TECHNICAL NOTE

Project Title: Ridham Dock

Report Reference: JNY10115-04

Date: April 2020

Response to Kent County Council Highways and Highways England

Introduction

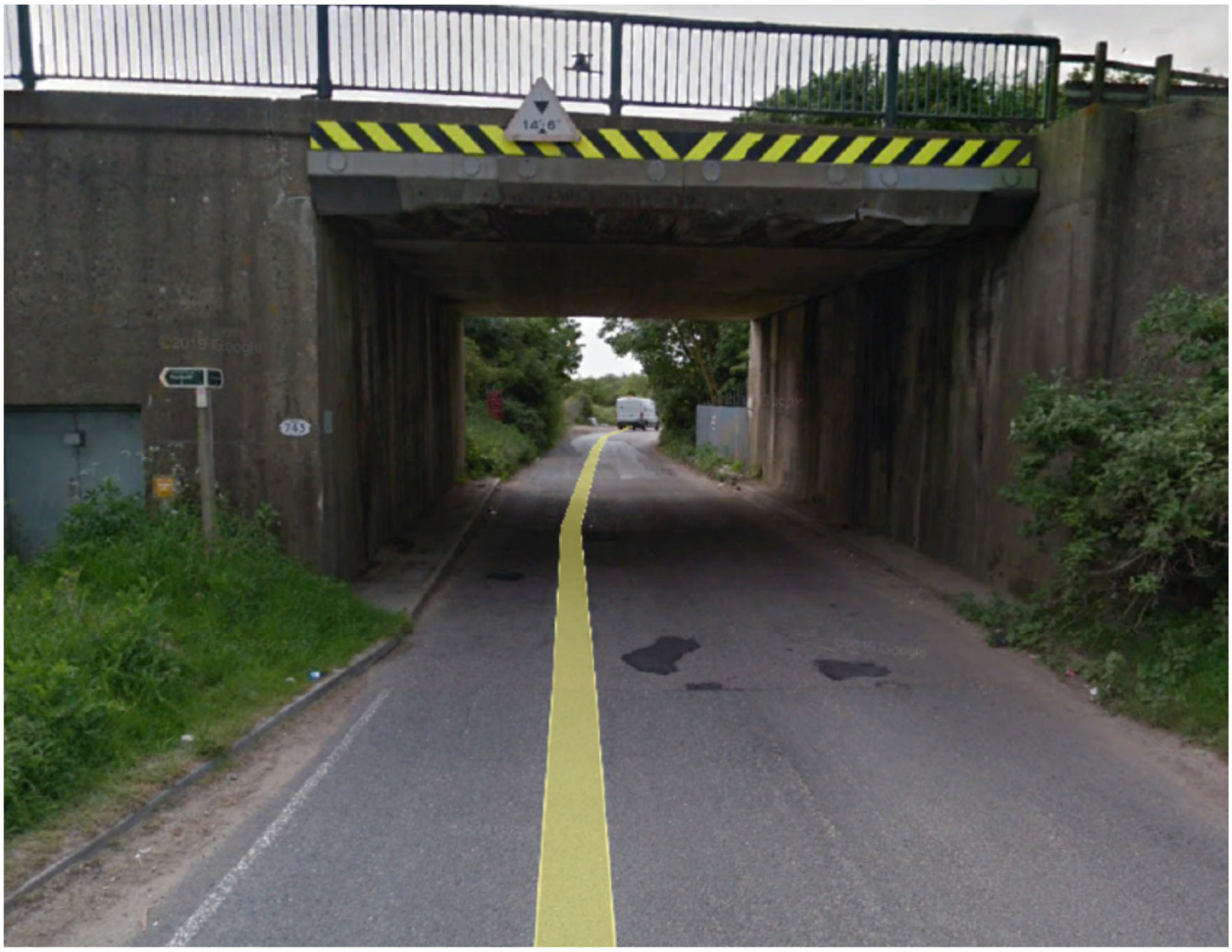
1.1 This note has been prepared to provide a response to comments received from Kent County Council (KCC) Highways and Highways England (HE) on the transport related aspects of the KCC/SW/0008/2020 full planning application for an Incineration Bottom Ash (IBA) recycling facility at Ridham Dock, to the north of Sittingbourne, in Kent. The note is to respond to comments from KCC Highways dated 9 March 2020 and from Highways England dated 20 February 2020.

1.2 The proposed development of the IBA recycling facility is inherently sustainable in nature by treating, stabilising and converting IBA to aggregate for construction use. The resulting product of the proposed development, IBAA, is used as a secondary aggregate, offsetting primary aggregate demand. The Planning Statement states the deficit between Kent's crushed rock production and sales within the county (approx. 50%). IBAA will replace a proportion of crushed rock imported to Kent, increasing Kent's net self-sufficiency in aggregate use, reducing regional movements of aggregate and substituting road movements of primary aggregate already occurring in Kent. The aggregate could also be used in the forthcoming construction works at the M2 Junction 5 and the A249 Grovehurst junction, which would minimise vehicle movements through these junctions during their construction as well as minimising vehicle-kilometres on the network.

Access Arrangements

1.3 HGVs accessing the proposed development will use a private road (Ridham Dock southern access road) to the south, which links to Barge Way, leading to the A249. HGVs are not able to access the proposed development from the west via a private road (Ridham Dock western access road) due to the railway bridge height restriction of 14 feet, 6 inches. Shown on **Figure 1** some HGVs will exceed this height restriction. This restriction would prevent larger payload capacity HGVs, such as the articulated lorries importing IBA, and those with aerodynamic features from accessing the proposed development, both of which should be supported.

Figure 1: Railway Bridge over Western Access Road



Confirmation of Import and Export Capacity

1.4 The proposed development will import 400,000 tonnes per annum (tpa) of IBA to be processed and export the resulting output of 360,000 tpa of Incinerator Bottom Ash Aggregate (IBAA) / metals. Of the 360,000 tpa of IBAA / metals to be exported 50,000 is anticipated to be exported via Ridham Dock, with the remaining IBAA / metals exported via the Strategic Road Network (SRN).

1.5 The discrepancy between import tonnage and export tonnage is due to moisture loss (circa average 10-12% by weight) during processing. This accounts for the need to export 360,000 tonnes of IBAA and metals at the end of the process (10% loss by weight).

1.6 Fortis have a Supply Agreement with Brett Aggregates' for them to take up to 50,000 tonnes per annum for export via the dock. To provide assurance that the 50,000 tpa would be exported via the dock (not using the SRN), the following planning condition is proposed:

"No more than 310,000 tpa of 'material' shall be exported from the site by road per annum."

1.7 Therefore the 50,000 tpa of IBAA / metals would not be exported via the SRN as they are not included within the vehicle calculations for the 310,000 tpa of IBA / metals shown in the Transport Statement (TS) (RPS Ref: JNY10115-02).

1.8 In order to provide comfort that IBA will be imported from the consented K3, the proposed K3 expansion and proposed WKN as per the calculations shown in the TS, the applicant proposes a planning condition worded such as:

"No more than 165,500tpa of IBA shall be imported to the site from sources other than K3/WKN."

1.9 This figure is the remaining throughput of the proposed development after subtracting the anticipated aggregated amount of IBA tonnage produced by K3 (consented plus proposed) and WKN (proposed) at completion. The vehicle movements associated with this are shown at **Appendix B**.

Evidence of Trip Generation Assumptions and Calculations

1.10 Page 23 of the consented K3 TA is provided at **Appendix A** which sets out details on the K3 consented HGV calculations. In the TS it stated that ash removals would occur 278 days, however as shown in the consented K3 TA, paragraph 4.8.1, it states 287 days per year. The consented K3 TA is in error as the number of working days for the consented K3 as calculated at that time (prior to the S73 application to enable seven-day HGV movement) was 278 (5.5 days multiplied by 52 weeks minus 8 bank holidays) rather than 287 working days. For ease the calculation as set out in the consented K3 TA and as granted is shown below.

1.11 In terms of daily HGV movements currently permitted for the export of IBAA / metals for the consented K3, in relation to its IBA recycling facility, the calculations are shown below:

- Maximum annual export of ash / aggregate: 165,000 tonnes;
- Average HGV load of 20 tonnes;
- Giving 8,250 HGV's per annum or 16,500 HGV movements per annum;
- Ash removals Monday – Friday and Saturday morning (5.5 days per week or 287 (note error above) days per year); and thus
- Average of 58 HGV movements per day.

1.12 Therefore, the IBA recycling facility incorporated as part of the consented K3 has consent for 58 HGV IBAA / metals export movements per on a weekday (note that if the correct 278 working days was applied within the consented K3 TA, this would equate to 59 HGV movements per day).

1.13 It is to be noted that of these 58 consented vehicle movements in relation to the export of IBAA only 41 vehicle movements are accounted for in the net change calculations in relation to the amount of IBA imported from the consented K3 due to the difference in Fortis estimated IBA produced by the consented K3. This is lower than the estimate made in the consented K3 TA (notwithstanding the error we have identified) and use of the lower number of 41 HGV movements per day is therefore a robust consideration in the context of this application.

1.14 The TS Table 5.3 outlines two-way daily trips associated with the development as being 102 HGVs for import and 102 for export with total two-way movements of 205 HGVs. The calculation sheets from which these movements are derived are shown at **Appendix B**.

1.15 In relation to the 20 tonne HGVs exporting IBAA / metals and the 27 tonne HGVs importing IBA for the proposed development, which differ from the consented K3 assumptions of 20 tonne HGVs for both import and export, the estimations differ due to different assumptions from Fortis and WTI. The assumptions for the payload of HGVs importing IBA from Fortis reflect current estimations, as opposed to those estimated for WTI over 10 years ago. The Fortis estimations are derived from their site in Hampshire whereby the average payload of vehicles importing IBA is 27.30 tonnes (articulated). This is shown in the QuarryMinder report included at **Appendix C**.

1.16 20 tonne vehicles (8 wheeled rigid) will be used to export IBAA as the typical destination is a construction site. 20 tonne vehicles are inherently more stable when tipping/delivering at such sites, which can vary in their ground conditions.

1.17 As per the TS the 50k per annum export via water will not lead to HGVs on the local road network. There will be plant vehicles based on site to shuttle IBAA / metals to the dock as and when required.

1.18 As shown at **Appendix B**, for the IBA imported from both the consented K3 and proposed WKN a 278 day working year has been used in the calculations. The 304 day working year for the proposed development is in relation to the exports of IBAA / metals and IBA imported from sites other than the consented K3 / proposed WKN. Therefore, there is no contradiction with the working days for the consented K3 / proposed WKN in terms of the calculations shown in the TS and the 304 working days for the proposed development represents Fortis estimations. The proposed WKN has been used in calculations as a worst case due to the lower number of working days than the working days from other sources.

Justification of Vehicle Arrival / Departure Profiles

1.19 The consented K3 TA stated the consented K3 would produce 165,500tpa of IBA and the current Fortis estimations are based upon 137,500tpa of IBA. The 165,500tpa of IBA was the estimate in 2009 in advance of any waste data being available at that time. 137,500tpa of IBA is the current estimate with refined information on, for example, the calorific value of the waste inputs. Notwithstanding, as above, a condition is proposed that will limit the amount of IBA to be delivered to the facility from sources other than K3/WKN.

1.20 There may be infrequent peaks of HGV movements at various times of day however these would be balanced by subsequent troughs and the assumption of a flat arrival and departure profile provides a robust assessment.

1.21 The flat arrival and departure profile is appropriate given the variation in vehicle movements which may occur on a day by day basis and the average daily vehicle movements would remain the same. Therefore, the flat profile represents average movements.

1.22 The weighbridge output data shown at **Appendix C** provides payload information and dates of delivery but not the time of delivery. A such it cannot be used to inform the temporal distribution for this proposal.

1.23 HGVs which access the proposed development from the SRN will use the A249. It is noted that there are improvements planned to the M2 Junction 5 due to the junctions being sensitive to increases in traffic at peak times. As such the applicant proposes a planning condition as follows:

"Inbound and outbound HGV movements exporting and importing 'material' from the site must not enter or leave the site between the hours of 08:00-09:00 and 17:00-18:00 Monday-Friday inclusive until the M2 Junction 5 and A249 Grovehurst junction improvement schemes are open to traffic."

1.24 The total daily and hourly trip generation by vehicle type associated with the operation of the development is shown at **Appendix C** of the TS. This has been recalculated in order to take into account the above two proposed planning conditions that will restrict input to no more than 165,500tpa of IBA from sources other than K3/WKN and the peak hour exclusions. These recalculated daily and hourly HGV movements are shown at **Appendix D** of this Technical Note.

1.25 The HGV daily and hourly trip generation for the construction phase will be less than that identified during the operational phase of the proposed development. As such the daily operation of the proposed development is considered to be the worst-case traffic scenario in terms of HGVs and therefore, not further assessment has been made in relation to construction traffic. Construction vehicle movements will be estimated by a construction contractor when appointed to make such estimates and these will be set out in a Construction Traffic Management Plan, which the client is happy to have conditioned.

Travel Plan and Construction Traffic Management Plan

1.26 A Travel Plan will be prepared and agreed with the Highway Authorities in order to manage operational HGVs and staff vehicles.

1.27 A Construction Traffic Management Plan will be prepared and agreed with the Highway Authorities to manage construction vehicles.

1.28 The applicant proposes that planning conditions are imposed requiring submission and approval of a Travel Plan prior to first occupation of development and a Construction Management Traffic Plan prior to commencement of development.

Justification for Using Trip Generation Discounts

1.29 As set out in paragraph 2.6 of the TS the application site has extant consent for use as a Car Shredding Facility and is currently a vacant brownfield site, having previously been granted planning permission in 2004, planning ref: SW/03/1331. The site operated until 2016, when the facility closed, and the site was cleared. Paragraph 6.4 of the TS details the 150 vehicle movements of the extant development to be considered against the proposed development.

1.30 The 2004 planning permission of the Car Shredding Facility has been recognised as not being in use for four years by both KCC and HE and as such is unlikely to have been captured in the traffic surveys that underpin the LP models. To ensure a robust consideration, the extant use of the proposed development site has not been considered further and Table 6.1 of the TS has been revised below so that no account has been taken of the 150 extant vehicular movements related to the 2004 planning permission when considering the proposed traffic impact.

1.31 **Table 1** shows the net change in daily vehicular trip generation with the above two proposed conditions. As described previously this shows the vehicle movements associated with the import of up to 165,500tpa from sources other than K3 and WKN and the export of up to 310,000tpa by road. The vehicle movements associated with the movement of IBA from the consented K3,

proposed K3 and proposed WKN are included within their planning applications and to include those vehicle movements in these calculations would be double counting. Hence the vehicle movements set out in **Table 2** represent the net change in vehicle movements as a result of this proposed IBA facility.

Table 1: Net Change in Daily Vehicular Trip Generation with Proposed Conditions

Vehicle Type	Number of Two-way Vehicle movements per day		
	Consented K3 Vehicle Movements	Proposed Use	Net Change
Cars	0	31	+31
Light Goods (LGV)	0	0	0
Heavy Goods (HGV)	41	142	+101
Total	**41**	**173**	**+132**

1.32 **Table 1** shows that over the course of the day there will be a total two-way net change of +132 vehicle movements, including an increase of 31 car movements and a net increase of 101 HGV movements.

1.33 Planning permission for storage and distribution of cement (18.502717/FULL) was granted in April 2019 on a section of the extant consented site. It is our understanding that from the landowner that this permission is no longer to be implemented.

1.34 Regarding concerns that the consented K3 IBA will be constructed or that something else will be constructed instead, the former WTI IBA planning permission adjacent the consented K3 (SW/16/507687) has now lapsed (February 2020) and therefore expired without implementation. Furthermore, the EA Permit for the site has also lapsed. It is also noted that the site of the expired IBA consent is the site on which WKN is proposed. Notwithstanding, the above proposed planning condition also links the IBA generated by K3 and WKN with the proposed IBA facility such that the consent, if granted, would not enable any other IBA facility to be constructed that would undermine the HGV movements considered as part of this Technical Note.

1.35 Concerns have also been raised that it cannot be assumed that the proposed development will replace the approved consented K3 traffic. Fortis IBA Ltd have the contract for processing and handling of all K3 and WKN IBA arisings.

IBA Export Vehicle Movements (Imported to Proposed Development)

1.36 The permitted consented K3 application stated the facility would generate up to 165,000 tonnes per annum of bottom ash. This will be treated, stabilized and converted to aggregate at the consented K3 IBA processing facility. The aggregate will be transported off site for use elsewhere. This is stated in Section 4 of the consented K3 TA.

1.37 As such the consented export movements of aggregate is 165,000 tonnes, at an average HGV load of 20 tonnes, leading to an average 58 HGV movements per day.

1.38 Nevertheless, as stated in paragraph 5.11 of the TS, current Fortis estimations are that once operational, the consented K3 will produce 137,500 tpa of IBA which as detailed in **Appendix B**

relates to 41 HGV movements for the IBAA exports. The original K3 consent included an IBA processing facility, but this was removed as part of subsequent S73 applications to vary the consent and which led to the separate application for the IBA facility (which has now expired). Hence, there is no longer any planning consent for IBA inputs, only exports, as part of the K3 consent. The consented movements are in relation to export of the processed aggregate.

1.39 The expected IBA import and IBAA export vehicle movements from K3, proposed WKN and other sources to the proposed development are shown in **Table 2**, with the net IBA export to the proposed development as imports also shown.

Table 2: Vehicle Movements between SEP, proposed WKN, Proposed Development and Other Sources

Details	Number of Two-way Vehicle movements per day					
	Consented IBAA Export K3 (from Fortis estimations)	Expected IBAA Export Proposed Development	Expected IBA Import from K3	Expected IBA Import from Proposed WKN	Total net IBA Import from K3 and WKN	Expected IBA Import from Other Sources
Heavy Goods Vehicles (HGV)	41	102	37	26	63	40
Average HGV load (tonnes)	20	20	27	27	27	27
tonnage (tonnes)	123,750	310,000	137,500	97,000	234,500	165,500

1.40 **Table 2** shows the relationship of the proposed development with K3 and proposed WKN and the resultant calculations which show there will be 63 net daily HGV movements generated to the proposed development from K3 and the proposed WKN. **Table 2** also shows the HGV movements from **Table 1** broken down to imports / exports and consented HGV movements. The expected IBAA export from the proposed development totals 102 HGV movements after taking into account the consented IBAA HGV movements. The IBA import to the proposed development totals 40 HGV movements after taking into account the net HGV movements from K3 and proposed WKN to avoid double counting. This results in 142 HGV two-way movements generated by the proposed development.

1.41 With the proposed conditions, this equates to an average of 13 net HGV two-way movements per hour, none of which would occur during the peak hours of 08:00 – 09:00 and 17:00 – 18:00.

Proposed Layout

1.42 The proposed layout is shown at **Appendix E**. The turning circle shows the ability of articulated HGVs to turn within the site. The length of the access road between the weighbridge provides space for 2 HGVs to be held prior to weighing. There will be a total of 9 HGVs per hour arriving at the proposed development. Over the course of the hour this allows for over 6 minutes for each

HGV to use the weighbridge. HGVs typically require a few minutes each to be weighed and processed over the weighbridge. When taking into account an HGV on the weighbridge and space for 2 HGVs to wait prior to weighing there is sufficient area and time for HGVs to be processed without queueing back through the main gate.

Appendices

Appendix A – Consented K3 TA Extract

4.6.2 It can be seen that the over half of all staff traffic (55.8%) will travel to and from the site from Kemsley along the B2005 and Swale Way. Approximately 11.8% of staff traffic will travel to and from the north of the site from the Isle of Sheppey along Barge Way. Only a small proportion of staff traffic (5.6%) will travel to and from the site from the M2 junction 5.

4.7 Assignment of Staff Car Movements

4.7.1 Peak hour and daily staff vehicle movements have been assigned to the highway network in accordance with the distribution set out in **Table 4** above and are shown in **Figure 10**.

4.8 Daily HGV Movements

4.8.1 The number of HGV movements associated with the proposed development has been derived on the basis of the following assumptions:

Import of Waste

- Annual import of waste: 550,000 tonnes;
- Average HGV load of 20 tonnes;
- Giving, 27,500 HGVs per annum or 55,000 HGV movements per annum;
- Waste deliveries Monday-Friday and Saturday morning (5.5 days per week or 287 days per year); and
- Average of 192 HGV movements per day (96 movements Saturday)

Export of Ash/Aggregate

- Maximum annual export of ash/ aggregate: 165,000 tonnes;
- Average HGV load of 20 tonnes;
- Giving 8,250 HGVs per annum or 16,500 HGV movements per annum;
- Ash removals Monday-Friday and Saturday morning (5.5 days per week or 287 days per year); and
- Average of 58 HGV movements per day (29 movements Saturday)

Appendix B – Vehicle Movements Calculation Sheets

Proposed Development Vehicle Movements From Other Sources		
	Tonnes	Notes
IBA in from other sources	165,500	
IBAA/metals Out (assumes 10% Moisture loss)	148,950	Assumes 10% moisture loss from IBA
Less 50ktpa IBAA exported via dock	50,000	Assumed Brett export to Ipswich via barge
Total Exported by road	**98,950**	
Vehicles In/annum	6,130	Assumes 27t load for IBA imports
Vehicles In/day	20	Assumes 304 day working year
Movements In/day	40	
Vehicles Out/annum	4,948	Assumes 20t load for IBAA/metal exports
Vehicles Out/day	16	Assumes 304 day working year
Movements Out/day	33	
Total Movements/annum	**11,077**	
Total Movements/day	**73**	
Proposed Development Vehicle Movements From Consented K3		
	Tonnes	Notes
IBA In Kemsley Line 1&2	137,500	
IBAA/metals Out (assumes 10% Moisture loss)	123,750	Assumes 10% moisture loss from IBA
Total Exported by road	**123,750**	
Vehicles In/annum	5,093	Assumes 27t load for IBA imports
Vehicles In/day	18	Assumes 278 day working year
Movements In/day	37	
Vehicles Out/annum	6,188	Assumes 20t load for IBAA/metal exports
Vehicles Out/day	20	Assumes 304 day working year
Movements Out/day	41	These movements are permitted as per the Permitted SEP Application
Total Movements/annum	**11,280**	
Total Movements/day	**77**	
Proposed Development Vehicle Movements From proposed WKN		
	Tonnes	Notes
IBA In Kemsley Line 3	97,000	
IBAA/metals Out (assumes 10% Moisture loss)	87,300	Assumes 10% moisture loss from IBA
Total Exported by road	**87,300**	
Vehicles In/annum	3,593	Assumes 27t load for IBA imports
Vehicles In/day	13	Assumes 278 day working year
Movements In/day	26	
Vehicles Out/annum	4,365	Assumes 20t load for IBAA/metal exports
Vehicles Out/day	14	Assumes 304 day working year
Movements Out/day	29	
Total Movements/annum	**7,958**	
Total Movements/day	**55**	
Total Proposed Development Vehicle Movements		
	Tonnes	Notes
IBA In Kemsley Line 1&2	137,500	
IBA In Kemsley Line 3	97,000	
IBA In Other	165,500	
Total IBA In	**400,000**	
IBAA/metals Out (assumes 10% Moisture loss)	360,000	Assumes 10% moisture loss from IBA
Less 50ktpa IBAA exported via dock	50,000	Assumed Brett export to Ipswich via barge
Total Exported by road	**310000**	
Vehicles In/annum	14,815	
Vehicles In/day	51	
Movements In/day	103	
Vehicles Out/annum	15,500	
Vehicles Out/day	51	
Movements Out/day	102	
Total Movements/annum	30,315	
Total Movements/day	**205**	

Appendix C – Quarryminder Report

Ticket Data - January - March

	Data		
Product Category	No of Loads	Tonnes	Average Weight
IBA in	966	26,370.74	27.30
IBAA out	2085	40,420.43	19.39
Grand Total	3051	66,791.17	

Appendix D – Operational Daily Movements with Conditions in Effect

Time Begin	Weekday									Saturday								
	Arrivals			Departures			Two Way			Arrivals			Departures			Two Way		
	Car	HGV	Total	Car	HGV	Total	Car	HGV	Total	Car	HGV	Total	Car	HGV	Total	Car	HGV	Total
00:00																		
01:00																		
02:00																		
03:00																		
04:00																		
05:00	5		5				5		5	5		5				5		5
06:00		6	6	5	6	12	5	13	18		6	6	5	6	12	5	13	18
07:00		6	6		6	6		13	13		6	6		6	6		13	13
08:00											0	0		0	0		0	0
09:00		6	6		6	6		13	13		6	6		6	6		13	13
10:00		6	6		6	6		13	13		6	6		6	6		13	13
11:00		6	6		6	6		13	13		6	6		6	6		13	13
12:00		6	6		6	6		13	13		6	6		6	6		13	13
13:00	5	6	12		6	6	5	13	18	5	6	12		6	6	5	13	18
14:00		6	6	5	6	12	5	13	18		6	6	5	6	12	5	13	18
15:00		6	6		6	6		13	13		6	6		6	6		13	13
16:00		6	6		6	6		13	13		6	6		6	6		13	13
17:00											0	0		0	0		0	0
18:00		6	6		6	6		13	13		6	6		6	6		13	13
19:00																		
20:00																		
21:00	5		5				5		5	5		5				5		5
22:00				5		5	5		5				5		5	5		5
23:00																		
Total	15	71	86	15	71	86	31	142	173	15	71	86	15	71	86	31	142	173

Appendix E – Proposed Layout

INSET

IBA STOCKPILE
5,660sq m IN STOCKPILES 8m
HIGH, 40° ANGLE OF REPOSE

IBA STOCKPILE
9,600sq m IN STOCKPILES 8m
HIGH, 40° ANGLE OF REPOSE

IBA STOCKPILE
4,400sq m IN STOCKPILES 8m
HIGH, 40° ANGLE OF REPOSE

INFEED IBA STOCKPILE
124.6M LONG X 55 M WIDE X 10M HIGH
= 261985M3 x 1.2mt = 744000
ANGLE OF REPOSE 40°

FASERFIX SUPER 200 BY HAURATON
OUTLET VIA PROPRIETARY SUMP

SURFACE WATER PUMPING STATION
75mm RISING MAIN IN 100mm DUCTING
UNDER REINFORCED BANK, THEN
VERTICAL ON FACE OF RETAINING WALL,
TO DISCHARGE INTO SITE THROUGH WALL

3m HIGH GALVANISED STEEL
PALISADE SECURITY FENCE
BOLTED DOWN TO SLAB

IN SITU REINFORCED
CONCRETE WALL TO
PROTECT CAR PARKING

VERGE MARKER POSTS
@ 2.0m CENTRES

SPRING STEEL BUFFERS GH TYPE
76x10mm. REFER TO MANUFACTURERS
INSTALLATION GUIDE

OFFICE AND WEIGHBRIDGE
FOUNDATIONS SEE DRAWING
19-0224/S005&S007

BOLLARDS

WHEEL WASH DETAIL
TO BE CONFIRMED

METAL
STORAGE BAYS

NF (A)
1-3mm

NF (B)
1-3mm

NF (A)
0-1.3mm

NF (B)
0-1.3mm

NF (A)
3-6mm

NF (B)
3-6mm

TO SPRAY
HEADS

WEDGE PIT
SEE DRAWING
19-0224/S004

SILTBUSTER
PLINTH

PUMPS

WTE VORTEX

ISOLATION
JOINT

FW1
Ø1.2m
CL 3.585m
IL 1.85m

12.0m WIDE MAIN
ACCESS GATE

12m WIDE
PEDESTRIAN
ACCESS GATE

BOLLARD

VERGE 0.8m WIDE
PC EDGING

ACCESS ROAD 6m WIDE
PC KERB 150mm FACE

FOOTWAY 1.8m WIDE

IN SITU REINFORCED
CONCRETE WALL TO
PROTECT SUB STATION

SUB STATION

EXTEND OF PROPOSED
PROCESSING PLANT
(DETAILS TO BE CONFIRMED)

FALLS

LEACHATE WATER
STORAGE TANK
SEE DRAWING 19-0224/S005

ISOLATION JOINT

FW1.2
Ø1.2m
CL 3.760m
IL 0.760m

DISCHARGE TO
EARTH DITCH

HEADWALL

ARTICULATED LORRY
TURNING CIRCLE

SEE
INSET
ABOVE

SCALE 1-250

Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT.

CDM REGULATIONS 2015 - RESIDUAL RISKS -

1. EXISTING UTILITY MAINS & SERVICES ARE PRESENT AND HAVE BEEN TAKEN FROM RECORDS OBTAINED FROM THE UTILITY COMPANIES. THERE IS A RISK OF UNCHARTED SERVICES BEING PRESENT.
2. THE CONTRACTOR MUST TAKE ADEQUATE PRECAUTIONS FROM THE POSSIBLE PRESENCE AND CONTAMINATION FROM LEPTOSPIROSIS (WEILS DISEASE)
3. THE WORKS WILL INVOLVE THE MOVEMENT OF PLANT AND MACHINERY IN AND AROUND A LIVE CARRIAGEWAY. THERE IS A RISK OF POTENTIAL CONFLICT BETWEEN PLANT AND ROAD/PEDESTRIAN USERS.

NOTES:

1. PROPOSED ACHIEVABLE LEVELS HAVE BEEN TAKEN FROM VERTASE FLI DRAWING D1779_18 DATED 06/09/19
2. CONTRACTOR WILL INDICATE SLAB JOINT POSITIONS TO BE APPROVED BY THE PROJECT MANAGER.
3. IBA - 1.2 TONNES PER CUBE / ANTICIPATED TONNAGE IS 31,000 t
4. IBAA - 1.2 TONNES PER CUBE / ANTICIPATED TONNAGE 75,000 t
5. LOWER GROUND TO BE IMPROVE BY DEEP SOIL MIXING TO ACHIEVE A CBR OF 10%

Rev	Description	Drn	Chk	Date
B	ROAD CHANNEL DRAIN EXTENDED	SGS	CJM	21.11.19
A	TENDER ISSUE	SGS	CJM	15.11.19

BdR Incorporating
K L Harrison & Associates Ltd
Civil & Structural Engineering Consultants
The Old Engine House, Goblands Farm Business Park
Court Lane, Goudhurst, TN17 1DP
Tel 01732 851416
email: engineering@bdr.uk.com

Client
FORTIS
Preserving our Natural Resources

Project
IBA PLANT KEMSLEY

Drawing
ENGINEERING LAYOUT
8 ACRES SITE

TENDER ISSUE

Scale @ A0	Date	Drawn by	Checked
1:250	NOV'19	SGS	CJM

Job No.	Drg. No.	Rev
19-0224	C10111	B

Contact

RPS Consulting Services Ltd
20 Western Avenue
Milton Park
Abingdon
Oxfordshire OX14 4SH
T: +44(0) 1235 432190
transport@rpsgroup.com