DATED

2012

VINCI CONSTRUCTION UK LIMITED

- and -

EMCOR ENGINEERING SERVICES LIMITED

IES DEVELOPMENT, OLDBURY
EMR BUILDING & BALANCE OF SITE
Agreement for use with the
Engineering and Construction Contract
Third Edition

Vinci Construction UK Limited
Astral House
Imperial Way
Watford
Hertfordshire
WD24 4WW
Tel: 01923 233433

Fax: 01923 280920 Ref: Prec/SF01 **BETWEEN VINCI CONSTRUCTION UK LIMITED** a company incorporated in England (No. 2295904) whose registered office is at Astral House, Imperial Way, Watford, Hertfordshire WD24 4WW ("the Contractor") of the first part and

EMCOR ENGINEERING SERVICES LIMITED a company incorporated in England (No. 03667540) whose registered office is at I Thameside Centre, Kew Bridge Road, Kew Bridge, Middlesex, TW8 0HF ("the Subcontractor") of the second part.

WHEREAS:-

- (1) The Contractor has entered into the Main Contract (as hereinafter defined) for the execution of the Main Contract Works (as hereinafter defined)
- (2) The Contractor wishes to enter into the Subcontract (as hereinafter defined) with the Subcontractor for the execution of the *subcontract works* which form part of the Main Contract Works based upon the Third Edition of the Engineering and Construction Subcontract, for use with the Engineering and Construction Contract.

IT IS AGREED as follows:-

1. Definitions and Interpretation

- 1.1 For the purpose of this Agreement and the Subcontract the following words shall have the following meanings:-
 - 1.1.1 "this Agreement" shall mean this agreement together with the recitals and schedules hereto.
 - 1.1.2 "the Contractor" shall bear the meaning set out at the head of this Agreement and shall, where the context so admits, include its successors and assigns.
 - 1.1.3 "the Employer" shall bear the meaning ascribed to it in Schedule 1.
 - 1.1.4 (NOT USED)
 - 1.1.5 "the Main Contract" shall bear the meaning ascribed to it in Schedule 1.
 - 1.1.6 "the Main Contract Works" shall bear the meaning ascribed to it in Schedule
 - 1.1.7 "the Special Conditions" shall mean the special conditions set out in Schedule 3.
 - 1.1.8 "the Standard Conditions" shall mean the third edition of the engineering and construction subcontract published by the Institution of Civil Engineers in June 2005 including the main and secondary option clause[s] set out in Schedule 2 and as further amended by the Special Conditions.
 - 1.1.9 "the Subcontract" shall mean the agreement constituted by this Agreement and incorporating the documents set out in clause 2.
 - 1.1.10 "Subcontract Data" shall mean the document so headed and set out in Schedule 4.

- 1.1.11 "the Subcontractor" shall bear the meaning set out at the head of this Agreement.
- 1.2 Definitions in the Standard Conditions and the Main Contract (whether or not such defined terms are italicised) [and the Invitation to Tender] shall, where the context so admits, bear the same meaning in this Agreement as are set out therein.
- 1.3 Reference in the Subcontract to any statute or regulation shall include any amendment or re-enactment thereof.
- 1.4 Reference in this Agreement to a clause, schedule or recital is, unless expressly stated otherwise, a reference to a clause schedule or recital of this Agreement.
- 1.5 The headings contained in this Agreement are for ease of reference and shall not affect the interpretation of this Agreement.

2. Subcontract Documentation

The following documents shall comprise the Subcontract and shall be deemed to be incorporated in this Agreement as if the same were set out herein seriatim and they shall be construed as mutually explanatory PROVIDED THAT if any conflict shall arise between any one or more of such documents they shall be construed in the following order of priority:-

- (a) This Agreement (excluding the Schedules);
- (b) The Standard Conditions; L02-30-(46) Issue 08.09.2011
- (c) Schedules 1,2,3,4, 6, 9 & 10 to this Agreement
- (d) [Other Documents?];

Bonds Guarantees and Warranties

- 3.1 Within 7 days of a demand, the Subcontractor shall unconditionally deliver to the Contractor:-
 - 3.1.1 a bond in the form set out in Schedule 5 duly executed by an English bank or surety approved by the Contractor in an amount of [] percent []% of the Prices (as specified in the Subcontract).
 - 3.1.2 a guarantee in the form set out in Schedule 9 duly executed by the Subcontractor's ultimate parent company.
 - 3.1.3 a letter of opinion in the form set out in Schedule 8-signed by a person approved by the Contractor.
- 3.2 Within 14 days of a demand to so do the Subcontractor shall unconditionally deliver to the Contractor duly executed warranties:-
 - 3.2.1 in the form set out in Schedule 6 in favour of []; and
 - 3.2.2 in the form set out in Schedule 6 in favour of [].

Payment to the Subcontractor pursuant to this Subcontract shall be conditional upon the Subcontractor fully discharging its obligations pursuant to this clause 3.

4. Complete Agreement

4.1 The Subcontract is the complete agreement between the parties hereto in connection with the Subcontract Works and shall supersede any prior agreement between the parties hereto in connection with the *subcontract works* whether made orally or in writing and shall apply to all aspects of the *subcontract works* whether executed on, before or after the date of this Agreement Furthermore the Subcontractor acknowledges that he has not entered into this agreement due to any representation whether made orally or in writing **PROVIDED THAT** nothing contained herein shall affect the right of either party hereto in respect of any fraudulent misrepresentation.

5. Main Contract

- 5.1 The Subcontractor shall be deemed to have full knowledge of the provisions of the Main Contract (other than the details of the Contractor's prices referred to therein), and the Contractor shall, if so requested by the Sub-Contractor, provide the Sub-Contractor with a true copy of the Main Contract less such details.
- 5.2 Save where the provisions of the Subcontract otherwise require, the Subcontractor shall so design, execute, complete and maintain the Subcontract Works so that no act or omission of his in relation thereto shall constitute, cause or contribute to any breach by the Contractor of any of his obligations under the Main Contract and the Subcontractor shall, save as aforesaid, assume and perform hereunder all the obligations and liabilities of the Contractor under the Main Contract in relation to the subcontract works. Nothing in this clause 5 shall be construed as creating any privity of contract between the Subcontractor and the Employer.
- 5.3 The Subcontractor shall indemnify the Contractor against every liability which the Contractor may incur to any other person whatsoever and against all claims, demands, proceedings, damages, costs and expenses made against or incurred by the Contractor by reason of any breach by the Subcontractor of the Subcontract.
- 5.4 The Subcontractor hereby acknowledges that any breach by him of the Subcontract may result in the Contractor committing breaches of and becoming liable in damages under the Main Contract and other contracts made by him in connection with the Main Contract Works and may occasion further loss or expense to the Contractor in connection with the Main Contract Works and all such damages loss and expense are hereby agreed to be within the contemplation of the parties as being the probable result of any such breach by the Subcontractor.

6. Third Parties

6.1 The parties hereby agree that this Agreement is not intended to and does not confer any benefit upon any person who is not a party to it and nor does it confer or purport to confer any right upon any such person to enforce any of its terms.

7. Governing Law

7.1 The Subcontract shall be governed and construed in accordance with the laws of England.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as a deed and have delivered it upon dating on the day and year first before written.

FOR AND ON BEHALF OF VINCI CONSTRUCTION UK LIMITED		
	Director	Director/Company Secretary
	Print Name	Print Name
FOR AND ON BEHALF OF EMCOR ENGINEERING SER	VICES LIMITED	
	Director	Director/Company Secretary
	 Print Name	Print Name

1.	Details of Main Contract
2.	Options
3.	Special Conditions
4.	Subcontract Data
5.	Performance Bond
6.	Collateral Warranties
7.	Parent Company Guarantee
8.	Form of Legal Opinion (PCG)
9.	Subcontract Works Information [S12 - 10 - (25)]
10.	Site Information

(Details of Main Contract)

Employer:

European Metal Recycling Limited a company incorporated in England (No. 2954623) whose registered office is at Sirius House, Delta Crescent, Westbrook, Warrington, WA5 7NS.

Main Contract:

A contract dated the day of 2012 between the Employer and the Contractor for the execution of the Main Contract Works and all documents incorporated or referred to therein.

Main Contract Works:

The execution of the design and construction of a Waste to Energy treatment plant, incorporating a recycling unit and gasification plant to generate energy including all associated services and external works (defined as "the works" in the Main Contract).

- 1. **Option A priced contract with activity schedule** is incorporated in the Standard Conditions.
- 2. The following secondary options are incorporated in the Standard Conditions:-
 - 2.1 Option W2 (Dispute Resolution Procedure);
 - 2.2 Options X2, X7, X15, X16, X18, Y(UK)2, Y(UK)3 and Option Z as set out below;

Z.1 Main Contract Amendments

The Standard Conditions, save for the Dispute Resolution and Secondary Option Clauses, are deemed to have been amended by the Option Z clauses of the Main Contract, and appended as Schedule 9 hereto, save that any reference in such clauses to *Employer* and/or *Project Manager* will be deemed to read *Contractor*, and any reference to *Contractor* will be deemed to read *Subcontractor*.

(Special Conditions)

The Standard Conditions shall be further amended and supplemented as follows:-

1. <u>Clause 13</u>

At the end of clause 13.8 add the following:-

"13.9 The Contractor may withhold acceptance of a submission by the Subcontractor where acceptance of a related submission made by the Contractor under the Main Contract has been withheld by the Project Manager."

2. <u>Clause 20.1</u>

Before the full stop add the following:-

"and the Works Information (as defined in the Main Contract) insofar as it relates to the *subcontract works*".

3. <u>Clause 51</u>

Delete existing clause 51.1 and 51.2 and replace with:-

- "51.1 The date on which a payment becomes due is fourteen days after the assessment date. Within 5 days of the due date the *Contractor* certifies a payment. The *Contractor's* certificate is the notice of payment to the *Subcontractor* specifying the amount due at the payment due date and stating the basis on which that amount was calculated.
- 51.2 The first payment is the amount due. Other payments are the change in the amount due since the last payment certificate. A payment is made by the *Subcontractor* to the *Contractor* if the change reduces the amount due. Other payments are made by the *Contractor* to the *Subcontractor*. Payments are in the *currency of this contract* unless otherwise stated in this Subcontract.
- 51.2(A) If the Contractor fails to provide the Contractor's certificate by the date required by clause 51.1. then, if the Subcontractor has not previously submitted an application in respect of the assessment concerned detailing the amount considered due and stating the basis on which that sum was calculated, the Subcontractor may give to the Contractor a notice specifying the amount the Subcontractor considers to be due at the payment due date and the basis upon which that amount has been calculated.
- 51.2(B) The final date for payment is twenty one days or a different period for payment if stated in the *Subcontract Data* after the date on which the payment becomes due provided that in the event that the *Subcontractor* gives a notice in accordance with clause 51.2(A), the final date for payment of the sum specified in the notice shall for all purposes be regarded as postponed by the same number of days as the number of days after the latest date when the *Contractor* should have given his certificate pursuant to clause 51.1 that the notice under clause 51.2(a) was given.
- 51.2(C) If either Party intends to pay less than the sum noted in the Contractor's Certificate under clause 51.1 or, in default of such certificate, the

Subcontractor's application or the *Subcontractor's* notice under clause 51.2(A) (as applicable) he notifies the other Party not later than one day before the final date for payment by stating the amount considered to be due at the date of that notice together with the basis on which that sum was calculated.

- 51.2(D) If the *Subcontractor* exercises his right under the Housing Grants, Construction and Regeneration Act 1996 to suspend performance, it is a compensation event.
- 51.2(E) If a payment notified and payable in accordance with this clause 51.2 is late, interest is paid on the late payment. Interest is assessed from the date from which the late payment should have been made until the date when the late payment is made, and is included in the first assessment after the late payment is made.

Add additional clause

"51.5 Notwithstanding any other provision of the *Subcontract*, where either the *Employer* or any third party is insolvent amounts shall only become due to the *Subcontractor* upon receipt of corresponding payment by the *Contractor* and the final date for payment in respect thereof shall be seven (7) days thereafter. For the purposes of this clause only "third party" shall mean any person (whether corporate entity or otherwise) who may make a payment (whether directly or indirectly) to the Employer in respect of such sums and "insolvent" shall have the meaning as ascribed to it by section 113 of the Housing Grants, Construction and Regeneration Act 1996."

4. <u>Clause 60</u>

At the end of clause 60.2 add the following:-

"information relating to the Site (as included in the Main Contract)"

5. Clause 61.3

At the end of the clause delete "unless the Contractor should have notified the event to the Subcontractor but did not."

6. Clause 70

After the second occurrence of the word: "Contractor" in clause 70.1 insert the words: ", the Project Manager or the Supervisor".

7. Clause 83

Prior to the full stop at the end of clause 83.1 add the words: "so far as such claims and/or liabilities relate to the *Subcontract Works*".

8. Option W2

W2.1(1)

Delete "is referred" and replace with "may be referred"

W2.3(7)

Add new sentence at the end "If the Adjudicators decision changes an amount notified as due under clause 51, payment of the sum decided by the Adjudicator is due not later than seven days from the date of the decision or the final date for payment of the notified amount whichever is later"

W2.3(8)

Add new sentence at the end "The Adjudicator may in his decision allocate his fees and expenses between the parties.

W2.3(11)

Delete existing and replace with

"The Adjudicators decision is binding until the dispute is finally determined by the tribunal or by agreement".

W2.3(12)

Delete existing and replace the "The Adjudicator may, within 7 days of giving his decision, correct his decision to remove a clerical or typographical error arising by accident or omission".

Delete clauses W2.4(1) - (3)

9 If Option X16 is used

16.1

Insert before the text in both bullet points "12 months after"

16.2

Insert before the text in both bullet points "12 months after"

(Subcontract Data)

Part one – Data provided by the Contractor

Statements given in all Subcontracts

Paragraph numbers used in Part one of the Contract Data refer to the corresponding core clauses in the Standard Conditions.

1. General

- The subcontract works are the provision of all Design, manufacture, supply, installation, & commissioning of all HV, Distribution, Mechanical & Electrical installations
- The Project Manager in the main contract is

Name: Mr. David Ireland
Address: European Metal Recycling Limited, Sirus
House, Delta Crescent, Westbrook, Warrington, WA5

7NS

or such other person as may be appointed pursuant to the Main Contract.

 The Supervisor in the main contract is TO BE APPOINTED

Name: **T.B.A** Address: **T.B.A**

 The Adjudicator in this subcontract is shall be nominated by the president or vice president of the Royal Institution of Chartered Surveyors

Name:

Address: 12 Great Portland Street, Parliament Square, London, SWQP 3AD

 The main contract Adjudicator is shall be nominated by the president or vice president of the Royal Institution of Chartered Surveyors

Name:

Address: 12 Great Portland Street, Parliament Square, London, SWQP 3AD

- The Subcontract Works Information is in Schedule 9 annexed hereto
- The Site Information is in Schedule 10 annexed hereto

- The boundaries of the site are as detailed within Chinook Sciences Ltd drawing 031-A03 Rev C
- The language of this subcontract is English
- The period for reply to a communication is
 - for a reply by the Contractor is two weeks
 - for a reply by the Subcontractor is one week
- The Adjudicator nominating body is England and Wales subject to the jurisdiction of the Courts of England and Wales.
- The tribunal is litigation in the courts of England and Wales.
- The following matters will be included in the Risk Register:

 As detailed below and are deemed included within the

 Prices: -
 - 1. All design work
 - 2. All material price increases
 - 3. All Information contained within the Trade Particulars Ref: BB0025/C57/S12-21(73)/C
 - 4. Inclement weather
 - 5. Increased costs
 - 6. Measured quantities
 - 7. Programming & co-ordinating of subcontract activities with Main Contractors works activities

- 3. Time
- The subcontract starting date is to be in accordance with Sectional Completion Supplement ref: BB0025/PROG SECTIONS/C57/01
- The subcontract access dates are as follows: -

Part of the Site

Date

 The Subcontractor submits revised programmes at intervals no longer than four weeks

- 4. Testing and Defects
- The defects date is 12 months after Completion of the whole of the subcontract works.
- Refer Main Contract Z clauses for response times to defects
- 5. Payment
- The currency of this subcontract is pounds sterling [£]

- The assessment interval is monthly as specified in the schedule of assessment dates.
- The interest rate is 2% per annum above the [base] rate of the Bank of England current at the most recent date of either 31st December or 30th June that has occurred immediately prior to the date that the debt fell due.

6. Compensation events

- The place where weather is to be recorded. This will be limited to weather effects on the construction activities.
- The weather measurements to be recorded for each calendar month are
 - the cumulative rainfall (mm)
 - the number of days with rainfall more than 5 mm
 - the number of days with minimum air temperature less than 2 degrees Celsius
 - the number of days with snow lying at 09.00 hours GMT
 - and these measurements: Working hours with windspeed exceeding 24 MPH
 - The weather measurements are supplied by the
 - The weather data are the records of past weather measurements for each calendar month which were recorded

Where no recorded data are available

 Assumed values for the ten year return weather data for each weather measurement for each calendar month are: T.B.A

Weather Measurements	<u>Assumed Values</u>
• the cumulative rainfall (mm):	[T.B.A] mm
 the number of days with rainfall more than 5 mm: 	[T.B.A] days
 the number of days with minimum air temperature less than 0 degrees Celsius: 	[T.B.A] days
 the number of days with snow lying at [T.B.A] hours GMT: 	[T.B.A] days

7. Risks and insurance

- The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the subcontract works, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the Subcontractor) due to activity in connection with this subcontract for any one event is five million pounds £5,000,000 any one accident/unlimited in the period of insurance.
- The amount of the minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Subcontractor arising out of and in the course of their employment in connection with this subcontract for any one event is five million pounds £5,000,000 any one accident/unlimited in the period of insurance.

Optional Statements

If the tribunal is arbitration

- The arbitration procedure is that set out in the Construction Industry Model Arbitration Rules, current at the date of this subcontract agreement
- The place where the arbitration is to be held is London
- The person or organisation who will choose an arbitrator
 - if the Parties cannot agree a choice or
 - if the arbitration procedure does not state who selects an arbitrator is then the Chartered Institute of Arbitrators will be used.

If the Contractor has decided the subcontract completion date for the whole of the subcontract works

 The subcontract completion date for the whole of the subcontract works is all be in accordance with Sectional Completion Supplement ref: BB0025/PROG SECTIONS/C57/01

If the *Contractor* is not willing to take over the *subcontract* works before the Subcontract Completion Date

 The Contractor is not willing to take over the subcontract works before the Subcontract Completion Date, subject to prior agreement.

If no programme is identified in part two of the Subcontract Data

 The Subcontractor is to submit a first programme for acceptance within two weeks of the Subcontract Date.

If the Contractor has identified work which is to meet a stated condition by a key date

The key dates and conditions to be met

condition to be met

key date

Access to IES building by Employers Plant Fit out contractors

2 weeks prior to completion of test & commissioning of works to workshop area

If the final date for payment is not 14 days after the date when payment is due (Clause 51.2(B))

• The period for payment is

If Option X7 is used (but not if Option X5 is also used)

 Delay damages for Completion of the whole of the subcontract works are £ T.B.C per working day

If Option X16 is used

- The retention free amount is Nil pounds
- The retention percentage is

If Option X18 is

- The Subcontractor's liability to the Contractor for indirect or consequential loss is limited to
- For any one event, the Subcontractor's liability to the Contractor for loss of or damage to the Employer's or Contractor's property is limited to
- The Subcontractor's liability for Defects due to his design which are not listed on the Defects Certificate is limited to
- The Subcontractor's total liability to the Contractor for all matters arising under or in connection with this subcontract, other than the excluded matters, is limited

The end of liability date is 12 years after the Completion of the whole of the subcontract works.

If Option Z is used

The additional conditions of subcontract are: Set out in Schedules 2 & 3 of this Agreement

Part two - Data provided by the Subcontractor

Statements given in all **Subcontracts**

The direct fee percentage is

The sub-subcontracted fee percentage is

The subcontract working areas are the Site boundaries

The key people are

(1) Name:

Mr. Neil Greensil

Job:

Regional Director

Responsibilities: Overall responsibility of the

company

Qualifications:

Experience:

30 years within the Construction

Industry

(2) Name:

Mr. Uri Ben-Tovim

Job:

Contracts Manager

Responsibilities: Compliance

with

Works

information and delivery to VCUK

programmed requirements.

Qualifications:

Chartered Engineer

Experience:

30 Years within the Construction

Industry

The following matters will be included in the Risk Register. All risks will remain the Sub-Contractors responsibility as detailed in Schedule 9 of the Trade Particulars Ref: S12-21(01)/BB0026/C57

Optional statements

If the Subcontractor is to provide Subcontract Works Information for his design

The Subcontract Works Information for the Subcontractor's design is in Schedule 9

If a programme is to be identified in the Subcontract Data

• The programme identified in the Subcontract Data - N/A.

Option A is used

 The priced contract with activity schedule is identified in Schedule 9

The tendered total Price

Data for the Shorter Schedule of Cost Company

- The percentage for people overheads is
- The published list of Equipment is the last edition of the list published by [N/A]
- The percentage for adjustment for listed Equipment is (state plus or minus)
- The rates of other Equipment are
- The hourly rates for Defined Cost of design outside the Working Areas are N/A
- The categories of design employees whose travelling expenses to and from the Working Areas are included in the Defined Cost are N/A
- The percentage for Working Areas overheads is :
- The hourly rates for Defined Cost of manufacture and fabrication outside the Working Areas are: are included in the agreed hourly rate as defined in Document "C" of the Dayworks Schedule Reference: S12-20-(45)/A/BB0026/C57 annexed hereto.
 - The percentage for manufacture and fabrication overheads is

(Subcontract Collateral Warranty)

Eversheds Sub-Contractor warranty in favour of the Beneficiary reference cam-1b\1858123\1 2 June 2012 brazilj

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(Subcontract Works Information)

Clause 11.2 (19) Subcontract Works Information is information which either

- Specifies and describes the subcontract works or
- States any constraints on how the Subcontractor Provides the Subcontract Works

PRELIMINARIES / GENERAL (AS ATTACHED TO HARD COPY IN DOCUMENT "A")

Invitation to Tender letter ref: S12-20-(05)/H/BBTBA/STEELWORK/ENQ/TBA dated 21st November 2011

Project Particulars Part 1 ref: S12-20-(15)/E/BB0026

Project Particulars Part 2 ref: S12-20-(20)/J/

Works Package Content Sheet ref: S12-10-(25)/E/BBTBA/C57, Issue Date 04.04.2012

Guide for Sub-Contractors Working with VINCI Construction UK Ltd ref: Issue 5/May 2011 including Compliance Matrix signed and dated 17/07/2012

VINCI PLC Procurement Policy ref: 27th May 2009

Quality Management ref: S12-20-(40)

Electronic Data Management ref: S12-20-(50)

Declaration of Non Collusion ref: S12-20-(90) - completed and signed 28/02/12

Pre-Sub-Contract Meeting Minutes ref: S12-30-(10)/i - completed and signed 17/07/2012

Design by Sub-Contractor S12-23-(01)/A/

ECIFICATION (AS ATTACHED TO HARD COPY IN DOCUMENT "B")

Vinci Construction UK Limited Contractors Proposals and Clarifications

 Contractors Proposals for EMR Building + Balance of Site – Final Contract Issue 5, Dated February 2012 [Pages 1 – 16]

Hulley & Kirkwood Specification 30526(SPC) 001

- Mechanical and Electrical Performance specification Preliminary Issue, dated 5th July 2012
- 11 kV Fixed Pattern High Voltage Switchgear specification Preliminary Issue, dated 9th July 2012
- 11 Kv Neutral Earthing Resistor specification Preliminary Issue, dated 9th July 2012
- 11 kV Transformer specification Preliminary Issue, dated 4th February 2012
- 33 Kv Transformer specification Preliminary Issue, dated 9th July 2012

Trade Specific Particulars

Trade Specific Particulars ref: BB0025/C57/12-21-(73)/C

PRICING DOCUMENT (AS ATTACHED TO HARD COPY IN DOCUMENT "C")

Activity Schedule / BB0026/007/C57 Subcontract Priced Contract with Activity Schedule

CHINOOK SCIENCES

	-A03 Rev C		es 2; Double Sided Copy]
<u>Old</u> <u>number</u>	<u>Number</u>	<u>Re</u> <u>v.</u>	<u>Title</u>
	A01	В	Planning Appilcation boundary
	A02	G	Plant Building elevations
	A03	С	Oldbury site plan
	A04	Α	Process floor plan
	A06	V1	IES Site plan
	A07	В	Chimney Stack Equipment Loadings
	A09	Α	M008 Secondary Air Fan Civil Loading
	A010	Α	M005 & M006 Recirc Fan Civil Loading
	A011	Α	RX8-50 Rodecs Machine & Trolley Equipment Loadings
	A012	Α	M10 ID Fan Civil Loading Details
	A013	Α	Rodecs & Material Storage Building
	A14	Α	80m3 Filter Residue Tanker Loading Silo Loadings
	A15	Α	80m3 Sodium Bicarbonate Silo Loadings
`	A16	В	25% Ammonium Hydroxide Storage Tank Loading
	A17	В	Rodecs Cooler Silo Equipment Loading
	A18	Α	Bin Trolley & Bin Tipper Equipment Loading (2 Sheets)
	A19	Α	MCC Room 1 (Rodecs 1 & 2)
	A20	Α	Floor Channel Layout - Rodecs Building
	A21	Α	M021 CGR Fan Civil Loading
	A22	Α	M016 Secondary Air Mixer Fan Civil Loading
	A23	Α	M015 RMC Fan Civil Loading
	A24	Α	MCC Room 2 (Rodecs 3 &4)
	A25	Α	MCC Room 3 (Filters 1 & 2)
	A26	Α	Combustion Chamber (RH) Equipment Loading
	A27	Α	Combustion Chamber (LH) Equipment Loading
	A28	В	MCC Room 4 (Material Handling)
	A29	В	Utilities, Buildings & Main Equipment locations (1 of 2)
(^{29A}			Utilities, Buildings & Main Equipment locations (2 of 2)
A30A			40 Pod Gas Cleaning System Equipment Loading
A31B			Steam Turbine / Air Cooled Condenser Module - FLD
A31C			Steam Turbine / Air Cooled Condenser Module - FLD
A32D			Steam Boiler Equipment Loadings
A33A			Rodecs Control Room Layout
A34A			M009-A Burner Air Fan Civil Loading
A35A			M009-B Burner Air Fan Civil Loading
A36B			Bin Handling Crane System
A39A			MCC Room#5 (2MW UPS Room)
A40A A40A			Vehicle tracking movements (VTM)-Pre-Processed Material Truck Delivery 8
A40A A40A			(VTM)-Zone 1 Power island tanker route (2 of 6)
A40A A40A			(VTM)-Zone 2 GCS Discharge system tanker route (3 of 6) (VTM)-Zone 3 GCS Bicarbonate feed system tanker route (4 of 6)
A40A A40A			
A40A A40A			(VTM)-Zone 4 Nox systems tanker route (5 of 6) (VTM)-Site General staff & visitor vehicle route (6 of 6)
ATVA		Α	MCC & Control Panels heat output calculations
		^	moo a control Fanels neat output calculations

Fairpoint Engineering Limited (A3 Size) 7128-0000-008B Rev A1

- 7128-0000-008C Rev A1
- 7128-1200-002 Rev A1

Number	<u>Re</u> <u>v.</u>	<u>Title</u>
		Electrical Single Line Diagram
1	С	Single Line Diagram (SLD) (1 of 11)
2	D	SLD-Phase 1 overview (2 of 11)
3	D	SLD-Phase 2 overview (3 of 11)
4	С	SLD-Rodecs#1 DB- MCC #1 (4 of 11)
5	С	SLD-Rodecs#2 DB- MCC #1 (5 of 11)
6	С	SLD-Rodecs#3 DB- MCC #1 (6 of 11)
7	С	SLD-Rodecs#4 DB- MCC #2 (7 of 11)
8	Α	Main 400V DB - MCC #5
8	С	SLD- Filter Room DB- MCC#3 (8 of 11)
9	С	SLD- Material Handling systems (9 of 11)
10	С	SLD-Phase 1 - Gas coolers (10 of 11)

MILLWARD MA8065 --

Number	<u>Re</u> <u>v.</u>	<u>Title</u>
104		Proposed Office Amenities General Layout
300		M8 Secondary Air Fan Foundation (4 No Required) General Arrangement
301		M10 1D Fan Foundation (4 No Required) General Arrangement
303		20 Pod Gas Cooler Foundations (2 No Required) General Arrangement
304		Filter Residue Tanker Foundation General Arrangement
305		Left Handed Combustion Chamber (2 No Required) General Arrangement
306		Right Handed Combustion Chamber (2 No Required) General Arrangement
307		Sodium Bicarbonate Foundation General Arrangement
309		Ammonium Hydroxide Foundation General Arrangement
310		Rodecs Machine Foundation (4 No Requried) General Arrangement
318		Rodecs Cooler Silo Foundation General Arrangement
319		M006 Recirc Fans (4 No Required) General Arrangement
320		Weighbridge General Arrangement
321		M005 Recirc Fans (4 No Required) General Arrangement
SK104		Chimney Base Foundation
SK100		Surface Water Drainage
SK100		Typical Foul Water Drainage
SK102		UPS Steel Frame GA
SK103		UPS Foundation GA
SK106		IES Oldbury- Pushwall- Bulk materials store Option 1
SK107		IES Oldbury- Pushwall- Bulk materials store Option 2
SK108		EMR Building Roof Loadings

UTILITY CONSULTANCY AND ENGINEERING LTD - VC-IES -

 $\begin{array}{cc} & \underline{\text{Re}} \\ \underline{\text{Number}} & \underline{\text{v.}} & \underline{\text{Title}} \end{array}$

1 IES Oldbury indicative HV single line diagram with 2 generators and expor

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<u>Nur</u>	<u>mber Re</u>	<u>.ev.</u>	<u>Title</u>			
2	A	41	Proposed Layout of Civils for Pre-Processing Building (EMR Plant)			
7	A	42	Proposed Plant layout - LAP2B			
8B	A	41	Proposed Building profiles External elevations (LAP2A - OP.2)* with marked comments			
8C		41	Proposed Building profiles External elevations (LAP2A - OP.2)* with marked comments			
HULL	EY& KIRK	woo	OD - 30526 - (6S)			
1	T'	1 I	Indicative HV single line schematic			
2	T.	1 :	Substation HV/LV Schematic – Rodecs number 1			
3	<u>T</u>		Substation HV/LV Schematic – Rodecs number 2			
4	T'		Substation HV/LV Schematic – Rodecs number 3			
5 6	T.		Substation HV/LV Schematic – Rodecs number 4 Substation HV/LV Schematic – Gas coolers			
7	Ť,		Substation HV/LV Schematic – Gas coolers			
8	Ť		Substation HV/LV Schematic – Materials handling			
.9	T	1 9	Substation HV/LV Schematic – EMR			
10	Ţ,		Substation HV/LV Schematic – UPS			
11	T′	1 8	Sitewide Fire alarm schematic			
HULL	HULLEY& KIRKWOOD - 30526 - (60)					
1 2	T′ T′		External Services sitewide layout External lighting & CCTV layout			
HULLI	EY& KIRK	WOO	OD - 30526 (61)			
1	T 1	1 C	Containment layout zone 1			
2	T 1		Containment layout zone 2			
3	T1		Containment layout zone 3			
4	T1		Containment layout zone 4			
5 6	T1 T1		Containment layout MCC room3,MCC room 5 & HV Switchrooms Containment layout Process floor plan			
7	T1		Containment layout Process floor plan			
HULLI	EY& KIRK	WOO	OD - 30526 - (62)			
) 5. 1	T 1	1 Sı	mall Power layout Zone 1			
2 3	T1	1 Si	mall Power layout Zone 2			
3			mall Power layout Zone 3			
4			mall Power layout Zone 4			
5 6			mall Power layout MCC room3,MCC room 5 & HV Switchrooms mall Power layout Process floor plan			
7	T1		mall Power layout Process floor plan			
			,			
HULLI	EY& KIRK	WOO	OD - 30526 - (63)			
1			ighting layout zone 1			
2			ighting layout zone 2			
3			ighting layout zone 3			
4 5			ighting layout zone 4. ighting layout MCC room3,MCC room 5 & HV Switchrooms			
6			ighting layout MCC rooms, MCC rooms & HV Switchrooms			
7	Ť		ighting layout Process floor plan			

HULLEY& KIRKWOOD - 30526 - (68)

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1 T1 Fire Alarm layout zone 1
2 T1 Fire Alarm layout zone 2
3 T1 Fire Alarm layout zone 3
4 T1 Fire Alarm layout zone 4
5 T1 Fire Alarm layout MCC room 5, MCC room 5 & HV Switchrooms
6 T1 Fire Alarm layout Process floor plan
7 T1 Fire Alarm layout Process floor plan
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HULLEY& KIRKWOOD - 30526 - (69)

1 T1 Lightning Protection layout

HULLEY& KIRKWOOD - 30526 - (5S)

MCWS T1 Cold Water supply schematic

Natural Gas T1 Natural Gas

HULLEY& KIRKWOOD - 30526 - (50)

1 T1 Environmental layout – Zone 1 2 T1 Environmental layout – Zone 2

HULLEY& KIRKWOOD - 30526 - (57)

1 T1 Ventilation layout – Zone 1 2 T1 Ventilation layout – Zone 2

STEELWORK DARWINGS

SCHEDULE OF DEROGATIONS TO WORKS INFORMATION

None

OTHER DOCUMENTS

Clancy Consulting Report

- Clancy Consulting Geotechnical Ground Investigation Report Ref 10/0311/001 Dated July 10 [Pages 1 – 54].
- National Grid Proposed gas connection quotation 9th September 2011, reference 30496519
- Western Power Distribution electricity generation connection reference 400058381, 23 August 2011
- WEG Synchronous Machine Generator Data sheet DS: 38848-1/2011, dated NOV/10/2011

(Site Information)

Clause 11.2 (16) Site Information is information which

- · describes the site and its surroundings and
- is in the documents which the Subcontract Data states it is in

SITE WORKS INFORMATION / DOCUMENTATION AS ATTACHED TO HARD COPY IN DOCUMENT "E"

DRAWINGS

Vinci Construction UK Ltd (A3 Size)

• IES Oldbury Site Plan VC/IES/001 Rev-

EXISTING SERVICES INFORMATION

Facilities; Reference S12-20-(28)/BB0026/C57

OTHER DOCUMENTS

None