



**RIBBLE VALLEY
BOROUGH COUNCIL**

17 DEC 2012

ATTENTION OF

320130036P

For office use only

Application No 3/2013/0006

Date received

Fee paid £

Receipt No:

Council Offices, Church Walk, Clitheroe, Lancashire. BB7 2RA Tel: 01200 425111 www.ribblevalley.gov.uk

**Application for listed building consent for alterations, extension or demolition of a listed building.
Planning (Listed Buildings and Conservation Areas) Act 1990**

You can complete and submit this form electronically via the Planning Portal by visiting www.planningportal.gov.uk/apply

Publication of applications on planning authority websites

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website. If you require any further clarification, please contact the Authority's planning department.

Please complete using block capitals and black ink

It is important that you read the accompanying guidance notes as incorrect completion will delay the processing of your application.

1. Applicant Name and Address

Title: First name:

Last name:

Company (optional): **STONYHURST COLLEGE**

Unit: House number: House suffix:

House name:

Address 1: **STONYHURST**

Address 2:

Address 3:

Town: **CLITHEROE**

County: **LANCASHIRE**

Country: **UK**

Postcode: **BB7 9PZ**

2. Agent Name and Address

Title: **MR** First name: **JOHN**

Last name: **BOOK**

Company (optional): **JRB ENVIRONMENTAL DESIGN**

Unit: **10** House number: House suffix:

House name:

Address 1: **EATON AVENUE**

Address 2: **MATRIX OFFICE PARK**

Address 3: **BUCKSHAW VILLAGE**

Town: **CHORLEY**

County: **LANCASHIRE**

Country: **UK**

Postcode: **P27 7NA**

3. Description of Proposed Work

Please describe the proposals to alter, extend or demolish the listed building(s):

REPLACEMENT OF EXISTING OIL FIRED STEAM BOILER PLANT WITHIN MAIN CENTRAL BOILER PLANT, TO INCLUDE BIOMASS BOILER, CHP UNIT, STANDBY OIL BOILER & SMALL STEAM GENERATOR UNIT.

THE ONLY WORK TO BE CARRIED OUT THAT AFFECTS THE EXTERNAL APPEARANCE TO THIS PART OF THE SITE IS RELATED TO THE EXISTING FREE-STANDING CHIMNEYS

3. Description of Proposed Work (continued)

Has the work already started without consent?

☐ Yes ☒ No

If Yes, please state when the work was started (DD/MM/YYYY):

(date must be pre-application submission)

Has the work been completed without consent?

☐ Yes ☒ No

If Yes, please state the date when the work was completed (DD/MM/YYYY):

(date must be pre-application submission)

4. Site Address Details

Please provide the full postal address of the application site

Unit: House number: House suffix:

House name: CENTRAL BOILER HOUSE

Address 1: STONYHURST COLLEGE

Address 2: STONYHURST

Address 3:

Town: CLITHORPE

County: LANCASHIRE

Postcode (optional): BB7 9PZ

Description of location or a grid reference.
(must be completed if postcode is not known):

Easting: Northing:

Description:

SEE ATTACHED LOCATION PLAN

5. Related Proposals

Are there any current applications, previous proposals or demolitions for the site?

☐ Yes ☒ No

If Yes please describe and include the planning application reference number(s), if known:

Description	Reference number

6. Pre-application Advice

Has assistance or prior advice been sought from the local authority about this application?

☒ Yes ☐ No

If Yes, please complete the following information about the advice you were given (This will help the authority to deal with this application more efficiently).

Please tick if the full contact details are not known, and then complete as much as possible: ☐

Officer name:

JOHN MACHOLE

Reference:

MEETING

Date (DD/MM/YYYY):

(must be pre-application submission)

17/10/12

Details of pre-application advice received?

PROPOSALS DISCUSSED WITH STONYHURST COLLEGE REPRESENTATIVES FOLLOWED BY SUBMISSION OF DRAWINGS AND REPORT

7. Neighbour and Community Consultation

Have you consulted your neighbours or the local community about the proposal?

☐ Yes ☒ No

If Yes, please provide details:

8. Authority Employee / Member

With respect to the Authority, I am:

- (a) a member of staff
(b) an elected member
(c) related to a member of staff
(d) related to an elected member

Do any of these statements apply to you?

☐ Yes ☒ No

If Yes, please provide details of the name, relationship and role

9. Materials

Please provide a description of existing and proposed materials and finishes to be used in the building (demolition excluded):

	Existing (where applicable)	Proposed	Not applicable	Don't Know
External walls	STONE / BRICK	UNAFFECTED	☐	☐
Roof covering	SLATE	UNAFFECTED	☐	☐
Chimney	2 No. 600 DIA STEEL CHIMNEY SYSTEMS EACH APPROX 14m HIGH	3 No. NEW STEEL CHIMNEYS, 1 No. 600 ϕ , 1 No. 300 ϕ & 1 No. 250 ϕ ALL APPROX 8m HIGH	☐	☐
Windows	NONE	NONE	☐	☐
External doors	TIMBER & METAL ROLLER SHUTTER	UNAFFECTED	☐	☐
Ceilings	NONE	NONE	☐	☐
Internal walls	BRICK	UNAFFECTED	☐	☐
Floors	CONCRETE	UNAFFECTED	☐	☐
Internal doors	TIMBER	UNAFFECTED	☐	☐
Rainwater goods	CAST-IRON & PVC	UNAFFECTED	☐	☐
Boundary treatments (e.g. fences, walls)	N/A	N/A	☐	☐
Vehicle access and hard standing	ROADWAY	UNAFFECTED	☐	☐
Lighting	FLUORESCENT	NEW HIGH EFFICIENCY LIGHTING	☐	☐
Others (add description)	NONE	NONE	☐	☐

Are you supplying additional information on submitted drawings or plans?

☒ Yes☐ No

If Yes, please state plan(s)/drawing(s) references:

PLANNING ADVICE REPORT.

EXISTING DRAWING - O10.036.M6

PROPOSED DRAWING - O10.036.M7

LOCATION PLAN - O10.036.M10

10. Demolition

Does the proposal include the partial or total demolition of a listed building?

☐ Yes ☒ No

If Yes, which of the following does the proposal involve?

a) Total demolition of the listed building: ☐ Yes ☒ No

b) Demolition of a building within the curtilage of the listed building: ☐ Yes ☒ No

c) Demolition of a part of the listed building: ☐ Yes ☒ No

If the answer to c) is Yes:

i) What is the total volume of the listed building?(cubic metres)

ii) What is the volume of the part to be demolished?(cubic metres)

iii) What was the (approximate) date of the erection of the part to be removed? (MM/YYYY) (date must be pre-application submission)

Please provide a brief description of the building or part of the building you are proposing to demolish:

THE ONLY DEMOLITION WORK RELATES TO THE REMOVAL OF THE EXISTING 2ND STEEL CHIMNEYS

Why is it necessary to demolish or extend (as applicable) all or part of the building(s) and or structure(s)?

THESE EXISTING CHIMNEYS ARE PART OF THE EXISTING 2ND STEAM BOILERS TO BE REMOVED

11. Listed Building Alterations

Do the proposed works include alterations to a listed building?

☐ Yes ☒ No

If Yes, do the proposed works include: (you must answer each of the questions)

a) Works to the interior of the building? ☐ Yes ☒ No

b) Works to the exterior of the building? ☐ Yes ☒ No

c) Works to any structure or object fixed to the property (or buildings within its curtilage) internally or externally? ☒ Yes ☐ No

d) Stripping out of any internal wall, ceiling or floor finishes (e.g. plaster, floorboards)? ☐ Yes ☒ No

If the answer to any of these questions is Yes, please provide plans, drawings, photographs sufficient to identify the location, extent and character of the items to be removed, and the proposal for their replacement, including any new means of structural support and state references for the plan(s)/drawing(s):

AS PER NOTES IN (10) DRAWINGS ARE PROVIDED TO INDICATE THE WORKS.

12. Listed Building Grading

Please state the grading (if known) of the building in the list of Buildings of Special Architectural or Historic Interest? (Note: only one box must be ticked)

Grade I ☐

Ecclesiastical Grade I ☐

Grade II* ☐

Ecclesiastical Grade II* ☐

Grade II ☐

Ecclesiastical Grade II ☐

Don't know ☒

13. Immunity From Listing

Has a Certificate of Immunity from Listing been sought in respect of this building?

☐ Yes

☒ No

☐ Don't know

If Yes, please provide the result of the application:

14. Certificates (continued)**CERTIFICATE OF OWNERSHIP - CERTIFICATE D****Certificate under Regulation 6 of the Planning (Listed Buildings and Conservation Areas) Regulations 1990**

I certify/ The applicant certifies that:

- Certificate A cannot be issued for this application
- All reasonable steps have been taken to find out the names and addresses of everyone else who, on the day 21 days before the date of this application, was the owner (owner is a person with a freehold interest or leasehold interest with at least 7 years left to run) of any part of the land to which this application relates, but I have/ the applicant has been unable to do so

The steps taken were:

Notice of the application has been published in the following newspaper (circulating in the area where the land is situated):

On the following date (which must not be earlier than 21 days before the date of the application):

Signed - Applicant:

Or signed - Agent:

Date DD/MM/YYYY:

15. Planning Application Requirements - Checklist

Please read the following checklist to make sure you have sent all the information in support of your proposal. Failure to submit all information required will result in your application being deemed invalid. It will not be considered valid until all information required by the Local Planning Authority has been submitted.

The original and 3 copies of a completed and dated application form:



The original and 3 copies of a plan which identifies the land to which the application relates and drawn to an identified scale and showing the direction of North:

The original and 3 copies of other plans and drawings or information necessary to describe the subject of the application: ☒The original and 3 copies of the completed dated ~~Ownership Certificate~~ **ALREADY IN JRB'S POSSESSION** ☒ **B.C. or D. as applicable**The original and 3 copies of a design and access statement, if required (see help text and guidance notes for details): ☐**16. Declaration**

I/we hereby apply for planning permission/consent as described in this form and the accompanying plans/drawings and additional information

Signed - Applicant:

Or signed - Agent:

Date (DD/MM/YYYY):

14/12/12 (date cannot be pre-application)

17. Applicant Contact Details

Telephone numbers

Country code: National number: Extension number:

Country code: Mobile number (optional):

Country code: Fax number (optional):

Email address (optional):

18. Agent Contact Details

Telephone numbers

Country code: National number: Extension number:

Country code: Mobile number (optional):

Country code: Fax number (optional):

Email address (optional):

jrb@jrbe.co.uk

19. Site VisitCan the site be seen from a public road, public footpath, bridleway or other public land? ☐ Yes ☐ No

If the planning authority needs to make an appointment to carry out a site visit, whom should they contact? (Please select only one)

☐ Agent ☒ Applicant ☐ Other (if different from the agent/applicant's details)

If Other has been selected, please provide:

Contact name:

Telephone number:

MR. J. SMALLEY

01254 827089

Email address:

j.smalley@stonyhurst.ac.uk

CENTRAL BOILER PLANT REPLACEMENT – PLANNING ADVICE NOTES

at

320130006 P

STONYHURST COLLEGE



Prepared by;

**JRB ENVIRONMENTAL DESIGN
10 EATON AVENUE
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SECTION 1

PURPOSE OF REPORT

- (i) The purpose of this report is to advise on the proposals for the replacement of the existing main boiler-plant currently serving the Stonyhurst College complex.

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SECTION 2

BASIS OF REPORT

The basis of this report is as follows:-

- (i) Survey of the existing steam, heating & hot water services plant by JRB EDL
- (ii) Preparation of plant operating considerations by JRB EDL
- (iii) Preparation of plant layout design by JRB EDL

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SECTION 3

EXISTING BOILER PLANT SERVICES

The College is currently served by an oil fired steam boiler plant comprising of 1No. Thompson Cochran – 12000lbs/hr unit and 1No. Robey of Lincoln 6000lbs/hr unit.

Both of the above units are oil fired and individually flued via 600mm diameter high-rise steel chimneys. See drawing no. 010.036.M6

The boilers currently operate at extremely low efficiency and with high outputs of CO₂.

It is calculated that approx. 5150Tonnes of CO₂ is currently generated annually from this boiler installation and provision of electricity from the grid.

SECTION 4**PROPOSED BOILER PLANT SERVICES**

The following equipment is being proposed to replace the existing steam boiler plant;

- (i) 700kW biomass boiler unit
- (ii) 450kW combined heating and power unit
- (iii) 1450kW LPHW boiler
- (iv) Oil fired steam generator to serve the Laundry

Biomass boilers;

Biomass boilers are currently seen as the most significant way to reduce carbon emissions for heating systems, and in that respect the comparison can be seen as follows;

<u>Type of Fuel</u>	<u>KgC/kWh</u>
Wood Pellets (4.7kWh/kg)	0.000
Wood Chips (3.7kWh/kg)	0.000
LPG (0.14l/kW)	0.068
Oil (9.9kW/l)	0.074
Electricity	0.113

In order to get the real benefits from the operation of a biomass boiler it is better to try and maintain a constant 24 hour operation over a long as possible period of time and hence the sizing of the boiler is preferred to match the 'base load' of any heating system.

The two elements which need to be addressed when considering the provision of a biomass boiler are (i) flueing of the boiler, and (ii) fuel storage requirements. In terms of flueing of the boiler this must comply with the Clean Air Act 1993 and BS EN 303-5:1999 (for boilers upto 300kW), and hence a conventional solid fuel type chimney system will be provided. The height of the flue termination will be lower from what exists from the boiler plant at the moment, and will be of a smaller diameter, however provision will be made for the fitting of cones at the outlet to ensure adequate efflux velocities are generated to prevent downdraughts to adjacent buildings.

With regards to fuel storage requirements it is recognised that deliveries of wood chips and or pellets are made at a volume of 30m³ and hence for the size of boiler required for Stonyhurst College, as a 90m³ storage area is to be provided then deliveries are less likely to be required. Fortunately because we are creating a large amount of available space by the removal of the existing steam boiler plant, the location of the storage facility will be adjacent to the boiler location within the boiler room itself.

Combined Heat & Power (CHP) units:

CHP units generally operate with either gas or oil as the energy source.

These systems generate electricity at the same time as generating high temperature heat which can readily introduced into heating systems.

The efficient use of CHP systems require an almost constant load of both electricity and heat and hence if a CHP unit was selected to provide the base load electrical supply requirement to Stonyhurst College, which is currently approx. 450kW 24 hours/day, 7 days/week & 365 days/year then the heat could be used to top-up the heating system and / or the hot water load demand.

Benefits in operation of the proposed plant:

The major benefits which will be experienced from the provision of the proposed new plant and in particular the biomass boiler unit and the CHP unit will be the reduction in the production of CO₂ and hence the improvement to the carbon footprint at Stonyhurst College, which will therefore create benefits to the environment.

Calculations show that a reduction in the generation of CO₂ into the environment will be in the order of 938Tonnes per year, which shows a 18% reduction on present levels.

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SECTION 5

INSTALLATION CONSIDERATIONS.

We are fortunate to have an existing large enough boiler-house which, after the removal of the existing steam boiler plant can accommodate all equipment necessary for the new high efficient / low carbon emission boiler plant installation within the confines of the existing structure itself.

Whilst the existing steam boiler plant has 2No. very high / 600mm diameter steel chimneys, and whilst there are now going to be 4No. pieces of equipment which need to be individually flued it should be pointed out that none of the flues are of the size or height of what the existing boiler plant requires. Furthermore the flues from the steam generator and LPHW boiler can be grouped together and hence there is only now going to be 3No. external flue apertures. See attached drawing no. 010.036.M7.

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SECTION 6

APPENDICES

Drawing No. 010.036.M1	-	Existing plant services layout
Drawing No. 010.036.M2	-	Proposed plant services layout
Drawing No. 010.036.M6	-	Existing boiler flue elevations
Drawing No. 010.036.M7	-	Proposed boiler flue elevations