PP Plasma

BREEAM Pre-Assessment Summary Report

Pre-assessment

Uncontrolled revision

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1.0 Introduction

This report is intended as a summary of the BREEAM pre-assessment review for the following project:

Project Name	PP Plasma
BREEAM Version	BREEAM 2011 v2 - Industrial
Assessment Stage	Pre-Assessment Stage
Lead Assessor	Shane Paul
Target Rating	Very Good (55%)
Downloaded By	Shane Paul
Download Date	04/10/12
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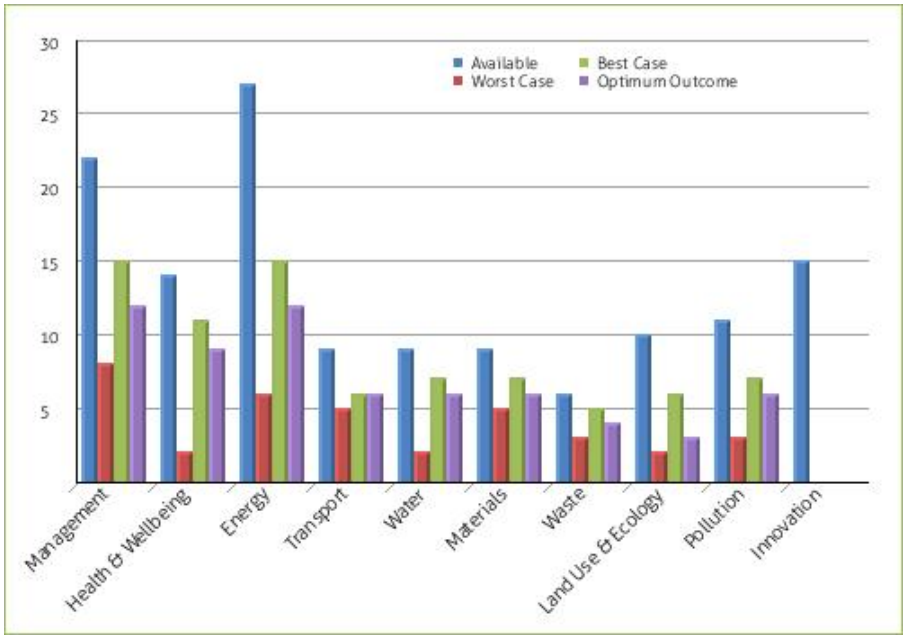
2.0 Scoring scenarios

It should be noted that the pre-assessment scores have been based on the following scoring scenarios;

- Worst Case - The worst case outcome for the project.
- Best Case - The best case outcome for the project.
- Optimal Outcome - The most likely outcome for the project.

On this basis, the following scores are considered achievable under each scenario;

Scenario	Score	BREEAM Rating
Worst Case	31.93	Pass
Best Case	68.86	Very Good
Optimum Outcome	55.75	Very Good



Credit Values

Each assessed section has a different weighing and as such the credits are not equal from section to section. The below table shows the value in percentage terms for each credit, within its individual section.

Section	Section Weighing	Total credits Available	Credit Value
Management	12%	22	**0.55%**
Health & Wellbeing	15%	14	**1.07%**
Energy	19%	27	**0.70%**
Transport	8%	9	**0.89%**
Water	6%	9	**0.67%**
Materials	12.5%	9	**1.39%**
Waste	7.5%	6	**1.25%**
Land Use & Ecology	10%	10	**1.00%**
Pollution	10%	11	**0.91%**
Innovation	15%	15	**1.00%**

2.1 Minimum Standards

In addition performance against the minimum standards (required for the specified target rating) under each scenario is summarised below;

Issue	Worst Case	Best Case	Optimal Outcome
Man 01 - Sustainable Procurement	Yes	Yes	Yes
Man 02 - Responsible Construction Practices	Yes	Yes	Yes
Man 04 - Stakeholder Participation	Yes	Yes	Yes
Hea 01 - Visual Comfort	Yes	Yes	Yes
Hea 04 - Water Quality	Yes	Yes	Yes
Ene 01 - Reduction of CO2 Emissions	Yes	Yes	Yes
Ene 02 - Energy Monitoring	Yes	Yes	Yes
Ene 04 - Low and Zero Carbon Technologies	Yes	Yes	Yes
Wat 01 - Water Consumption	Yes	Yes	Yes
Wat 02 - Water Monitoring	Yes	Yes	Yes
Mat 03 - Responsible Sourcing of Materials	Yes	Yes	Yes
Wst 01 - Construction Waste Management	Yes	Yes	Yes
Wst 03 - Operational Waste	Yes	Yes	Yes
LE 03 - Mitigating Ecological Impact	Yes	Yes	Yes

If the required minimum standards are not met then the target rating will not be achieved regardless of overall score.

3.0 - Credits and Comments Table

		Available	Worst Case	Best Case	Optimal Outcome	Comments
Management						
Man 01	Sustainable Procurement	8	2	5	3	It was agreed in the pre-assessment meeting on 28th September 2012 that the first credit will be targeted. BREEAM AP credits (3no) are not being targeted for this project. No BREEAM AP is intended to be appointed. A thermographic survey may be included should it be necessary to make up a shortfall in overall credits. Client to confirm. All commissioning credits (2no.) will be included within the specification. Aftercare support from the contractor (seasonal commissioning of complex systems) shall be included within the specification. Client to confirm if there will be a commitment to collect energy and water consumption data for the first 12 months to satisfy the second credit of the Aftercare requirement and for their intention to apply for ISO14001 accreditation.
Man 02	Responsible Construction Practices	2	1	2	2	It was agreed in the pre-assessment meeting on 28th September 2012 that two credits shall be targeted.
Man 03	Construction Site Impacts	5	4	5	5	It was agreed in the pre-assessment meeting on 28th September 2012 at all five credits shall be targeted. Please include these requirements on the tender specification. Ensure that all delivery notes to state timber is FSC/PEFC and shows the Chain of Custody(CoC)number.
Man 04	Stakeholder Participation	4	1	3	2	It was agreed in the pre-assessment meeting on 28th September 2012 that both the inclusive & accessible design and the building user guide credits will be targeted.
Man 05	Life Cycle Cost and Service Life Planning	3	0	0	0	It was agreed during the pre-assessment meeting on 28th September 2012 that the credits are unlikely to be targeted.
	Management Totals:	**22**	**8**	**15**	**12**	
	Management score totals:	**12**	**4.364**	**8.182**	**6.545**	
Health & Wellbeing						
Hea 01	Visual Comfort	3	1	3	1	It was confirmed during the pre-assessment meeting on 28th September 2012 that the following shall be targeted: All fluorescent and compact fluorescent lamps shall be fitted with high frequency ballasts. Daylighting credit is unlikely to be achieved due to the design of deep plan open office spaces. View Out & Glare Control may not be achievable due to the design of occupied spaces over 7m from permanent openings. Architect to confirm that windows in these spaces meet requirements of Table 1 of BS8206. The credit of internal and external lighting design shall be targeted.
Hea 02	Indoor Air Quality	4	1	2	2	During the pre-assessment meeting on 28th September 2012, it was confirmed that the building will be designed for mixed-mode ventilation. The credit is unlikely to be achieved as there are a number of external pollution sources in close proximity to the site.

						The second credit on VOC testing is targeted however, please note that to obtain this credit criterion 1 of the first credit must be satisfied which requires the following: An indoor air quality plan has been produced which considers; a. Removal of contaminant sources b. Dilution and control of contaminant sources c. Procedures for pre-occupancy flush out d.3rd party testing and analysis.
Hea 03	Thermal Comfort	2	0	2	2	It was agreed in the pre-assessment meeting on 28th September 2012 that two credits shall be targeted.
Hea 04	Water Quality	1	0	1	1	It was agreed in the pre-assessment meeting on 28th September 2012 that:- The first part of the credit for designing in line with ACoP 2000 for legionnaires disease will be undertaken as a matter of course. The building will have no humidification. The second part of the credit for chilled mains fed water coolers is confirmed. The credit shall be targeted.
Hea 05	Acoustic Performance	2	0	2	2	It was confirmed during the pre-assessment meeting on 28th September 2012 that an acoustician shall be appointed for the project and that two credits will be targeted.
Hea 06	Safety and Security	2	0	1	1	It was agreed during the pre-assessment meeting on 28th September 2012 that one credit for security of site and building shall be targeted for consultation with the Crime Prevention Design Advisor (CPDA) or Police Architectural Liaison Officers (ALO) in the area. Ensure that this is undertaken at RIBA stage C and all recommendations are incorporated into the final design.
Health & Wellbeing Totals:		**14**	**2**	**11**	**9**	
Health & Wellbeing score totals:		**15**	**2.143**	**11.786**	**9.643**	
Energy						
Ene 01	Reduction of CO2 Emissions	15	2	4	2	Until the base calculations have been provided the score is only an estimate. Please commission a design stage energy assessment in the earliest stage of the design process.
Ene 02	Energy Monitoring	2	2	2	2	M&E contractor has confirmed that all major energy uses within the building shall be separately metered with metering being managed through the Building Management System. Therefore, two credits are targeted. Please ensure accessible BEMS or accessible sub-meters are provided covering the energy supply to all relevant function areas or departments within the building/unit.
Ene 03	External Lighting	1	1	1	1	It was agreed during the pre-assessment meeting 28th September 2012 that this credit shall be targeted.
Ene 04	Low and Zero Carbon Technologies	5	1	4	3	It was confirmed during the pre-assessment meeting on 28th September 2012 that photovoltaic's shall be integrated into the design. It must be demonstrated that the PV system will offset a minimum of 10% CO2 to achieve two credits. A feasibility report MUST also been carried out at RIBA Stage C to cover the full list of BREEAM requirements for an additional credit. The free cooling credit is not targeted
Ene 06	Energy Efficient Transportation Systems	2	0	2	2	It was confirmed during the pre-assessment meeting on 28th September 2012 that a lift is to be installed within the building. It was agreed that two credits shall be targeted.
Ene	Energy Efficient	2	0	2	2	It was discussed at the pre-assessment meeting on 28th September 2012 that this credit would be considered and

08	Equipment					that the client is to confirm their intention to target this credit.
	Energy Totals:	**27**	**6**	**15**	**12**	
	Energy score totals:	**19**	**4.222**	**10.556**	**8.444**	
Transport						
Tra 01	Public Transport Accessibility	3	3	3	3	The proposed building is in close proximity to a bus stop and train station. Research carried out by the BREEAM assessor has confirmed that three credits should be achieved.
Tra 02	Proximity to Amenities	1	0	0	0	Research carried out by the BREEAM assessor has found that only a post box is within 500m of the site. The lack of a food outlet and ATM means that this credit is unlikely to be achieved.
Tra 03	Cyclist Facilities	2	1	2	2	It was confirmed during the pre-assessment meeting on 28th September 2012 that two credits will be targeted. This shall require provision of 1No. cycle space per 10 No. building occupants along with 2 No. compliant cyclist facilities. (Refer to technical manual for details for BREEAM compliant cyclist storage and facilities).
Tra 04	Maximum Car Parking Capacity	2	0	0	0	It was confirmed during the pre-assessment meeting on 28th September 2012 that this credit will not be targeted.
Tra 05	Travel Plan	1	1	1	1	It was agreed during the pre-assessment meeting on 28th September 2012 that a travel plan shall be carried out for the development.
	Transport Totals:	**9**	**5**	**6**	**6**	
	Transport score totals:	**8**	**4.444**	**5.333**	**5.333**	
Water						
Wat 01	Water Consumption	5	1	3	2	The 2011 criteria now includes WCs, Urinals, Taps (WHB, Kitchen & Waste disposal units), showers, baths, dishwashers & washing machines. Target low flow and low flush fitting. At present the credits are an estimation and will be confirmed once detailed information can be provided.
Wat 02	Water Monitoring	1	0	1	1	It was agreed in the pre-assessment meeting on 28th September 2012 that this credit shall be targeted.
Wat 03	Leak Detection	2	0	2	2	It was confirmed by the M&E contractor that two credits shall be targeted.
Wat 04	Water Efficient Equipment	1	1	1	1	It was confirmed during the pre-assessment meeting on 28th September 2012 that there is no irrigation planned on the site and all new planting should rely solely on precipitation.
	Water Totals:	**9**	**2**	**7**	**6**	
	Water score totals:	**6**	**1.333**	**4.667**	**4**	
Materials						
Mat 01	Life Cycle Impacts	2	2	2	2	It was confirmed during the pre-assessment meeting that two credits shall be targeted. Architect to specify Green Guide Rated products of A+ for external walls and roof building elements.
Mat 02	Hard Landscaping and Boundary Protection	1	1	1	1	It was agreed in the pre-assessment meeting on 28th September 2012 that this credit shall be targeted. Include as much A or A+ rated materials as possible for all hard landscaping and boundary protection.
Mat 03	Responsible Sourcing of Materials	3	0	2	1	At least 1 credit should be achieved, but as many credits as possible should be targeted. Included within the specification, materials should be specified that are: FSC / PEFC for timber, BES 6001 / ISO 14001 for other materials. Note that the new tiers mean that BES 6001 Excellent and Very Good achieve more points than ISO 14001.
Mat 04	Insulation	2	1	1	1	It was agreed during the pre-assessment meeting on 28th September 2012 that the first credit shall be targeted. Review all specifications for the insulation used and target A and A+ rated insulation. The requirement is for thermal insulation used within external walls, ground floor, roofs and building services. The second credit is starting to become possible and it is worth asking the question of insulation companies as many of them have now started to provide responsibly sourced insulation.

Mat 05	Designing for Robustness	1	1	1	1	It was agreed in the pre-assessment meeting on 28th September 2012 that the design is likely to provide a number of features that would contribute to a robust design, such as kick plates and hard wearing floor coverings. Additional features would also need to be included such as corner protection, external bollards etc, ensure as many as possible are included within the specification.
	Materials Totals:	**9**	**5**	**7**	**6**	
	Materials score totals:	**12.5**	**6.944**	**9.722**	**8.333**	
Waste						
Wst 01	Construction Waste Management	4	2	4	3	It was discussed during the pre-assessment meeting on 28th September 2012 that it is considered that four credits shall be targeted. Waste minimisation targets should be included within the specification.
Wst 02	Recycled Aggregates	1	0	0	0	It was confirmed during the pre-assessment meeting on 28th September 2012 that this credit will not be targeted.
Wst 03	Operational Waste	1	1	1	1	It was agreed during the pre-assessment meeting on 28th September 2012 that external space for recycling of waste sized in relation to the overall building size shall be implemented. Please note that where the consistent generation in volume of the appropriate operational waste streams is likely to exist, e.g. large amounts of packaging by the building's use and operation, the following facilities are provided as part of its waste management strategy: a. Static waste compactor(s) or baler(s); situated in a service area or dedicated waste management space.
	Waste Totals:	**6**	**3**	**5**	**4**	
	Waste score totals:	**7.5**	**3.75**	**6.25**	**5**	
Land Use & Ecology						
LE 01	Site Selection	2	1	1	1	It was confirmed during the pre-assessment meeting on 28th September 2012 that the proposed site has been extensively developed over the past 50 years. It was also confirmed that a site investigation is presently being carried out to determine the extent of any site contamination. It is unknown if the site will require any environmental remediation. At least one credit is targeted.
LE 02	Ecological Value of Site and Protection of Ecological Features	1	0	1	1	No ecologist has been appointed. It is however considered that the site is of low ecological value. One credit has been targeted.
LE 03	Mitigating Ecological Impact	2	1	2	1	It is not confirmed that an Ecologist will be appointed. The credit can still be achieved without the appointment of a Suitably Qualified Ecologist however, a species account does need to be assess pre-construction in order to satisfy the criteria.
LE 04	Enhancing Site Ecology	3	0	1	0	It was discussed during the pre-assessment meeting that a suitably qualified ecologist might be employed for the project. The credits cannot be awarded without appointing a SQE.
LE 05	Long Term Impact on Biodiversity	2	0	1	0	It was discussed during the pre-assessment meeting that a suitably qualified ecologist might be employed for the project. The credits cannot be awarded without appointing a SQE.
	Land Use & Ecology Totals:	**10**	**2**	**6**	**3**	
	Land Use & Ecology score totals:	**10**	**2**	**6**	**3**	
Pollution						
Pol 01	Impact of Refrigerants	3	0	0	0	It was confirmed during the pre-assessment meeting that the proposed office areas shall be heated/cooled using heat pumps. It is unknown of the type of refrigerant that will be used however, it is considered that the credits are unlikely to be achieved.
Pol	NOx Emissions	1	0	0	0	As the heating/cooling system will rely solely on grid supplied electricity, this credit has not been targeted.

02						
Pol 03	Surface Water Run Off	5	2	5	4	During the pre-assessment meeting on 28th September 2012, it is understood that a Flood Risk Assessment has been carried out which considers all sources of flooding. Please ensure that the FRA concludes a Zone 1 flood risk after assessing flood risk from all sources of flooding as stated within the BREEAM manual. The first surface water runoff credit is targeted for peak run off. The second credit for no flooding in the event of a local drainage system failure is unsure at present, but could be targeted if the project wants to target further credits to achieve a BREEAM Very Good. It is understood that the minimising of water course pollution credit is targeted and an appropriate consultant shall be appointed to investigate and implement appropriate attenuation measures.
Pol 04	Reduction of Night Time Light Pollution	1	1	1	1	It was agreed by the M&E contractor that this credit will be targeted. Lights that do not cause light pollution must be specified as standard. Ensure all details are included within the specification.
Pol 05	Noise Attenuation	1	0	1	1	It was confirmed during the pre-assessment meeting on 28th September 2012 that an acoustician will be appointed to assess noise impacts on sensitive receptors and implement attenuation measures where necessary. This credit has been targeted.
	Pollution Totals:	**11**	**3**	**7**	**6**	
	Pollution score totals:	**10**	**2.727**	**6.364**	**5.455**	
Innovation						
Man 01	Sustainable Procurement	1	0	0	0	Not targeted
Man 02	Responsible Construction Practices	1	0	0	0	Not targeted
Hea 01	Visual Comfort	1	0	0	0	Not targeted
Ene 01	Reduction of CO2 Emissions	5	0	0	0	Not targeted
Ene 04	Low or Zero Carbon Technologies	1	0	0	0	Not targeted
Wat 01	Water Consumption	1	0	0	0	Not targeted
Mat 01	Life Cycle Impacts	1	0	0	0	Not targeted
Mat 03	Responsible Sourcing of Materials	1	0	0	0	Not targeted
Wst 01	Construction Waste Management	1	0	0	0	Not targeted
AI	Approved Innovation	1	0	0	0	Not targeted
Wst 02	Recycled Aggregates	1	0	0	0	Not targeted
	Innovation Totals:	**15**	**0**	**0**	**0**	
	Innovation score totals:	**15**	**0**	**0**	**0**	
	OVERALL SCORE TOTALS:	**115**	**31.927**	**68.86**	**55.753**	