



- DO NOT SCALE -

**Legend**  
 Existing Development - See BGP Drawing "EGL-BGP-01-XX-DR-C-52-00902"  
 Impermeable Area = 9399m<sup>2</sup>  
 Permeable Area = 2927m<sup>2</sup>  
**Proposed Development**  
 Impermeable Area = 7603m<sup>2</sup>  
 (20% reduction on existing)  
 Permeable Area = 4723m<sup>2</sup>

**Existing vs Proposed Discharge Rate**  
 A rainfall profile was created from Microdrainage for a 100yr 360 minute storm and provided a peak rainfall intensity of 39.205mm/hr.  
 The surface water discharge rate during this rain event based on the above rainfall intensity equates to:  
 Existing = 102,711 l/s  
 Proposed = 83,0 l/s  
 The existing discharge rate has been reduced by 20% for the proposed scheme.

The overall volume of runoff has also been reduced due to the reduction in total impermeable area.  
**IMPORTANT NOTE: THIS DRAWING IS TO BE READ IN CONJUNCTION WITH BGP DRAWING EXISTING IMPERMEABLE AREAS COMPARISON PLAN "EGL-BGP-01-XX-DR-C-52-00902".**

Issued for Planning	JJH	P02	SR	24.04.2021
Issued for Planning	JJH	P02	SR	24.03.2021
Issued for Information	JJH	P01	SR	15.12.2020
AMENDMENT	BY	REV	CHK	DATE

Rev: P = Primary T = Tender C = Construction LQ = Last Construction Issue  
 In instances where this drawing completes or partly completes a contract, Billingham George & Partners will consider that the product has been delivered, unless in a period not exceeding 90 working days, the client advises to the contrary.



**Billingham George & Partners**  
 CIVIL & STRUCTURAL ENGINEERS | BUILDING SURVEYORS  
 1st Floor, Wellington House, Wellington Court, Stockton-on-Tees, TS18 3TA  
 T: 01942 876 470 @BGPrombing E: [enquiries@bip-teeside.co.uk](mailto:enquiries@bip-teeside.co.uk) W: [www.bipconsulting.co.uk](http://www.bipconsulting.co.uk)

<b>Client</b> Stockton Borough Council		<b>Project</b> Eggleston Life School		<b>Project No.</b> 19T2333	
<b>Drawing Title</b> Proposed Impermeable Areas Comparison					
<b>Drawn</b> JJH	<b>Date</b> Oct 2020	<b>Checked</b> SR	<b>Date</b> Oct 2020	<b>Size</b> A1	<b>Scale</b> 1:500
<b>Class.</b> S2	<b>Rev.</b> P03	<b>Originator</b> BGP	<b>Volume</b> 01	<b>Level</b> XX	<b>Type</b> DR
<b>Location</b> EGL	<b>Originator</b> BGP	<b>Volume</b> 01	<b>Level</b> XX	<b>Type</b> DR	<b>Role</b> C
<b>Unique No.</b> 01903	<b>File Reference</b> EGL-BGP-01-XX-DR-C-52-01903				