



Biodiversity Net Gain Baseline & Feasibility Report

Site name	Langho Agricultural Building
Client	J. Lowther c/o Gary Hoerty Associates
Author	Carol Edmondson MSc MRSB
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Produced by	Ark Ecology, Moor Lane, Lancashire BB7 9JQ

SUMMARY

A baseline Biodiversity Net Gain calculation was required to meet the National Planning Policy Framework (NPPF, 180(d)2023), Statutory Biodiversity Net Gain requirements and the Ribble Valley Borough Council Core Strategy Key Statement.

The DEFRA Statutory BNG Metric Tool (published 23/07/2024) was used to calculate the baseline habitats, to support a planning application and for comparison with those of the final proposed development & final % net gain.

A site visit carried out on 20th June 2025 determined the proposed development site baseline condition is of low ecological value, with species poor modified grassland habitat present on the site of the proposals.

The baseline assessment of the site shows a total of 0.03 Biodiversity Net Gain (BNG) habitat units.

Four native trees will be planted within the boundary of the site to compensate for the loss of modified grass. These trees will need to reach Moderate Condition according to the Statutory BNG assessments within 27 years of planting.

The outcome of the calculation on the proposals listed shows a potential net gain of **43.2%**.

A full site Habitat Baseline Plan is included at Appendix 2, site photos as Appendix 3, proposed plan at Appendix 4.

1. INTRODUCTION

1.1 Background

An assessment was required to determine the Biodiversity Net Gain baseline habitats and units of the site to support a planning application for the addition of an agricultural storage building, on Land to the rear of The Petre Arms Public House, Whalley Road, Langho, Blackburn, BB6 8AB.

1.2 Scope of the Report

The assessment takes into consideration the local and national planning policy and strategy relevant to the site, the baseline ecological condition of the site, and the proposed development plans and the enhancement plan, and to meet the requirements of The National Planning Policy Framework (2023) and standards set in the CIEEM/CIRIA *Biodiversity Net Gain. Good Practice Principles for development a practical guide.*

2. METHODOLOGY

2.1 Desk and Field study methods

- Habitats are described using the UK Habitat Classification System methods and codes (converted from JNCC Phase 1 codes where necessary), and condition assessed using the Statutory Biodiversity Net Gain Metric - Auditing and Accounting for Biodiversity Condition Assessment Sheets.
- Areas were measured using Google Earth and the clients' own plans drawn by Gary Hoerty Associates ref. Low/668/3551/01 A\$ Location Plan.
- Surveys and assessment were carried out by C Edmondson MSc MRSB, Principal ecologist with 12yrs field survey experience and Natural England Class 2 bat licence holder.
- Site Survey methods used were as described in the UKHab User Guide (2023). The data collected during the survey have been used to inform this report.
- Calculations were made using the Statutory Biodiversity Net Gain Metric issued on July 23rd 2024.
- BNG Metric tree helper was used to calculate the unit value of any single trees present on the site.

2.2 Approach to BNG

BNG Principles: BNG is achieved through 10 principles, the first of which is the Mitigation Hierarchy. This Hierarchy will be followed at each stage of the development.

The DEFRA Statutory Biodiversity Net Gain Metric aims to:

- Assess the biodiversity unit value of the area of land.
- Demonstrate biodiversity net gains or losses in a consistent way.
- Measure and account for direct impacts on biodiversity.
- Compare proposals for the site - such as creating or enhancing habitat on-site or off-site.
- The metric assesses existing habitats and planned new habitats created by a development or land change.

2.3 Limitations

There were no limitations to this report.

3. BASELINE SITE CONDITIONS

Site Description

A site survey was carried out on 20th June 2025 at the site location, central grid reference SD 71088 35064. At the time of the survey, the was being managed as amenity grassland, with an area of bare ground, the remainder being species poor lawn. The dominant species was perennial ryegrass *Lolium perenne*, with frequent creeping buttercup *Ranunculus repens* and white clover *Trifolium repens*.

The site proposals include the existing tarmac entrance track which has not been included in the Metric calculation, having a BNG value of 0.

Important Ecological Features:

- There were no Priority Habitats or protected species recorded on site.
- Not within any Statutory designated areas.

Baseline Metric Calculations

Using the Statutory Metric BNG Calculation tool, and areas taken from GHA drawing no's Low.668.3551.01 & .02 the development shows a baseline habitat unit total of 0.03 (Headline results at Appendix.1) and is made up of the habitats listed at table 1.

A full site Habitat Baseline Plan is included at Appendix 2, site photos as Appendix 3, proposed plan at Appendix 4.

Table 1. Habitats at baseline calculation

Map ref	Site Features:	Code (UKHabs)	Area ha/length/no.	BNG units
BH1	Modified grassland, poor condition (see Appendix 5)	g4	0.0174	0.03
BH2	Developed land sealed surface	u1b5	0.0036	0
			Total baseline units	0.03

4. BNG GOOD PRACTICE PRINCIPLES FOR DEVELOPMENT

BNG is achieved through 10 principles, the first of which is the Mitigation Hierarchy. This Hierarchy will be followed at each stage of the development.

Principle 1: Mitigation Hierarchy

- 1: Avoid Biodiversity Loss e.g. Finding alternative sites, changing development plans etc
- 2: Minimise any loss
- 3: Mitigate for any loss
- 4: Compensate

Table 2: Hierarchy measures to obtain the target net gain

1: Avoidance The CSBI defines avoidance as 'Measures taken to anticipate and prevent adverse impacts on biodiversity before actions or decisions are taken that could lead to such impacts'.	The results of the UKHab assessment show that there were no priority habitats present within the site boundaries. <ul style="list-style-type: none"> • Habitats present: Modified grassland • Condition: Poor • Distinctiveness: Low Measures to avoid pollution to local sites will be implemented according to current EA Pollution Prevention Guidance.
2. Minimise	The development will contain the works within the footprint to avoid impact on a larger area.
3. Mitigation	Planting native berry producing trees on the site.
4. Compensation	Planting native berry producing trees on the site.

Principle 2: Avoid losing biodiversity that cannot be offset by gains elsewhere:

Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain.

- No Priority Habitats or Irreplaceable habitats are present on site.
- Trading Rules for irreplaceable habitats will not apply.

Principle 3: Be Inclusive and Equitable

Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Biodiversity Net Gain. Achieve net gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.

- Further stakeholders could be engaged at the design stage.

Principle 4: Address Risk

- This is addressed within the metric.

Principle 5: Make a measurable Net Gain Achievement

- This will be achieved through the landscape plan and Biodiversity Enhancement Plan.

Principle 6: Achieve the best outcomes for biodiversity.

- Increasing the number of trees on site will create a more diverse habitat suited to a wide variety of invertebrates and birds.

Principle 7: Be additional.

- This proposal aims to achieve a greater BNG than the required 10%.

Principle 8: Create a net gain legacy.

To be achieved through the “Next steps”:

Principle 9: Optimise sustainability & prioritise biodiversity.

- By implementing the enhancements and proposed tree planting in the landscaping plan this development will improve the sustainability of the site.

Principle 10: Be transparent.

- Communicate all Biodiversity Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

5. PROPOSED DESIGN & POTENTIAL NET GAIN

The potential net gains have been calculated from the GHA Drawing No. GHAS/1018/3611/02 which shows the habitats listed in Table 3 below.

Table 3: proposed habitats

Site Features:	Code (UKHabs)	Area ha/length/no.	BNG units
Unvegetated, unsealed surface	u1b5	0.0210	0
4 individual trees size small, condition: moderate within 27 years			0.05
		Uplift in BNG units	0.02

5.1 Biodiversity Net Gain Feasibility


The outcome of the calculation on the proposals listed at table 3 shows a potential net gain of 43.2%.

Four native trees will be planted within the boundary of the site. These trees will need to reach Moderate Condition according to the Statutory BNG assessments within 27 years of planting.

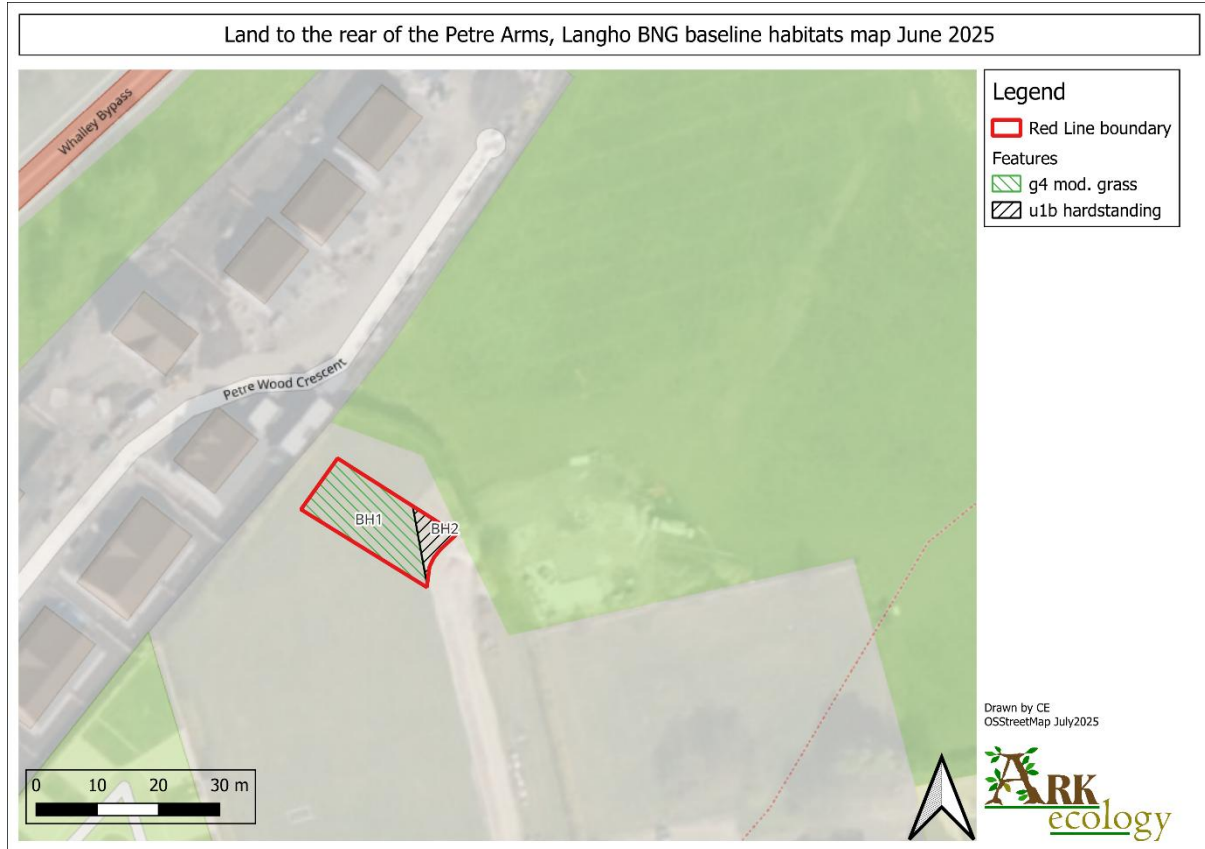
References

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http://www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf
- CIEEM (2013) Guidelines for Preliminary Ecological Appraisal Institute of Ecology and Environmental Management
http://www.cieem.net/data/files/Resource_Library/Technical_Guidance_Series/GPEA/GPEA_April_2013.pdf
- CIEEM, CIRIA, IEMA (2019) Biodiversity net gain. Good practice principles for development. A practical guide. CIRIA C776a. London, 2019.
- DEFRA Statutory Biodiversity Metric User Guide
https://assets.publishing.service.gov.uk/media/65c60e0514b83c000ca715f3/The_Statutory_Biodiversity_Metric_-_User_Guide_.pdf
- National Planning Policy Framework, 2023
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF2023.pdf
- UKHab Classification Guide v2.0 2023 <https://ukhab.org/>

Appendix 1 Headline results

Land at Rear of Petre Arms, Langho		Return to results menu			
Headline Results					
Scroll down for final results 					
On-site baseline	Habitat units	0.03			
	Hedgerow units	0.00			
	Watercourse units	0.00			
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	0.05			
	Hedgerow units	0.00			
	Watercourse units	0.00			
On-site net change <small>(units & percentage)</small>	Habitat units	0.02	43.20%		
	Hedgerow units	0.00	0.00%		
	Watercourse units	0.00	0.00%		
Off-site baseline	Habitat units	0.00			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	0.00			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Off-site net change <small>(units & percentage)</small>	Habitat units	0.00	0.00%		
	Hedgerow units	0.00	0.00%		
	Watercourse units	0.00	0.00%		
Combined net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	0.02			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Spatial risk multiplier (SRM) deductions	Habitat units	0.00			
	Hedgerow units	0.00			
	Watercourse units	0.00			
FINAL RESULTS					
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	0.02			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	43.20%			
	Hedgerow units	0.00%			
	Watercourse units	0.00%			
Trading rules satisfied?	Yes ✓				
Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	0.03	0.04	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

Appendix 2: Baseline habitats



Appendix 3: Site photos



Plate 1: Area where the existing track meets the proposed site location

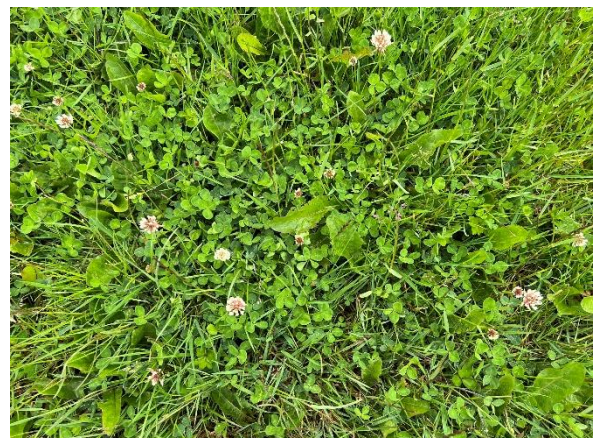
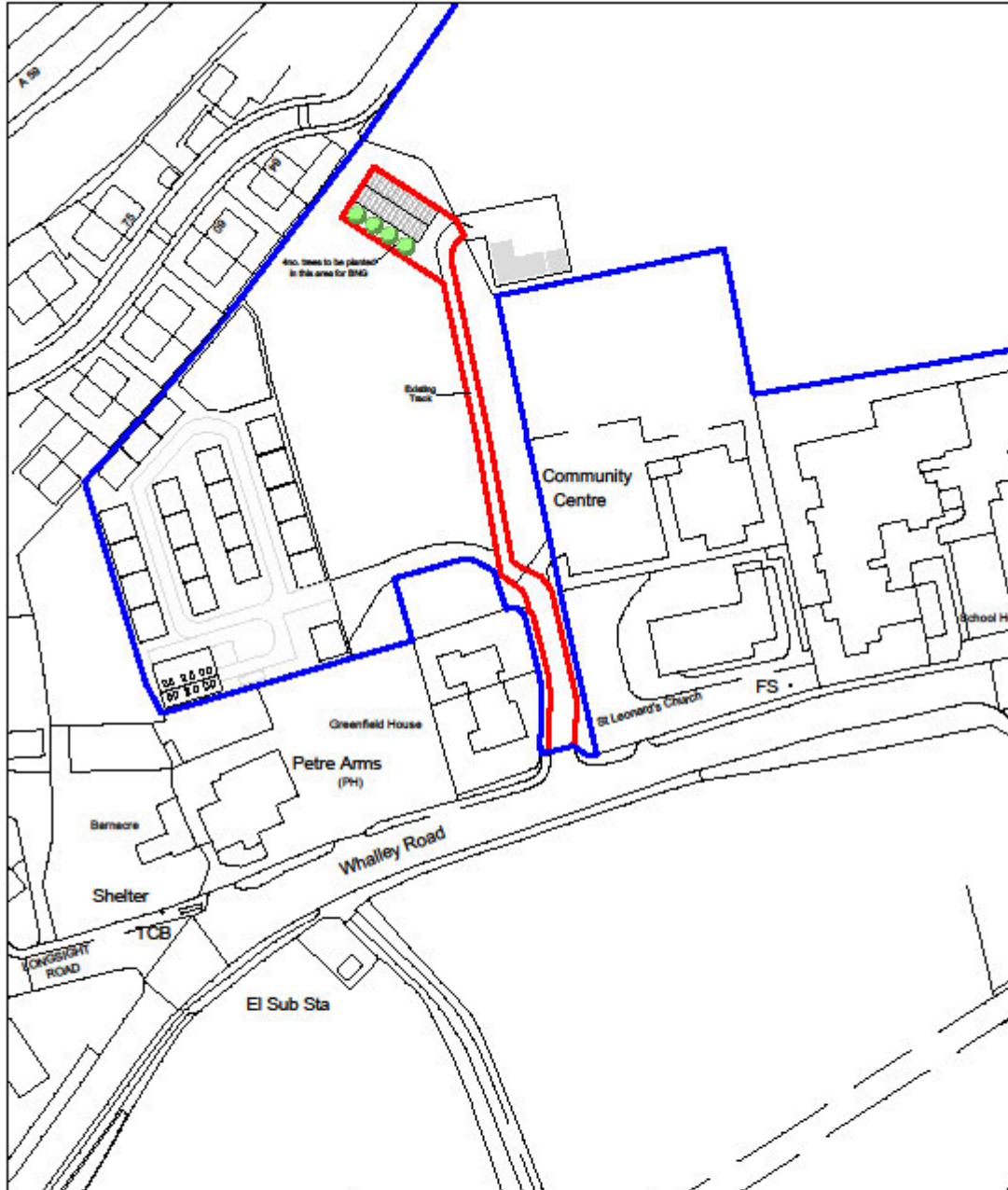



Plate 2: Example of sward dominated by white clover..

Appendix 4: Proposals & location map



 <p>G H A Gary Hoerty Associates</p> <p>Gary Hoerty Associates Chartered Surveyors Suite 9 - Grindleton Business Centre The Spinney Grindleton Clitheroe Lancashire BB7 4DH</p> <p>T: 01200 449700 Email: info@ghaonline.co.uk</p>	<p>Project: (No: Low.668.3551.GH)</p> <p>Planning - Proposed Agricultural Storage Building on Land to the rear of</p> <p>The Petre Arms Public House Whalley Road Langho Blackburn BB6 8AB</p>	<p>Notes: All work is to be carried out to the latest current British standard Codes of Practice and recognised working practices. All work and materials should comply with Health and Safety legislation. All dimensions are in millimetres except where explicitly shown otherwise. The contractor should check and certify all dimensions as work proceeds and notify GHA of any discrepancies. Do not scale off the drawings, if in doubt ask.</p>		
	<p>Drawing No : Low.668.3551.01</p>	<p>Client: Mr J Lowther</p>	<p>Drawn: KA</p>	
	<p>Title: Location Plan</p>	<p>Date: 28.07.2025</p>	<p>Scale: 1:1250 @ A4</p>	
	<p>Amendments:</p>			

Appendix 5: Condition Assessments

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	Land to rear of Petre Arms	Survey date and Surveyor name	19.06.25
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference	SD 71088 35064	Habitat parcel reference	
Habitat Description			
Modified grass dominated by white clover. Max4 sp. per sqm			
Ukhhab - UK Habitat Classification			
Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)	
A There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m ² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	NO		
B Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	no		
C Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	yes		
D Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	yes		
E Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	yes		
F Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	yes		
G There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	yes		
Essential criterion achieved (Yes or No)			No
Number of criteria passed			5
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)		
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	Yes	
Suggested enhancement interventions to improve condition score			
Footnotes			
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> .			
Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.			
Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.			
Footnote 4 – Wildlife and Countryside Act 1981 (as amended).			