

# MINUTES

JBA Project Code 2011s5031  
 Contract Thorne, Crowle & Goole Moors  
 Client Doncaster East IDB  
 Day, Date and Time 05 April 2016 – 10:00  
 Meeting Steering Group Meeting - 005  
 Venue Natural England Thorne

**JBA**  
consulting

Status		
Attending	Paul Duncan – Natural England - Chairman	PD (NE)
	Tim Kohler – Natural England	TK (NE)
	David Hoskins – Environment Agency	DH (EA)
	Matt Cox – North Lincs Wildlife Trust	MC (NLWT)
	Martin Oldknow – Doncaster East IDB	MO (DEIDB)
	Sue Wilkinson- Doncaster East IDB	S
	David Hargreaves – Life Project	DH (LP)
	Craig Benson – IDB Finance Officer	CB (IDB)
	Richard Buck – JBA Consulting	RB (JBA)
	Balaji Angamuthu – JBA Consulting	BA (JBA)
	Chris Wright - JBA Consulting	CW (JBA)
	<i>Minutes taken by JBA Consulting</i>	

Item		Action
<b>1</b>	<b>Apologies</b> No apologies were received. MO wasn't able to be there for the main part of the meeting, just the site visit.	
<b>2</b>	<b>Introductions</b> Introductions were made. MC reported that he was the new NLWT permanent member.	
<b>3</b>	<b>Matters arising / minutes of last meeting</b>	
<b>3.1</b>	(3.0) TK met Darren Whitaker (JBA) who is completing the Habitat Regulations Assessment (HRA).	
<b>3.2</b>	(3.1) BA has uploaded all Members Interest Forms to the web site, except that for MC which he has received and will upload shortly.	BA
<b>3.3</b>	(3.2) Re filling vacancies, see agenda item 8.2.	
<b>3.4</b>	(6.6) BA & DH (LP) to meet this month to finalise relevant invoices to end of 2015/16 financial year.	BA/DH
<b>3.5</b>	(5.4) The hand over meeting has been held. BA is to send shape files to TK.	BA
<b>4</b>	<b>Health &amp; Safety and Environmental Issues</b>	
<b>4.1</b>	No accidents or near misses have been reported.	
<b>4.2</b>	BA reported that there are no contractors currently working on site.	
<b>4.3</b>	BA reported on the theft of batteries from the solar panel raft at the Blue Bridge tilting weir. The Contractor had left the pontoon next to the bank. The Contractor agreed to have the batteries replaced. BA reported that this Contractor had also planned to place concrete at the weir after he had been informed that this was not permitted and had excavated the top surface of part of the access track recently without instruction or permission. SW expressed concern that the contractor was on the tender list for the pumping station. BA confirmed that past performance will be considered during the tender assessment process.	

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**JBA**  
consulting

Item	Action
4.4 BA stated that no environmental issues had been reported and that the Contractors had left site by 25 March.	
<b>5 Programme of works</b> BA reported the following:	
5.1 Angle Drain Weir – contract works completed. A locking arrangement is being considered by NE to secure the stop log boards.	
5.2 Blue Bridge Weir – Contract works completed and tilting weir commissioned.	
5.3 Crowle Moor – some peat bunding not completed due to presence of tree stumps	
5.4 South of Limestone Road – Peat bunding complete, 9 plastic piled weirs completed, 3 to be constructed.	
5.5 North of Limestone Road – All except 4 pipe culverts completed. Water levels too high at the 4. TK advised that water levels will be lower in after the end of the nesting season. 10 to 15% of peat bunding to be completed after end of nesting season.	
5.6 BA noted that not all of the scrub clearance required for the works had been completed. Agreed BA, DW and TK to meet to ensure scrub clearance is planned and carried out at the appropriate time.	BA/DW/ TK
5.7 Pumping Station - BA will complete the technical part of the tender appraisal next week and submit to North Lincs Council who will report to the IDB, probably before the end of April.	BA
<b>6 Financial</b>	
6.1 CB presented a full financial report including the updated spend profile, attached to these minutes as an addendum. The balance is based on the original EA approval. Potential additional works are described below. The finance for these will be taken from the balance. DH (EA) agreed with the principle of re-investing the surplus in the project. CB advised that if a balance should remain at the end of the project it would be returned to the EA.	
6.2 BA reported JBA submitted a fee invoice in March for time spent between November and February inclusive and that this results in a zero balance in the fee budget. He submitted an activity schedule (attached to these minutes) showing all works predicted from 1 October 2015 to the end of the project. Taking into account the remaining budget at that date, the predicted additional fee cost is £69,000. PD noted this was the second increase, the first being in 2014. CB confirmed that there are sufficient funds in the budget. CB/BA will produce a report to the Doncaster East IDB. This was agreed by the Group.	BA/CB
6.3 DH (NE) reported that the current end of the LIFE project will be 30/06/2017 although it may be extended. BA/DH agreed to liaise to maximise appropriate match funding.	BA/DH

# MINUTES

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Contract	Thorne, Crowle & Goole Moors
Client	Doncaster East IDB
Day, Date and Time	05 April 2016 – 10:00
Meeting	Steering Group Meeting - 005
Venue	Natural England Thorne



Item	Action
<p><b>7 Works Information</b></p> <p><b>7.1</b> BA presented a list of potential additional works which could be carried out in the 2016/2017 season with estimated costs based on recent tender sums. The fee costs will need to be added to these costs. PD suggested prioritising the additional works, bearing in mind grouping these with already proposed works on the basis of location and type. BA/TK/DW to discuss the additional works to produce a final proposal for approval at the next meeting</p> <p><b>7.2</b> BA reported that the consent from the IDB has been received for the works affecting Swinefleet Drain at the pumping station which includes a number of conditions.</p>	<p><b>BA/TK/DW</b></p>
<p><b>8 Any Other Business</b></p> <p><b>8.1</b> PD noted that the Group terms of reference requires the election of the Chairman by the end of April 2016. The meeting agreed unanimously that PD continues as Chairman.</p> <p><b>8.2</b> PD reported that Malcolm Barker had agreed to sit on the Steering Group as representative of Reedness &amp; Swinefleet IDB. BA to send invitation to MB.</p>	<p><b>BA</b></p>
<p><b>9 Date of next meeting</b></p> <p><b>9.1</b> In consideration of fixing the date of the next meeting, CB reported the following:- IDB Finance Committee – 3 June 2016 Full IDB meeting 24 June 2016. PD suggested the next Steering Group meeting should be during June. BA to send out a Doodle Poll.</p> <p><b>9.2</b> The meeting closed at 11:45 am and was followed by a site visit to recent construction sites on the Moors.</p>	<p><b>BA</b></p>

## 10 Attachments to These Minutes

Financial report including Invoices, spend profile

Progress Report including programme, photos

## Consents



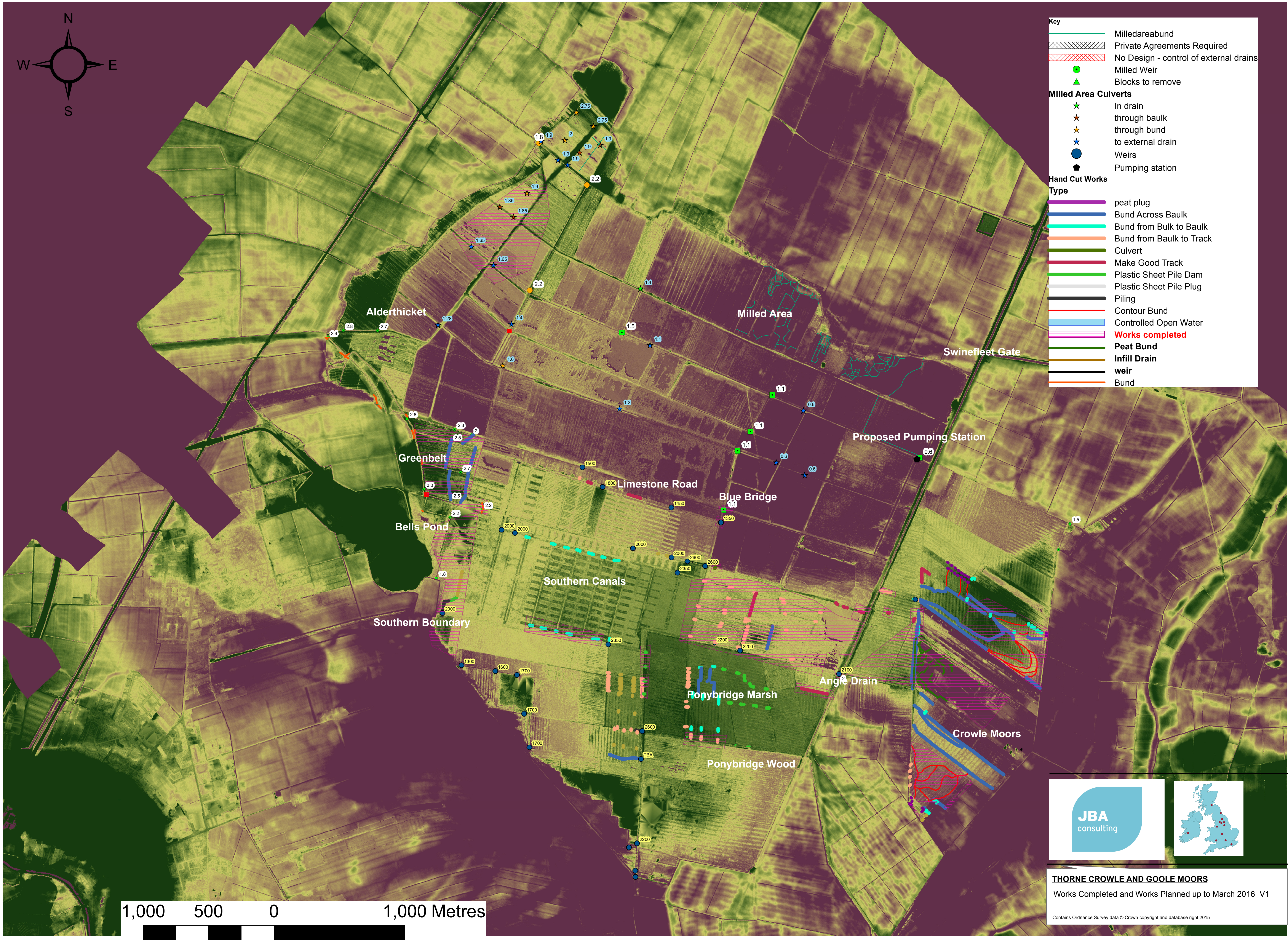






2011s5031-Thorne Moors Water Level Management Plan (WLMP)			Programme for 2015-16 and 2016-17																				
S.No.	Activities	Apr-15	-	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	
	Financial Year: 2015-16																						
1	Steel Pile Structures - Angle Drain and Blue Bridge																						
1.1	Tendering																						
1.2	Construction & hand over																						
2	Peat bunding - Phase I, 22 weirs and 22 pipe culverts																						
2.1	Design & tender documents																						
2.2	Tendering																						
2.3	Construction including scrub clearance & hand over																						
3	Pumping Station																						
3.1	Design & tender documents																						
3.2	Tendering																						
	Financial Year: 2016-17																						
3.3	Construction & hand over																						
4	14 Weirs - Phase II																						
4.1	Design & tender documents																						
4.2	Tendering																						
4.3	Construction & hand over																						
5	Peat bunding - Phase II																						
5.1	Design & tender documents																						
5.2	Tendering																						
5.3	Construction & hand over																						
6	Additional works - Crowle Failed Weir, Milled Area Bund & other works																						
6.1	Design & tender documents																						
6.2	Tendering																						
6.3	Construction & hand over																						
Key																							
To begin																							
Ongoing																							
Completed																							





**Key**

- Milledareabund
- Private Agreements Required
- No Design - control of external drains
- Milled Weir
- Blocks to remove

**Milled Area Culverts**

- In drain
- through baulk
- through bund
- to external drain
- Weirs
- Pumping station

**Hand Cut Works**

Type	
peat plug	
Bund Across Baulk	
Bund from Bulk to Baulk	
Bund from Baulk to Track	
Culvert	
Make Good Track	
Plastic Sheet Pile Dam	
Plastic Sheet Pile Plug	
Piling	
Contour Bund	
Controlled Open Water	
Works completed	
Peat Bund	
Infill Drain	
weir	
Bund	





Thorne, Crowle & Goole Moors SSSI WLMP Spend Profile	Estimated Final Costs	Estimated Final Contributions	Estimated Final Net Expenditure	EA Grant Approved	Expenditure to date to end Mar 16	Contributions To date to end Mar 16	Net Expenditure to date to end Mar 16	EA Grant balance end Mar 16	Actual Expenditure 2015/16				Estimated Expenditure 2016/17				Estimated Expenditure 2017/18				Estimated EA Grant Final Balance
									Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
									apr to Jun	Jul to Sep	Oct to Dec	Jan to Mar									
Environmental Statemen	£100,000		£10,000	£90,000	£90,000	£92,790	£10,000	£82,790	£7,210	£0	£0	£0	£0	7,210	-	-	-	-	-	-	£0
Design and Appraisal	£464,407		£4,760	£459,647	£514,480	£418,825	£4,760	£414,064	£100,416	£4,874	£26,758	£32,945	£23,896	£15,583	£10,000	£10,000	£10,000	-	-	-	£54,833
Construction Works	£2,109,879		£46,580	£2,063,299	£2,329,610	£809,618	£46,580	£763,038	£1,566,572	£20,979	£21,692	£69,812	£252,940	£438,263	£806,000	£32,000	£24,000	-	-	-	£266,309
Contingencies	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
									£25,853	£48,450	£102,757	£276,836	£461,056	£816,000	£42,000	£34,000	£0	£0	£0	£0	
TOTALS									Year Total			£453,896	Year Total			£1,353,056	Year Total			£0	£321,141

**NOTES** £321,144

The current project forecast indicates that the final total expenditure on the scheme is estimated to be £2,674,286.

The project has generated contributions from various sources to a current value of £61,340.

This contribution figure is expected to increase with the addition of any further bank interest gained and the likely contribution of € 12,000 from Natural England with respect to the construction of the pumping station.

The estimated net final expenditure figure is £2,612,946 which is less than the Environment Agency approved figure of £2,934,090. In summary it is envisaged that the scheme will be £321,144 under budget.

The project has to date incurred £1,321,233 of expenditure and received £61,340 in contributions.

This results in a net expenditure of £1,259,893. The maximum amount of EA grant to spend is £1,674,197.

However the Environment Agency are looking for at least 10% efficiency saving on this scheme.

The current project forecast meets this target if the Risk Contingency Monies are included.

The spend profile over the next three years shows how this remaining grant money is to be spent.

In summary, the yearly expenditure figures are 2015/16 £453,896, 2016/17 £1,353,056

Which confirms the underspend of £321,144 (which includes £196,000 Risk element)

The net underspend is £125,144 which equates to a 4.57% efficiency saving.

# Invoice



Doncaster East IDB  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE

Invoice Date: 14/ 03/ 2016

Invoice Number: 24616

**To: Life + Project Action C5 Life + Project Reference: LIFE13NAT/UK00451  
Lot 3 North of Limestone Road**

**Supply of Beamless Tilting Gate Solar Powered System, complete with Floating Raft and Solar Panels.**

Supply of Tilting Gate as outlined above	£17499	00
V.A.T. @ 20%	£3499	80
<b>Total Amount Due</b>	<b>£20998</b>	<b>80</b>

**Please make Cheques payable to: Northmoor Plant Ltd**  
Payment due within 30 Days

Brincliffe, North Moor Road, Walkeringham, Doncaster DN10 4LW

T: 01427 890088 F: 01427 891567 E: northmoorplant@gmail.com W: www.northmoorplant.com

Northmoor Plant Limited VAT No: 852 9155 09 Company Reg: 05340759

# Invoice



Doncaster East IDB  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE

Invoice Date: 14/ 03/ 2016

Invoice Number: 24716

**To: Life + Project Action C5 Life + Project Reference: LIFE13NAT/UK00451  
Lot 3 North of Limestone Road**

**Supply 350m of 300m Twin Wall Pipe, Seals and Couplers – Western Edge**

Supply of pipe, seals and couplers as above	£3956	94
V.A.T. @ 20%	£791	38
<b>Total Amount Due</b>	<b>£4748</b>	<b>32</b>

**Please make Cheques payable to: Northmoor Plant Ltd**  
Payment due within 30 Days

Brincliffe, North Moor Road, Walkeringham, Doncaster DN10 4LW

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# Invoice



Doncaster East IDB  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE

Invoice Date: 14/ 03/ 2016

Invoice Number: 24816

**To: Life + Project Action C5 Life + Project Reference: LIFE13NAT/UK00451  
Lot 3 North of Limestone Road**

**Supply Posts and Bracings for large Pile Structures – Western Edge / North of Limestone Road.**

36 Posts 90x90 Square	£984	96
180m 100x35 Bracing	£1026	00
<b>V.A.T. @ 20%</b>	£402	19
<b>Total Amount Due</b>	<b>£2413</b>	<b>15</b>

**Please make Cheques payable to: Northmoor Plant Ltd**  
Payment due within 30 Days

Brincliffe, North Moor Road, Walkeringham, Doncaster DN10 4LW

T: 01427 890088 F: 01427 891567 E: northmoorplant@gmail.com W: www.northmoorplant.com

Northmoor Plant Limited VAT No: 852 9155 09 Company Reg: 05340759

# Invoice



Doncaster East IDB  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE

Invoice Date: 14/ 03/ 2016

Invoice Number: 249A16

To: **Life + Project Action C5 Life + Project Reference: LIFE13NAT/UK00451**  
**Lot 1 Crowle Moors**

**Supply U610/9 piles for unnamed structures Crowle,**

Piles as outlined above	£4621	40
<b>V.A.T. @ 20%</b>	£924	28
<b>Total Amount Due</b>	<b>£5545</b>	<b>68</b>

**Please make Cheques payable to: Northmoor Plant Ltd**  
Payment due within 30 Days

Brincliffe, North Moor Road, Walkeringham, Doncaster DN10 4LW

T: 01427 890088 F: 01427 891567 E: northmoorplant@gmail.com W: www.northmoorplant.com

Northmoor Plant Limited VAT No: 852 9155 09 Company Reg: 05340759

# INVOICE

**JBA**  
consulting

**To:** Doncaster East Internal Drainage Board  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
DN6 7FE

**FAO:** Ian Benn

South Barn  
Broughton Hall  
Skipton  
North Yorkshire  
BD23 3AE  
United Kingdom

**Client:** Doncaster East Internal Drainage Board  
**Contract:** Thorne, Crowle and Goole Moors WLMP Implementation  
**Client Order No:** Meeting dated 6th April 2011  
**Client Contact:** Ian Benn  
**JBA Project Code:** 2011s5031

**T** +44 (0) 1756 799 919  
**E** info@jbaconsulting.com

www.jbaconsulting.com

**Invoice Number:** 2016/0913  
**Tax Date:** 11 March 2016  
**Stage:** Interim Invoice No. 51

**Registered Office**  
South Barn  
Broughton Hall  
Skipton  
North Yorkshire  
BD23 3AE  
United Kingdom

**Jeremy Benn Associates Ltd**  
Registered in England 3246693

Item	Description	Net Amount	VAT Rate	VAT
	<i>For professional services rendered and expenses incurred in connection with the implementation of the WLMP for the period from the 1 November 2015 to 29 February 2016</i>			
1	Design and Appraisal			
	Staff Costs (539.25 hours)	£23,538.07	20.00%	£4,707.61
	Expenses (utilities map)	£85.00	20.00%	£17.00
	Travel	£273.50	20.00%	£54.70
2	Construction Works			
	Staff Costs (347.8 hours)	£14,430.70	20.00%	£2,886.14
	Expenses (Wooden pegs, marking paint)	£57.78	20.00%	£11.56
	Travel	£326.50	20.00%	£65.30
3	Additional DEIDB asset items			
		<b>Net Total:</b>		<b>£38,711.55</b>
		<b>VAT:</b>		<b>£7,742.31</b>
		<b>Total now due:</b>		<b>£46,453.86</b>

VAT Registration No. GB 665 3009 41

Payment to 'Jeremy Benn Associates Ltd' at our Skipton office address, or BACS to Sort Code 20-78-42, A/C No. 10869538

SWIFT: BARC GB 22; IBAN: GB28 BARC 2078 4210 6695 38

Payment Terms are strictly 28 days net from date of invoice.

Finance contact: finance@jbaconsulting.com



# G Fillingham & Sons

Dobella Farm  
Dobella Lane  
Rawcliffe  
Nr Goole  
East Yorkshire  
DN14 8SQ

Mobile 07976 564994

V.A.T Reg No 347 6603 40

**Invoice to:**

Doncaster East IDB  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE  
06 March 2015

Invoice Number : 2016 – 0001

Description	Qty.	Price Each	Amount
			£0.00
			£0.00
<b>Clearing Reeds from Warping Drain</b>	1	£1,950.00	£1,950.00
"Life+Project Action C6 Life+Project			£0.00
Reference: LIFE13NAT/UK00451"			£0.00
			£0.00
			£0.00
			£0.00
Sub total			£1,950.00
Vat @ 20 %			£390.00
Total			£2,340.00

Thank you, we appreciate your business

Payment from:-

Bank : HSBC Goole  
Sort code : 40-22-13  
Bank Account : 11370146

Sub Total	£1,950.00
Vat @ 20 %	£390.00
Total Paid	£2,340.00

# G Fillingham & Sons

Dobella Farm  
Dobella Lane  
Rawcliffe  
Nr Goole  
East Yorkshire  
DN14 8SQ

Mobile 07976 564994

V.A.T Reg No 347 6603 40

**Invoice to:**

Doncaster East IDB  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE  
06 March 2015

Invoice Number : 2016 – 0002

Description	Qty.	Price Each	Amount
			£0.00
			£0.00
<b>Fencing at New Pump House Site. 2 men &amp; Materials</b>	1	£350.00	£350.00
"Life+Project Action C6 Life+Project			£0.00
Reference: LIFE13NAT/UK00451"			£0.00
			£0.00
			£0.00
			£0.00
Sub total			£350.00
Vat @ 20 %			£70.00
Total			£420.00

Thank you, we appreciate your business

Payment from:-

Bank : HSBC Goole  
Sort code : 40-22-13  
Bank Account : 11370146

Sub Total	£350.00
Vat @ 20 %	£70.00
Total Paid	£420.00

# G Fillingham & Sons

Dobella Farm  
Dobella Lane  
Rawcliffe  
Nr Goole  
East Yorkshire  
DN14 8SQ

Mobile 07976 564994  
V.A.T Reg No 347 6603 40

**Invoice to:**

Doncaster East IDB  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE  
06 March 2015

Invoice Number : 2016 – 0007

Description	Qty.	Price Each	Amount
			£0.00
			£0.00
<b>Pulling Stumps out for new Pump house</b>	1	£580.00	£580.00
"Life+Project Action C6 Life+Project			£0.00
Reference: LIFE13NAT/UK00451"			£0.00
			£0.00
			£0.00
			£0.00
Sub total			£580.00
Vat @ 20 %			£116.00
Total			£696.00

Thank you, we appreciate your business

Payment from:-

Bank : HSBC Goole  
Sort code : 40-22-13  
Bank Account : 11370146

Sub Total	£580.00
Vat @ 20 %	£116.00
Total Paid	£696.00

# G Fillingham & Sons

Dobella Farm  
Dobella Lane  
Rawcliffe  
Nr Goole  
East Yorkshire  
DN14 8SQ

Mobile 07976 564994

V.A.T Reg No 347 6603 40

**Invoice to:**

Doncaster East IDB  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE  
06 March 2015

Invoice Number : 2016 – 0005

Description	Qty.	Price Each	Amount
			£0.00
			£0.00
<b>Scrub Clearance for Crowle Moors</b>	1	£1,250.00	£1,250.00
"Life+Project Action C5 Life+Project			£0.00
Reference: LIFE13NAT/UK00451"			£0.00
			£0.00
			£0.00
			£0.00
Sub total			£1,250.00
Vat @ 20 %			£250.00
Total			£1,500.00

Thank you, we appreciate your business

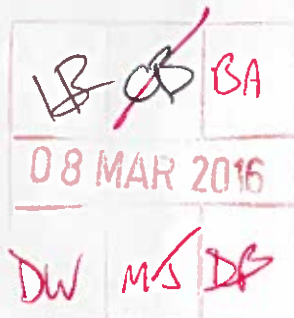
Payment from:-

Bank : HSBC Goole  
Sort code : 40-22-13  
Bank Account : 11370146

Sub Total	£1,250.00
Vat @ 20 %	£250.00
Total Paid	£1,500.00



# G Fillingham & Sons



Dobella Farm  
Dobella Lane  
Rawcliffe  
Nr Goole  
East Yorkshire  
DN14 8SQ

Mobile 07976 564994  
V.A.T Reg No 347 6603 40

**Invoice to:**

Doncaster East IDB  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE  
06 March 2015

Invoice Number : 2016 – 0006

Description	Qty.	Price Each	Amount
			£0.00
			£0.00
Repair Foot Path on Bank Top	1	£600.00	£600.00
			£0.00
			£0.00
			£0.00
			£0.00
			£0.00
Sub total			£600.00
Vat @ 20 %			£120.00
Total			£720.00

Thank you, we appreciate your business

**Payment from:-**

Bank : HSBC Goole  
Sort code : 40-22-13  
Bank Account : 11370146

Sub Total	£600.00
Vat @ 20 %	£120.00
Total Paid	£720.00



# George Fillingham

## TREE SURGERY • GARDEN MAINTENANCE & TURFING • FORESTRY • PEST CONTROL

Hook Moor Farm, Rawcliffe Bridge, Goole, N Yorkshire, DN14 8PR Mobile: 07870780163  
Email: [fillingham.george@googlemail.com](mailto:fillingham.george@googlemail.com) Web: [www.fillinghamandsons.co.uk/treesurgery](http://www.fillinghamandsons.co.uk/treesurgery)

### **INVOICE no.2**

March 22, 2016

To: Balaji Angamuthu  
JBA Consulting, Epsom House  
Chase Park, Redhouse Interchange  
Doncaster, DN6 7FE

Invoice to: Balaji Angamuthu

Dear Balaji:

**Please find below invoice for work undertaken as per emails dated: 12 February/8 March 2016**

Quantity	Description of item	Price per unit	Price
1	Work undertaken as part of:- Life+Project Action C5 Life+Project Reference: LIFE13NAT/UK00451 - Scrub Clearance 6 days for 2 man team @ £250 per day at Thorne Moors - Scrub Clearance 3 days for 3 man team @ £280 per day at Thorne Moors	£1500.00 £840.00	£1500.00 £840.00
Total			£2340.00
Discount			
VAT @ 20%			n/a
Grand total			£2340.00

Please make cheques payable to: George Fillingham  
Or for payment direct to bank: GEORGE FILLINGHAM  
HSBC  
SORT CODE: 40-22-13  
ACCOUNT NO. 31480693

As always, it's a pleasure doing business with you. We look forward to completing this order to your satisfaction.

Sincerely,  
George Fillingham

Note: If you would like to discuss items in this invoice, or if you need any additional information, please call me personally on **07870780163**.

# NOTE TO FILE

JBA Project Code	2011s5031
Contract	Thorne, Crowle and Goole Moors WLMP Implementation
Client	Doncaster East Internal Drainage Board
Day, Date and Time	27 January 2016
Author	Balaji Angamuthu
Subject	Thorne, Crowle and Goole Moors WLMP Implementation



The following are the reasons to justify additional variation:

1. At the early stage of the project (financial year: 2012-13), ICE contract conditions were used for the construction works on this scheme. Later, due to the change in legislation, NEC3 contract conditions are being used. Contract administration under NEC3 is different from ICE and is time consuming due its proactive approach. With many users (public, land owner: Natural England, Natural England appointed contractors) on the site, co-ordination of communication between these site users and the water Level Management Plan (WLMP) appointed contractors is key and time consuming.
2. During the financial year 2014-15, there was an occasion where returned tenders for proposed steel sheet pile structures were financially not feasible (budget allocated for proposed works: £500k but the minimum of returned tender was £900k). Further to this, there involved a process of redefining the scope of work, prepare and conduct tendering and tender appraisal report once again.
3. Project Officer, Darren Whitaker, is also employed to setting the bench mark and spot levels for the proposed construction works including for the peat bunding of 20km length (in more than 100 segments over the entire site). Normally, construction contractor is asked to do this task. However, due to the nature of the site (as no lone working is permitted) and project, in this case JBA Consulting are doing this task as this would reduce the overall scheme cost as Darren would anyway visit the site for the supervision of peat bunding construction.
4. Vicinity, size and soft ground nature of the site is influencing the timescale at all stages of this project. Access within the site can be time consuming as the maximum speed limit inside the site is 10mph and it can take hours to reach the working location from the main entrance. Also, vehicular access is not possible at all the vicinities. Site survey and design of peat bunding involved several kilometres of walking within the site.
5. Cost (£23.5k) includes purchasing the equipment for carrying out the Environmental Impact Assessment and design of this scheme. However, these equipment is to be owned by the client, DEIDB.



RESOURCE COSTING SHEET

Project Title:	Thorne, Crowle and Goole Moors WLMP
Client:	Doncaster East Internal Drainage Board
Client Contact:	Chris McGuinness
JBA Ref:	2011s5031
Date:	16-Oct-15
JBA Project Manager:	Balaji Angamuthu

Ref	Staff Title:
	Staff Member:
	Staff Member(s) Initials:
	Hourly Rate (£/hr)
100	Task 100 - Design
105	Pumping station (1no.)
110	Weir structures (36 no.)
115	Pipe culverts (22 no.)
120	Plastic piling and bunding (Few hundred metres)
125	Design report
	Sub-Total
200	Task 200 - Tendering
205	Design drawings - preparation and review
210	Bill of Quantities & specification
215	Consent Application (for consents from IDB and Coal Authority)
220	Pre-construction Information Pack
225	Contract data and tender invitation
230	Conduct tendering
235	Tender appraisal
240	Appointment of contractor
	Sub-Total
300	Task 300 - Construction Management
305	Site supervision including managing archaeology sub-contract onsite
310	Contract administration
315	Management of water level monitors and telemetry installation
320	CDM Services as Principal Designer - during design & works
325	Monitoring of telemetry system
	Sub-Total
400	Task 400 -Site Visits
405	Design stage including survey
410	Tendering stage
415	Scheme promotion among IDB & Steering group members
	Sub-Total
500	Task 500 - Project Management
505	Project Management
510	Pre-tender liaising with IDB and Natural England
515	Post-tender liasing with IDB and Natural England
520	Organising and conducting steering group meetings (once every 3 months)
525	Project website maintenance
530	Project handover workshop with Natural England
	Sub-Total
	GRAND TOTALS

Staff Hours										Total Hours
Design Engineer	Principal Engineer	Director	Senior Engineer	CAD Technician	Technician	Senior Ecologist	Senior Ecologist	Senior Ecologist	Project Officer	
Andrew Thomas	Christopher Wright	Richard Buck	Balaji Angamuthu	Henry Shone	Aaron M Taylor	Kieran Sheehan	Laura Thomas	Rob Harrison	Darren Whitakker	
AT	CW	RB	BA	HS	AMT	KS	LT	RH	DW	
£49.23	£84.88	£100.00	£55.73	£26.48	£24.24	£58.74	£45.19	£45.19	£43.68	
16	8		120							144
			24		40					64
			8		40					48
			8						120	128
	8	4	40							
16	16	4	200	0	80	0	0	0	120	436
	8	4	8	72	24				16	132
	8		40	16	16				16	96
	4		8						16	28
	4		32						16	52
	8		48							56
			32							32
	8		24	8						40
			14							14
0	40	4	206	96	40	0	0	0	64	450
	8		168							480
	8	4								176
8									40	52
8				4					32	44
16	12	0	168	4	0	0	0	0	552	752
									48	48
									24	24
			8						16	24
0	0	0	8	0	0	0	0	0	88	96
34	34	4.25	136							208.25
			32							32
			32							32
	16		120							136
			12							12
			8						16	24
34	50	4.25	340	0	0	0	0	0	16	444.25
66	118	12	922	100	120	0	0	0	840	2,178

Total Staff Cost	Expenses (£)			Total Expenses	TOTAL
	Sub Contract	Mileage (m)	Other		
		at £0.50/mile			
8,154.32				-	£ 8,154.32
2,307.12				-	£ 2,307.12
1,415.44				-	£ 1,415.44
5,687.44				-	£ 5,687.44
17,564.32	0	-	0	0.00	£ 17,564.32
4,712.08				-	£ 4,712.08
4,418.64				-	£ 4,418.64
1,484.24				-	£ 1,484.24
2,821.76				-	£ 2,821.76
3,354.08				-	£ 3,354.08
1,783.36				-	£ 1,783.36
2,228.40				-	£ 2,228.40
780.22				-	£ 780.22
21,582.78	0	-	0	0.00	£ 21,582.78
20,966.40		4,000.00		2,000.00	£ 22,966.40
10,041.68				-	£ 10,041.68
2,480.56				-	£ 2,480.56
	10,000.00			10,000.00	£ 10,000.00
1,897.52				-	£ 1,897.52
35,386.16	10000	2,000.00	0	12000.00	£ 47,386.16
2,096.64		375.00		187.50	£ 2,284.14
1,048.32		225.00		112.50	£ 1,160.82
1,144.72		150.00		75.00	£ 1,219.72
4,289.68	0	375.00	0	375.00	£ 4,664.68
12,564.02				-	£ 12,564.02
1,783.36				-	£ 1,783.36
1,783.36				-	£ 1,783.36
8,045.68				-	£ 8,045.68
668.76				-	£ 668.76
1,144.72				-	£ 1,144.72
25,989.90	0	-	0	0.00	£ 25,989.90
104,813	10,000	2,375	0	12,375	£ 117,188

Project Total	£ 117,188
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## Reedness & Swinefleet Drainage Board

### *A member of the Shire Group of Internal Drainage Boards*

Our Ref: PJ/RSDB/58

Balaji Angamuthu  
JBA Consulting  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
DN6 7FE

18<sup>th</sup> March 2016

Dear Sirs

#### **Permanent works consent for the installation of a replacement Pumping Station.**

We refer to the Application for Works within the Drainage District and enclose the formal consent.

Please note that conditions may be imposed with the consent and those ***conditions must be discharged in writing*** (with evidence where necessary) to the Risk Management Authority ***before the works start***. Upon receiving a request to discharge conditions of consent we will endeavour to respond, or determine the condition, ***within ten working days*** depending on complexity of the condition.

Every person who acts in contravention of, or fails to comply with, any notice served under Section 24 LDA or Byelaws under Section 66 LDA shall be guilty of an offence and liable, on summary conviction to such fines as prescribed within Section 24(3) and Section 66(6) LDA.

If you have any queries please do not hesitate to contact Paul Jones by letter, email or telephone, quoting our reference on all correspondence.

Yours faithfully,

**For and on behalf of the Reedness & Swinefleet Drainage Board**



**Paul Jones** BSc (Hons) MSc (Eng)  
*Engineer to the Board*  
Lead Water Level Management Engineer  
[paul.jones@shiregroup-idbs.gov.uk](mailto:paul.jones@shiregroup-idbs.gov.uk)

#### **Reedness & Swinefleet Drainage Board**

Epsom House, Chase Park, Redhouse Interchange, Doncaster, DN6 7FE  
Telephone Number (01302) 337 798



Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
South Yorkshire  
DN6 7FE  
United Kingdom

**T +44 (0)1302 33 77 98**

**E [info@shiregroup-idbs.gov.uk](mailto:info@shiregroup-idbs.gov.uk)**

[www.shiregroup-idbs.gov.uk](http://www.shiregroup-idbs.gov.uk)

**Clerk and Engineer to**  
Ancholme IDB  
Black Drain DB  
Danvm Drainage Commissioners  
Doncaster East IDB  
Goole Fields District DB  
Reedness and Swinefleet DB  
Scunthorpe & Gainsborough WMB  
Sow and Penk IDB

**Engineer to**  
Selby Area IDB  
Swale and Ure DB

The Shire Group of  
Internal Drainage Boards  
is managed by JBA Consulting

**Registered Office**  
South Barn  
Broughton Hall  
Skipton  
North Yorkshire  
BD23 3AE  
United Kingdom

**Jeremy Benn Associates Limited**  
Registered in England 3246693

# Reedness & Swinefleet Drainage Board

## *A member of the Shire Group of Internal Drainage Boards*

Our Ref: PJ/RSDB/58

Doncaster East Internal Drainage Board  
Epsom House  
Chase Park  
Redhouse Interchange  
Doncaster  
DN6 7FE

18<sup>th</sup> March 2016



### CONSENT FOR PERMANENT WORKS

**PROPOSAL:** Installation of a replacement Pumping Station

**LOCATION:** Thorne Moors, Grid Ref E: 475121, N: 416287

The **Reedness & Swinefleet Drainage Board**, in the pursuance of their powers under Section 23 and Section 66 of the Land Drainage Act 1991 (as amended) **HEREBY CONSENT** to the execution and completion of **PERMANENT** works in accordance with the Application subject to the following conditions.

1. The works shall commence within 12 months from the date of this notice.
2. 7 days notice of the start of works shall be provided to the Board.
3. No obstruction to the proper flow of water shall be permitted.
4. The works shall comply with the details on the application form, dated 8<sup>th</sup> January 2016, and the drawings and additional information submitted.
5. Any change or modification to any detail of the application shall be notified to us.
6. A tilting weir shall be installed to control the water level in Black Water Dyke.
7. When the water level in Black Water Dyke exceeds a set level (current target set level +0.6m AOD) and the water level in the Warping Drain a gravity discharge to the Warping Drain shall be allowed via a 600mm diameter pipe.
8. When gravity discharge is not possible or is insufficient to maintain the set water level in Black Water Dyke a pumped discharge to the Warping Drain shall be allowed to reduce the water level in Black Water Dyke to the set water level.
9. During all scenarios of gravity and pumped discharge the total discharge into the Warping Drain shall not exceed a maximum of 300 litres per second.
10. When water level in the Warping Drain reaches or exceeds +2.20m AOD any discharge from the pumping station shall cease. Any pumping shall also cease immediately if the Reedness and Swinefleet Drainage Board so requests.
11. Any damage to the watercourse bed and banks as a result of the works shall be remediated at the Applicants cost.
12. The works shall comply with the Pollution Prevention Guidelines.
13. Ownership and responsibility for maintenance, repair and eventual replacement will remain with the owners or successors in title.
14. The responsibility for third party losses or disturbance considered to be as a result of work included in this consent will remain with the owners or successors in title

The Board, by granting Consent under the Land Drainage Act 1991 (as amended) for these works accepts no liability for any loss or damage which may arise out of design, construction, maintenance or use.

Your attention is drawn to the notes and requirements attached.

Dated this 18<sup>th</sup> Day of March 2016

**JBA Consulting - Clerk and Engineer to the Board**

Any enquiries relating to the consent should be made to the Drainage Board.

### Reedness & Swinefleet Drainage Board

Epsom House, Chase Park, Redhouse Interchange, Doncaster, DN6 7FE  
Telephone Number (01302) 337 798

Epsom House  
Chase Park  
Redhouse Interchange  
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#### **Clerk and Engineer to**

Ancholme IDB  
Black Drain DB  
Danvm Drainage Commissioners  
Doncaster East IDB  
Goole Fields District DB  
Reedness and Swinefleet DB  
Scunthorpe & Gainsborough WMB  
Sow and Penk IDB

#### **Engineer to**

Selby Area IDB  
Swale and Ure DB

The Shire Group of  
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is managed by JBA Consulting

#### **Registered Office**

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Skipton  
North Yorkshire  
BD23 3AE  
United Kingdom

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## **LAND DRAINAGE ACT 1991**

### **CONSENT FOR WORKS AFFECTING A WATERCOURSE**

#### **- NOTES FOR APPLICANTS -**

##### **Byelaw Requirements**

Consent for the works does not give exemption from the requirements of the Act or of the Drainage Board's Bye-Laws beyond what is specifically consented, nor does it include any temporary works which may be required to carry out the consented works.

A copy of the Bye-Laws may be obtained from the Engineer on request, but where the works have no exceptional features, it will suffice if the following guidelines are followed.

- (1) No material intended for or arising from the works and no equipment or other item for use in executing the works should be stored or disposed of:-
  - (a) in the watercourse,  
or
  - (b) in a position where it may fall or be washed into the watercourse.

Any such material, equipment or other item in the watercourse should be removed immediately.

- (2) At all times during the course of the works the bank and any floodbank and foreshore of the watercourse should be kept clear of any such material, equipment and other item unless actually in use.
- (3) All surplus materials and all plant and equipment must be cleared from the site to the approval of the Engineer by the date specified for the completion of the works.

##### **Specification - General**

- (4) The width between the banks of the watercourse shall not be diminished except with the prior written approval of the Engineer.
- (5) At all times during the course of the works the existing bank and any floodbank of the watercourse shall be preserved, or an adequate alternative flood barrier shall be provided and maintained to the full height of the bank and existing floodbank until the original bank and floodbank have been reinstated to the written approval of the Engineer.
- (6) If the execution of the works requires passage on to or over a floodbank of the watercourse, proper means for such a passage shall be provided by forming a ramp or ramps of easy gradient, surfaced with stone or other suitable material. Any such ramp shall be removed on completion of the works. The level of the floodbank crest must not be reduced.
- (7) Every part of the banks and channel of the watercourse which has been affected by the works shall be reinstated by replacement of top soil and re-seeding or by turf or stone pitching to prevent scour to the approval of the Engineer.



### **Procedures**

- (8) The work must be completed within the time specified in the Consent.
- (9) Written notice must be given to the Engineer (preferably at least 7 days) before work starts.

### **Other Approvals Required**

- (10) Any planning or other permission required for the works must be obtained by the applicant.
- (11) Consent by the Board will not authorise any obstruction or interference with a right of way, whether public or private. Approval for doing so must be obtained by the applicant from The Highways Authority or from the private owner or occupier affected as the case may be.
- (12) The Consent relates to the flood defence aspects of the proposed works. For a proposed discharge to the watercourse, consent is also required from the Environment Agency under the Water Act 1989. For any alteration of a mill, dam, weir or other like obstruction to flow in any watercourse, or any impounding works, consent is also required from the Environment Agency under S25 of the Water Resources Act 1991.
- (13) The applicant must make his own arrangements with any owner or occupier of land which may be affected by the works.
- (14) In the case of the construction or alteration of a culvert, the Consent of the District Council in whose area the works lie is also required under Section 263 of the Public Health Act 1939.
- (15) The provisions of the Salmon and Freshwater Fisheries Act 1975 and the provisions of the Water Resources Act 1991 relating to Fisheries may also apply.

<b>Project Title:</b>	Thorne, Crowle and Goole Moors WLMP
<b>Client:</b>	Doncaster East Internal Drainage Board
<b>Client Contact:</b>	Chris McGuiness
<b>JBA Ref:</b>	2011s5031
<b>Date:</b>	04-Apr-15
<b>JBA Project Manager:</b>	Balaji Angamuthu

JBA Consulting,  
www.jbaconsulting.co.uk

<b>Project Title:</b>	Thorne, Crowle and Goole Moors WLMP
<b>Client:</b>	Doncaster East Internal Drainage Board
<b>Client Contact:</b>	Chris McGuinness
<b>JBA Ref:</b>	2011s5031
<b>Date:</b>	07-Apr-15
<b>JBA Project Manager:</b>	Balaji Angamuthu

Staff Hours						
Principal Engineer	Director	Senior Engineer	Assistant Engineer	Senior Ecologist	Project Officer	Total Hours
Christopher Wright	Richard Buck	Balaji Angamuthu	Henry Shone	Helen Archer	Darren Whitakker	
CW £84.88	RB £100.00	BA £55.73	HS £26.48	HA £45.19	DW £43.68	
				15	15	30
					7.5	7.5
		4			4	8
		2				2
		2				2
		4			4	8
7.5		4			2	6
						7.5
		3.75			30	33.75
		7.5		30	30	60
7.5		16	0	15	32.5	71
		4	4		4	12
		30	7.5			37.5
		7.5	7.5			22.5
		2				15
		2				2
		4			4	8
7.5		7.5				7.5
		11.25	11.25			22.5
		15			4	34
7.5	0	83.25	67.75	0	12	170.5
		4	4		4	12
		15	7.5			22.5
		4	4			7.5
						8
						0
						0
						0
7.5						7.5
		11.25	11.25			22.5
		7.5	7.5			15
7.5	0	37.75	37.75	0	0	83
			7.5		7.5	15
		4	7.5		3.75	15.25
		4				4
		4			4	8
		2				2
		2				2
		4				4
7.5		4				7.5
		7.5			15	22.5
				15	15	30
7.5	0	7.5			7.5	15
		39	15	15	45.25	121.75
			11.25		11.25	22.5
		4	4		7.5	15.5
					7.5	7.5
		4	4		4	12
		2				2
		2				2
		4				4
7.5		4	4			8
						7.5
		3.75			15	18.75
		7.5		7.5	7.5	15
7.5	0	7.5			7.5	15
		31.25	23.25	7.5	56.75	126.25
			7.5		7.5	15
		4	4		7.5	15.5
		4				8
		4	3.75		4	11.75
		2				2
		2				2
		4				4
7.5		4	4			8
						7.5
		3.75			15	18.75
		7.5		7.5	7.5	15
7.5	0	7.5			7.5	15
		35.25	23.25	7.5	41.5	115
						0
						0
		22.5	22.5		22.5	67.5
						0
0	0	22.5	22.5	0	22.5	67.5
7.5	7.5	37.5				52.5
		15			15	30
		15			15	30
4		15			15	34
11.5	7.5	82.5	0	0	45	146.5
34	8	243	105	30	157	577

Project Total	£ 60,702
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Revitt's Strip and  
LWT North Reserve

An aerial photograph of a wetland area, likely a peat bog, showing various features and planned interventions. A magenta line runs diagonally across the upper half of the image. A dashed blue line runs horizontally across the lower half. A green dot is located on the right side. Text annotations are present in yellow boxes.

Plastic pile along edge of track, with  
some reinforcement of the other side,  
and a number of pipe wiers  
Up to 1000m

Two peat bunds or plastic pile dams  
across width of compartment, with  
plastic pile dams and wiers at the  
south ends

New dam to replace existing  
steel sheet pile structure, with  
tilting wier. Approx. 5 metre  
span, holding back 1m depth  
of water





Yorkshire  
Triange

Double walled plastic pile dams to  
block cuttings and provide access

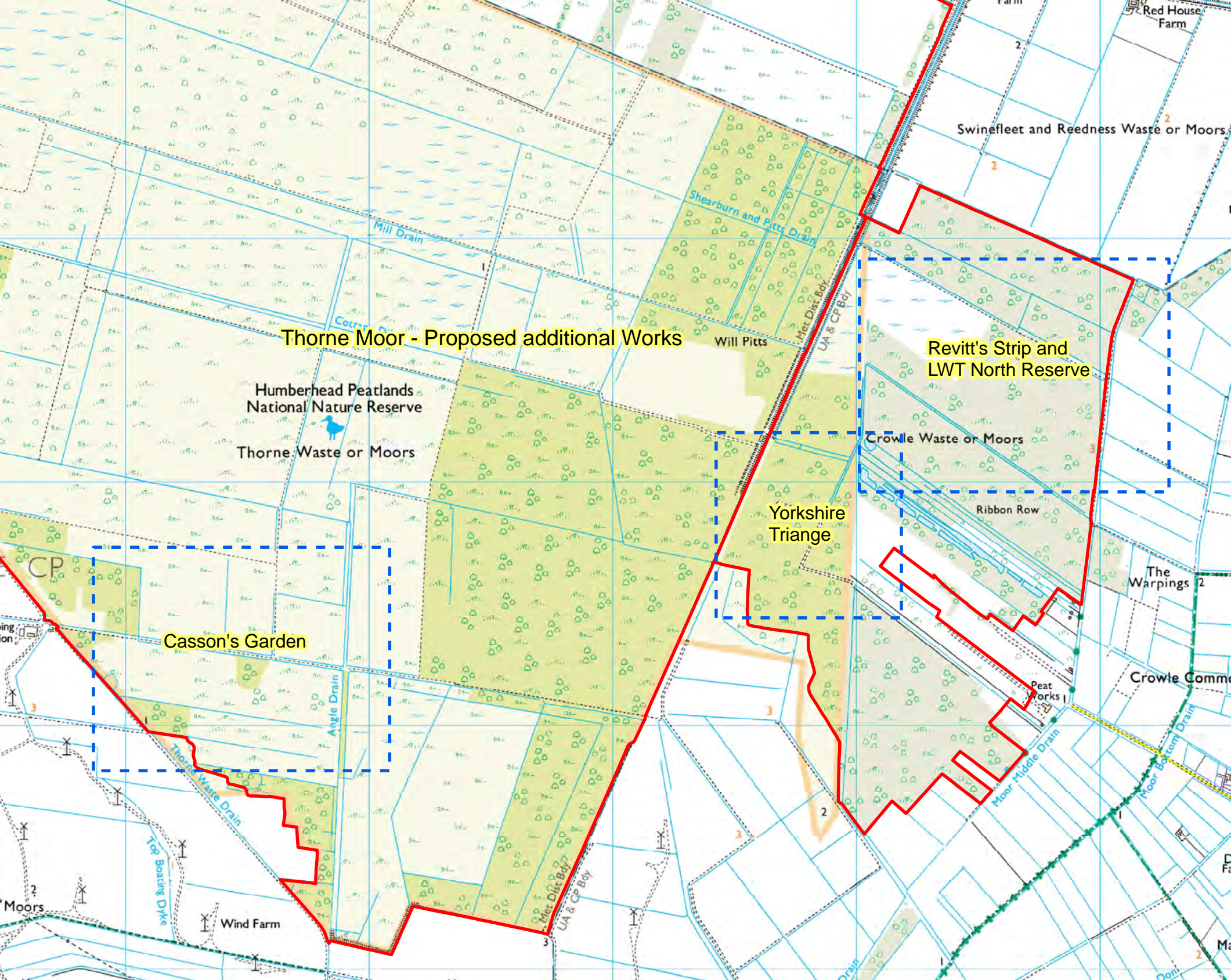


Casson's Garden

Plastic pile dams in drain

Peat bunds/plastic pile to block cuttings





Thorne Moor - Proposed additional Works

Humberhead Peatlands  
National Nature Reserve

Thorne Waste or Moors

Casson's Garden

Yorkshire  
Triange

Revitt's Strip and  
LWT North Reserve

Crowle Waste or Moors

Ribbon Row

The Warpings

Crowle Common

Peat Works

Moor Middle Drain

Moor Bottom Drain

Wind Farm

Kor Boating Dyke

Thorne Waste Drain

Agle Drain

Mer Dist Bdy  
UA & CP Bdy

Shearburn and Pitts Drain

Mill Drain

Swinefleet and Reedness Waste or Moors

Red House Farm



2011s5031 - Thorne Moors Water level Management Plan

Client: Doncaster East IDB

Date: 04-Apr-2016

Prepared by: Darren Whitaker and Balaji Angamuthu

**Additional Works**

S.No.	Location
1	Milled Area Bund
2	Crowle Failed Dam
3	Casson's Garden
4	Yorkshire Triangle
5	Crowle NE Site
6	Crowle LWT North Reserve boundary track
7	Pony Bridge Tram
8	Thousand Acre Drain
9	4 weirs on Angle Drain near Pony Bridge Wood
10	Culvert crossing on Limestone Road near NE Gate entrance

Scope of work	Construction estimated costs	
	Maximum	Minimum
Peat bunding		
Ground investigation and construction of steel pile weir	£ 160,000.00	£ 160,000.00
Peat bunding and plastic piling	£ 30,000.00	£ 10,000.00
Double walled plastic pile dams (2Nos.)	£ 8,000.00	£ 8,000.00
Peat bunding or plastic pile dams	£ 7,000.00	£ 2,000.00
Plastic sheet piling	£ 10,000.00	£ 10,000.00
Plastic sheet piling	£ 10,000.00	£ 10,000.00
Plastic sheet piling	£ 3,000.00	£ 3,000.00
Plastic sheet pile weirs	£ 15,000.00	£ 15,000.00
Culvert replacement		
<b>Total</b>	<b>£ 243,000.00</b>	<b>£ 218,000.00</b>

<b>Remarks and contract</b>
Amount of £40,000 is already allocated in the spend profile. Group with other works planned in North of Lime
Keep this a separate contract if Crowle Moors peat bunding contractors do not have technical ability to do ste
Group with other works planned in South of Limestone Road
Group with other works planned in Crowle
Group with other works planned in Crowle
Group with other works planned in Crowle
Group with other works planned in South of Limestone Road
Group with other works planned in South of Limestone Road
Group with other works planned in South of Limestone Road
Need to be assessed if any more money is left to do the works

stone Road  
el structures

## Proposed Additional works for the Thorne WLMP

See attached maps for locations and outline design

### 1a Revitt's Strip and Lincolnshire Wildlife Trust North Reserve

Revitt's strip is a narrow strip running up from the access track at the south end, bordered by a strips owned by LWT. A drain runs up the south west boundary, which has a large steel pile dam blocking it at the south end. This dam needs replacing as it is corroded and leaking. It is approximately 5m wide and is currently holding back around 1m depth of water (the total drain depth is unknown). This should be replaced with a similar sized structure with a tilting weir. The strip itself is currently one large compartment, and this should be divided up into at least three smaller compartments with two peat/plastic bunds across the width of the strip (around 40m). The bunds will need to be tied into plastic pile dams in the drain on the south-east boundary of the strip.

The North Reserve track is an old peat baulk about 1000m in length, which acts as a hydraulic boundary holding water in the compartment to the south west which is 0.5 to 1m higher than the compartment on the other side. This baulk is leaking in numerous places, some of which have been reinforced with plastic piling in the past, but to uncertain effect. The whole of the baulk requires checking and additional piling where required, which may be a significant part of the whole length. At low points (around three or four) pipe weirs through the track will be required to allow excess water to run off. Due to past leakage some parts of the baulk are now in very poor condition, and piling on both sides and some fill may be required to make good.

### 1b Yorkshire Triangle

The existing bunding has left a few gaps at the ends where cuttings reach the old baulk. Two (or more) plastic pile baulks are required to seal these. These will also need to be wide enough to allow access. Locations on the map are indicative, exact number and locations need to be determined in discussion with LWT.

### 1c Casson's Garden

Clearance of dense rhododendron have revealed a number of cuttings and a drain. Two plastic pile dams are required to block the drain, and peat bunds/plastic pile bunds are needed to block the cuttings. The design on the map is indicative, and further work is required to refine this.

RTK

10/3/16