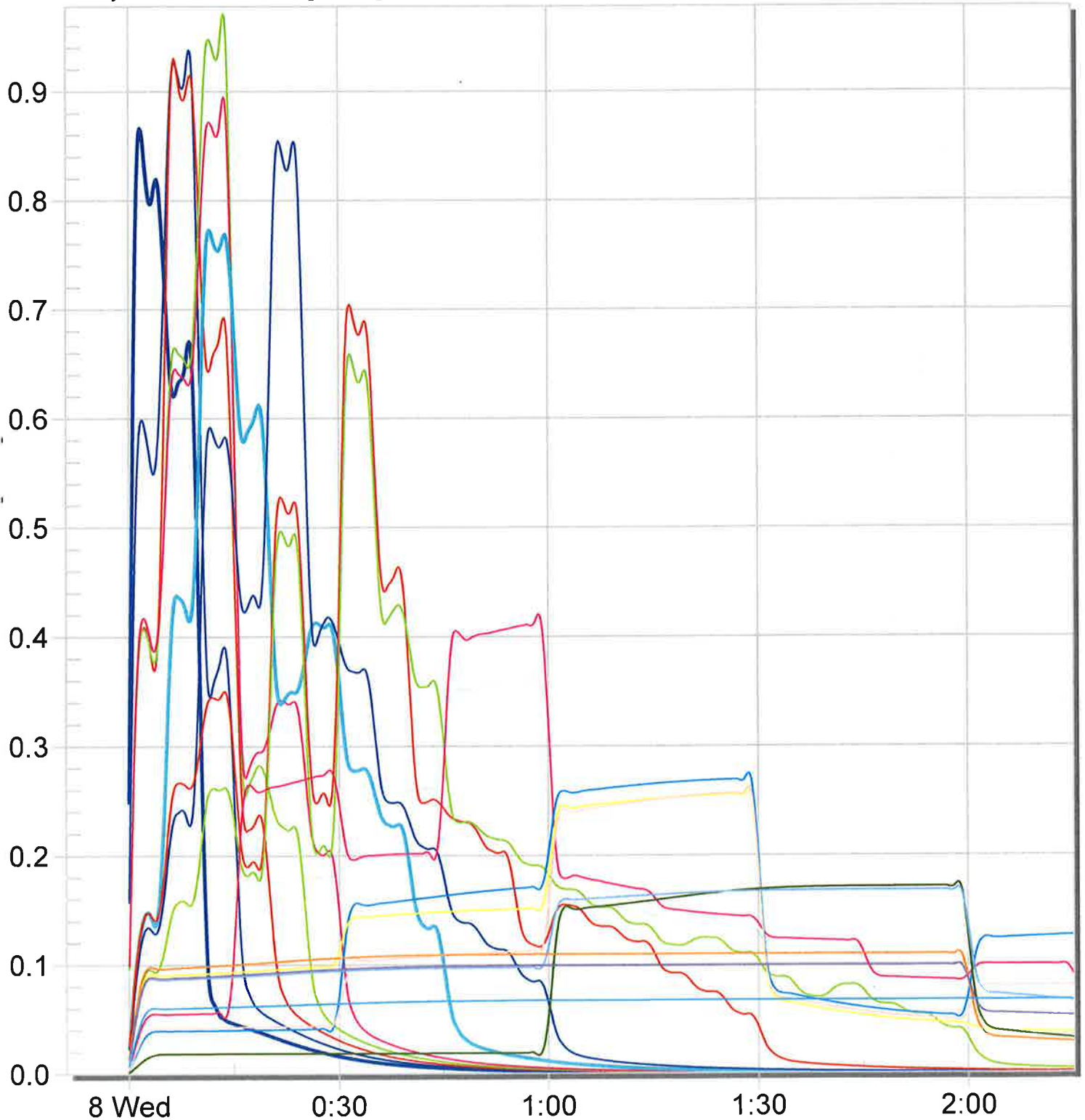
5yr 10min max [0.751]	5yr 15min max [0.811]	5yr 20min max [0.806]
5yr 25min max [0.837]	5yr 30min max [0.773]	5yr 45min max [0.677]
5yr 60min max [0.747]	5yr 90min max [0.616]	5yr 120min max [0.576]
5yr 180min max [0.364]	5yr 270min max [0.317]	5yr 360min max [0.236]
5yr 540min max [0.224]	5yr 720min max [0.225]	5yr 1080min max [0.150]
5yr 1440min max [0.147]	5yr 2160min max [0.096]	5yr 2880min max [0.087]
5yr 4320min max [0.059]		



SHO-LED [ALL STORMS]

Total Flow

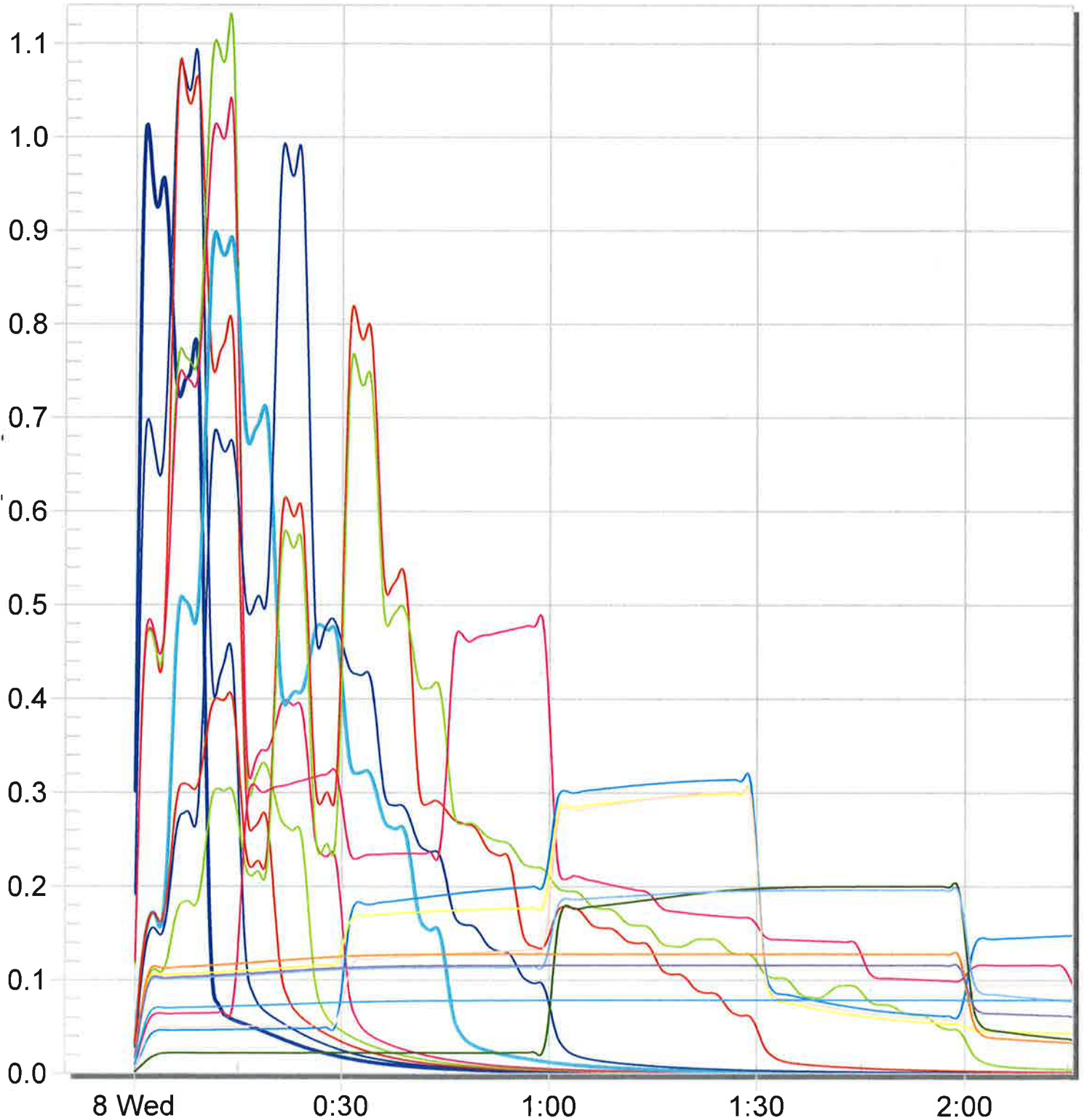
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10yr 1440min max [0.168]	10yr 2160min max [0.109]	10yr 2880min max [0.099]
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SHOULDER [ALL STORMS]

Total Flow

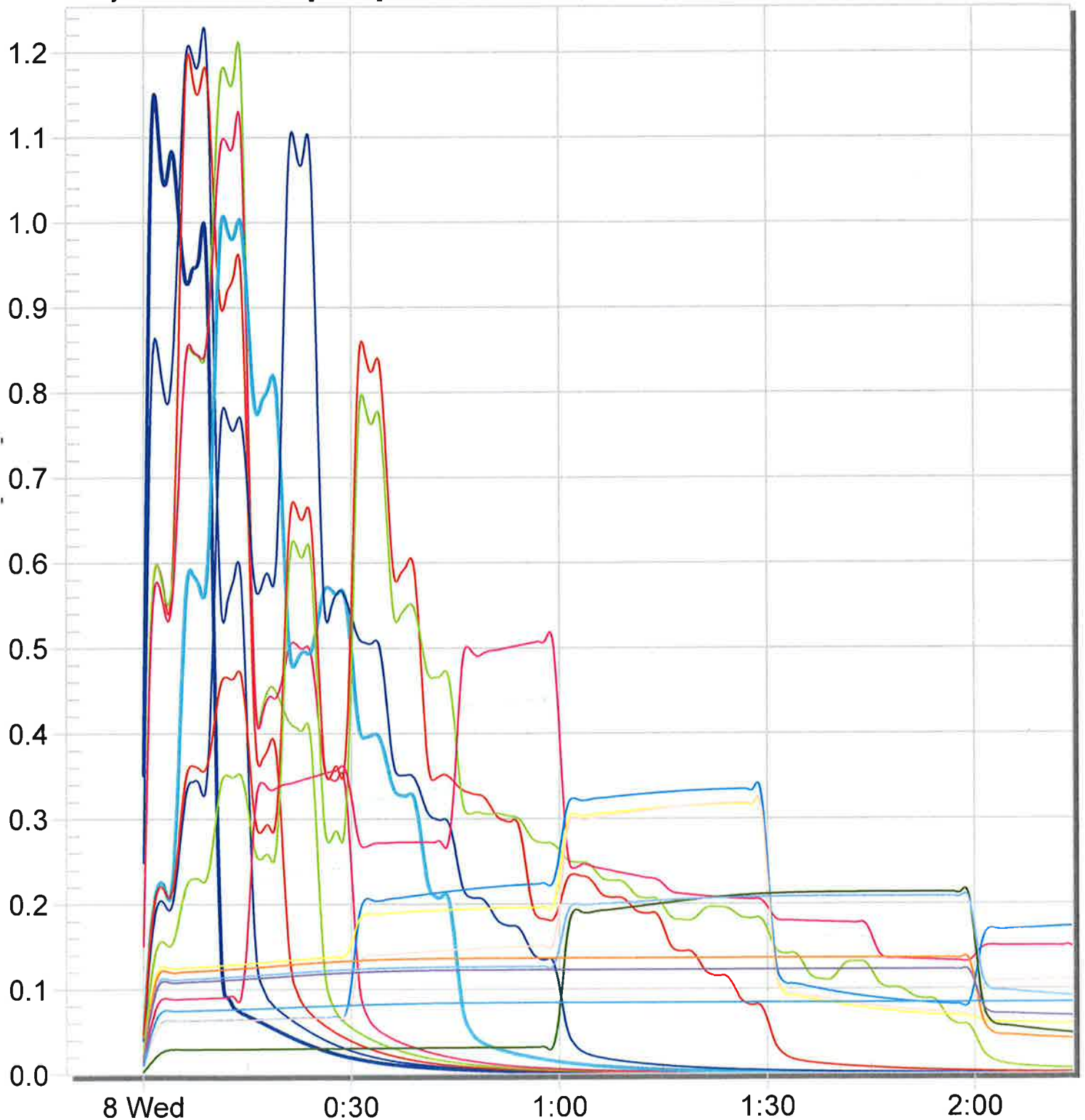
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20yr 1440min max [0.196]	20yr 2160min max [0.128]	20yr 2880min max [0.116]
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SHO-LTD [ALL STORMS]

Total Flow

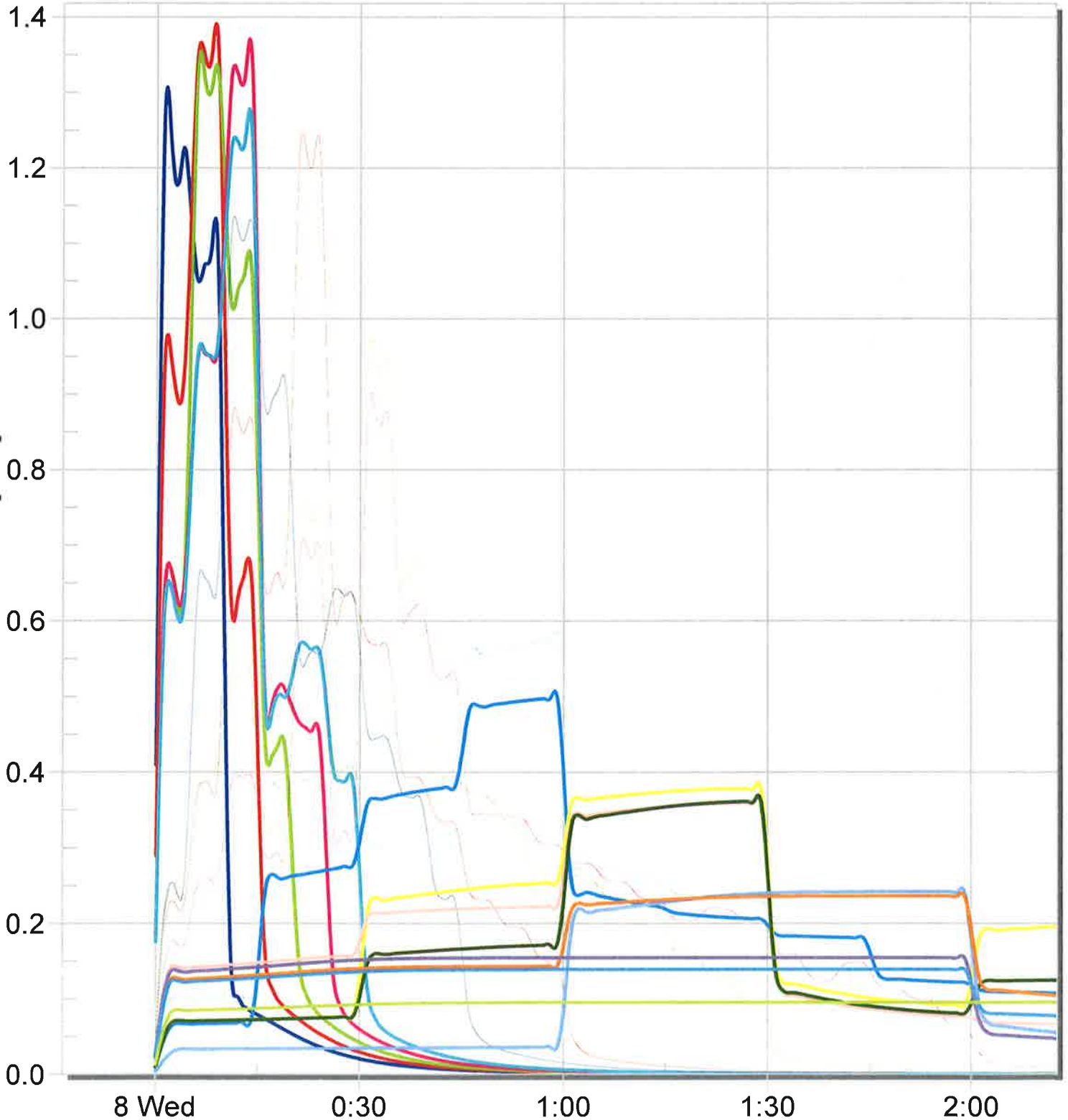
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50yr 4320min max [0.084]		



SHIELD [ALL STORMS]

Total Flow

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100yr 4320min max [0.095]		



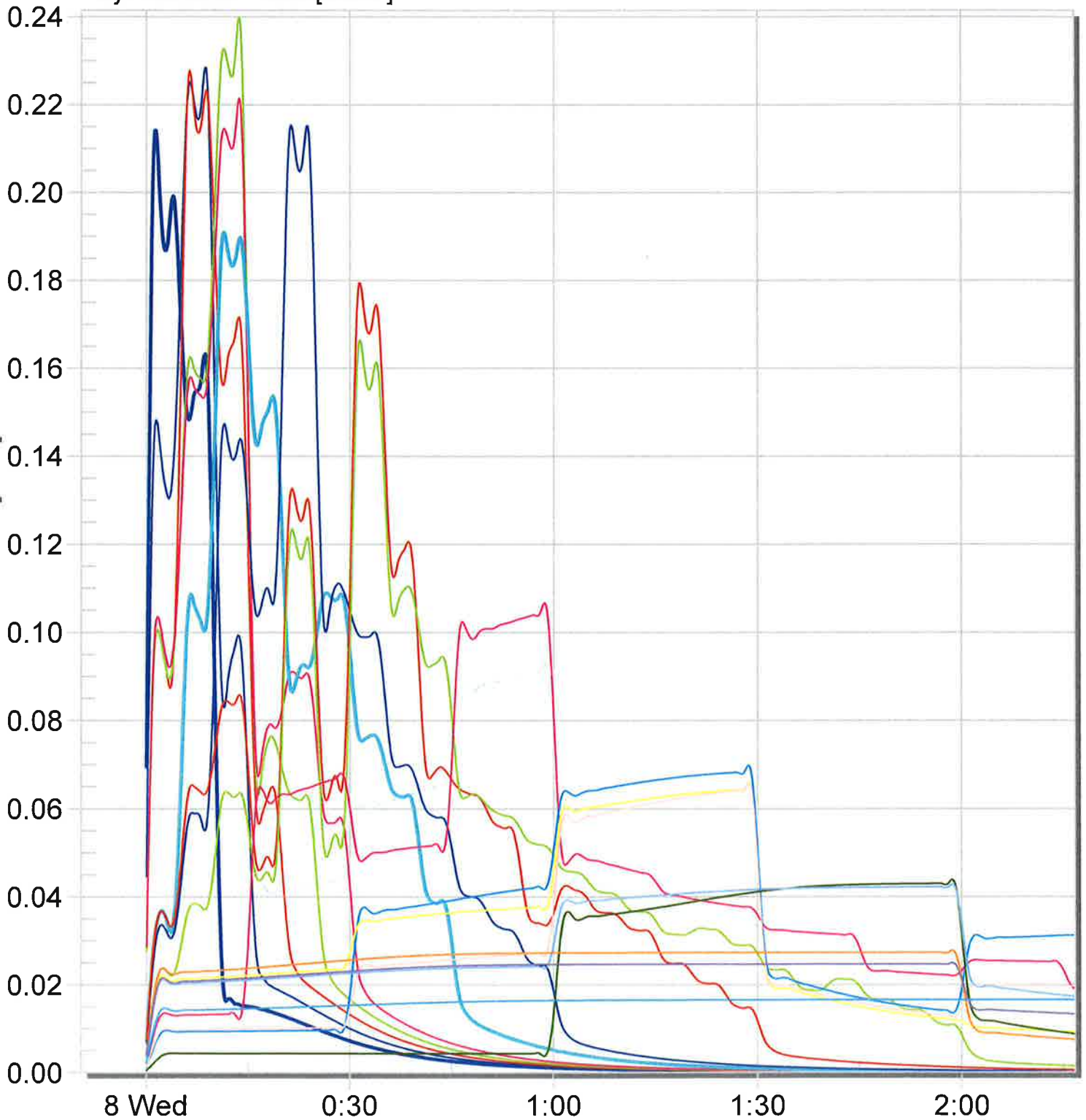
APPENDIX F

POST-DEVELOPMENT XP-RAFTS HYDROGRAPHS
CUNNINGHAM HIGHWAY DISCHARGE

CIPED [ALL STORMS]

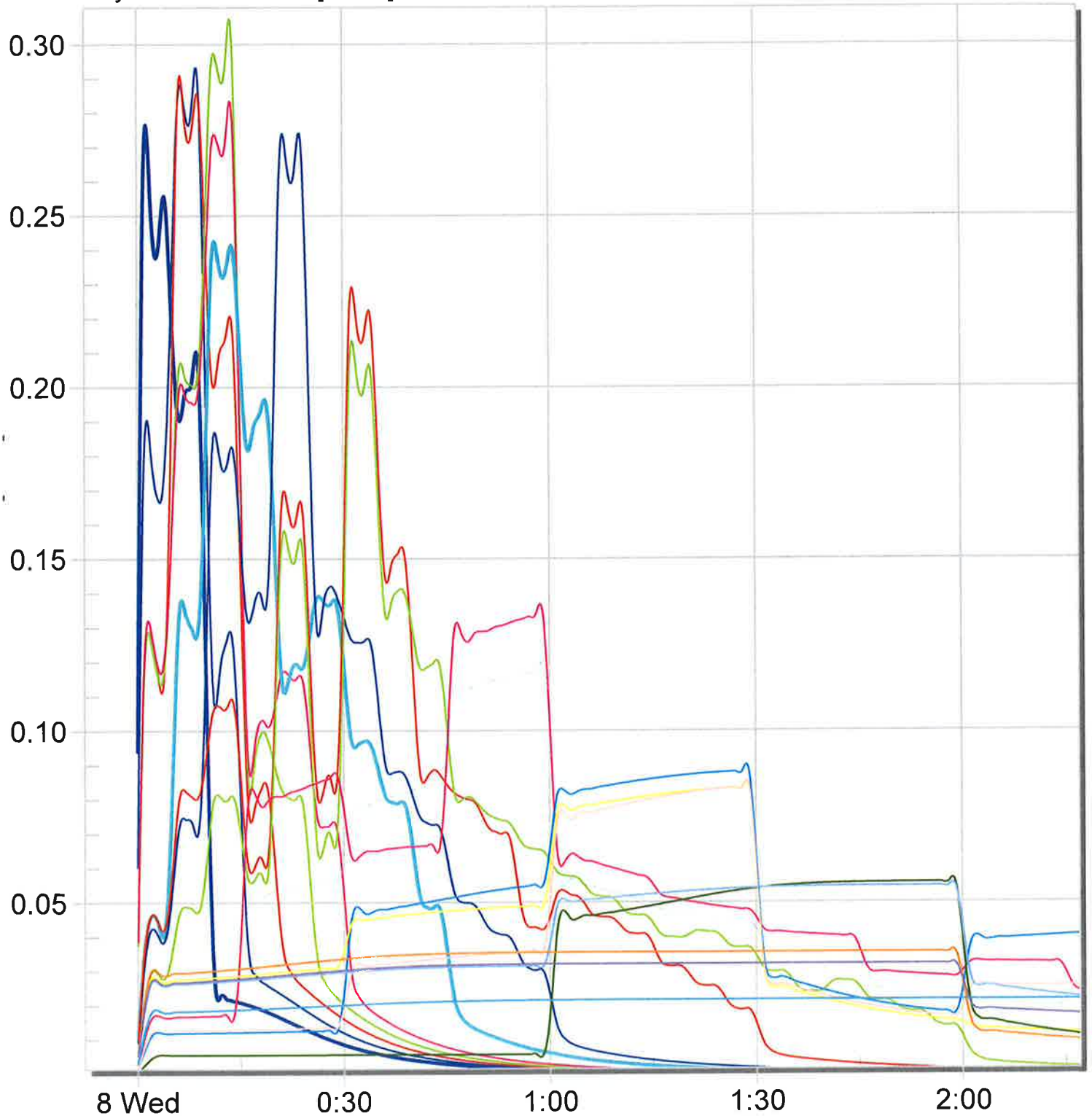
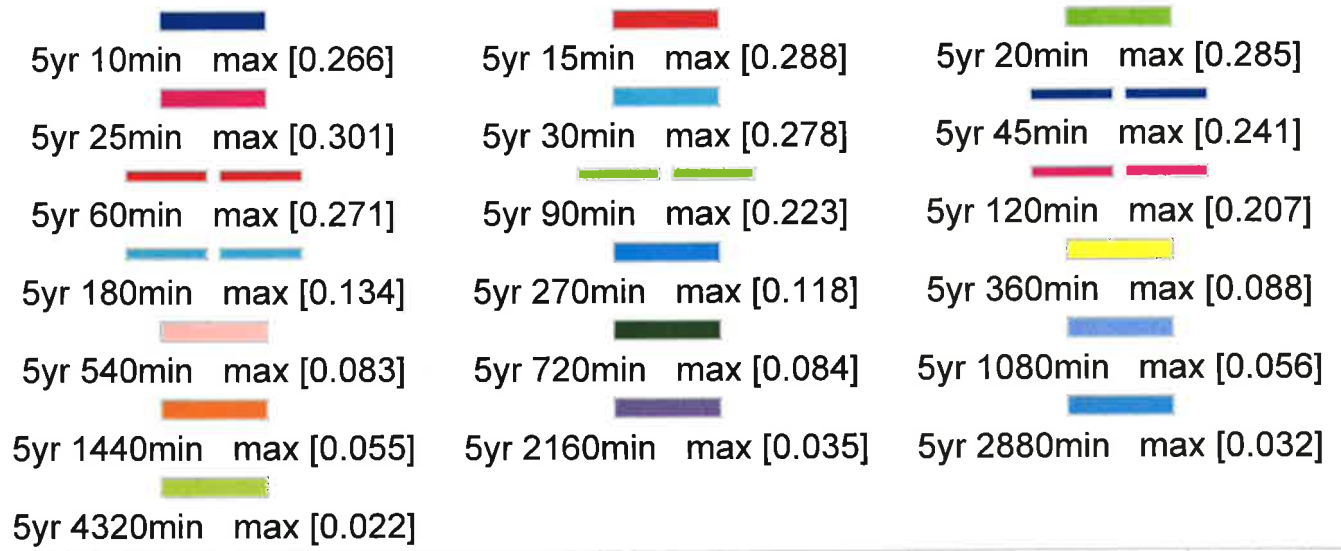
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CHFD [ALL STORMS]

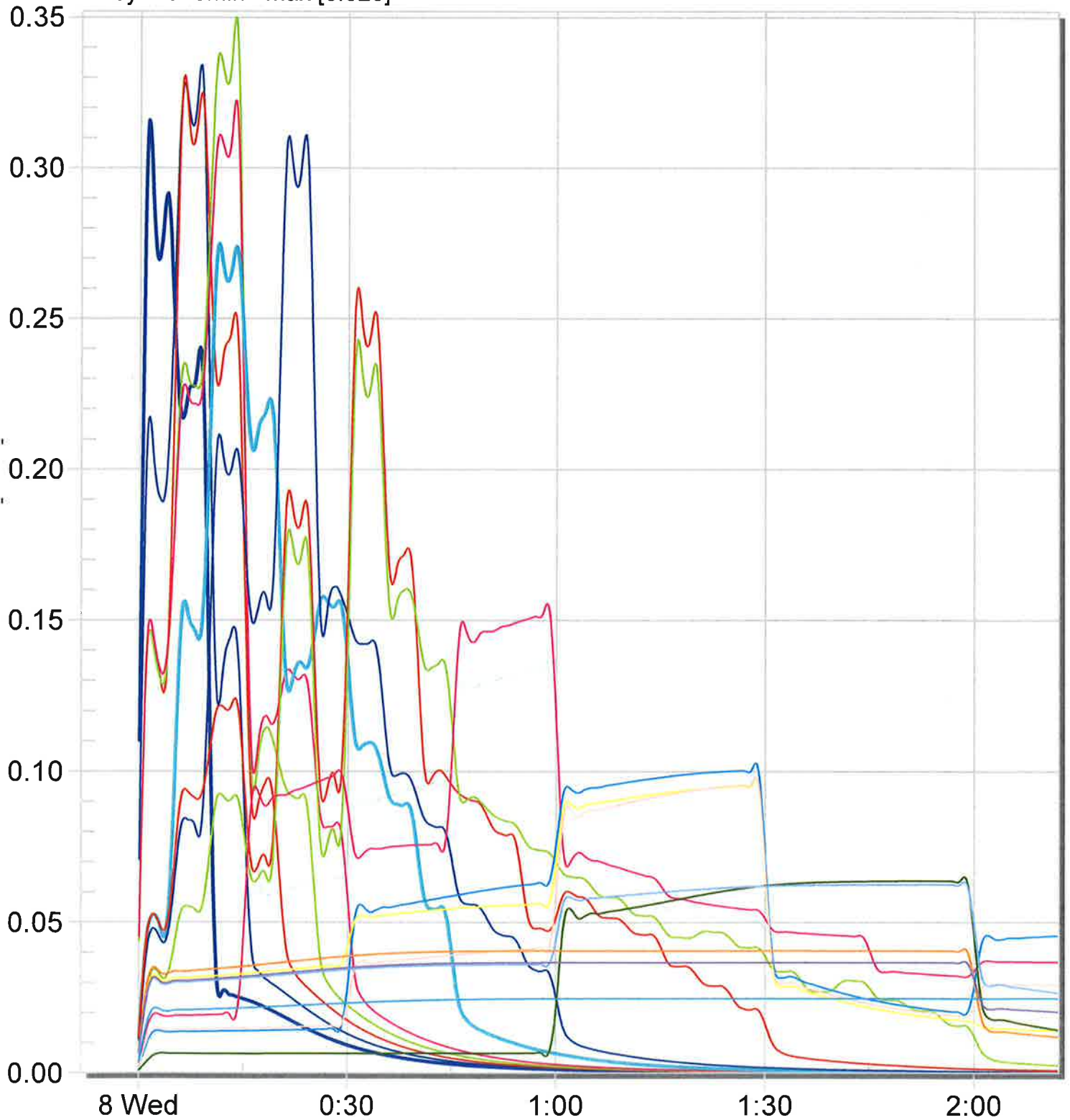
Total Flow



CUT-10 [ALL STORMS]

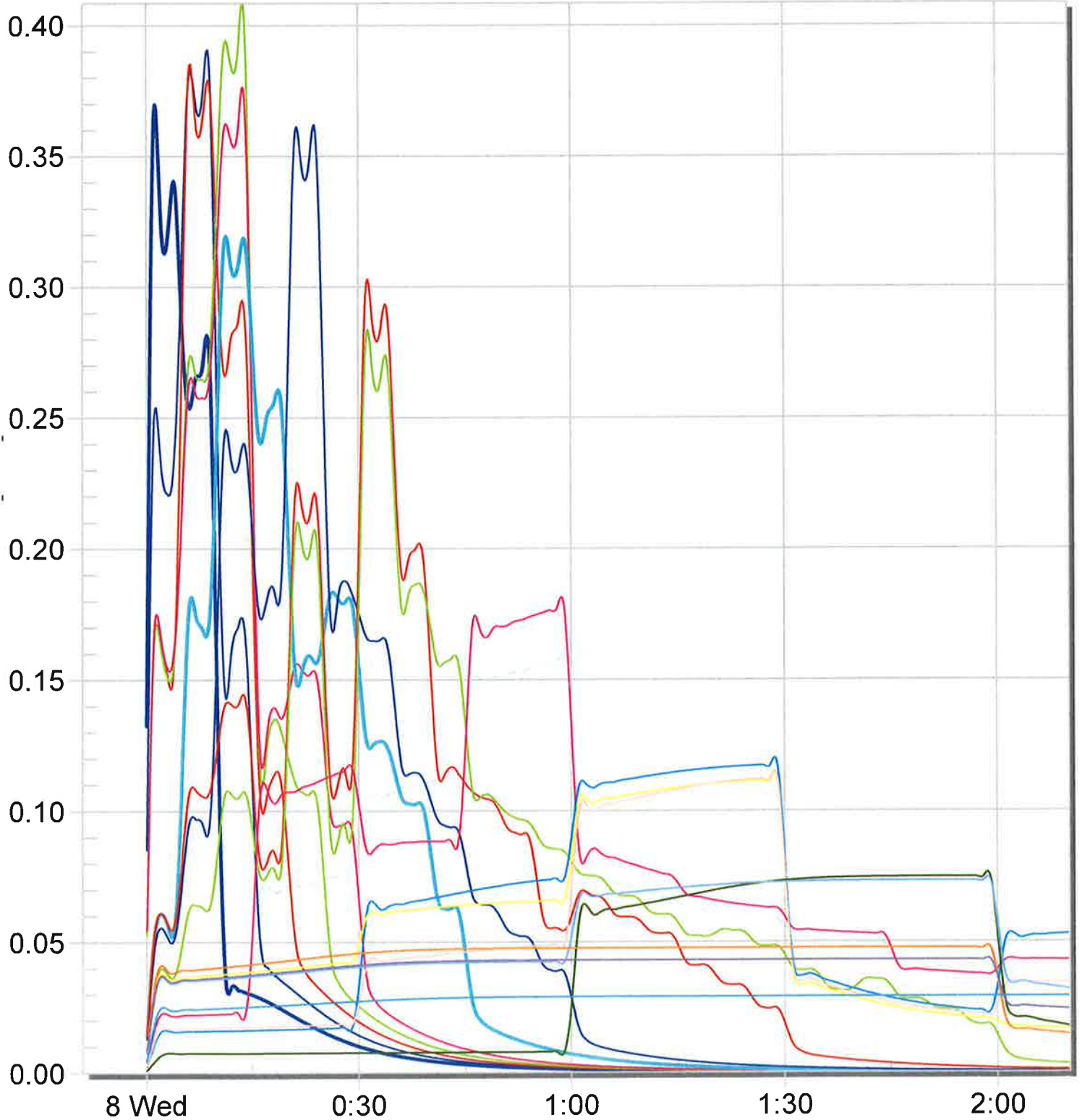
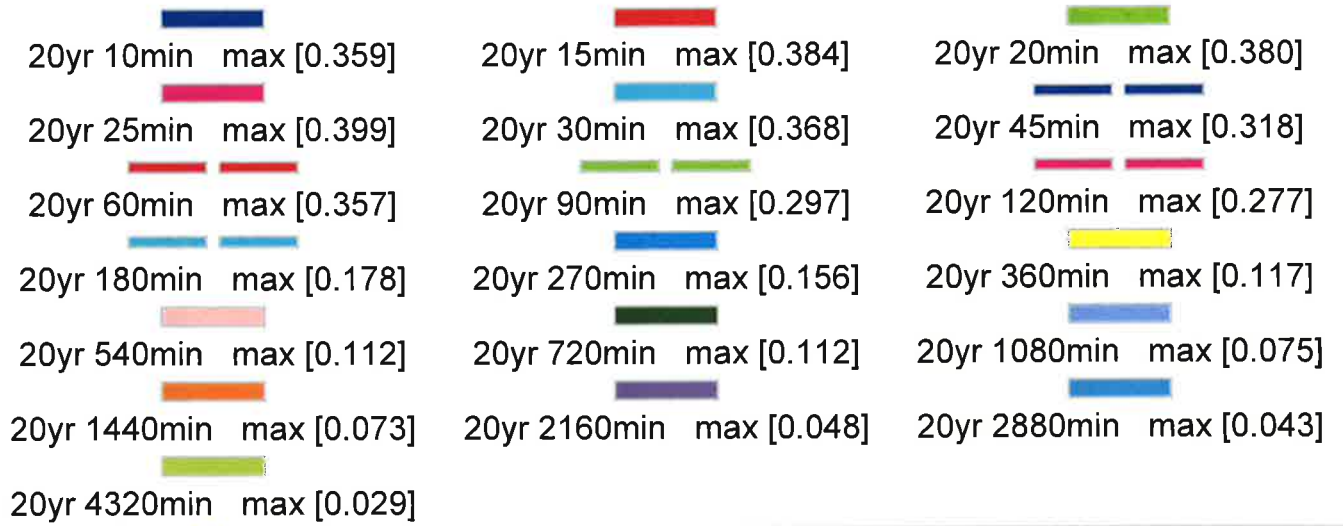
Total Flow

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10yr 540min max [0.095]	10yr 720min max [0.096]	10yr 1080min max [0.064]
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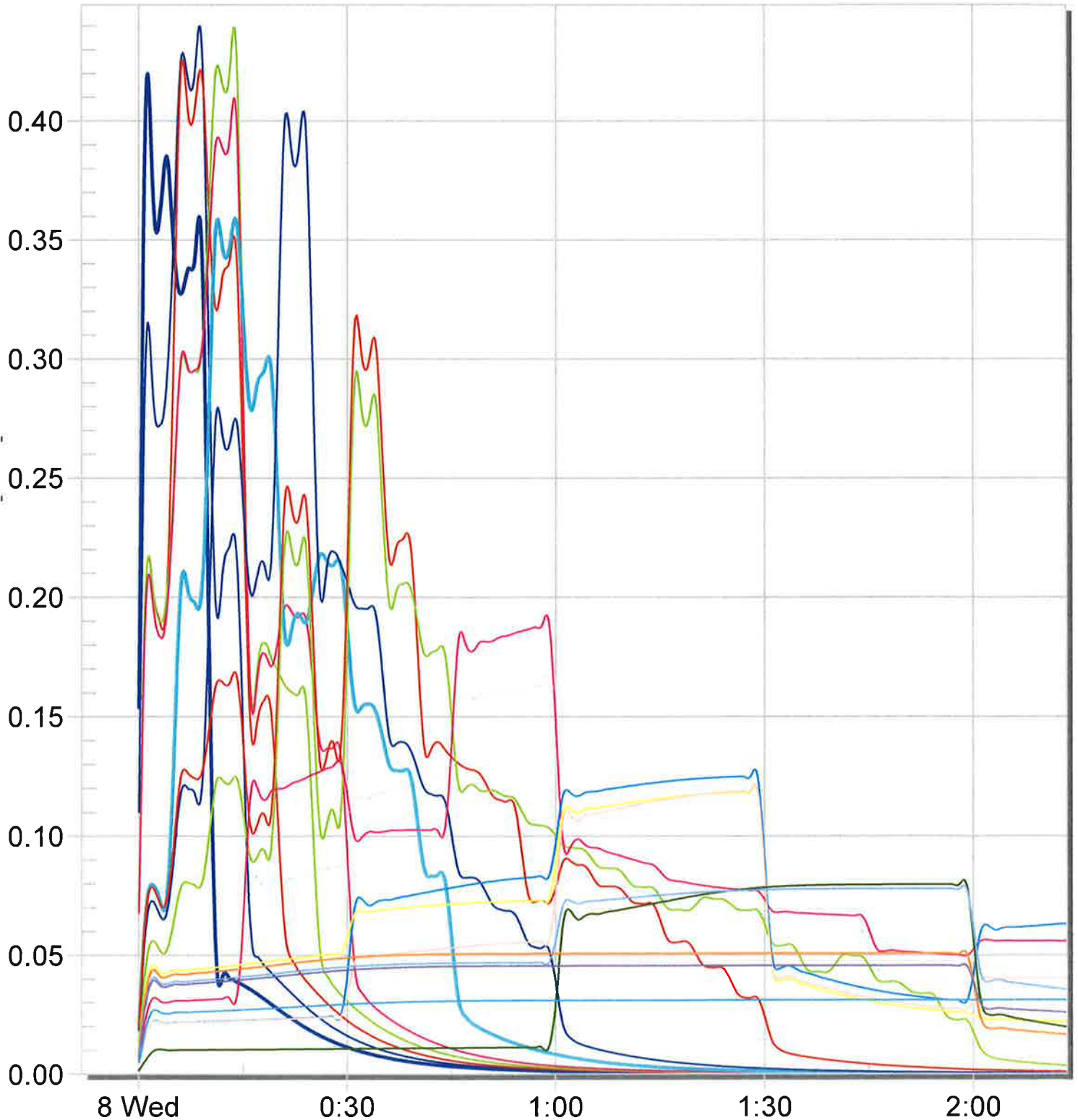
CIPED [ALL STORMS]

Total Flow



CIPED [ALL STORMS]

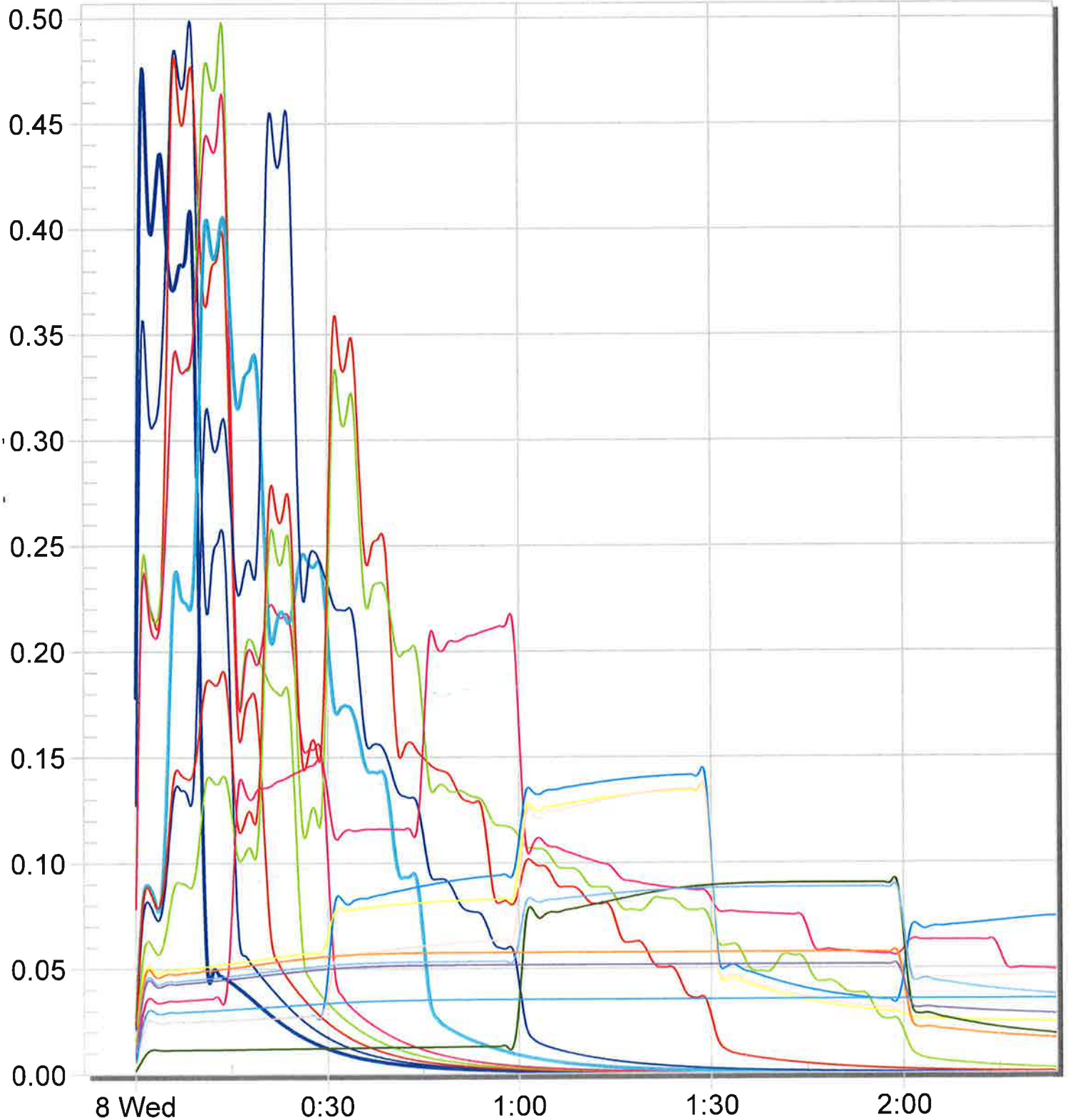
Total Flow



CHELD [ALL STORMS]

Total Flow

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100yr 180min max [0.214]	100yr 270min max [0.186]	100yr 360min max [0.142]
100yr 540min max [0.134]	100yr 720min max [0.135]	100yr 1080min max [0.090]
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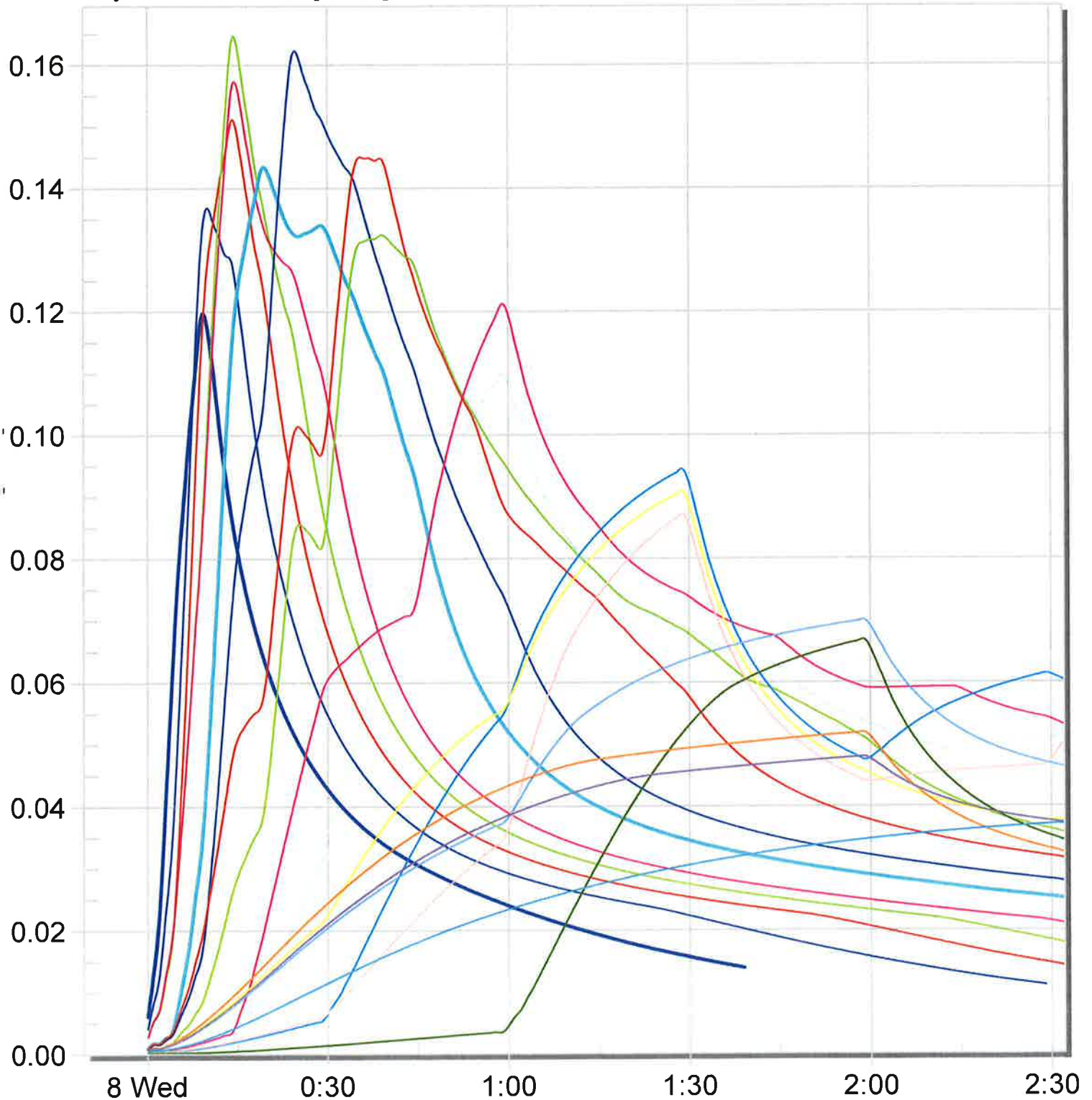
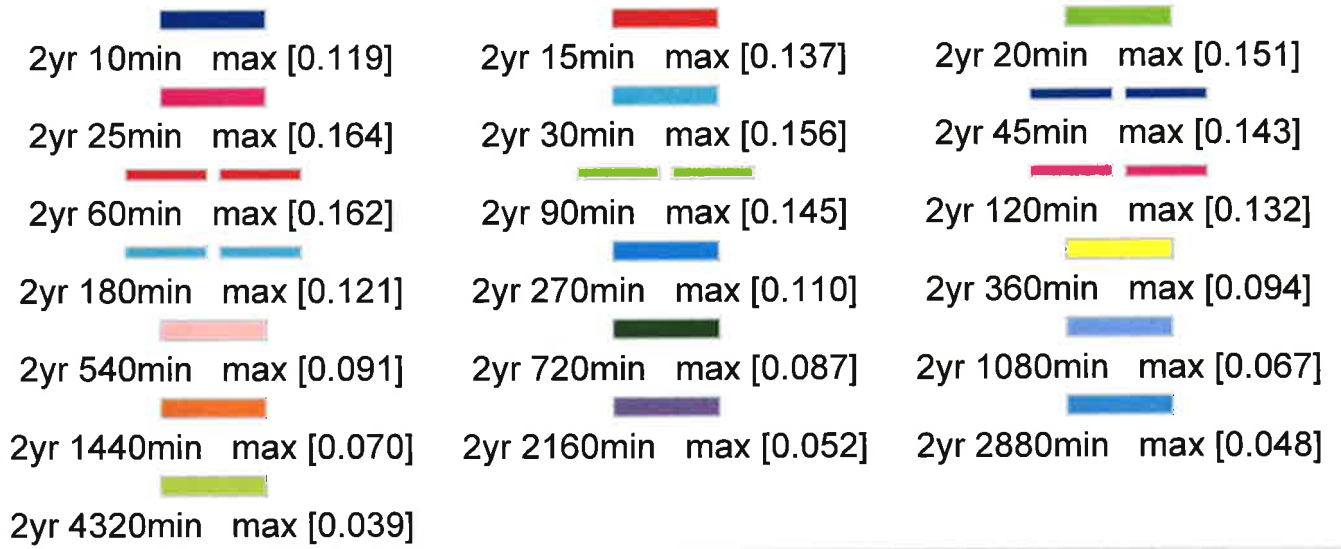


APPENDIX G

POST-DEVELOPMENT MITIGATED XP-RAFTS HYDROGRAPHS
SITE DISCHARGE

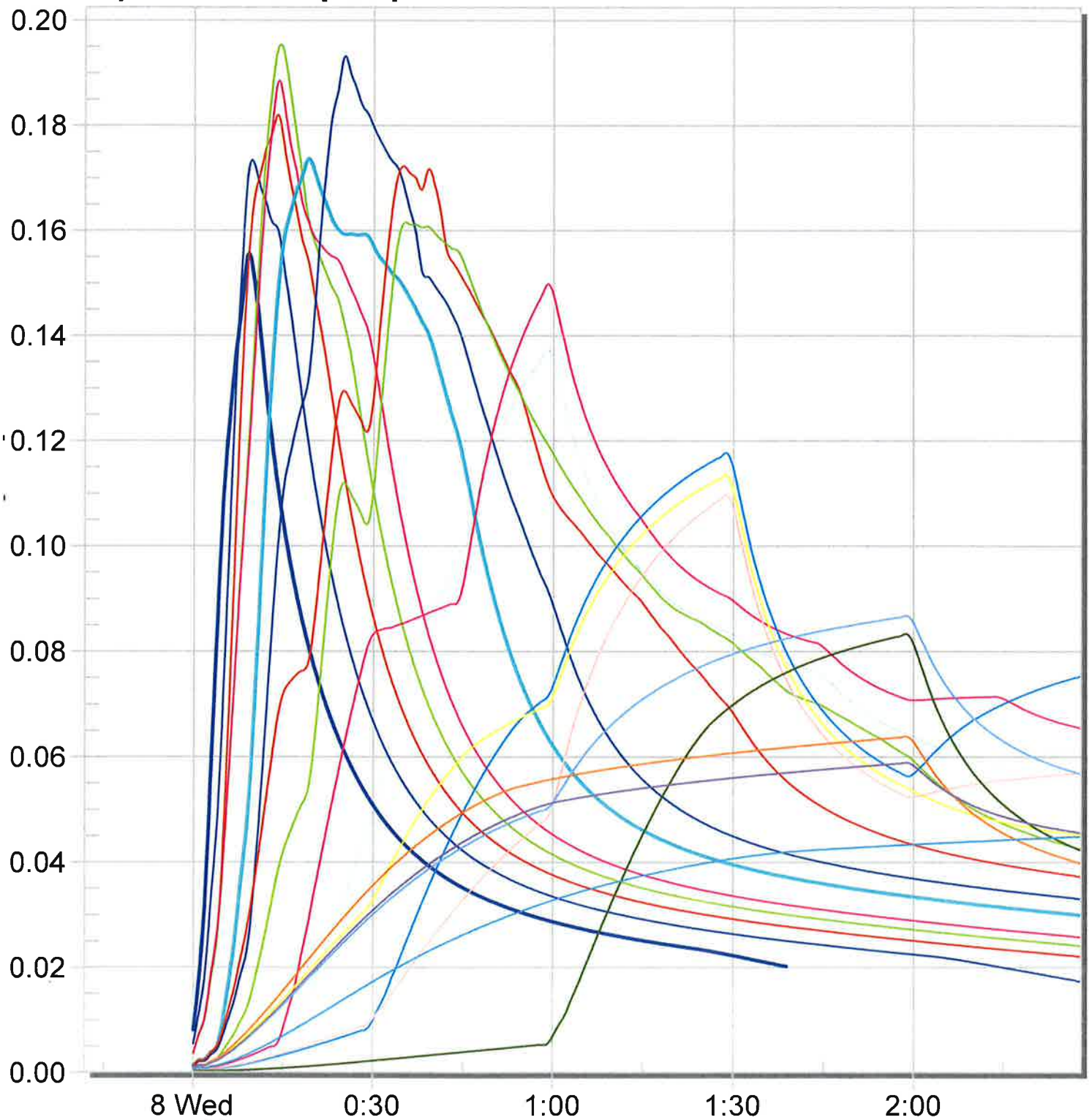
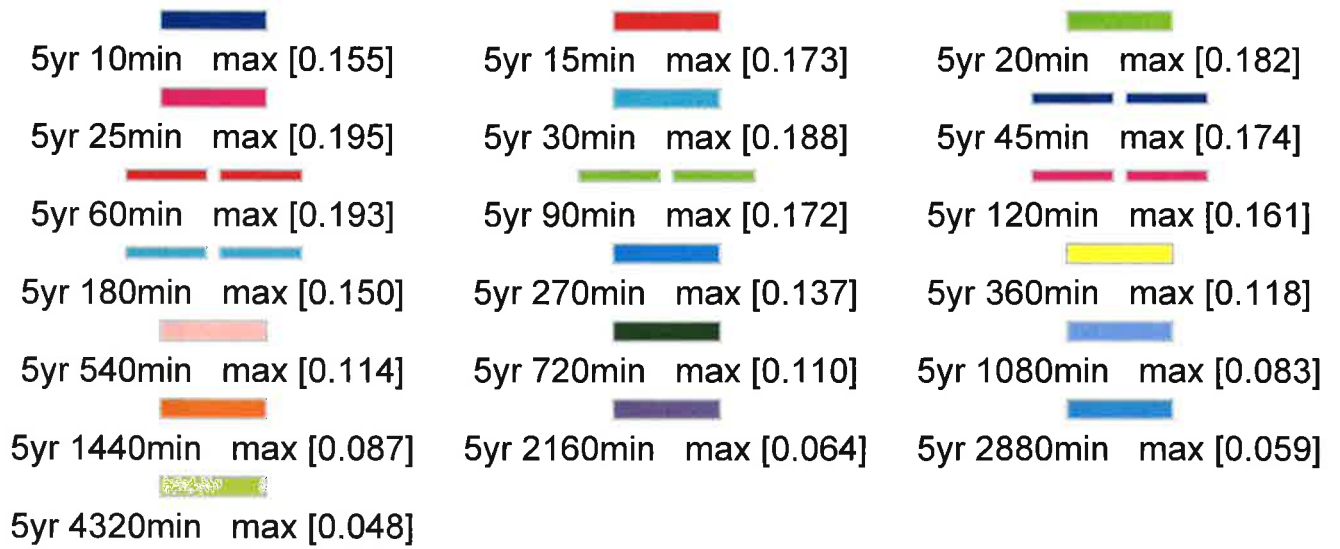
SHR-LE D [ALL STORMS]

Total Flow



STREET D [ALL STORMS]

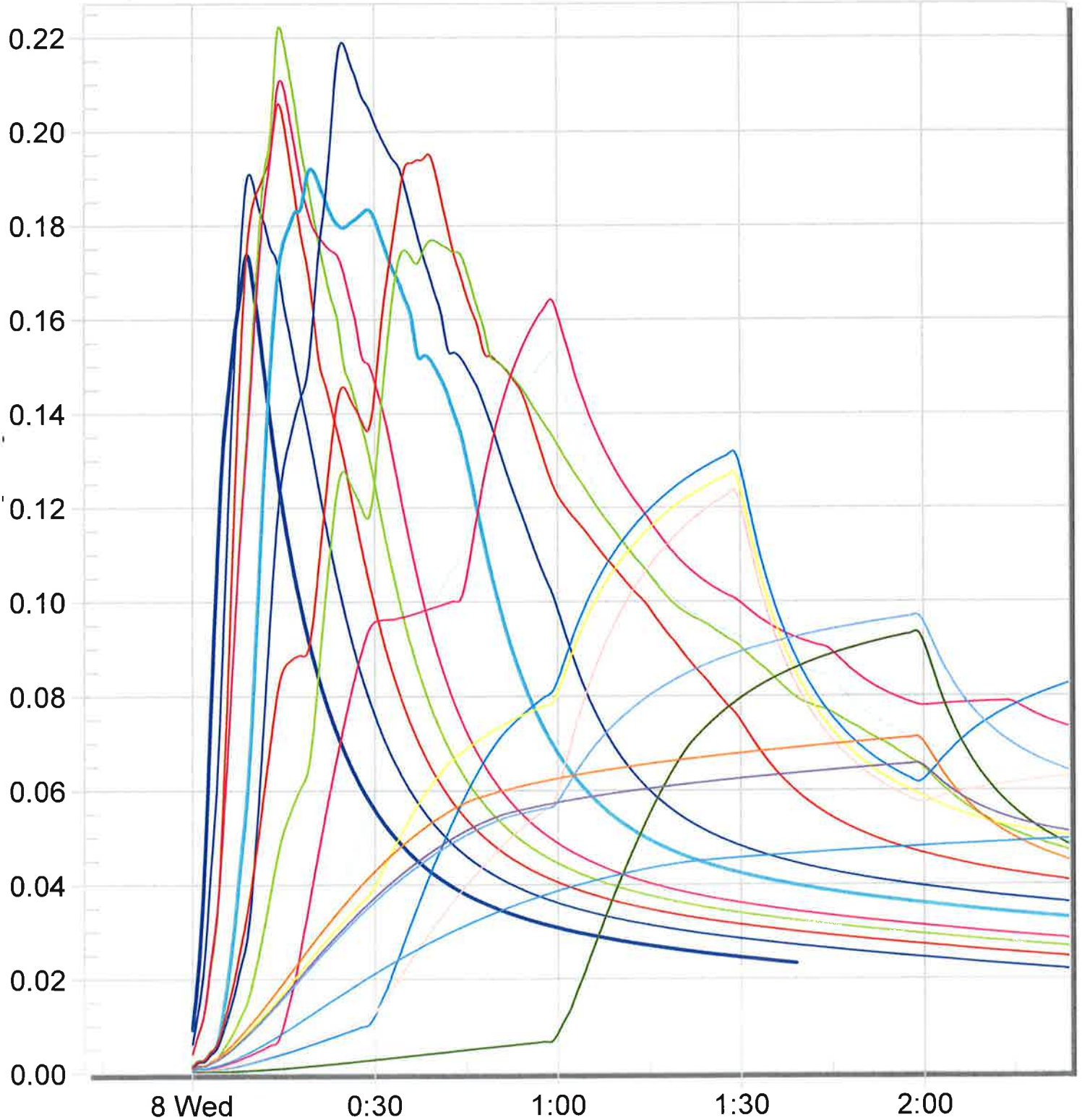
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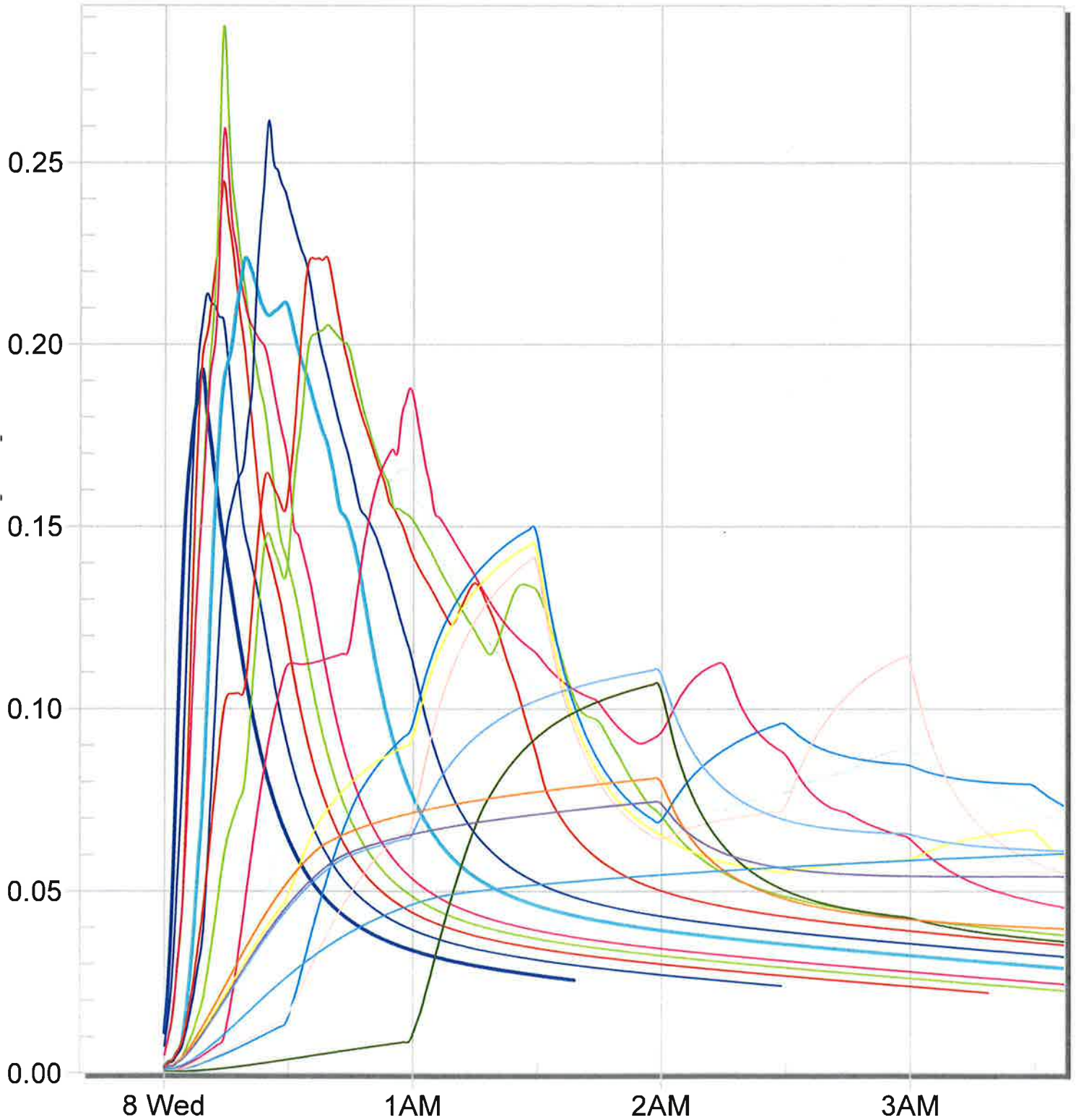
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10yr 180min max [0.164]	10yr 270min max [0.153]	10yr 360min max [0.132]
10yr 540min max [0.127]	10yr 720min max [0.124]	10yr 1080min max [0.093]
10yr 1440min max [0.097]	10yr 2160min max [0.071]	10yr 2880min max [0.066]
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STORM D [ALL STORMS]

Total Flow

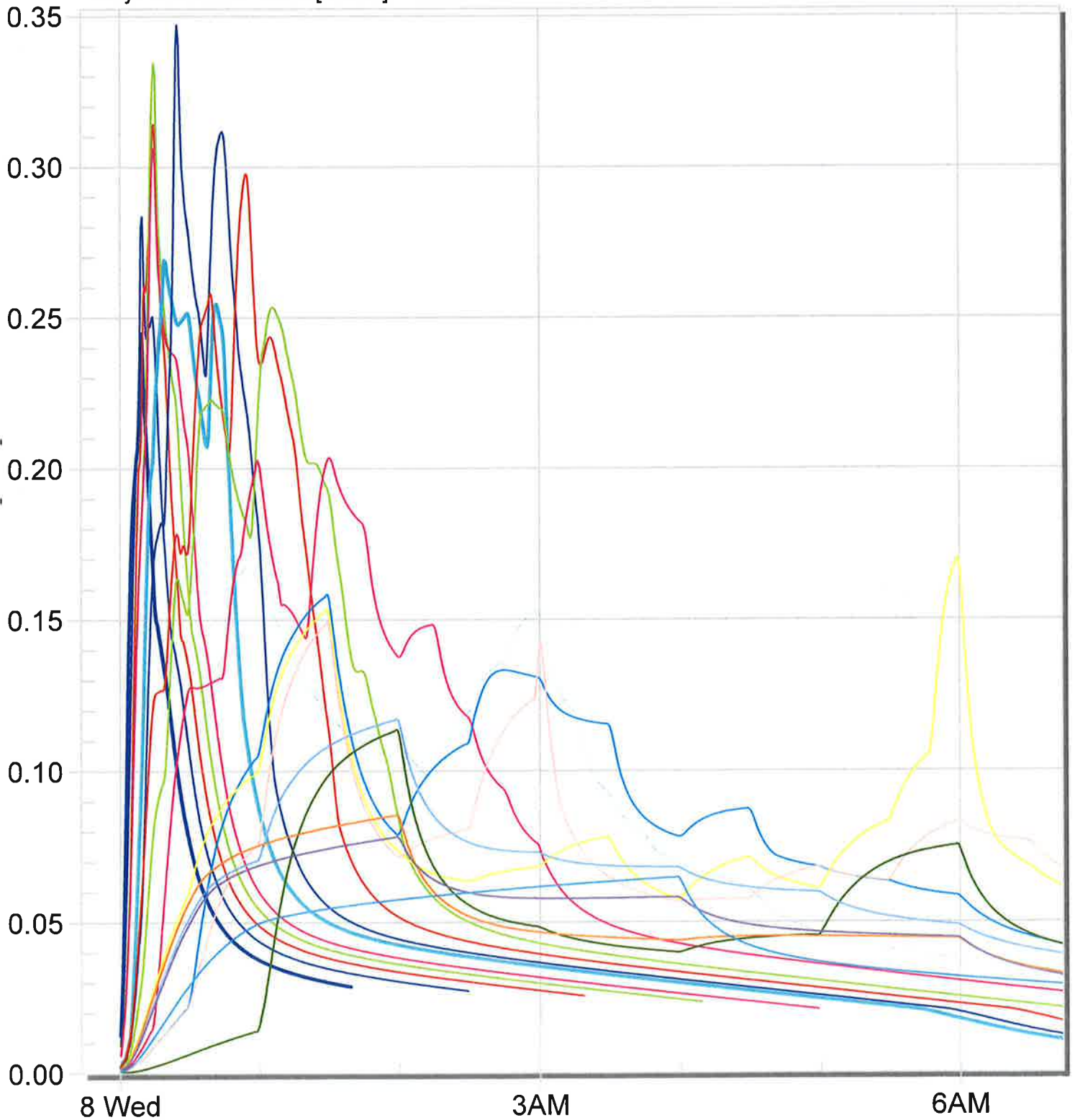
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20yr 1440min max [0.111]	20yr 2160min max [0.081]	20yr 2880min max [0.075]
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SHR-LED [ALL STORMS]

Total Flow

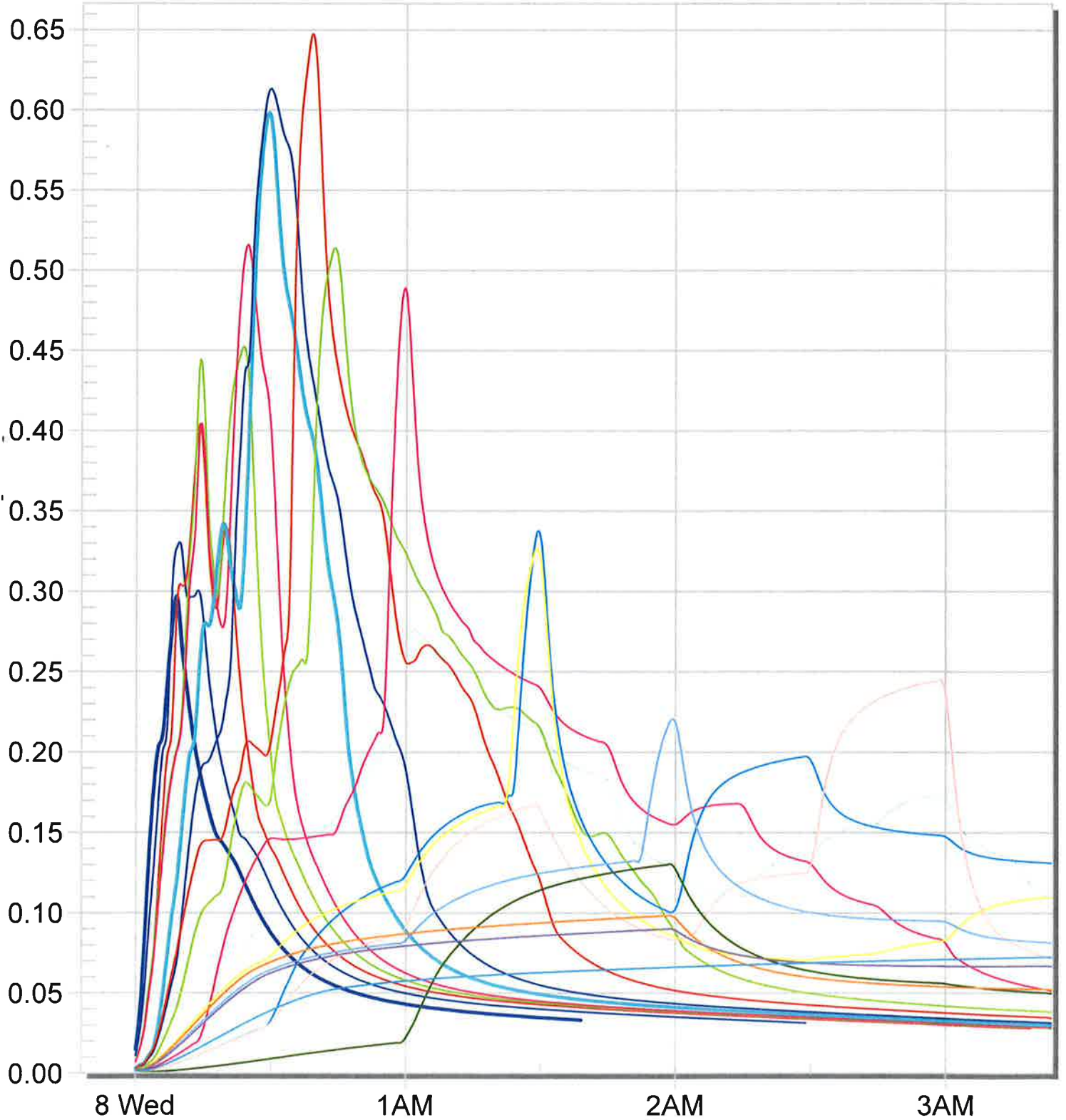
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50yr 4320min max [0.065]		



STORM [ALL STORMS]

Total Flow

100yr 10min max [0.297]	100yr 15min max [0.327]	100yr 20min max [0.404]
100yr 25min max [0.452]	100yr 30min max [0.514]	100yr 45min max [0.597]
100yr 60min max [0.613]	100yr 90min max [0.648]	100yr 120min max [0.514]
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100yr 540min max [0.327]	100yr 720min max [0.245]	100yr 1080min max [0.130]
100yr 1440min max [0.220]	100yr 2160min max [0.098]	100yr 2880min max [0.090]
100yr 4320min max [0.075]		

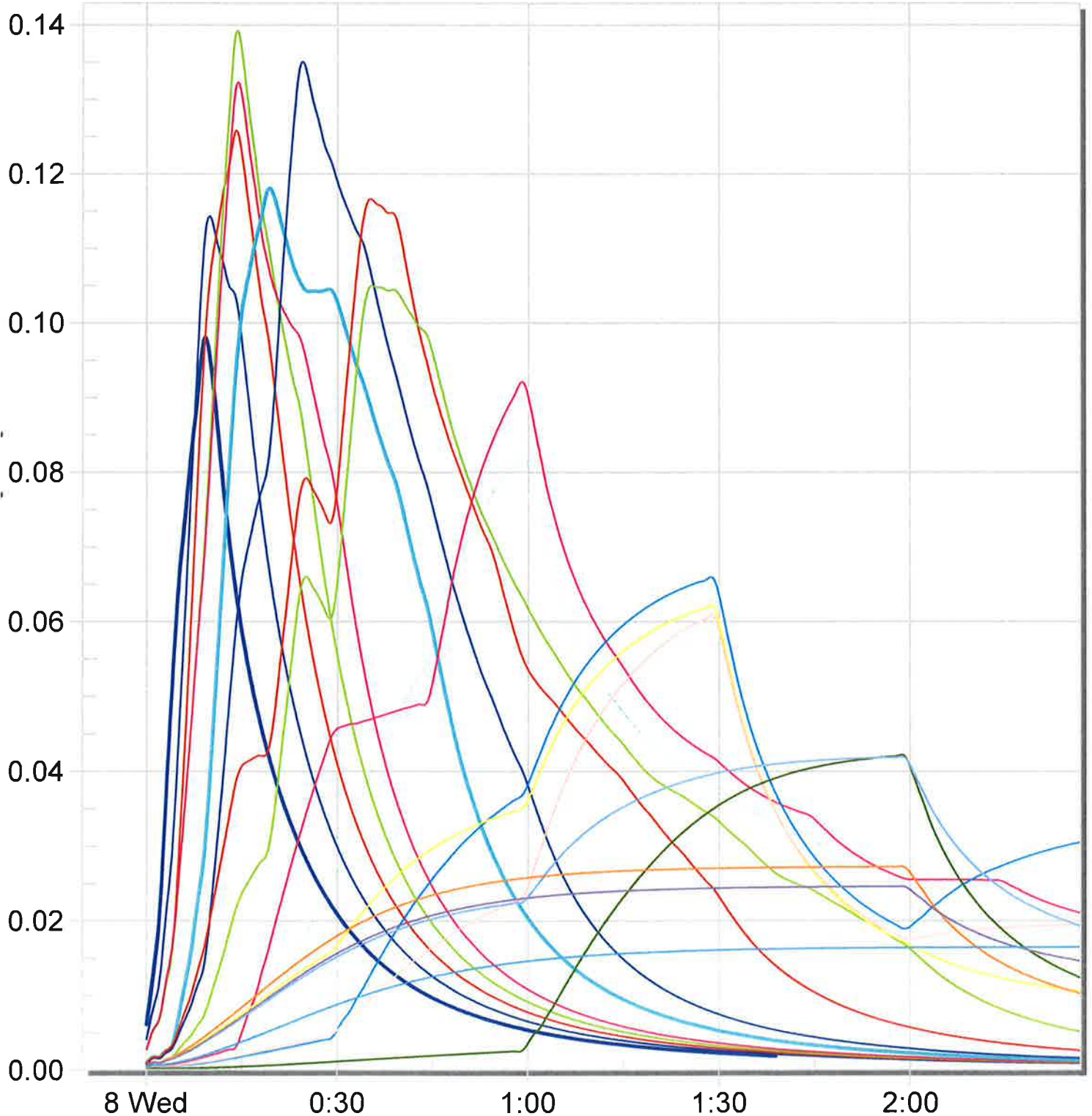
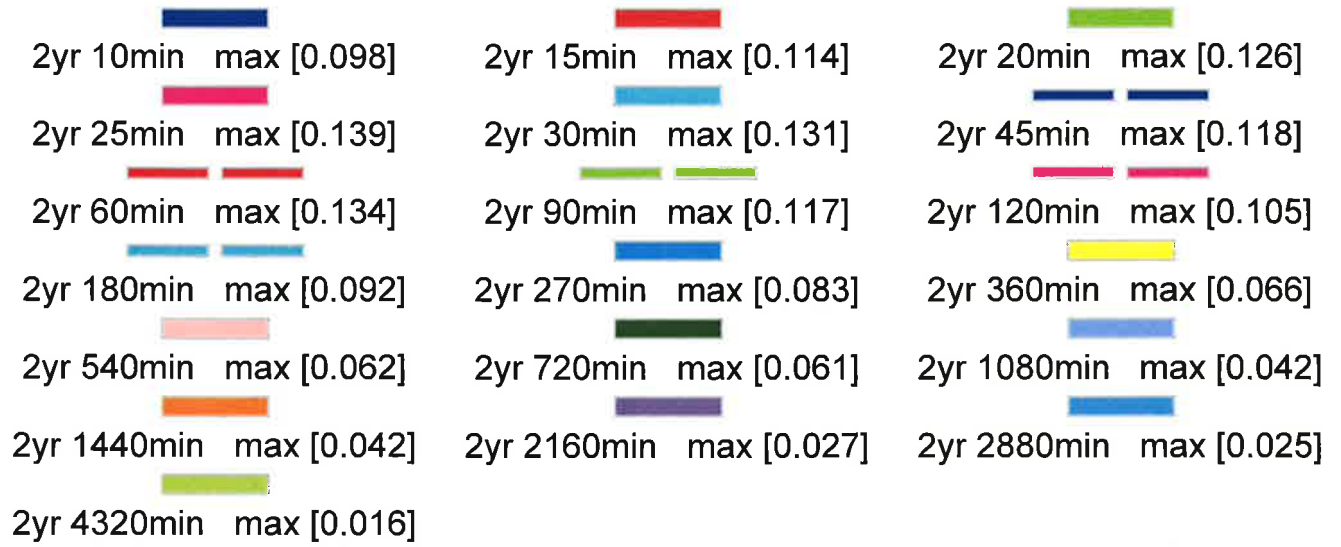


APPENDIX G

POST-DEVELOPMENT MITIGATED XP-RAFTS HYDROGRAPHS
CUNNINGHAM HIGHWAY DISCHARGE

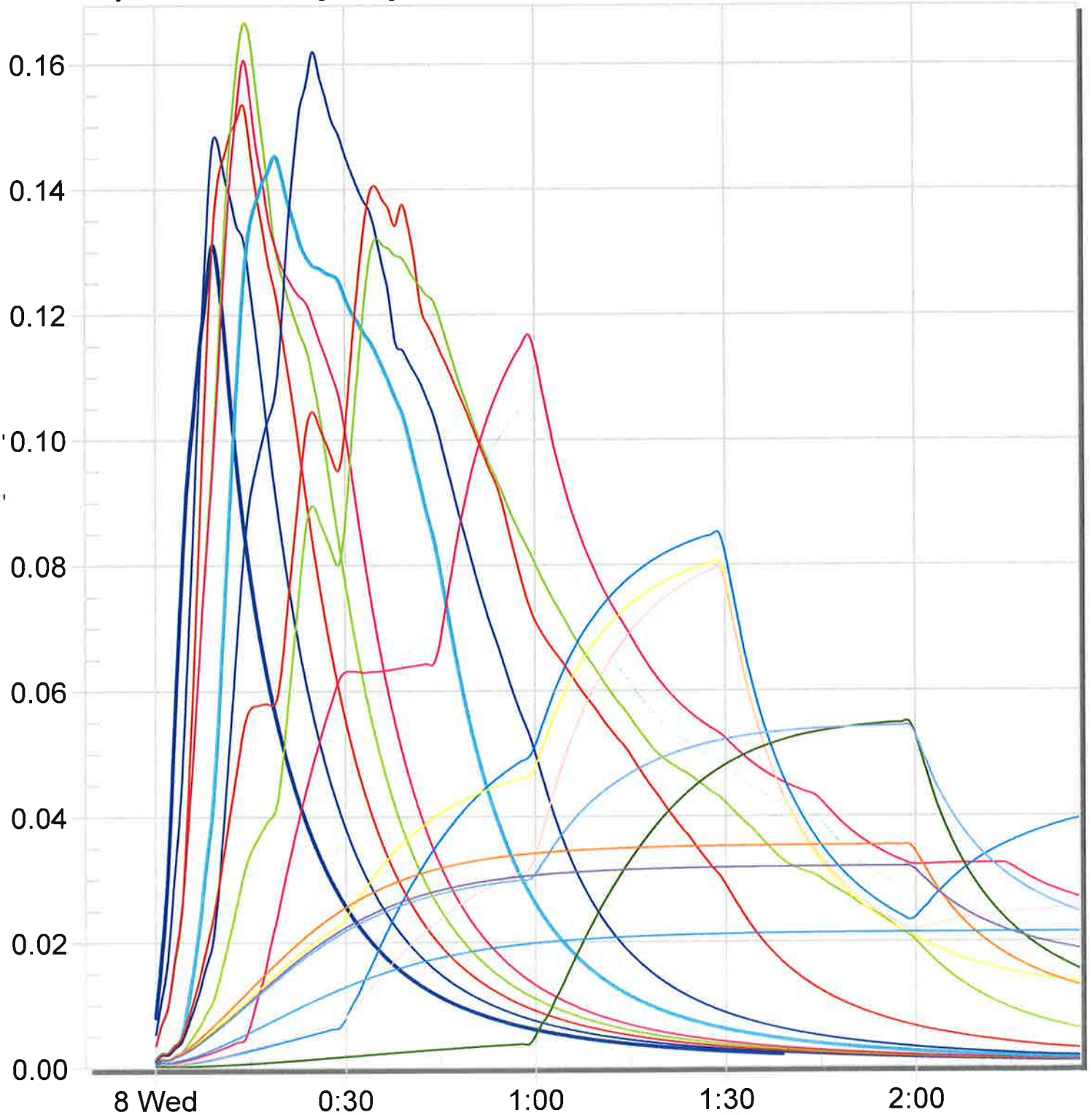
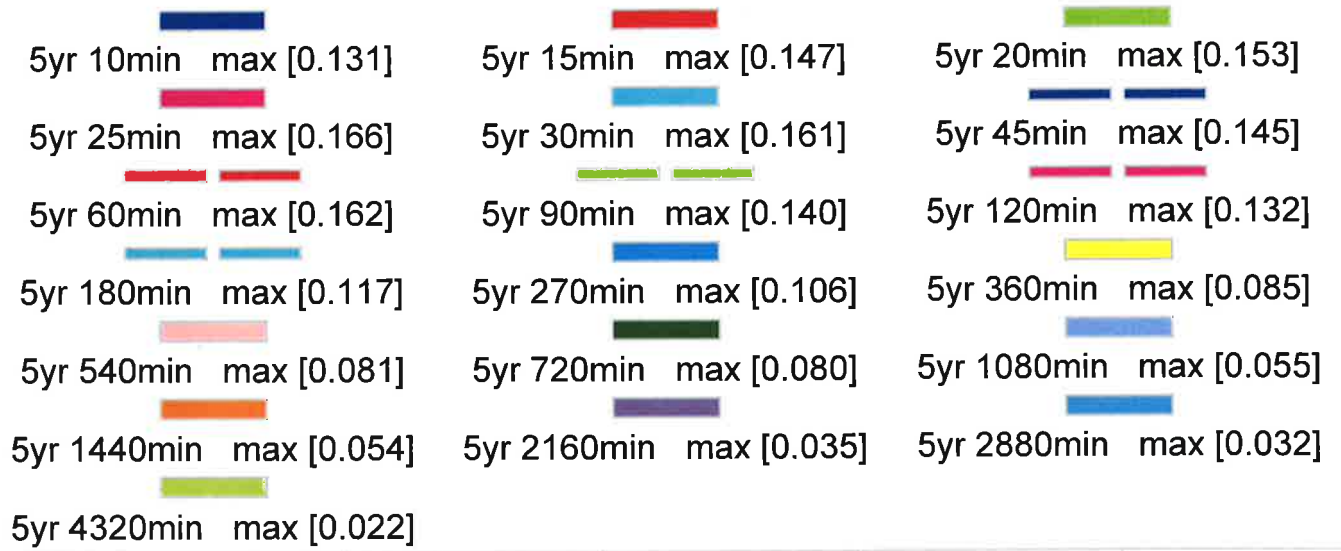
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Total Flow



CIPED [ALL STORMS]

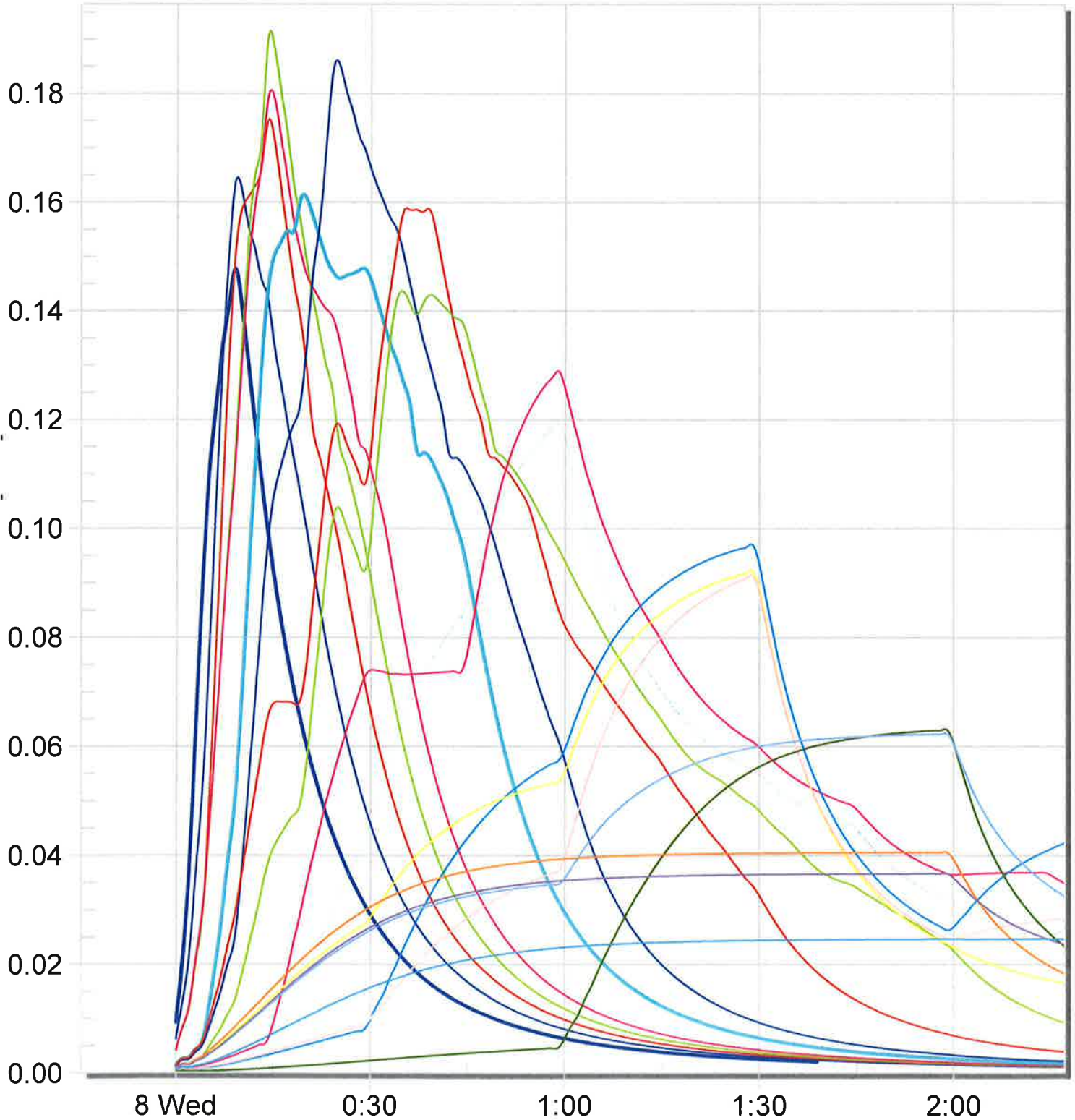
Total Flow



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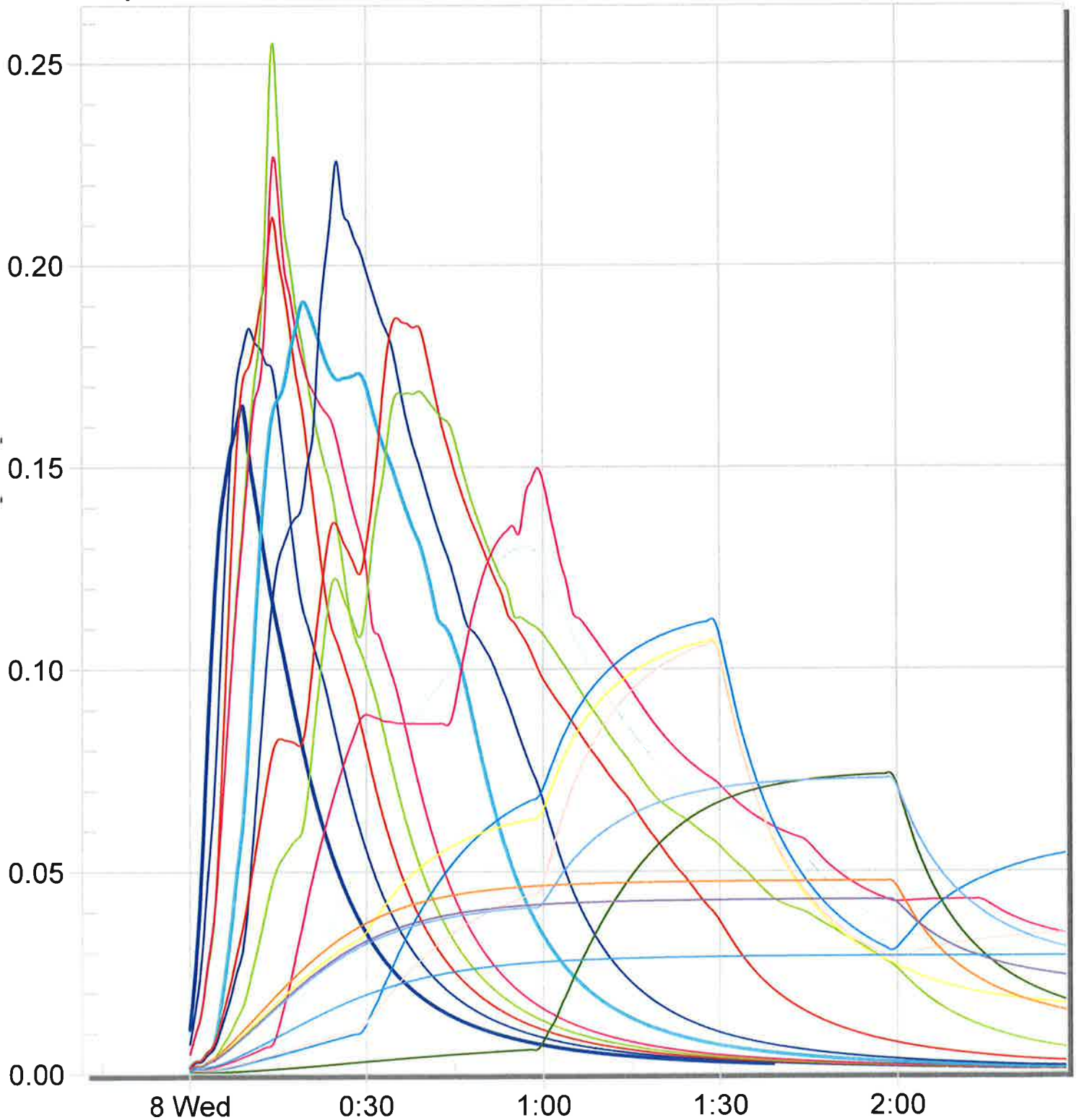
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10yr 60min max [0.186]	10yr 90min max [0.159]	10yr 120min max [0.143]
10yr 180min max [0.129]	10yr 270min max [0.120]	10yr 360min max [0.097]
10yr 540min max [0.092]	10yr 720min max [0.091]	10yr 1080min max [0.063]
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10yr 4320min max [0.025]		



CITLED [ALL STORMS]

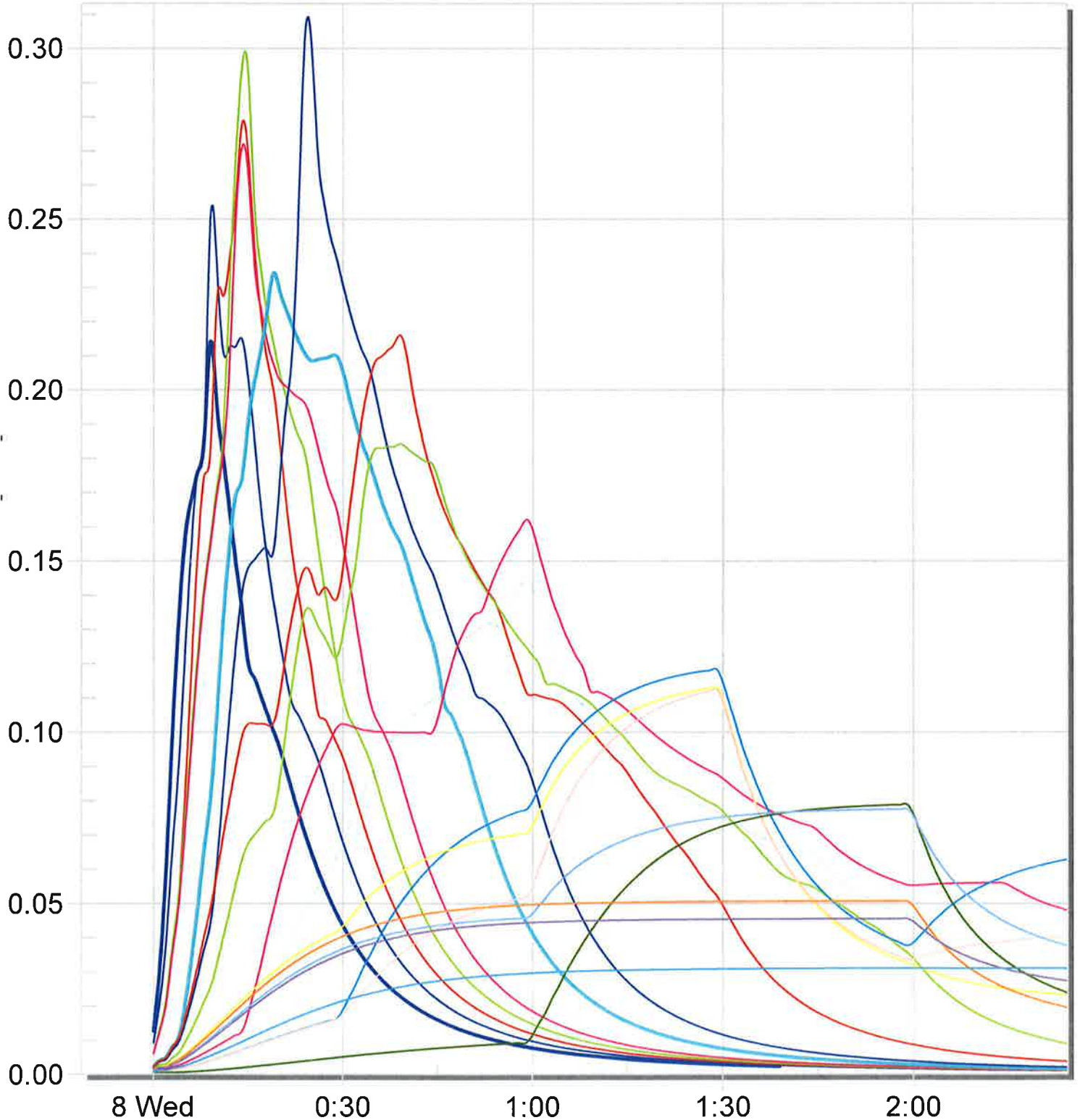
Total Flow

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20yr 60min max [0.226]	20yr 90min max [0.187]	20yr 120min max [0.169]
20yr 180min max [0.150]	20yr 270min max [0.131]	20yr 360min max [0.112]
20yr 540min max [0.107]	20yr 720min max [0.106]	20yr 1080min max [0.074]
20yr 1440min max [0.073]	20yr 2160min max [0.048]	20yr 2880min max [0.043]
20yr 4320min max [0.029]		



CIPLED [ALL STORMS]

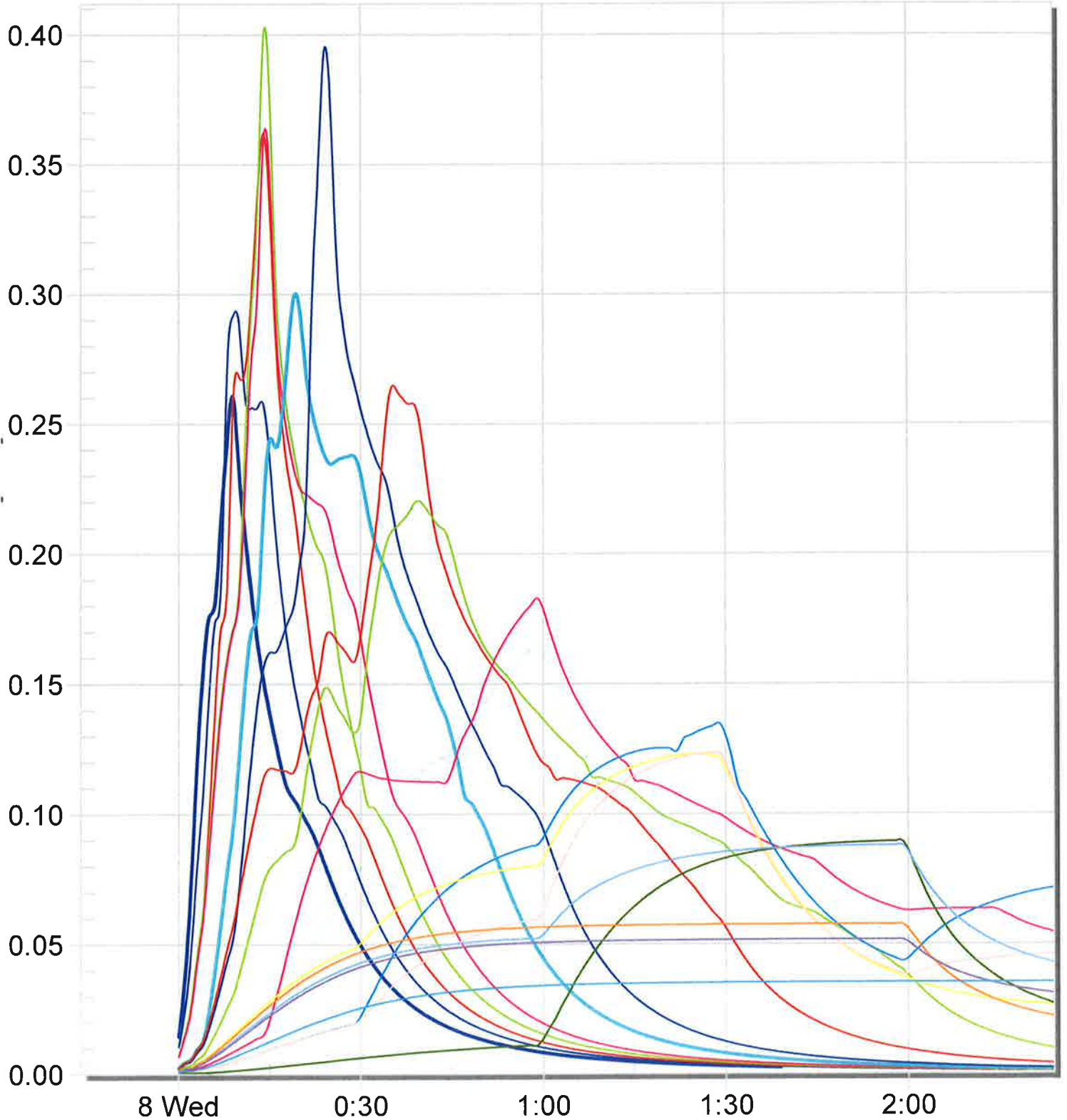
Total Flow



CIFED [ALL STORMS]

Total Flow

100yr 10min max [0.260]	100yr 15min max [0.291]	100yr 20min max [0.362]
100yr 25min max [0.398]	100yr 30min max [0.358]	100yr 45min max [0.299]
100yr 60min max [0.393]	100yr 90min max [0.264]	100yr 120min max [0.220]
100yr 180min max [0.183]	100yr 270min max [0.165]	100yr 360min max [0.135]
100yr 540min max [0.123]	100yr 720min max [0.124]	100yr 1080min max [0.090]
100yr 1440min max [0.088]	100yr 2160min max [0.058]	100yr 2880min max [0.052]
100yr 4320min max [0.035]		



APPENDIX H

STORMWATER QUALITY OPERATION AND MAINTENANCE GUIDELINES



♦STRUCTURAL♦CIVIL♦HOUSING♦FORENSIC♦

**MORGAN CONSULTING
ENGINEERS PTY LTD**

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BIO-RETENTION OPERATIONAL MANAGEMENT AND MAINTENANCE GUIDELINE



JAS-ANZ



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1 INTRODUCTION

The water quality treatment for the proposed development includes a proposed bio-retention basin. This document provides an overview of the maintenance requirements for the bio-retention water quality device(s) on site to ensure that they are properly maintained.

2 GENERAL

Bio-retention basins are vegetated areas where runoff is filtered through a filter media layer (e.g. sandy loam) as it percolates downwards. It is then collected via perforated underground drains and flows to downstream waterways or to storages for reuse. Bio-retention basins operate by filtering stormwater runoff through densely planted surface vegetation and then percolating runoff through a prescribed filter media. During percolation, pollutants are retained through fine filtration, adsorption and some biological uptake. The vegetation in a bio-retention system is a vital functional element of the system providing a substrate for biofilm growth within the upper layer of the filter media. The proposed bio-retention basin within the site will do much of the same. It has been designed to reduce the impact of the development on the downstream waterway environment.

3 RESPONSIBILITY FOR INSPECTION

The principal involved consultancy will be required to appoint an appropriately qualified consultant maintenance contractor to carry out the inspections of the bio-retention basin during the construction and on-maintenance period. At the completion of the maintenance period the responsibility to undertake the inspections and generally maintain the basin will be shifted to the Body Corporate.

4 DATA COLLECTION / STORAGE REQUIREMENTS

Inspection records will be required for comparison of the performance of the system. In order to assist this process it is proposed that the Bio-retention Basin Maintenance Checklist prepared by Healthy Waterways (2006) be adopted for the site. Refer Appendix A for a copy of the checklist.

Copies of the completed checklist are to be forwarded to the Morgan Consulting Engineers (or other consultant nominated by the Principal) and to be provided to Council at the expiry of the maintenance period and on request thereafter.

5 MAINTENANCE PROCEDURE

5.1 General

Vegetation plays a key role in maintaining the porosity of the filter media of a bio-retention basin and a strong healthy growth of vegetation is critical to its performance. Therefore the most intensive period of maintenance is during the plant establishment period (i.e. first two years) when weed removal and replanting may be required.

It is also the time when high sediment loads may impact on plant growth and infiltration rates. For this reason, the bio-retention systems are to be initially turfed. Vegetation can be introduced when construction has been completed on an appropriate percentage of the lots draining to each bio-retention system.

Inflow systems and overflow systems require careful monitoring, as these can be prone to scour and litter build up. Debris can block inlets or outlets and can be unsightly, particularly in high visibility areas. Inspection and removal of debris should be done regularly, and debris should be removed whenever it is observed on a site.

5.2 Inspections

5.2.1 General

The bio-retention basins treat stormwater runoff through the principles of sedimentation, filtration and percolation. These devices do not incorporate the use of screens and require minimal maintenance during their operation. However, the systems are subject to deposition of sediment that is filtered through the media.

Routine inspections shall be undertaken on the bio-retention basins after every significant rainfall event (30mm of rainfall in a 24 hour period) or on a three (3) monthly basis within the first twelve (12) months and on a six (6) monthly basis thereafter. The requirements of the inspection for the bio-retention basin shall include the following:

1. Check for build up of sediment at pipe inlet structures;
2. Check for sediment within sub-soil drainage lines;
3. Check all concrete structures for damage and deterioration;
4. Check for the build up of vegetation matter on the bed surface and removal of vegetation matter to ensure minimal blockage to media;
5. Check achieved flow rate through the media is maintained in accordance with the design requirements and anticipated compaction;
6. Check inflow systems, outlets and the under drainage pipe elements to identify and remove any blockages such as litter build up.

5.2.2 Filter Media

The filter media will be inspected for sediment deposition of the bed of the bio-retention basins and removed as required.

Inspect for the accumulation of an impermeable layer (such as oily or clayey sediment) that may have formed on the surface of the filter media. A symptom may be that water remains ponded in the bio-retention basin for more than a few hours after a rain event. Repair minor accumulations by raking away any mulch on the surface and scarifying the surface of the filter media between plants. Any leaf litter should be removed to help maintain the surface porosity of the filter media.

Ensure the perforated pipes are not blocked to prevent filter media and plants from becoming waterlogged. A small steady clear flow of water may be observed discharging from the perforated pipe at its connection into the downstream pit some hours after rainfall.

Note that smaller rainfall events after dry weather may be completely absorbed by the filter media and not result in flow. Sub-soil drainage lines are to be flushed with clean water as required to remove and blockage.

Sediment should be removed where it has smothered vegetation or caused blockages to the inlets or outlet systems.

Any holes and or scouring apparent on the filter media will be repaired. Ensure no damage has occurred to the inlet and outlet systems, if this has occurred repair as required.

5.2.3 Repair of Damage

Any accumulation of an impermeable layer, (such as oily or clayey sediment) that may have formed on the surface of the filter media will be repaired. A symptom may be that water remains ponded in the bio-retention basin for more than a few hours after a rain event. Repair these minor accumulations by raking away any mulch on the surface and scarifying the surface of the filter media between plants. Any leaf litter should be removed to help maintain the surface porosity of the filter media.

5.3 Watering

Regular watering of the bio-retention basin vegetation is essential for successful establishment and healthy growth. The frequency of watering to achieve successful establishment will depend upon rainfall, maturity of planting stock and the water holding capacity of the soil.

The following watering program should be adequate following the installation of vegetation:

1. Week 1-2, 3 visits/week
2. Week 3-6, 2 visits/week
3. Week 7-12, 1 visit/week

After the first three month period, watering may still be required, particularly during the first winter (dry period). Irrigation shall be undertaken in consultation with the Landscape Architect.

5.4 *Vegetation Management and Weed Control*

Conventional surface mulching of the bio-retention basins with organic material like tanbark, should not be undertaken. Most organic mulch floats and runoff typically causes this material to be washed away with a risk of blocking drains.

If weeds are observed within the bio-retention basin they shall be removed. Weeding will generally involve manual removal of the species.

Vegetation planting densities are to be in accordance with the Landscape Architect's design. Where necessary a biodegradable erosion mat can be applied the basin batters to help combat weed invasion and reduce the labour intensive maintenance requirements for weed removal.

Herbicides are not recommended as a means of weed control. If required, however, their application is to be managed to avoid unintentional destruction of other vegetation or the introduction of chemicals that may contaminate the stormwater runoff.

Where necessary, in areas that have been extensively weeded, the bio-retention basin shall be replanted with similar planting densities using suitable native species in accordance with the Landscape Architects design.

Inspection of the existing vegetation is to take place and any dead or diseased vegetation shall be removed and replaced with suitable native species in accordance with the Landscape Architects design.

The removal of plants, dead or diseased vegetation or weeds shall be disposed offsite at an appropriate waste management facility.

All litter and debris present on the surface or batters of the bio-retention basins shall be removed and disposed offsite at an appropriate waste management facility.

5.5 *Validation Water Quality Testing*

Validation water quality testing is not proposed for the site.

5.6 *Equipment Needs*

The equipment required to undertake regular maintenance to the bio-retention basins will be standard hand held landscaping tools. No specific mechanical equipment is expected to be required for the maintenance of the basins unless resetting is required (refer Section 5.11).

5.7 *Occupational Health and Safety*

The maintenance activities are to be undertaken in accordance with all current occupational and workplace health and safety legislation, regulations, codes of practice or manufacturers guidelines.

For maintenance access the shallow nature of the bio-retention systems enables pedestrian ingress. As noted above no mechanical equipment is required unless resetting is required. The batter grades are considered to be acceptable and do not pose an occupational health and safety issue given proper training to maintenance personnel.

The application of pesticides or herbicides in response to any weed outbreak, which cannot be controlled via manual removal, is to be undertaken by maintenance personnel in accordance with manufacturer's guidelines in consultation with the Landscape Architect. Protective measures are to be implemented so as to minimise exposure to personnel, with personal protective measures to be the final hierarchical option.

5.8 Public Safety

While maintenance is being undertaken consideration of pedestrians and cyclists is to be made due to the close proximity of the footpaths. To avoid any safety concerns it is recommended that temporary warning signs be placed at a sufficient distance to allow pedestrians and cyclists to become aware of possible maintenance vehicles/personnel when maintenance is being undertaken.

5.9 Disposal Requirements

The removal of litter and debris, plants, dead or diseased vegetation or weeds are to be disposed offsite at an appropriate waste management facility.

5.10 Access Issues

Suitable access to the bio-retention basins can be achieved directly from the internal car park pavement within the site.

5.11 Bio-Retention Basin Resetting

Resetting (i.e. complete reconstruction) of the bio-retention basins will be required if the system fails to drain adequately after tilling of the surface. Replacement of the filter media is required when it becomes 50% blocked, which is estimated to occur approximately every 8 to 10 years.

This can be assessed via a review of sediment build up and the time necessary for the system to drain or by in-situ falling head permeability tests of the filter media.

Appendix A

BIO-RETENTION BASIN MAINTENANCE CHECKLIST

BIORETENTION BASIN MAINTENANCE CHECKLIST			
Inspection Frequency:	1 to 6 monthly	Date of Visit:	
Location:			
Description:			
Asset I.D.			
Site Visit by:			
INSPECTION ITEMS:	Y	N	Action Required (details)
Sediment accumulation at inflow points?			
Litter within basin?			
Erosion at inlet or other key structures?			
Traffic damage present?			
Evidence of dumping (e.g. building waste)?			
Vegetation condition satisfactory (density, weeds etc)?			
Watering of vegetation required?			
Replanting required?			
Mowing/slashing required?			
Clogging of drainage points (sediment or debris)?			
Evidence of ponding?			
Damage/vandalism to structures present?			
Surface clogging visible?			
Drainage system inspected?			
Resetting of system required?			
COMMENTS			

APPENDIX I

SPEL ENVIRONMENTAL OPERATION AND MAINTENANCE GUIDELINES

SPEL Separator Commissioning Operation and Maintenance



Puraceptor Class 1

Operation and Maintenance Manual

Introduction

Congratulations on your purchase of a SPEL Environmental Stormwater Quality Improvements Device.
With proper care and by following a few simple guide lines your system will give you many years
of dependable service.

Important

Only qualified personnel should maintain, operate and repair you Stormwater system. Any wiring of equipment should be performed by a qualified electrician.

Warning

Operation may cause injury. Take all necessary precautions, wear protective equipment, refer to Engineers Department.
For your own safety, read all instruction manuals prior to working on equipment.

Safety Precautions

- Follow all “occupation, health and safety” regulations.
- Ensure maintenance personnel are aware of “Confined Spaces” guidelines, which must be followed.
 - Make sure that there is sufficient oxygen and that there are no poisonous gases present.
 - Check the explosion risk before welding or using electric hand tools.
 - Do not ignore health hazards. Observe strict cleanliness.
 - Ensure that the lifting equipment (where required) is in good condition.
- All personnel who are to work with these systems should be vaccinated against diseases that can occur.
 - Keep a first aid kit handy.

Health & Safety

Maintenance should be carried out by a competent contractor in accordance with the above procedures.

Health and Safety at Work legislation and good building practice.

A warning notice should be visible at the top of each access shaft - ‘danger, harmful fumes’ and ‘ respirators should be worn in this tank.’ Before entering persons must be qualified in accordance with ‘confined space’ requirements



Information contained in this data sheet is approximate and for general guidance only. In accordance with the companies policy of constant improvement and development SPEL Products reserves the right to change the specification without prior notice.

SPEL Puraceptor Class 1 **Operation and Maintenance Manual**

Service Stations

Fuel Depots

Windfarms

Switchyards

Sub Stations

Power Stations

Industrial Locations

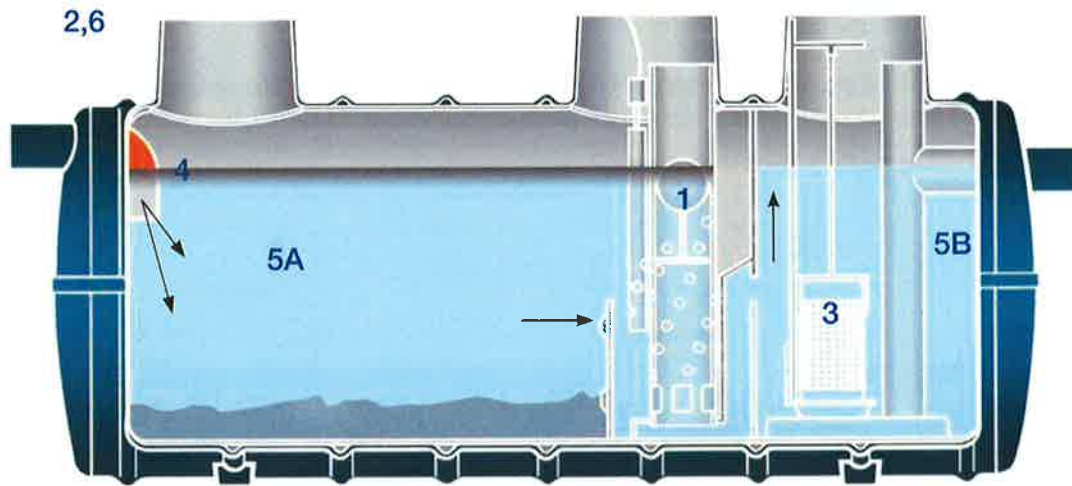
Contents

SPEL Puraceptor - How it works	page 2
SPEL Puraceptor Maintenance	page 3
SPEL Coalescer Units	page 4
SPEL Auto Closure Device	page 5
SPEL Oil Alert System	page 6
Spare Parts List	page 8

SPEL PURACEPTOR™ CLASS 1

Oil containment

“How it works”



SPEL PURACEPTOR™ is a **FULL RETENTION** separator that treats all flows and is sized to contain more than the anticipated maximum oil spillage enabling it to be fully operational at all times.

It has two chambers, a coalescer and is fitted with an automatic closure device specifically designed to treat and contain major oil spills thereby making it suitable for high risk applications.

It achieves a water discharge quality of 5mg light liquids per litre complying to European Standard BS EN 858.1. 2006. Treatable flow rates range from 2LPS to 200LPS. Pipe sizes range from 100mm to 450mm (larger sizes on request).

Careful and proper planning by corporate Australia and government bodies is essential when designing and implementing systems that are effective in protecting our environment. The proven and independently accredited SPEL PURACEPTOR™ (complies to European Standard BS EN 858.1 2006) is an Australian made stormwater treatment and oil containment device that can contain and prevent light liquid pollutants from discharging into our waterways.

1 AUTOMATIC CLOSURE DEVICE

The AUTOMATIC CLOSURE DEVICE (A.C.D.) is a precisely engineered device comprising a water-bouyant ball that is sensitive to any change in the water density as a consequence of light liquids build up, thereby automatically activating a process of depressing the A.C.D. to SHUT OFF the separator, preventing pollutants from discharging to drains and waterways.

2 FULL RETENTION

All liquid is treated. There is no by-pass operation.

3 COALESCER EQUIPPED

Provides a coalescing process for the separation of smaller globular of light liquid pollutants to reduce the light liquid content in the outlet to **5mg/litre or less**.

4 INLET DIP PIPE - FLAME TRAP

For minimum turbulence and to prevent fire and inflammable vapours passing through to the drainage system.

5 TWO CHAMBER

A non-turbulant flow through two horizontal treatment chambers, utilising the underflow principle to retain light liquids in all flow conditions.

A. CONTAINMENT CHAMBER: Where Total Suspended Solids (TSS) silt, sediments, sludge and gross pollutants are trapped and settle on the chamber floor and where light liquids are contained.

B. COALESCER CHAMBER: Where light liquids separation is enhanced reducing it to **5mg/litre** or less prior to discharge.

6 GRAVITY OPERATED

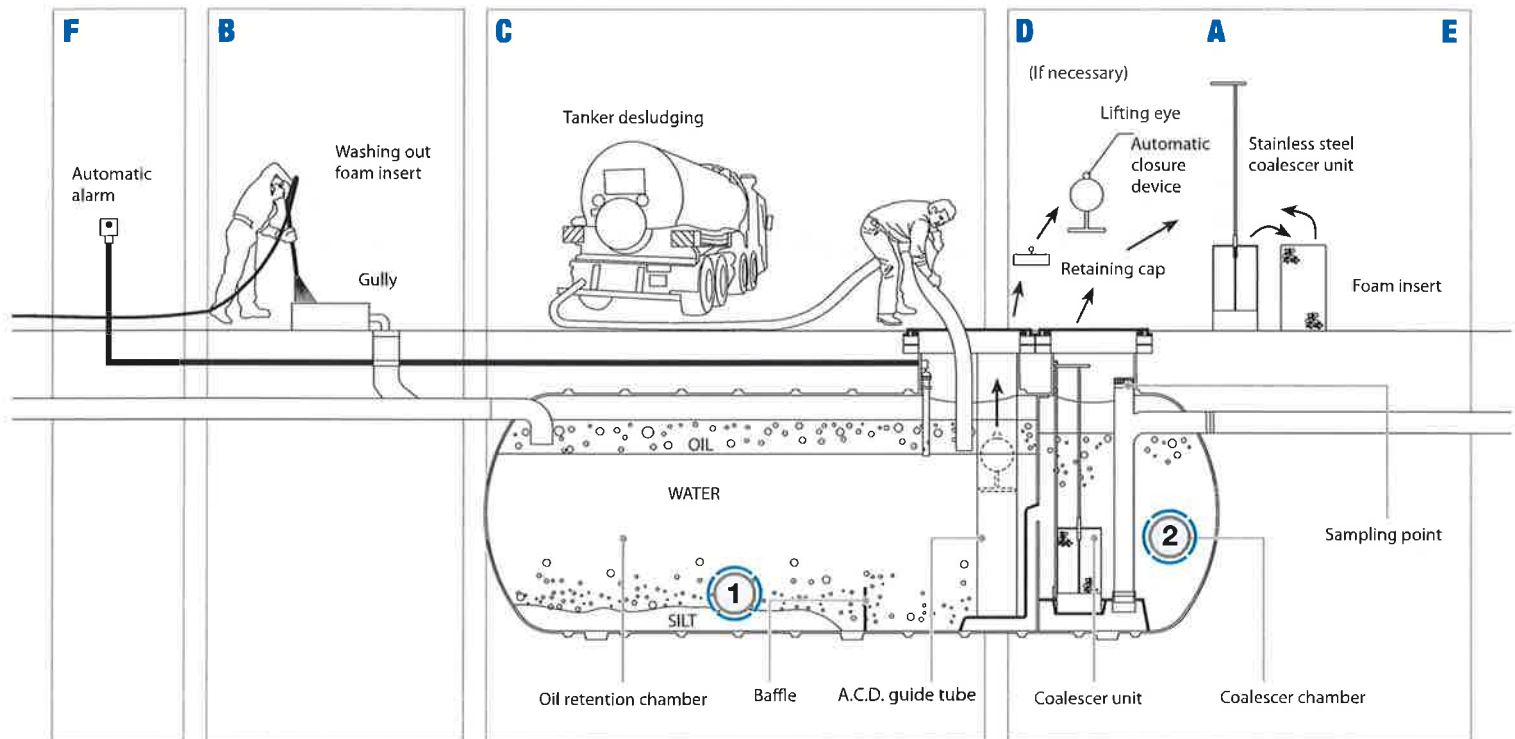
Will function in the event of power failure and fits into existing pipe drainage systems or new sites.

7 MAINTENANCE

Easy and safe with no entering of the tank required.

Puraceptors™ should be inspected at three - six - or twelve monthly intervals depending on site conditions, to determine the depth of retained pollutants and silt in both chambers and the correct operating of the ACD (automatic closure device). When the depth of the oil/fuel retained has reached the predetermined design level, (approx. 50mm) or after a spill it should be cleaned out.

- 1 CONTAINMENT CHAMBER:** Where silt, sediments, sludge, gross pollutants settle out and light liquids are retained. The auto closure device operates in its retaining tube next to the oil alert sensor probe.
- 2 COALESCER CHAMBER:** Where light liquids separation is enhanced prior to discharge and where the coalescer unit is incorporated, the coalescer should be removed and cleaned in accordance with the requirements set out in the coalescer data sheet.



MAINTENANCE PROCEDURE

A Coalescer unit

Use the lifting handle or the chain and lift the coalescer unit out of the tank and place it near the Puraceptor™. In a retained area so pollutants do not escape.

B Cleaning foam insert

Remove foam insert and wash with normal water pressure ensuring the dirty water runs into the Puraceptor™.

C Sucking out oil/fuel and silt

Suck off the retained oil from both chambers of the Puraceptor™ and then the silt deposited on the bottom, leaving sufficient water to ensure the (auto closure device) ACD remains floating.

D Sucking out complete contents (if necessary)

If the quantity of pollutants exceeds recommended level, the complete contents of the Puraceptor™ may need to be removed. After sucking out completely, remove the ACD. Using a pole with a hook, lift out the ACD using the lifting eye on the float, if fitted.

E Re-insert coalescer unit and ACD

Re-insert the foam insert into the stainless steel coalescer unit and re-insert the coalescer unit into the Puraceptor™ as provided with the SPEL lifting/location/locking system.

Partially fill the Puraceptor™ with clean water (if necessary) to ensure the ACD when re-inserted remains floating. Re-insert the ACD.

Finally check the ACD is floating after it has been replaced to safeguard against its removal by unauthorised persons, unless depth of tank precludes doing so from ground level.

F SPEL automatic alarm/monitoring system

The SPEL automatic alarm/monitoring system probe should be lifted out of the probe protection tube, wiped clean and re-inserted. The system should now be reset according to instructions.

Important note:

When cleaning out, ensure both chambers are sucked out equally starting with the first chamber and then the second chamber and back again. Ensuring even water pressure against baffle wall.

The SPEL Puraceptor™ Class 1 separator and the SPEL Stormceptor™ Class 1 by-pass separators incorporate coalescer units. The coalescer units provide a coalescence process for the separation of small globules of light liquid pollutants before final discharge to the surface water drain.

Coalescers are found in the second chamber of the SPEL Puraceptor™ and the second chamber of the SPEL Stormceptor™ Class 1

Prior to installation

1. Remove any strapping / ropes which have been used to hold the coalescer units from shifting in transit.
2. The access shaft(s) above the coalescer units should be covered to prevent ingress of concrete, dust, debris etc., which could clog the foam inserts.
3. On completion of installation, check that the coalescer unit is inserted securely into the base socket.

On heavily polluted sites silt and contaminants may build up in the coalescer unit foam inserts and add significantly to its weight. Use lifting chain sets that are on hooks at ground level for safe lifting with a tripod or hoist.

Installation

During installation, it is important that the foam inserts are not clogged with dust, debris or drops of wet concrete. To safeguard against this, we recommend covering the access shaft with a sheet of polythene, if not already covered.

Commissioning

On completion of installation, check the foam insert is fitted inside the stainless steel coalescer unit and the coalescer unit is inserted securely into the base socket.

Maintenance

1. Lift handle and coalescer unit out of the tank and place in a retained area so pollutants do not escape.
2. Remove foam insert and wash with normal water pressure ensuring the dirty water runs into the Puraceptor™ / Stormceptor™.
3. Make sure the hole in the centre of the coalescer foam is facing towards the manhole when installed in the tank.
4. Re-insert the foam insert into the stainless steel coalescer unit and re-insert the coalescer into the Puraceptor™ / Stormceptor™. After the tank has been cleaned.

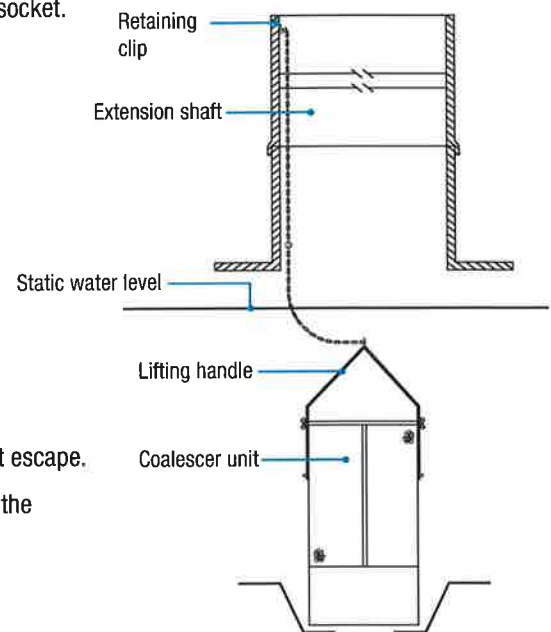


Figure 1. Coalescer unit with lifting chains

SPEL COALESCER UNITS GUIDE RAIL SYSTEM/LIFTING, LOCATING AND LOCKING SYSTEM

SPEL coalescer unit guide rail system

This facilitates easy insertion and removal of coalescer units. The system is robust, manufactured throughout in stainless steel and is action positive, leaving no doubt the coalescer unit is located properly.

Brackets fixed to the top and bottom of the coalescer unit simply engage the stainless steel guide rail fixed to the top of the stub access shaft. The coalescer is then lowered in the normal way, being guided at the correct angle into the conical base unit which finally locates the coalescer unit into its final position.

Extension guide rails can be incorporated into the SPEL extension shafts to suit (preferably when ordered with the separator).

However, when the separator is full of water, debris or sludge accumulated over a period could prevent the coalescer unit from re-seating correctly after servicing.

The coalescer unit lifting / locating / locking system ensures the coalescer unit is seated correctly and can be locked into position to prevent tampering.

The stainless steel lifting handle can be extended to suit deep tank inverts and provide easy access for lifting manually or with a tripod and hoist utilising the lifting hook.

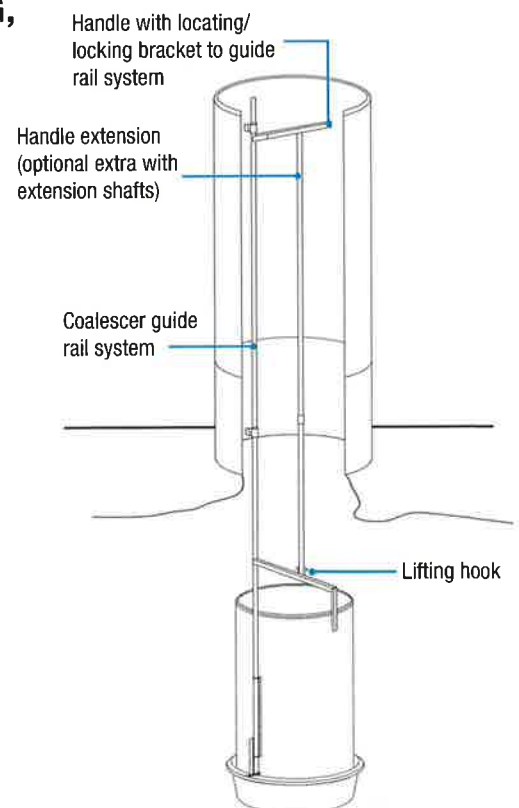


Figure 2. SPEL coalescer unit guide rail system/lifting, locating and locking system

• **SPEL ACD**The Automatic Closure Device (ACD) is found in the first chamber of a Puraceptor™. The purpose of the ACD is to close the separator off automatically when the maximum storage capacity of light liquid is attained.

The ACD is to ensure that in the event of a major spillage, pollutants do not pass into the drainage system; it should not be regarded as a substitute for an automatic alarm / monitoring system.

Prior to installation

Prior to installation the ACD retaining tube should be covered to prevent ingress of concrete etc., which could fall onto the ACD and upset it's calibration.

Operation and Maintenance

If the tank should fill with light liquid, the ACD which is calibrated for a specific gravity of 0.85, will automatically sink and close off the SPEL Puraceptor™.

Normally routine maintenance would include removing light liquid intercepted within the Puraceptor™. If a SPEL automatic alarm / monitoring system is incorporated, it will automatically indicate when the Puraceptor™ should be emptied. Only in an emergency will the Puraceptor™ fill to it's maximum and operate the ACD.

In such an event the Puraceptor™ should be completely sucked out and the ACD lifted out. Check that the ACD is in good working condition – ie. Lifting hook secure and sealed; float not leaking; knuckle joint free and clean; sealing ring intact and complete. Clean with warm soapy water before re-inserting.

To re-insert the ACD, partially fill the Puraceptor™ with clean water (if necessary) to ensure the ACD when re-inserted remains floating. Re-insert the ACD.

Finally check the ACD is floating after it has been replaced.

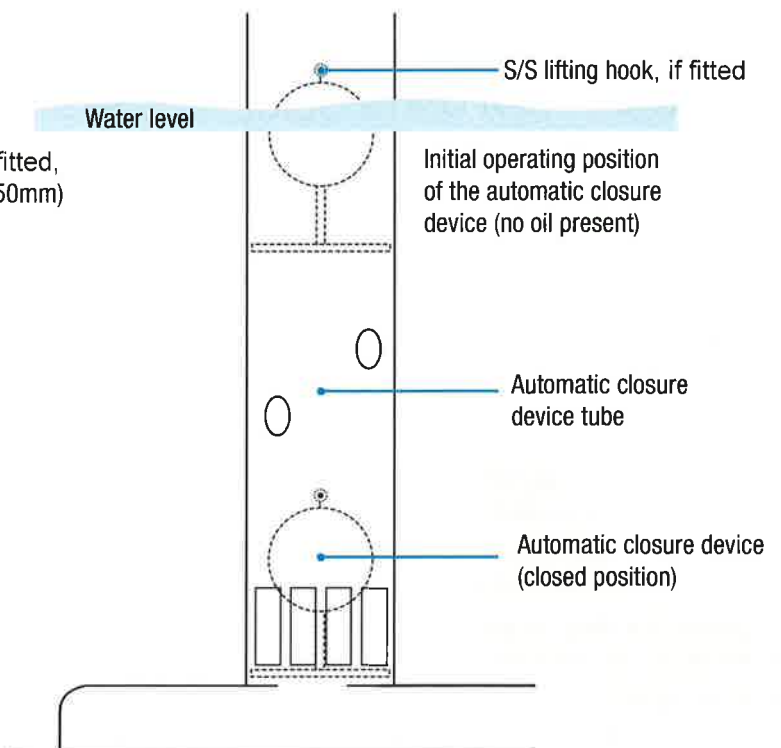
Automatic closure device SPEL Puraceptor™ Class 1 separators (two chamber)

SPEL Puraceptor™ Class 1 separators – Two Chamber Models

Commissioning

After the tank has been installed, leave the water in.

1. Remove the ACD from the packing box, taking care not to cause damage.
2. Insert the ACD into the retaining tube using the lifting eye, if fitted, ensuring it floats correctly with the float (top section approx. 50mm) just visible above the water level.





Model Number

Job Number

StormSack[®] installation manual

www.spel.com.au

Purpose

The purpose of this manual is to indicate the safest and most efficient method in installing the SPEL StormSack

Personal protective equipment

The following personal protective equipment is required by staff for install activities:

- High visibility vest or shirt
- Safety footwear (Steel cap toe)
- Gloves (leather palmed riggers gloves or similar)

Note: Personnel on construction and private sites must also adhere to the specific safety requirements of each work site

Tools required for installation

- Tape measure
- Marker pen/texta
- Gloves
- Safety glasses
- Hearing protection
- Level/straight edge
- Grinder

Pre-Installation works (To be completed by others)

1. Inlet pits shall be clean prior to installation by either a "sucker truck" or manual methods
2. All solidified material and debris within the inlet pit shall be broken-out and removed.
3. Cleaning shall be carried out up to 1 week immediately prior to installation
4. Any standing water shall be removed from the inlet pit
5. Any pipe penetrations within the inlet pit must cut off flush with pit walls and rendered prior to installation

Installation

The aim of all StormSack installations is to install the largest unit into each pit, without influencing the hydraulic performance of the pit or drainage system. To provide clarification on certain aspects of the installation the following tolerances are included

1) Tools Required

- Tape measure
- Marker pen/texta
- Gloves
- Safety glasses
- Hearing protection
- Level/straight edge
- Grinder



2) Set up safety cones around pit before opening



3) Remove grates from pit ready for StormSack installation



- 4) Measure length
& width of grate
support ledge for
StormSack to sit on**



- 5) Use measuring
tape and marker
to mark plastic
StormSack
support sheet to
be cut off**



- 6) Use level/straight
edge to mark a
straight cutting line**



- 7) Use angle grinder with cutting blade or similar to cut plastic StormSack support sheeting to match opening size**



- 8) Once the plastic StormSack support sheet has been trimmed to suit grate opening simply install into grate support ledge**



- 9) Re-install grates**





HEAD OFFICE

PO Box 6144
Silverwater NSW 1811

100 Silverwater Rd
Silverwater NSW 2128

Phone: +61 2 8705 0255

Fax: +61 2 8014 8699



DESIGN OFFICES

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Canberra	61 2 6128 1000
Queensland	61 7 3271 6960
Victoria & Tasmania	61 3 5274 1336
South Australia	61 8 8275 8000
West Australia	61 8 9350 1000
Northern Territory	61 2 8705 0255
New Zealand	64 9 276 9045

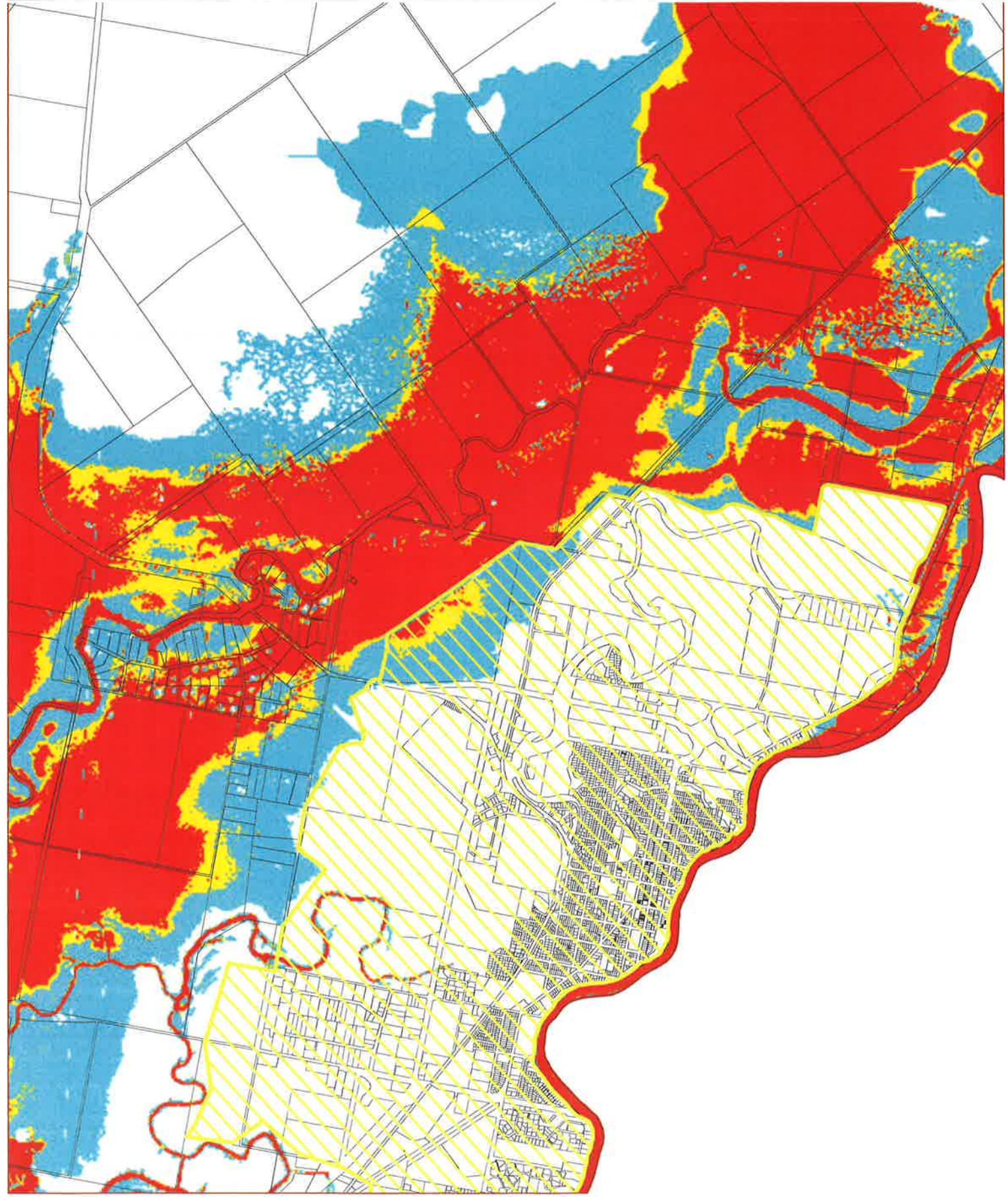


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SPEL Environmental accepts no responsibility for any loss or damage resulting from any person acting on this information. The details and dimensions contained in this document may change, please check with SPEL Environmental for confirmation of current specifications.

APPENDIX J

GRC FLOOD HAZARD MAP



Medium Flood Hazard
 Low Flood Hazard
NOTE: The hazard levels shown on this map are based on the hazard study (Cardinal) and the defined flood extent.

Area of Floodplain
 by Council Topographic Features

Other
 Cadastre
 Waterway
 Goondiwindi Region

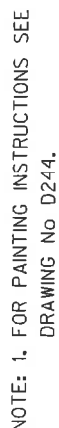
Map Index



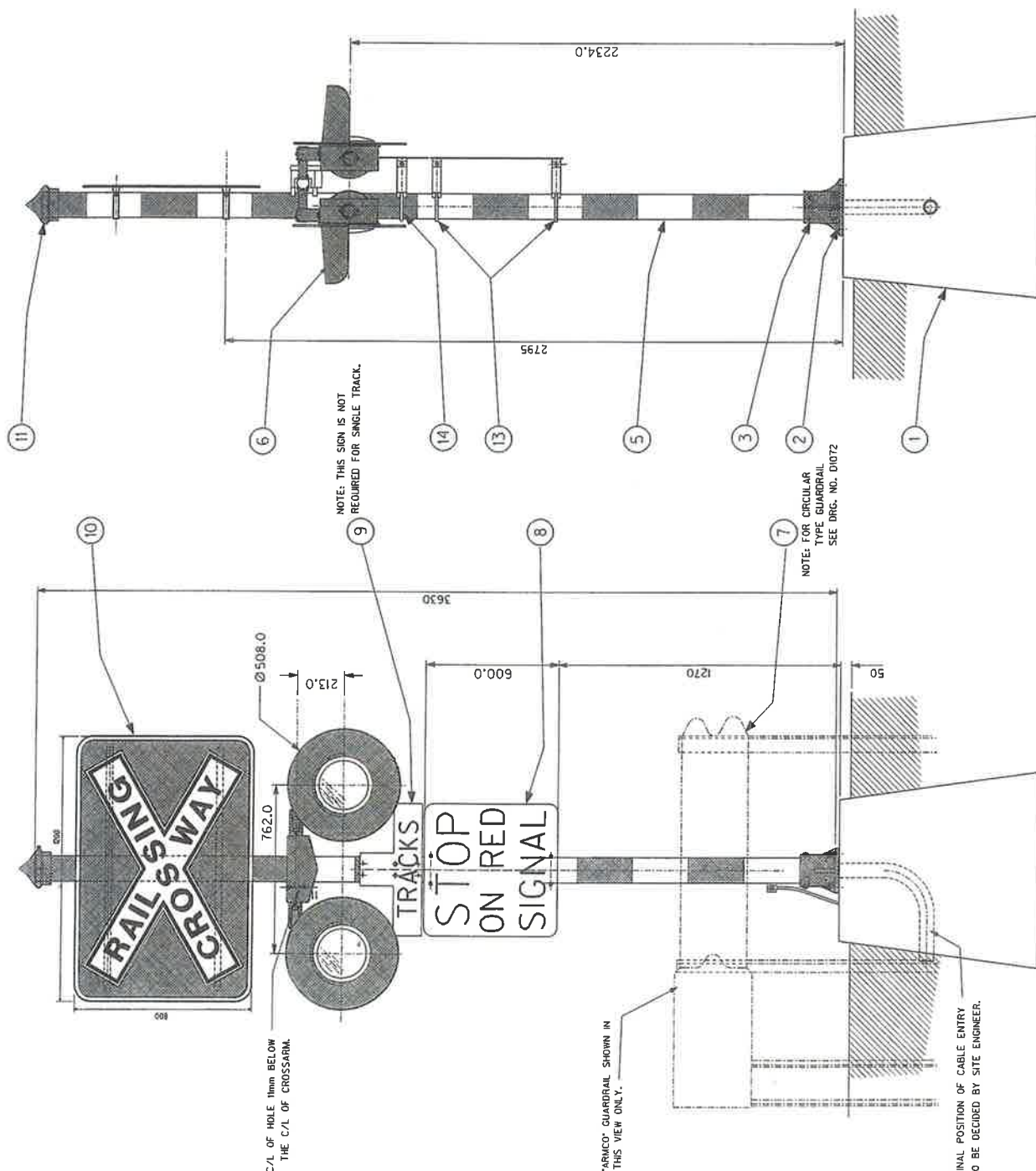
Information

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Date: 12 February 2018



2.FOR METHOD OF INSTALLING
ARMCO GUARD RAIL SEE
DRAWING No D1208 & D1072.



15							
14	37510	BRACKET FOR "NO OF TRACKS" SIGN			STEEL	D462	1
13	32510	BRACKET FOR "STOP" SIGN			STEEL	D457	2
12							
11	19510-2	PRINCIPLE CAP FOR 100 NB POST			C.I.	P658	1
10		"RAILWAY CROSSING" SIGN-REFLECTORISED			ALUM	D1647	1
9	10510	"NO. OF TRACKS" SIGN			ALUM	D1718	1
8	11510	"STOP ON RED SIGNAL" SIGN			ALUM	D1719	1
7		"ARMCO" GUARD RAIL			STEEL	D1208	1
6		FLASHING LIGHT UNIT COMPLETE					
5	19510	100 NB POST			STEEL	F36	1
4							
3		CAST IRON BASE			C.S.	D762	1
2		M20 NUT & SPRING WASHER			STEEL		4
1		CONCRETE FOUNDATION BLOCK					
ITEM	ORD.NO	DESCRIPTION				P361	
							DWG.NO:MD-001
							MATL.

SIGNAL AND OPERATIONAL SYSTEMS

STANDARD
RAILWAY CROSSING
FLASHING LIGHT SIGNAL.



3205

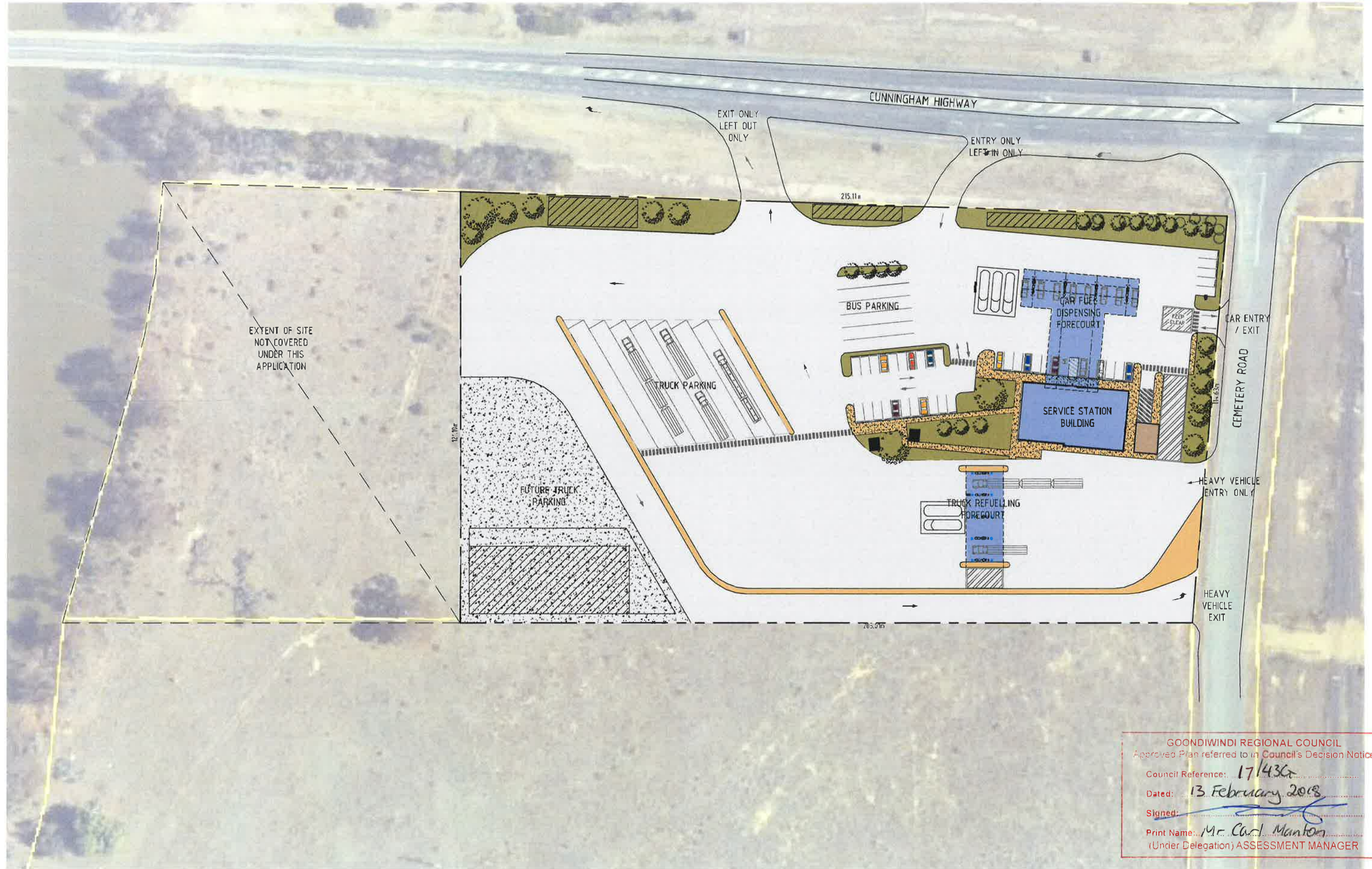
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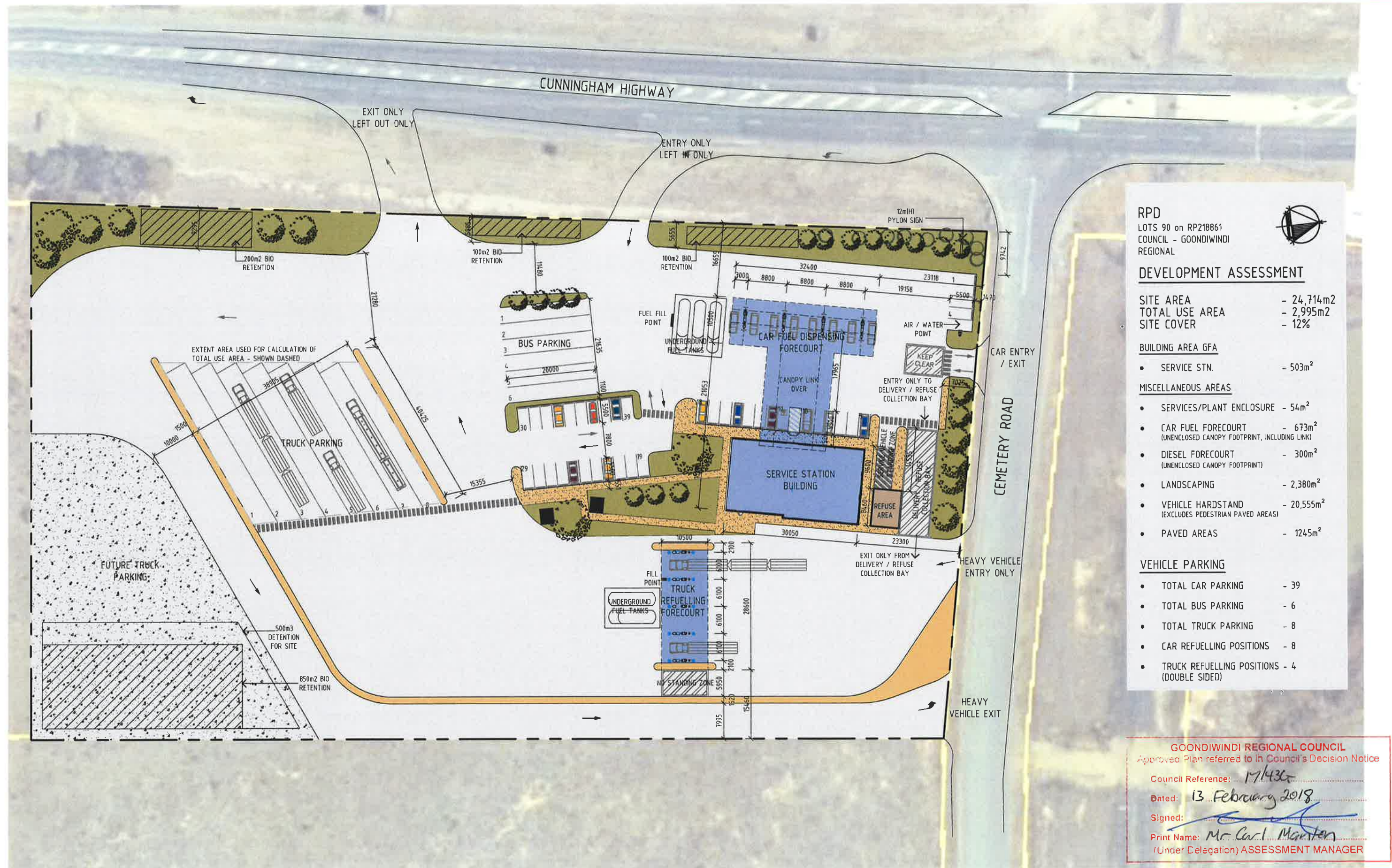


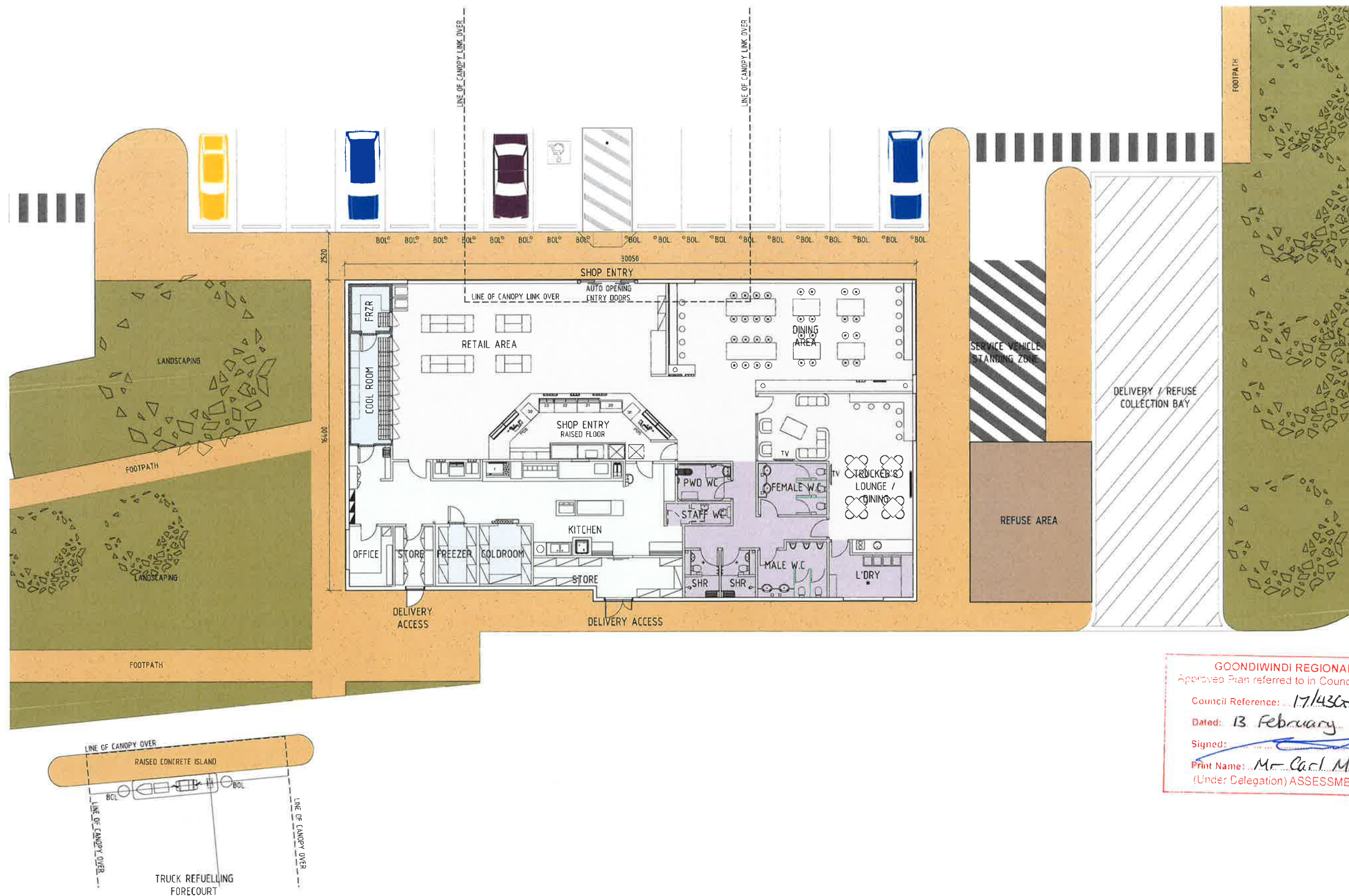
Attachment 2 – Approved Plans





GOONDIWINDI REGIONAL COUNCIL
 Approved Plan referred to in Council's Decision Notice
 Council Reference: **17/436**
 Dated: **13 February 2018**
 Signed: *[Signature]*
 Print Name: **Mr. Carl Manton**
 (Under Delegation) ASSESSMENT MANAGER






GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice

Council Reference: 17/436x

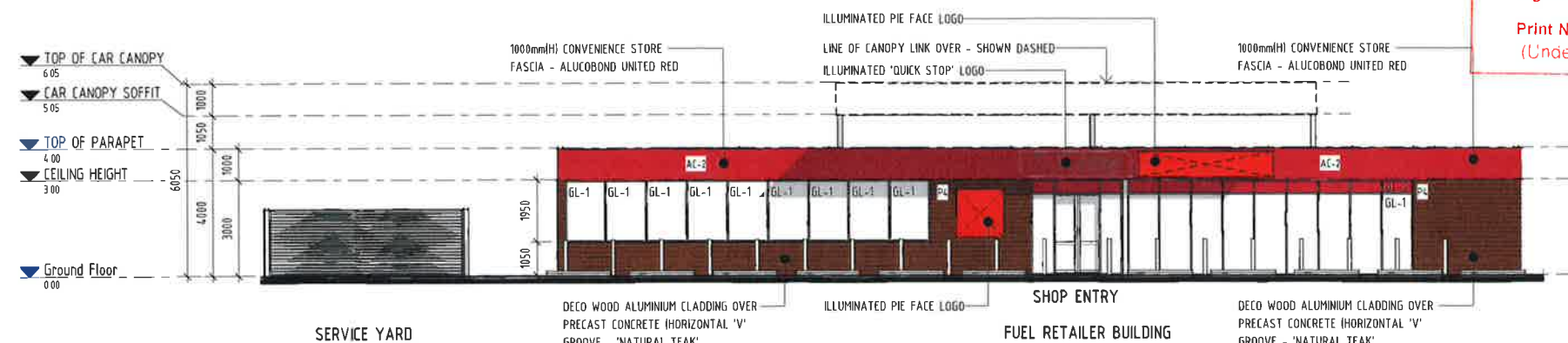
Dated: 13 February 2018

Signed: *[Signature]*

Print Name: Mr. Carl Munter
(Under Delegation) ASSESSMENT MANAGER

GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice
Council Reference: 17/436
Dated: 13 February 2018
Signed: 
Print Name: Mr. Carl Manton
(Under Delegation) ASSESSMENT MANAGER

PRELIMINARY
THIS DRAWING IS NOT
FOR CONSTRUCTION



1 ELEVATION - WEST
1:100

ALL DIMENSIONS ARE FROM FLOOR LEVEL UNLESS NOTED OTHERWISE

NOTE: - ALL ALUCOBOND CLADDING TO BE 4MM THICK UTILISING THE FLAT STICK METHOD WITH AN ALUCOBOND BACKING IN THE SAME MATERIAL AS THE CLADDING FIXED IN PLACE WHERE A JOINT EXISTS AND THE ALUCOBOND PANELS FIXED TO THE BACKING PLATE BY 3M VHB DOUBLE SIDED TAPE 4991 WITH A 3MM JOINT BETWEEN PANELS AND NO CAULKING

COLOUR

- AC-1 - CANOPY FASCIA - UNITED BLUE
- AC-2 - STORE FASCIA - UNITED RED
- P1 - STEEL COLUMN ALUCOBOND - UNITED WHITE
- P2 - EXTERNAL WALLS PAINT DULUX - VIVID WHITE
- P3 - DOORS & WINDOWS POWDERCOATED BLACK
- P4 - PRECAST CONCRETE WITH DECO CLAD DECO WOOD ALUMINIUM CLADDING - HORIZONTAL 'V' GROOVE PROFILE - COLOUR: NATURAL TEAK
- GL-1 CLEAR GLAZING TO CODE, BCA & RELEVANT STANDARDS
- GL-2 OPAQUE RED GLAZING TO CODE, BCA & RELEVANT STANDARDS



2 PERSPECTIVE VIEW 1



3 ELEVATION - SOUTH
1:100

CONSULTING ENGINEER



commercial / industrial / retail
fast food restaurant design
travel centre / service stations
project concept to completion

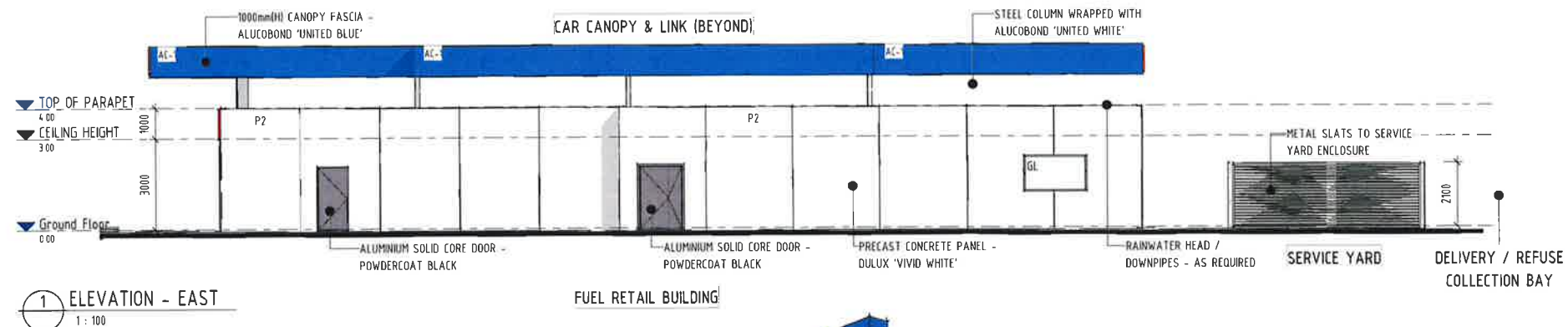
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Rev	Date	Drn	Description	Appr
P1	28/08/13	GN	PRELIMINARY ISSUE	
P2	01/09/13	GN	PRELIMINARY ISSUE	
P3	04/09/13	GN	PRELIMINARY ISSUE	

Project Description
PROPOSED TRUCKSTOP
Cnr CUNNINGHAM HWY & CEMETRY RD
GOONDOOWINDI QLD 4390
Scale @A1
1:100
Drawn: CWS
Date: AUG 2017
Approved by: GN

Drawing Title
BUILDING ELEVATIONS & PERSPECTIVES
Job Number - Drawing Number
17012 DA03
Revision: P3

PRELIMINARY
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FOR CONSTRUCTION



GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice
Council Reference: 17/436
Dated: 13 February 2018
Signed:
Print Name: Mr. Carl Mantou
(Under Delegation) ASSESSMENT MANAGER

ALL DIMENSIONS ARE FROM FLOOR LEVEL UNLESS NOTED OTHERWISE

NOTE - ALL ALUCOBOND CLADDING TO BE 4MM THICK UTILISING THE FLAT STICK METHOD WITH AN ALUCOBOND BACKING IN THE SAME MATERIAL AS THE CLADDING FIXED IN PLACE WHERE A JOINT EXISTS AND THE ALUCOBOND PANELS FIXED TO THE BACKING PLATE BY 3M VHB DOUBLE SIDED TAPE 4991 WITH A 3MM JOINT BETWEEN PANELS AND NO CAULKING

COLOUR

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- GL-2 OPAQUE RED GLAZING TO CODE, BCA & RELEVANT STANDARDS



CONSULTING ENGINEER



commercial / industrial / retail
fast food restaurant design
travelcentre / service stations
project concept to completion

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Revision and approvals				Description	Appr
Rev	Date	By	Check		
P1	28.08.17	GN		PRELIMINARY ISSUE	
P2	01.09.17	GN		PRELIMINARY ISSUE	
P3	08.09.17	GN		PRELIMINARY ISSUE	

Project Description
PROPOSED TRUCKSTOP
Cnr CUNNINGHAM HWY & CEMETRY RD
GOONDOOWINDI QLD 4390

Scale (BAT)
1 : 100

Drawn
CWS


Date
AUS 2017

Approved By
GN

Drawing Title
BUILDING ELEVATIONS & PERSPECTIVES

Job Number - Drawing Number
17012 DA04

Revision
P3

Council Reference: 14/436
Dated: 13 February 2018
Signed: 
Print Name: Mr Carl Minton
(Under Delegation) ASSESSMENT MANAGER

COLOUR

- | | |
|---|---|
|  | AC-1 - CANOPY FASCIA
- UNITED BLUE |
|  | AC-2 - STORE FASCIA
- UNITED RED |
|  | P1 - STEEL COLUMN
ALUCOBOND - UNITED WHITE |
|  | P2 - EXTERNAL WALLS
PAINT DULUX - VIVID WHITE |
|  | P3 - DOORS & WINDOWS
POWDERCOATED BLACK |
|  | P4 - PRECAST CONCRETE WITH DECO
CLAD DECO WOOD ALUMINIUM
CLADDING - HORIZONTAL 'V' GROOVE
PROFILE - COLOUR: NATURAL TEAK |
|  | GL-1 CLEAR GLAZING TO CODE,
BCA & RELEVANT STANDARDS |
|  | GL-2 OPAQUE RED GLAZING TO CODE,
BCA & RELEVANT STANDARDS |

ALL DIMENSIONS ARE FROM FLOOR LEVEL UNLESS NOTED OTHERWISE

NOTE: - ALL ALUCOBOND CLADDING TO BE 4MM THICK UTILISING THE FLAT STICK METHOD WITH AN ALUCOBOND BACKING IN THE SAME MATERIAL AS THE CLADDING FIXED IN PLACE WHERE A JOINT EXISTS AND THE ALUCOBOND PANELS FIXED TO THE BACKING PLATE BY 3M V8H DOUBLE SIDED TAPE 4991 WITH A 3MM JOINT BETWEEN PANELS AND NO CAULKING



VERVE
BUILDING DESIGN CO.

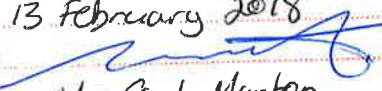
BUILDING DESIGNERS LICENSE NO. 166797
CORPORATE: 1-800-368-0000 FAX: 415-351-1000
www.vervedesign.com

- | | |
|---|--|
| <input type="checkbox"/> commercial / industrial / retail | ② 2015 copyright all rights reserved. |
| <input type="checkbox"/> fast food restaurant design | The drawing is the copyright of the
architectural firm. It should not be
used or distributed without the firm's
written permission. |
| <input type="checkbox"/> travel centre / service stations | 2015/01/16 10:10:10 |
| <input type="checkbox"/> project concept to completion | Check all dimensions on site prior
to construction of walls. |

[illegible]

Project Description	PROPOSED TRUCKSTOP	
cnr CUNNINGHAM HWY & CEMETRY RD		
GOONDOOWINDI QLD 4390		
Scale @A1 1:100	Date	15/02/17
Drawn	Approved By	

Drawing Title		BUILDING ELEVATIONS & PERSPECTIVES	
Job Number - Drawing Number		17012	DA05
			P2

GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice
Council Reference: 17/436
Dated: 13 February 2018
Signed: 
Print Name: Mr. Carl Manton
(Under Delegation) ASSESSMENT MANAGER

PRELIMINARY
THIS DRAWING IS NOT
FOR CONSTRUCTION



1 OVERALL SITE PERSPECTIVE 1



2 OVERALL SITE PERSPECTIVE 2

VERVE SCHEDULES DISCLAIMER:
1. ALL SCHEDULES SHOULD BE CHECKED WITH THE REMAINDER OF THE DRAWING SET.
2. SCHEDULED RATES AND AREAS ARE INTENDED FOR ASSISTANCE ONLY. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF QUANTITIES.
3. ANY DISCREPANCIES IN SCHEDULES SHOULD BE IDENTIFIED TO THE AUTHOR NOTED.
4. ALL AREAS ARE GROSS AREAS, UNLESS NOTED OTHERWISE.

CONSULTING ENGINEER



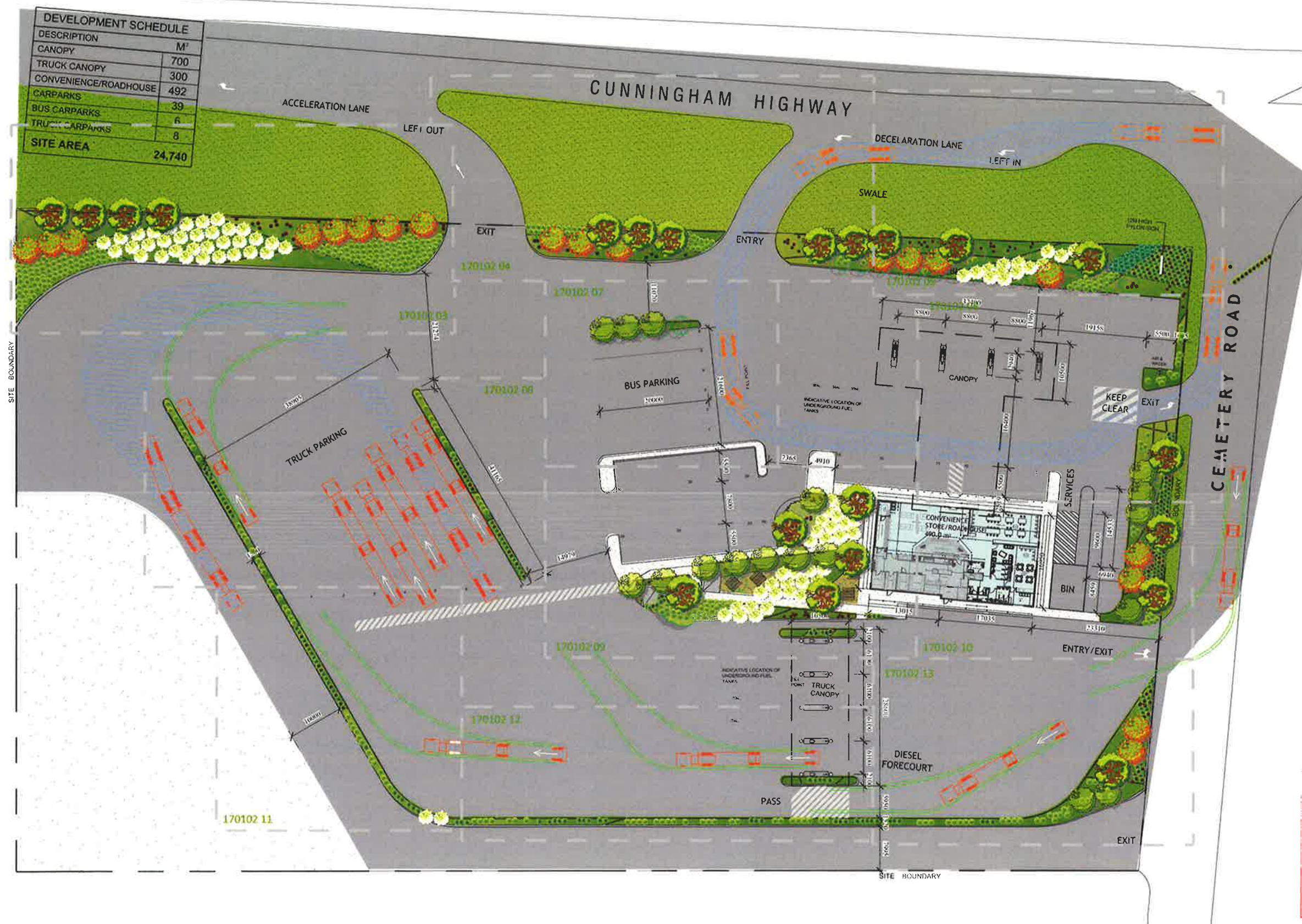
commercial / industrial / retail
fast food restaurant design
travel centre / service stations
project concept to completion

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Do not scale this drawing
Check all dimensions on site prior to construction of works.

Revision and approvals				Description		Appr.	
Rev	Date	By	Appr				
P1	28.08.17	GN		PRELIMINARY ISSUE			
P2	06.09.17	GN		PRELIMINARY ISSUE			

Project Description
PROPOSED TRUCKSTOP
cnr CUNNINGHAM HWY & CEMETRY RD
GOONDOOWINDI QLD 4390
Scale: @A1
Date: AUG 2017
Approved By: GN
Drawn: CWS

Drawing Title
OVERALL SITE PERSPECTIVES
Job Number - Drawing Number
17012 DA06
Revision
P2



GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice

Council Reference: 17/143G

Dated: 13 February 2018

Signed: *[Signature]*

Print Name: Mr. Carl Manton
(Under Delegation) ASSESSMENT MANAGER

NOTES

Use figured dimensions in preference to scaled.

Notify the Landscape Designer before proceeding if any anomaly is found between this drawing and conditions on site.

Details not certified for construction. Contractor responsible for structural engineering certifications, hydraulic certifications & building approvals. Levels taken from information provided from the Client's site setup plan. Confirm all finished levels on site prior to excavation.

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Attn: Developer/Builder
Landscape Compliance Certification may be necessary at BA Stage of development. Please contact Landscape Designer for Detailed Landscape Design to complete approval package requirements (04 1616 9858)

Not for Construction

DRAWING

master plan

drawing no. 170102 02
drawn rs
scale 1:750 @ A3

north



CLIENT

NICLIN GROUP

PROJECT

170102

2-12 Cemetery Road
Goondiwindi QLD 4390

ISSUE
25/08/17

A



Attachment 3 – Infrastructure Charges Notice





Goondiwindi Customer Service Centre
4 McLean Street
Goondiwindi
Inglewood Customer Service Centre
18 Elizabeth Street
Inglewood

Locked Mail Bag 7
Inglewood QLD 4387

Telephone: 07 4671 7400
Fax: 07 4671 7433

Email: mail@grc.qld.gov.au

Infrastructure Charges Notice

Address	2-12 Cemetery Road, Goondiwindi
Owner	Hatia Goondiwindi Pty Ltd TTE Hatia Goondiwindi Trust
Applicant	Niclin No. 1 Pty Ltd ATF the NCA Trust c/- DTS Group Qld Pty Ltd
Application No.	17/43G
Lot and Survey Plan	Lot 90 on RP218861
Date	13 February 2018
Approval	Development Permit – Material Change of Use

Development Application Details
<i>"Industrial activities" – "Service station"</i>

Type of Charge	Charge Area (A, B, C, D or E)	Type of Charge	Charge Amount (\$)	Unit	Total Charge (\$)
Commercial (Retail)	A	Infrastructure	8.00 per m ² of GFA	503m ²	4,024
		Stormwater	1.00 per m ² IA	22,303m ²	22,303

Due Date	When the change of use happens	Total Charge (\$)	\$26,327
Charge to be paid to	Goondiwindi Regional Council		
Lapse Date	13 February 2024		

Authorized by:

Print Name: **Mr Carl Manton**
Chief Executive Officer

In accordance with the Planning Act 2016

Office Use – Receipt Number

Charges – 1250-1150-0000

Drainage – 1250-1151-0000

An offset has been applied to this notice for any existing buildings GFA \$8 per m², and \$1 per m² of any existing impervious areas.





Attachment 4 – Notice about decision - Statement of reasons



Notice about decision - Statement of reasons

The following information is provided in accordance with section 63 (5) of the *Planning Act 2016* and must be published on the assessment managers website

The development application for "*Industrial activities*" – "*Service station*"

17/43G

2-12 Cemetery Road, Goondiwindi

Lot 90 on RP218861

On 13 February 2018, the above development application was:

- ☐ approved in full or
☐ approved in part for _____ or
☒ approved in full with conditions or
☐ approved in part for _____,
with conditions or
☐ refused.

1. Reasons for the decision

The reasons for this decision are:

- Having regard to the relevant criteria in the Industrial Zone code of the *2006 Planning Scheme for the former Goondiwindi Town Council*, the proposed development satisfied all relevant criteria, and was approved subject to appropriate, relevant and reasonable conditions.

2. Assessment benchmarks

The following are the benchmarks applying for this development:

Benchmarks applying for the development	Benchmark reference
Industrial Zone Code	<i>2006 Planning Scheme for the former Goondiwindi Town Council:</i> AS2.1, AS2.2, PC3, AS4, AS5, AS6.1, AS6.2, AS7, PC8, AS9.1, AS10, AS11.1, PC12, AS13, AS14, AS15, AS16.1, AS16.2, AS16.3, AS20, AS21.1, AS21.2, PC22, PC23, PC24, AS25.1, AS25.2, AS25.3, AS26, PC28

3. Compliance with benchmarks

Not applicable, as the proposed development complied with all applicable benchmarks.

4. Relevant matters for impact assessable development

Not applicable, as the proposed development was code assessable.

5. Matters raised in submissions for impact assessable development

Not applicable, as the proposed development was code assessable.

6. Matters prescribed by Regulation

Not applicable for this proposed development.



Attachment 5 – Rights of Appeal Waiver



Attachment 5: Rights of Appeal Waiver

Planning Act 2016
Rights of Appeal Waiver

Purpose of this form: *This form will be used to process your request to waive your appeal rights to process your approval without unnecessary delay.*

Applicant:	
File Number:	
Property Address:	

This is to confirm that I/We have received the above approval and agree to the conditions contained therein. I/We hereby waive my/our appeal rights available under the *Planning Act 2016*.

Name		Name	
Signature		Signature	
Date		Date	

Please return this form to:

Fax: (07) 4671 7433

Post: LMB 7, Inglewood QLD 4387

Email: mail@grc.qld.gov.au

In person: Council Chambers, 4 McLean Street, Goondiwindi QLD 4390
Goondiwindi Civic Centre, 100 Marshall Street, Goondiwindi QLD 4390
Inglewood Customer Service Centre, 18 Elizabeth Street, Inglewood QLD 4387
Texas Customer Service Centre, High Street, Texas QLD 4385

Privacy Statement

This information collected on this Form will be used by the Goondiwindi Regional Council in accordance with the processing and assessment of your application. Your personal details will not be disclosed for a purpose outside of Council policy, except where required by legislation (including the *Information Privacy Act 2009*) or as required by the Queensland State Government. This information may be stored in the Council database.



Attachment 6 – *Planning Act 2016* Extracts



EXTRACT FROM *PLANNING ACT 2016* RELATING TO APPEAL RIGHTS

Chapter 6 Dispute Resolution, Part 1 Appeal Rights

229 Appeals to tribunal or P&E Court

(1) *Schedule 1 states—*

(a) *matters that may be appealed to—*

(i) *either a tribunal or the P&E Court; or*

(ii) *only a tribunal; or*

(iii) *only the P&E Court; and*

(b) *the person—*

(i) *who may appeal a matter (the appellant); and*

(ii) *who is a respondent in an appeal of the matter; and*

(iii) *who is a co-respondent in an appeal of the matter; and*

(iv) *who may elect to be a co-respondent in an appeal of the matter.*

(2) *An appellant may start an appeal within the appeal period.*

(3) *The appeal period is—*

(a) *for an appeal by a building advisory agency—10 business days after a decision notice for the decision is given to the agency; or*

(b) *for an appeal against a deemed refusal—at any time after the deemed refusal happens; or*

(c) *for an appeal against a decision of the Minister, under chapter 7, part 4, to register premises or to renew the registration of premises—20 business days after a notice is published under section 269(3)(a) or (4); or*

(d) *for an appeal against an infrastructure charges notice—20 business days after the infrastructure charges notice is given to the person; or*

(e) *for an appeal about a deemed approval of a development application for which a decision notice has not been given—30 business days after the applicant gives the*

deemed approval notice to the assessment manager; or

(f) *for any other appeal—20 business days after a notice of the decision for the matter, including an enforcement notice, is given to the person.*

Note—

See the P&E Court Act for the court's power to extend the appeal period.

(4) *Each respondent and co-respondent for an appeal may be heard in the appeal.*

(5) *If an appeal is only about a referral agency's response, the assessment manager may apply to the tribunal or P&E Court to withdraw from the appeal.*

(6) *To remove any doubt, it is declared that an appeal against an infrastructure charges notice must not be about—*

(a) *the adopted charge itself; or*

(b) *for a decision about an offset or refund—*

(i) *the establishment cost of trunk infrastructure identified in a LGIP; or*

(ii) *the cost of infrastructure decided using the method included in the local government's charges resolution.*

230 Notice of appeal

(1) *An appellant starts an appeal by lodging, with the registrar of the tribunal or P&E Court, a notice of appeal that—*

(a) *is in the approved form; and*

(b) *succinctly states the grounds of the appeal.*

(2) *The notice of appeal must be accompanied by the required fee.*

(3) *The appellant or, for an appeal to a tribunal, the registrar must, within the service period, give a copy of the notice of appeal to—*

(a) *the respondent for the appeal; and*

(b) *each co-respondent for the appeal; and*

(c) *for an appeal about a development application under schedule 1, table 1, item 1—each*

principal submitter for the development application; and

- (d) for an appeal about a change application under schedule 1, table 1, item 2—each principal submitter for the change application; and
- (e) each person who may elect to become a co-respondent for the appeal, other than an eligible submitter who is not a principal submitter in an appeal under paragraph (c) or (d); and
- (f) for an appeal to the P&E Court—the chief executive; and
- (g) for an appeal to a tribunal under another Act—any other person who the registrar considers appropriate.

(4) The **service period** is—

- (a) if a submitter or advice agency started the appeal in the P&E Court—2 business days after the appeal is started; or
 - (b) otherwise—10 business days after the appeal is started.
- (5) A notice of appeal given to a person who may elect to be a co-respondent must state the effect of subsection (6).
- (6) A person elects to be a co-respondent by filing a notice of election, in the approved form, within 10 business days after the notice of appeal is given to the person.

231 Other appeals

- (1) Subject to this chapter, schedule 1 and the P&E Court Act, unless the Supreme Court decides a decision or other matter under this Act is affected by jurisdictional error, the decision or matter is non-appealable.
- (2) The Judicial Review Act 1991, part 5 applies to the decision or matter to the extent it is affected by jurisdictional error.
- (3) A person who, but for subsection (1) could have made an application under the Judicial Review Act 1991 in relation to the decision or matter, may apply under part 4 of that Act for a statement of reasons in relation to the decision or matter.

(4) In this section—

decision includes—

- (a) conduct engaged in for the purpose of making a decision; and
- (b) other conduct that relates to the making of a decision; and
- (c) the making of a decision or the failure to make a decision; and
- (d) a purported decision; and
- (e) a deemed refusal.

non-appealable, for a decision or matter, means the decision or matter—

- (a) is final and conclusive; and
- (b) may not be challenged, appealed against, reviewed, quashed, set aside or called into question in any other way under the Judicial Review Act 1991 or otherwise, whether by the Supreme Court, another court, a tribunal or another entity; and
- (c) is not subject to any declaratory, injunctive or other order of the Supreme Court, another court, a tribunal or another entity on any ground.

232 Rules of the P&E Court

- (1) A person who is appealing to the P&E Court must comply with the rules of the court that apply to the appeal.
- (2) However, the P&E Court may hear and decide an appeal even if the person has not complied with rules of the P&E Court.

Part 2 Development tribunal

Division 1 General

233 Appointment of referees

- (1) The Minister, or chief executive, (the appointer) may appoint a person to be a referee, by an appointment notice, if the appointer considers the person—
 - (a) has the qualifications or experience prescribed by regulation; and
 - (b) has demonstrated an ability—
 - (i) to negotiate and mediate outcomes between parties to a proceeding; and

(ii) to apply the principles of natural justice; and

(iii) to analyse complex technical issues; and

(iv) to communicate effectively, including, for example, to write informed succinct and well-organised decisions, reports, submissions or other documents.

(2) The appointer may—

(a) appoint a referee for the term, of not more than 3 years, stated in the appointment notice; and

(b) reappoint a referee, by notice, for further terms of not more than 3 years.

(3) If an appointer appoints a public service officer as a referee, the officer holds the appointment concurrently with any other appointment that the officer holds in the public service.

(4) A referee must not sit on a tribunal unless the referee has given a declaration, in the approved form and signed by the referee, to the chief executive.

(5) The appointer may cancel a referee's appointment at any time by giving a notice, signed by the appointer, to the referee.

(6) A referee may resign the referee's appointment at any time by giving a notice, signed by the referee, to the appointer.

(7) In this section—

appointment notice means—

(a) if the Minister gives the notice—a gazette notice; or

(b) if the chief executive gives the notice—a notice given to the person appointed as a referee.

234 Referee with conflict of interest

(1) This section applies if the chief executive informs a referee that the chief executive proposes to appoint the referee as a tribunal member, and either or both of the following apply—

(a) the tribunal is to hear a matter about premises—

(i) the referee owns; or

(ii) for which the referee was, is, or is to be, an architect, builder, drainer, engineer, planner, plumber, plumbing inspector, certifier, site evaluator or soil assessor; or

(iii) for which the referee has been, is, or will be, engaged by any party in the referee's capacity as an accountant, lawyer or other professional; or

(iv) situated or to be situated in the area of a local government of which the referee is an officer, employee or councillor;

(b) the referee has a direct or indirect personal interest in a matter to be considered by the tribunal, and the interest could conflict with the proper performance of the referee's functions for the tribunal's consideration of the matter.

(2) However, this section does not apply to a referee only because the referee previously acted in relation to the preparation of a relevant local planning instrument.

(3) The referee must notify the chief executive that this section applies to the referee, and on doing so, the chief executive must not appoint the referee to the tribunal.

(4) If a tribunal member is, or becomes, aware the member should not have been appointed to the tribunal, the member must not act, or continue to act, as a member of the tribunal.

235 Establishing development tribunal

(1) The chief executive may at any time establish a tribunal, consisting of up to 5 referees, for tribunal proceedings.

(2) The chief executive may appoint a referee for tribunal proceedings if the chief executive considers the referee has the qualifications or experience for the proceedings.

(3) The chief executive must appoint a referee as the chairperson for each tribunal.

(4) A regulation may specify the qualifications or experience required for particular proceedings.

(5) After a tribunal is established, the tribunal's membership must not be changed.

236 Remuneration

A tribunal member must be paid the remuneration the Governor in Council decides.

237 Tribunal proceedings

- (1) A tribunal must ensure all persons before the tribunal are afforded natural justice.*
- (2) A tribunal must make its decisions in a timely way.*
- (3) A tribunal may—*
 - (a) conduct its business as the tribunal considers appropriate, subject to a regulation made for this section; and*
 - (b) sit at the times and places the tribunal decides; and*
 - (c) hear an appeal and application for a declaration together; and*
 - (d) hear 2 or more appeals or applications for a declaration together.*
- (4) A regulation may provide for—*
 - (a) the way in which a tribunal is to operate, including the qualifications of the chairperson of the tribunal for particular proceedings; or*
 - (b) the required fee for tribunal proceedings.*

238 Registrar and other officers

- (1) The chief executive may, by gazette notice, appoint—*
 - (a) a registrar; and*
 - (b) other officers (including persons who are public service officers) as the chief executive considers appropriate to help a tribunal perform its functions.*
- (2) A person may hold the appointment or assist concurrently with any other public service appointment that the person holds.*

Division 2 Applications for declarations

239 Starting proceedings for declarations

- (1) A person may start proceedings for a declaration by a tribunal by filing an application, in the approved form, with the registrar.*
- (2) The application must be accompanied by the required fee.*

240 Application for declaration about making of development application

- (1) The following persons may start proceedings for a declaration about whether a development application is properly made—*
 - (a) the applicant;*
 - (b) the assessment manager.*
- (2) However, a person may not seek a declaration under this section about whether a development application is accompanied by the written consent of the owner of the premises to the application.*
- (3) The proceedings must be started by—*
 - (a) the applicant within 20 business days after receiving notice from the assessment manager, under the development assessment rules, that the development application is not properly made; or*
 - (b) the assessment manager within 10 business days after receiving the development application.*
- (4) The registrar must, within 10 business days after the proceedings start, give notice of the proceedings to the respondent as a party to the proceedings.*
- (5) In this section—*

respondent means—

- (a) if the applicant started the proceedings—the assessment manager; or*
- (b) if the assessment manager started the proceedings—the applicant.*

241 Application for declaration about change to development approval

- (1) This section applies to a change application for a development approval if—*
 - (a) the approval is for a material change of use of premises that involves the use of a classified building; and*
 - (b) the responsible entity for the change application is not the P&E Court.*
- (2) The applicant, or responsible entity, for the change application may start proceedings for a*

declaration about whether the proposed change to the approval is a minor change.

- (3) The registrar must, within 10 business days after the proceedings start, give notice of the proceedings to the respondent as a party to the proceedings.

- (4) In this section—

respondent means—

- (a) if the applicant started the proceedings—the responsible entity; or
- (b) if the responsible entity started the proceedings—the applicant.

Division 3 Tribunal proceedings for appeals and declarations

242 Action when proceedings start

If a document starting tribunal proceedings is filed with the registrar within the period required under this Act, and is accompanied by the required fee, the chief executive must—

- (a) establish a tribunal for the proceedings; and
- (b) appoint 1 of the referees for the tribunal as the tribunal's chairperson, in the way required under a regulation; and
- (c) give notice of the establishment of the tribunal to each party to the proceedings.

243 Chief executive excusing noncompliance

- (1) This section applies if—

- (a) the registrar receives a document purporting to start tribunal proceedings, accompanied by the required fee; and
- (b) the document does not comply with any requirement under this Act for validly starting the proceedings.

- (2) The chief executive must consider the document and decide whether or not it is reasonable in the circumstances to excuse the noncompliance (because it would not cause substantial injustice in the proceedings, for example).

- (3) If the chief executive decides not to excuse the noncompliance, the chief executive must give a notice stating that the document is of no effect,

because of the noncompliance, to the person who filed the document.

- (4) The chief executive must give the notice within 10 business days after the document is given to the chief executive.

- (5) If the chief executive does excuse the noncompliance, the chief executive may act under section 242 as if the noncompliance had not happened.

244 Ending tribunal proceedings or establishing new tribunal

- (1) The chief executive may decide not to establish a tribunal when a document starting tribunal proceedings is filed, if the chief executive considers it is not reasonably practicable to establish a tribunal.

Examples of when it is not reasonably practicable to establish a tribunal—

- there are no qualified referees or insufficient qualified referees because of a conflict of interest
- the referees who are available will not be able to decide the proceedings in a timely way

- (2) If the chief executive considers a tribunal established for tribunal proceedings—

(a) does not have the expertise to hear or decide the proceedings; or

(b) is not able to make a decision for proceedings (because of a tribunal member's conflict of interest, for example); the chief executive may decide to suspend the proceedings and establish another tribunal, complying with section 242(c), to hear or re-hear the proceedings.

- (3) However, the chief executive may instead decide to end the proceedings if the chief executive considers it is not reasonably practicable to establish another tribunal to hear or re-hear the proceedings.

- (4) If the chief executive makes a decision under subsection (1) or (3), the chief executive must give a decision notice about the decision to the parties to the proceedings.

- (5) Any period for starting proceedings in the P&E Court, for the matter that is the subject of the tribunal proceedings, starts again when the chief

executive gives the decision notice to the party who started the proceedings.

- (6) *The decision notice must state the effect of subsection (5).*

245 Refunding fees

The chief executive may, but need not, refund all or part of the fee paid to start proceedings if the chief executive decides under section 244—

- (a) not to establish a tribunal; or*
- (b) to end the proceedings.*

246 Further material for tribunal proceedings

- (1) *The registrar may, at any time, ask a person to give the registrar any information that the registrar reasonably requires for the proceedings.*

Examples of information that the registrar may require—

- material about the proceedings (plans, for example)*
- information to help the chief executive decide whether to excuse noncompliance under section 243*
- for a deemed refusal—a statement of the reasons why the entity responsible for deciding the application had not decided the application during the period for deciding the application.*

- (2) *The person must give the information to the registrar within 10 business days after the registrar asks for the information.*

247 Representation of Minister if State interest involved

If, before tribunal proceedings are decided, the Minister decides the proceedings involve a State interest, the Minister may be represented in the proceedings.

248 Representation of parties at hearing

A party to tribunal proceedings may appear—

- (a) in person; or*
- (b) by an agent who is not a lawyer.*

249 Conduct of tribunal proceedings

- (1) *Subject to section 237, the chairperson of a tribunal must decide how tribunal proceedings are to be conducted.*

- (2) *The tribunal may decide the proceedings on submissions if the parties agree.*

- (3) *If the proceedings are to be decided on submissions, the tribunal must give all parties a notice asking for the submissions to be made to the tribunal within a stated reasonable period.*

- (4) *Otherwise, the tribunal must give notice of the time and place of the hearing to all parties.*

- (5) *The tribunal may decide the proceedings without a party's submission (written or oral) if—*

- (a) for proceedings to be decided on submissions—the party's submission is not received within the time stated in the notice given under subsection (3); or*

- (b) for proceedings to be decided by hearing—the person, or the person's agent, does not appear at the hearing.*

- (6) *When hearing proceedings, the tribunal—*

- (a) need not proceed in a formal way; and*
- (b) is not bound by the rules of evidence; and*
- (c) may inform itself in the way it considers appropriate; and*
- (d) may seek the views of any person; and*
- (e) must ensure all persons appearing before the tribunal have a reasonable opportunity to be heard; and*
- (f) may prohibit or regulate questioning in the hearing.*

- (7) *If, because of the time available for the proceedings, a person does not have an opportunity to be heard, or fully heard, the person may make a submission to the tribunal.*

250 Tribunal directions or orders

A tribunal may, at any time during tribunal proceedings, make any direction or order that the tribunal considers appropriate.

Examples of directions—

- a direction to an applicant about how to make their development application comply with this Act
- a direction to an assessment manager to assess a development application, even though the referral agency's response to the assessment manager was to refuse the application

251 Matters tribunal may consider

- (1) This section applies to tribunal proceedings about—
 - (a) a development application or change application; or
 - (b) an application or request (however called) under the Building Act or the Plumbing and Drainage Act.
- (2) The tribunal must decide the proceedings based on the laws in effect when—
 - (a) the application or request was properly made; or
 - (b) if the application or request was not required to be properly made—the application or request was made.
- (3) However, the tribunal may give the weight that the tribunal considers appropriate, in the circumstances, to any new laws.

252 Deciding no jurisdiction for tribunal proceedings

- (1) A tribunal may decide that the tribunal has no jurisdiction for tribunal proceedings, at any time before the proceedings are decided—
 - (a) on the tribunal's initiative; or
 - (b) on the application of a party.
- (2) If the tribunal decides that the tribunal has no jurisdiction, the tribunal must give a decision notice about the decision to all parties to the proceedings.
- (3) Any period for starting proceedings in the P&E Court, for the matter that is the subject of the tribunal proceedings, starts again when the tribunal gives the decision notice to the party who started the proceedings.

- (4) The decision notice must state the effect of subsection (3).
- (5) If the tribunal decides to end the proceedings, the fee paid to start the proceedings is not refundable.

253 Conduct of appeals

- (1) This section applies to an appeal to a tribunal.
- (2) Generally, the appellant must establish the appeal should be upheld.
- (3) However, for an appeal by the recipient of an enforcement notice, the enforcement authority that gave the notice must establish the appeal should be dismissed.
- (4) The tribunal must hear and decide the appeal by way of a reconsideration of the evidence that was before the person who made the decision appealed against.
- (5) However, the tribunal may, but need not, consider—
 - (a) other evidence presented by a party to the appeal with leave of the tribunal; or
 - (b) any information provided under section 246.

254 Deciding appeals to tribunal

- (1) This section applies to an appeal to a tribunal against a decision.
- (2) The tribunal must decide the appeal by—
 - (a) confirming the decision; or
 - (b) changing the decision; or
 - (c) replacing the decision with another decision; or
 - (d) setting the decision aside, and ordering the person who made the decision to remake the decision by a stated time; or
 - (e) for a deemed refusal of an application—
 - (i) ordering the entity responsible for deciding the application to decide the application by a stated time and, if the entity does not comply with the order, deciding the application; or
 - (ii) deciding the application.

(3) However, the tribunal must not make a change, other than a minor change, to a development application.

(4) The tribunal's decision takes the place of the decision appealed against.

(5) The tribunal's decision starts to have effect—

(a) if a party does not appeal the decision—at the end of the appeal period for the decision; or

(b) if a party appeals against the decision to the P&E Court—subject to the decision of the court, when the appeal ends.

255 Notice of tribunal's decision

A tribunal must give a decision notice about the tribunal's decision for tribunal proceedings, other than for any directions or interim orders given by the tribunal, to all parties to proceedings.

256 No costs orders

A tribunal must not make any order as to costs.

257 Recipient's notice of compliance with direction or order

If a tribunal directs or orders a party to do something, the party must notify the registrar when the thing is done.

258 Tribunal may extend period to take action

(1) This section applies if, under this chapter, an action for tribunal proceedings must be taken within a stated period or before a stated time, even if the period has ended or the time has passed.

(2) The tribunal may allow a longer period or a different time to take the action if the tribunal considers there are sufficient grounds for the extension.

259 Publication of tribunal decisions

The registrar must publish tribunal decisions under the arrangements, and in the way, that the chief executive decides.

Schedule 1 Appeals

section 229

Appeal rights and parties to appeals

(1) Table 1 states the matters that may be appealed to—

(a) the P&E court; or

(b) a tribunal.

(2) However, table 1 applies to a tribunal only if the matter involves—

(a) the refusal, or deemed refusal of a development application, for—

(i) a material change of use for a classified building; or

(ii) operational work associated with building work, a retaining wall, or a tennis court; or

(b) a provision of a development approval for—

(i) a material change of use for a classified building; or

(ii) operational work associated with building work, a retaining wall, or a tennis court; or

(c) if a development permit was applied for—the decision to give a preliminary approval for—

(i) a material change of use for a classified building; or

(ii) operational work associated with building work, a retaining wall, or a tennis court; or

(d) a development condition if—

(i) the development approval is only for a material change of use that involves the use of a building classified under the Building Code as a class 2 building; and

(ii) the building is, or is proposed to be, not more than 3 storeys; and

(iii) the proposed development is for not more than 60 sole-occupancy units; or

(e) a decision for, or a deemed refusal of, an extension application for a development approval that is only for a material change of use of a classified building; or

(f) a decision for, or a deemed refusal of, a change

application for a development approval that is only for a material change of use of a classified building; or

(g) a matter under this Act, to the extent the matter relates to the Building Act, other than a matter under that Act that may or must be decided by the Queensland Building and Construction Commission; or

(h) a decision to give an enforcement notice—

(i) in relation to a matter under paragraphs (a) to (g); or

(ii) under the Plumbing and Drainage Act; or

(i) an infrastructure charges notice; or

(j) the refusal, or deemed refusal, of a conversion application; or

(l) a matter prescribed by regulation.

(3) Also, table 1 does not apply to a tribunal if the matter involves—

(a) for a matter in subsection (2)(a) to (d)—

(i) a development approval for which the development application required impact assessment; and

(ii) a development approval in relation to which the assessment manager received a property made submission for the development application; or

(b) a provision of a development approval about the identification or inclusion, under a variation approval, of a matter for the development.

(4) Table 2 states the matters that may be appealed only to the P&E Court.

(5) Table 3 states the matters that may be appealed only to the tribunal.

(6) In each table—

(a) column 1 states the appellant in the appeal; and

(b) column 2 states the respondent in the appeal; and

(c) column 3 states the co-respondent (if any) in the appeal; and

(d) column 4 states the co-respondents by election (if any) in the appeal.

(7) If the chief executive receives a notice of appeal under section 230(3)(f), the chief executive may elect to be a co-respondent in the appeal.

(8) In this section—

storey see the Building Code, part A1.1.

Table 1

Appeals to the P&E Court and, for certain matters, to a tribunal

1. Development applications

For a development application other than a development application called in by the

Minister, an appeal may be made against—

(a) the refusal of all or part of the development application; or

(b) the deemed refusal of the development application; or

(c) a provision of the development approval; or

(d) if a development permit was applied for—the decision to give a preliminary approval.

**EXTRACT FROM THE *PLANNING ACT 2016*
RELATING TO LAPSE DATES**

***Division 4 Lapsing of and extending
development approvals***

85 Lapsing of approval at end of current period

*(1) A part of a development approval lapses at the end of the following period (the **currency period**)—*

(a) for any part of the development approval relating to a material change of use—if the first change of use does not happen within—

(i) the period stated for that part of the approval; or

(ii) if no period is stated—6 years after the approval starts to have effect;

(b) for any part of the development approval relating to reconfiguring a lot—if a plan for the reconfiguration that, under the Land Title Act, is required to be given to a local government for approval is not given to the local government within—

(i) the period stated for that part of the approval; or

(ii) if no period is stated—4 years after the approval starts to have effect;

(c) for any other part of the development approval if the development does not substantially start within—

(i) the period stated for that part of the approval; or

(ii) if no period is stated—2 years after the approval starts to take effect.

(2) If part of a development approval lapses, any monetary security given for that part of the approval must be released.