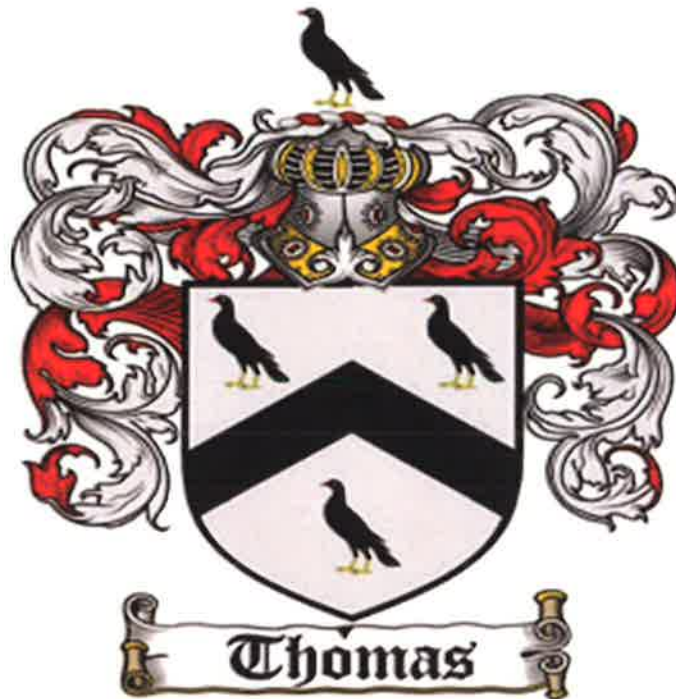


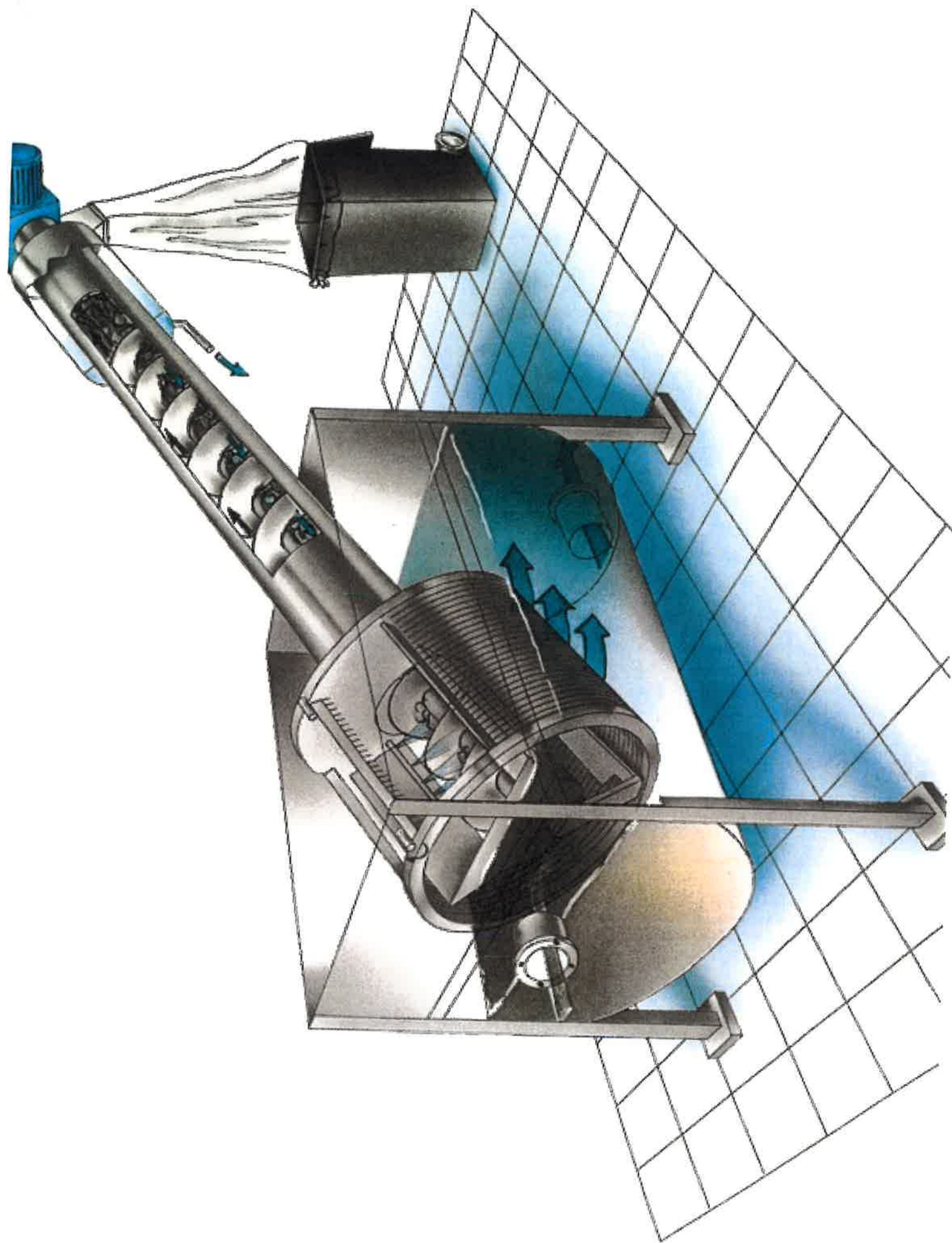
# **Hefin Thomas**

## **Agri Contractors Ltd**



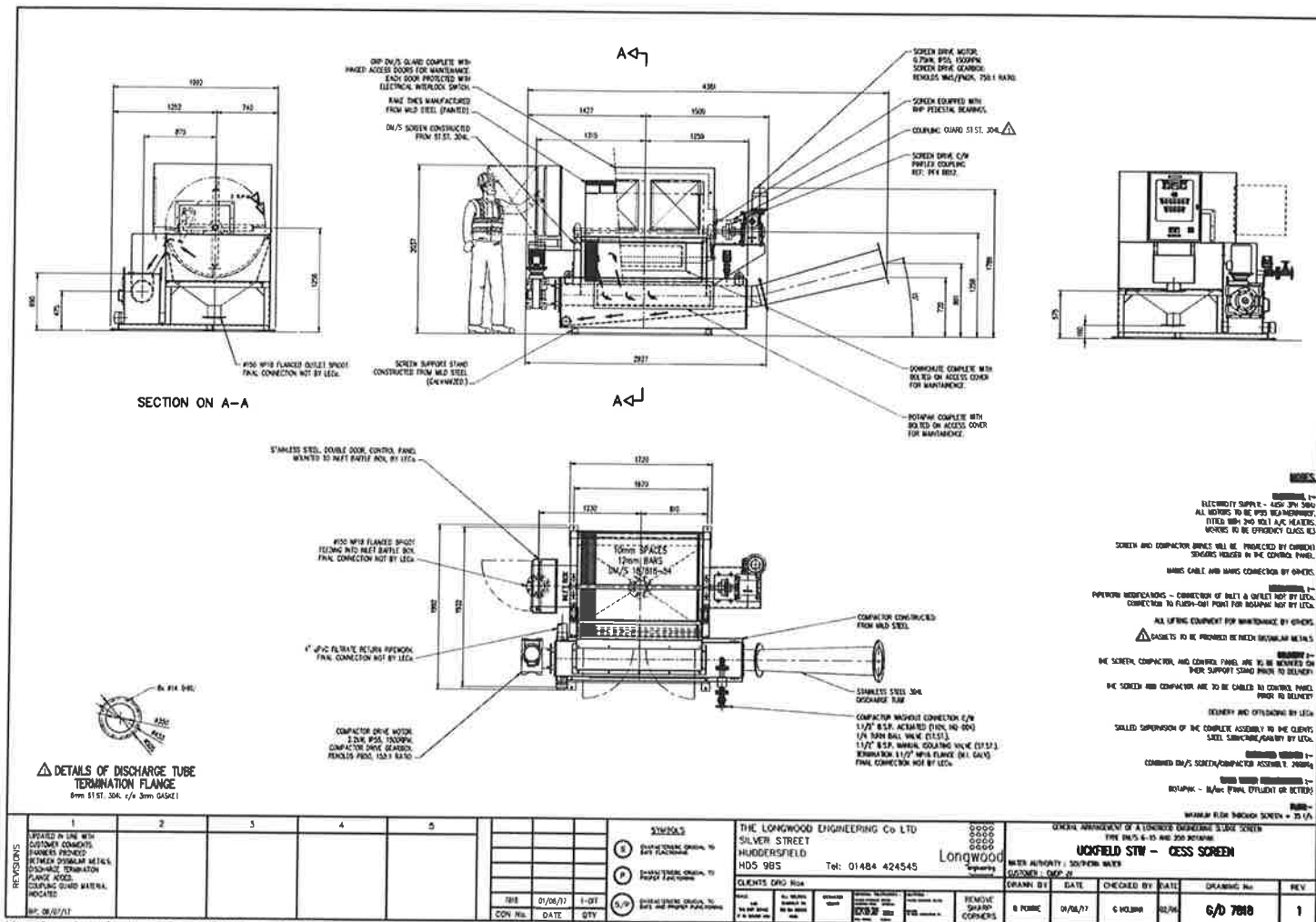
## **Plant Options**



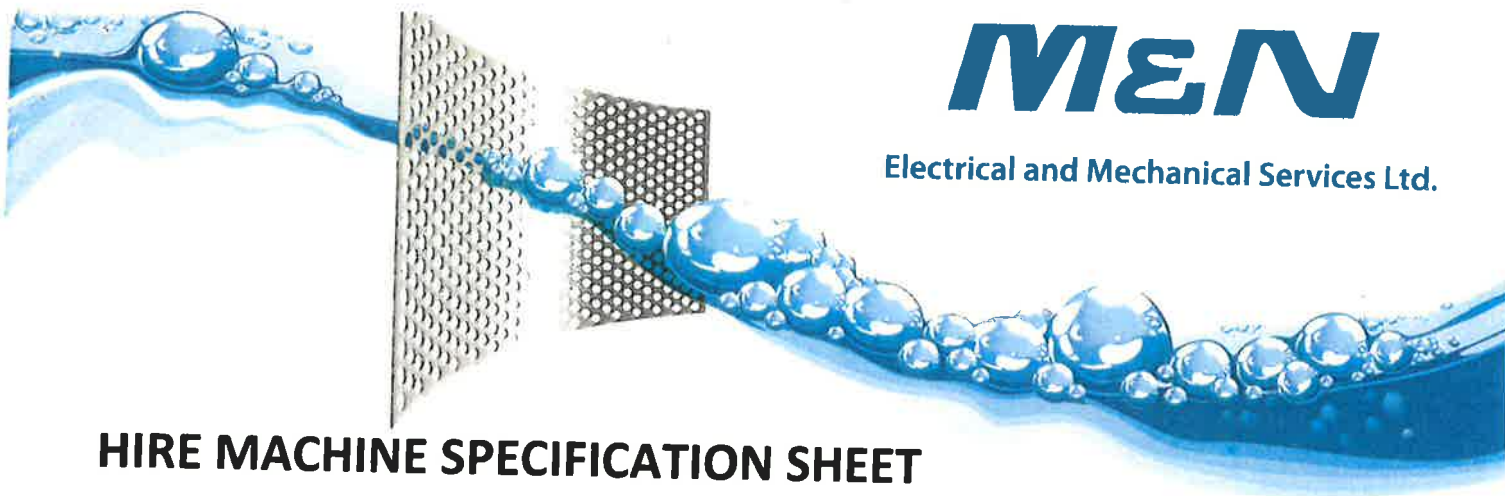




## PLANT OPTIONS





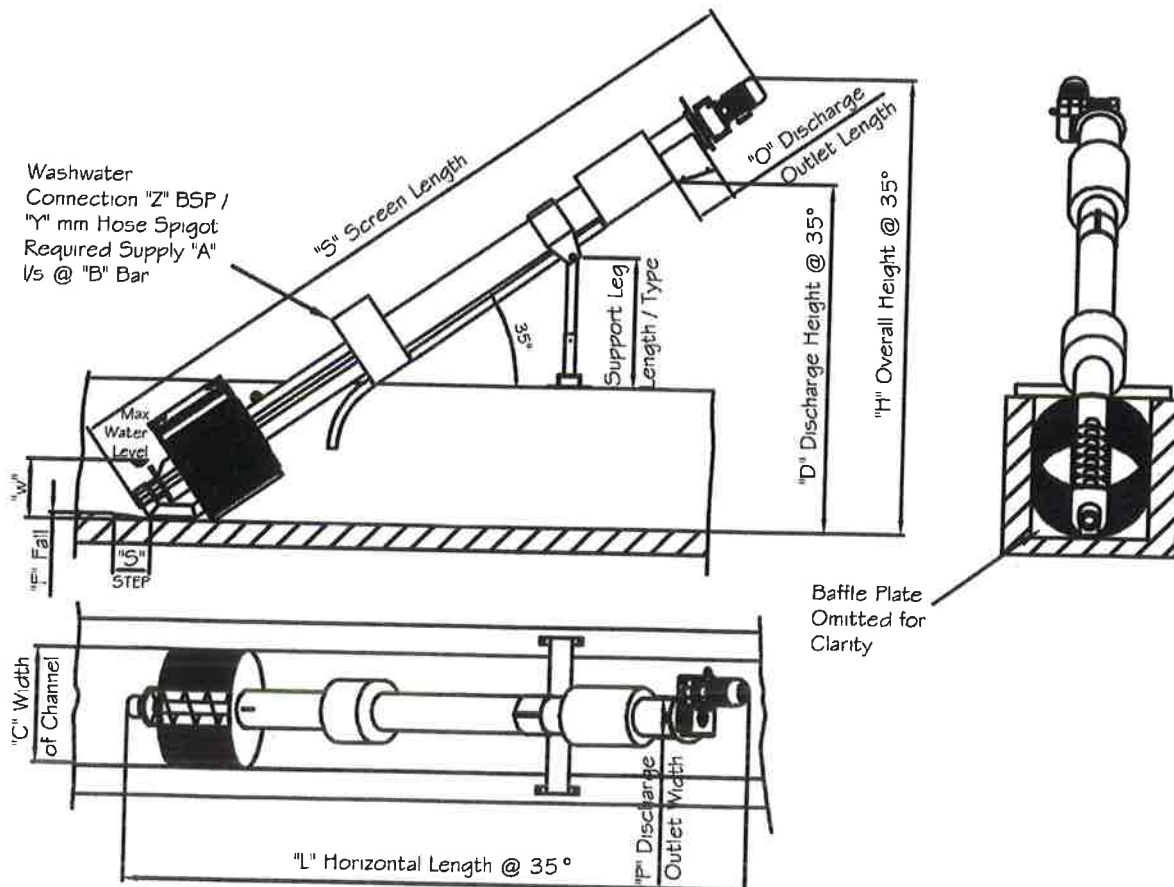


# M&N

Electrical and Mechanical Services Ltd.

## HIRE MACHINE SPECIFICATION SHEET

<b>Screen Type:</b>	Ro1/1,400/6	<b>M &amp; N Hire No</b>	<b>MNH075</b>
<b>Manufacturer:</b>	Huber GMBH	<b>Serial Number</b>	456555
<b>Max Flow rate Sewage:</b>	120 litres / sec 3% DS	<b>Year of Manufacture</b>	2000
<b>Screen Basket Diameter:</b>	1,400 mm	<b>Conveyor Capacity</b>	2.1 m <sup>3</sup> /hr
<b>Dry Weight (Empty):</b>	kgs	<b>Conveyor Diameter</b>	273 mm
<b>Power Supply:</b>	415 / 3 / 50	<b>Frost Protection</b>	Yes
<b>Motor Output Power:</b>	1.1 kW	<b>Screen Output Speed</b>	11 RPM
<b>Level Detection:</b>	Conductivity Level Probe	<b>Angle of Installation</b>	35°
<b>"S" Screen Length</b>	4600 mm	<b>"H" Overall Height</b>	4000 mm
<b>"L" Screen Hor. Length</b>	4600 mm	<b>"D" Discharge Height</b>	3890 mm
<b>"W" Max. Water level</b>	1800 mm	<b>"P" Discharge Width</b>	300 mm
<b>"Z" Washwater Connection</b>	1" BSP	<b>"O" Discharge Length</b>	300 mm
<b>"Y" Washwater Connection</b>	25 mm	<b>"C" Channel Width</b>	1,400 mm
<b>"A" Washwater Flow Rate</b>	3.0 l/s	<b>"F" Channel Step Fall</b>	80 mm
<b>"B" Washwater Pressure</b>	4 Bar	<b>"S" Channel Step Width</b>	250 mm



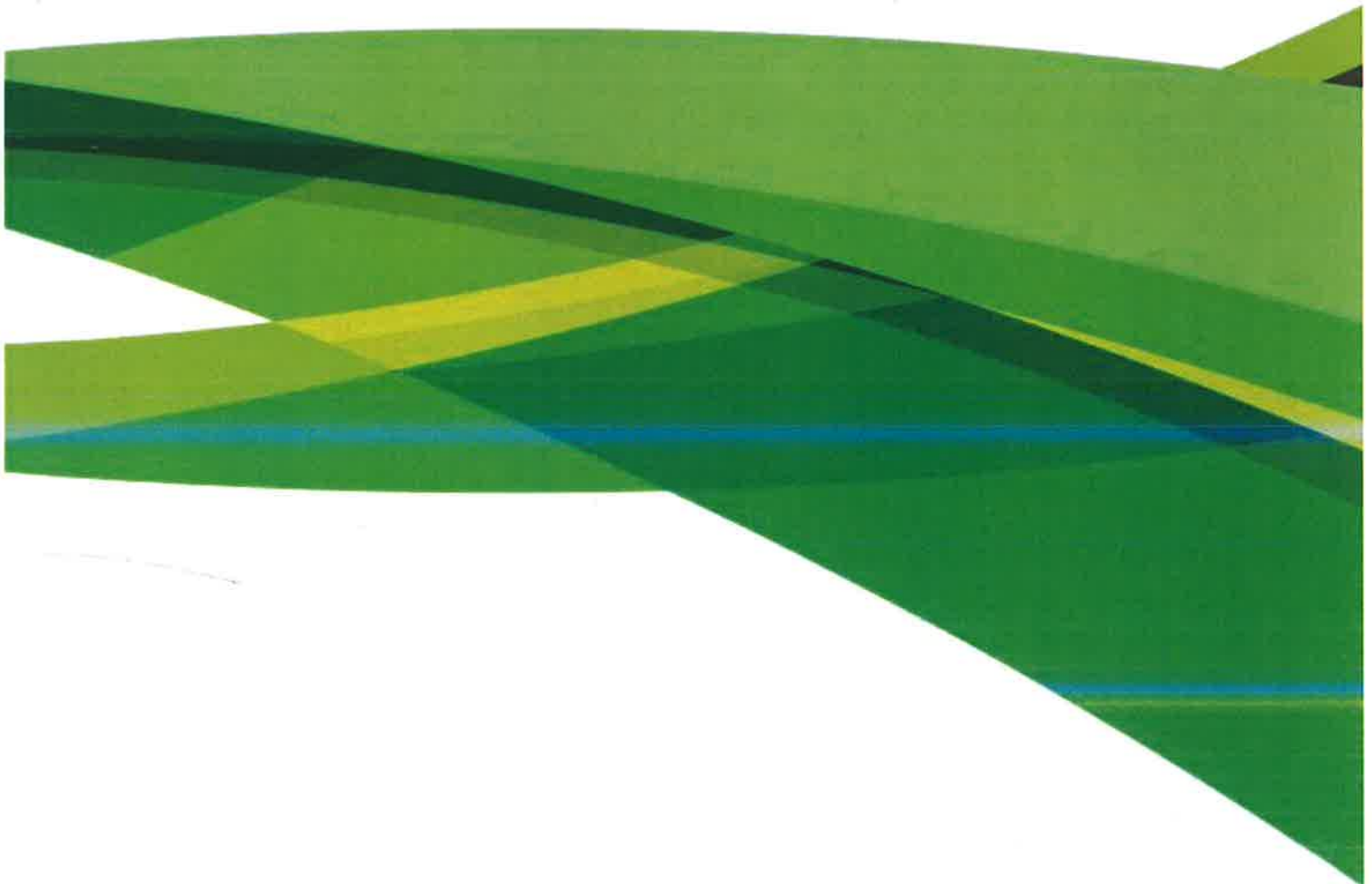






Hefin Thomas Agri Contractors  
15<sup>th</sup> June 2017

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# TABLE OF CONTENTS

TABLE OF CONTENTS .....	2
REVISION DETAILS .....	3
BUSINESS CASE .....	4
PROPOSED SOLUTION.....	5
ITEM 1: D:MAX .....	5
ADDITIONAL SERVICES.....	8
HEALTH & SAFETY .....	8
DELIVERY PROCESS.....	8
OTHER SERVICES .....	8
MECHANICAL ASSEMBLY + LABOUR .....	9
ELECTRICAL INSTALLATION .....	10
TERMS & CONDITIONS.....	11
NOTED EXCLUSIONS .....	11
COMMERCIAL TERMS .....	11
APPROXIMATE DISPATCH DATE AND PAYMENTS TERMS .....	12
WARRANTY .....	13
PRICING SCHEDULE .....	13
OUR STORY .....	14
THE 0% RISK OPTION.....	15
OUR CAMPUS AND INNOVATION CENTRE .....	16
ENERGY FROM WASTE .....	17
LANDFILL DIVERSION.....	18
RECYCLING WASTE WATER .....	18
ENVIRONMENTAL REMEDIATION.....	19
CONTACT DETAILS.....	21

## REVISION DETAILS

Date	Details	Author
15 <sup>th</sup> June 2017	Initial Proposal	Chris Zammit

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## BUSINESS CASE

Hefin Thomas operate a comprehensive fleet of vacuum tankers and road sweepers and offer a range of waste management services ranging from portalooos to excavation, pipe relining and cleansing.

The D:Max on offer complements the nature of the business and will provide Hefin Thomas the opportunity to add value and drastically reduce disposal costs.

CD Enviro - CONFIDENTIAL

## PROPOSED SOLUTION

### ITEM 1: D:MAX



#### Step Framed Trailer

- 4 No. Flood lights fitted to plant so operation can continue in poor natural light conditions
- Ladder up to trailer fitted for access
- EU compliant trailer meeting transport regulations including max. height - 4m & max. width - 2.55m

#### High Frequency Dewatering Screen - 1 x Grit, 1 x Rag

- Modular polyurethane panels
- Polyurethane liners along screen sides
- Replaceable modular back splash panels
- Polyurethane dam bar at front of dewatering screen (grit only)
- 2 no. adjustable offset vibrating motor
- 4 no. High-efficiency Rosta screen mounts
- Rubber lined feed box for discharging material evenly over area of screen

#### Sump - 1 x Grit, 1 x Rag

- Mild steel sand slurry sump
- Automatic sump level controls (stainless steel float)

- Feed/overflow points
- Skid mounted with integrated base for pump and motor

**Heavy Duty Warman Slurry Pump – 1 x Grit, 1 x Rag**

- Heavy-duty rubber lined Warman slurry pump
- Sigma Flexible Heavy Duty slurry pipe-work between pump and cyclone
- Complete with motor and drive
- Rubber lined pipework between pump and cyclone

**Hydrocyclone**

- Natural rubber lined modular cyclone c/w overflow discharge chamber

**2.3m 400mm Belt Grit Conveyor**

- Motorised drive head drum
- Head Drum Belt scraper
- Hydraulic hand pump to extend/retract between transport & working position
- Trailer discharge side optional, confirmed upon receipt of layout signoff

**Waste Water Transfer Sump & Pump**

- Mild steel sand slurry sump c/w automatic sump level control via ultrasonic & overflow points on one side
- Vogelsang Positive displacement Wastewater Pump c/w dry run protection
- Discharge rate controlled via variable speed drive

**Feed Water Booster Pump**

- Lowara NSCE pump (9.2Kw - IE3)
- Camlock coupling for water supply for quick and easy on-site connection

**Material Washing Spray Bars – 1 x Grit, 1 x Rag**

- High pressure spray bar fitted over screen.
- Adjustable spray bar manifold.
- Integrated hose-reel for plant wash down

**Generator Set**

- 150kVA diesel powered generator c/w 2no. 415V and 2 no.110V power sockets & 300 litre fuel tank

**Additional specifications**

- All necessary internal pipe-work and fittings
- All necessary guards and protection
- Galvanised walkways on both sides of the plant; with handrail, kick plate, and access stairs

- System painted to WIMES 4.01 specification (colour RAL 6018 - excluding OEM items)
- Primary Plant Colour RAL6018, Secondary Plant Colour RAL 9016

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## ADDITIONAL SERVICES

### HEALTH & SAFETY

- Operator training
  - 1 Day of training on plant operation
  - It is preferred that the operator will be present for the installation
  - It is essential that the operator is present for the commissioning
  - A classroom test will be given once the training is complete. On successful completion of the training and classroom test, a certificate of competence will awarded on successful completion.

### DELIVERY PROCESS

*Analysed, Assembled, Tested, Quality checked, Dismantled and packaged before leaving CDE headquarters. (F.A.T. if required)*

- Delivery to site (Liverpool) of all listed items
  - Incoterm (DAP)
  - Incoterm Responsibility Matrix <http://www.atlascargo.com/incoterms-2016>

### OTHER SERVICES

- CDEnviro ProMan (World Class Project Management)
- Pipe-work within proposed washing system
- Operation and maintenance manuals
- Painted to standard CDEnviro colours; RAL 6018 & RAL 9016



## MECHANICAL ASSEMBLY + LABOUR

DESCRIPTION	SCOPE OF WORK		
	BY CDEnviro	BY Customer	BY Others
Plant layout design and drawings.	✓		
Site layout drawings		✓	
Outline civil drawings - detailing concrete loading and service details. Site assembly and transport drawings	✓		
All necessary civil works including ducting and pipework where applicable		✓	
Supervision of Mechanical Install Team	✓		
Mechanical Installation Team & Tools	✓		
Commissioning Engineer	✓		
*Craneage, elevated working platforms and telehandler (where required) for erection & commissioning		n/a	
Principle contractor requirement upon completion of civils (Welfare Facilities, Fencing, Signage etc.) (Detail if CDE in control)		✓	
Water Supply pump and starter		✓	

\* Craneage provision is dependent on sufficient access and egress on site and ground bearing pressure. May be confirmed by provision of site layout to CDEnviro.

## ELECTRICAL INSTALLATION

DESCRIPTION	SCOPE OF WORK		
	BY CDEnviro	BY Customer	BY Others
Control panel form 2 for washing plant	✓		
3 Phase, 480V, Neutral & Earth Supply, 60Hz		✓	
Mains Supply (T-N-CS required) Or Generator	✓		
Distribution Board to supply separate equipment (e.g. M2500) - including cables and connections		✓	
Power Factor correction unit		✓	
Site Wiring (Supply & Connection of all site cables that cannot be Pre-Wired at CDE Factory)		✓	
Electrical Commissioning	✓		
Standard Pre-wiring of CDE plant to UK/European standard, Internal cable cores Brown, Black, Grey & Earth (yellow/green). Outside of UK/Europe the colour identification on inter cables will be sleeved to suit regional legations.	✓		
Site Lighting		✓	
Site CCTV cameras		✓	
Any disconnections (existing plant items on site)		✓	
Connection to CDE Panel (Cable and labour)		✓	

## TERMS & CONDITIONS

### NOTED EXCLUSIONS

- Crane hire / working at height equipment
- Concrete & rebar design / bases / pipe ducts
- Principal Contractor Requirements
- Power supply / connection to control panel(s) / site wiring
- Supply and connection of all site cables
- Fresh water supply / pipe-work / connection
- Top-up water supply / pump / pipe-work / connection
- Waste water / emergency overflow pipe-work / connection / supply
- Poly dilution water supply / pump / pipe-work / connection
- Polyelectrolyte/Coagulant/Antifoam supply
- Modifications / adjustments to existing plant items
- Legalization / Certification of documents
- Any item / service not specifically mentioned
- Client responsible for sampling, testing and provision of a wholly representative raw material feed analysis and final products specification requirements; any information provided by CDEnviro is for indicative purposes only.

### COMMERCIAL TERMS

- Our quotation is valid for acceptance within a period of 30 days
- All prices quoted are Sterling and exclude VAT
- A copy of our standard trading terms is attached
- Entire Agreement
  - This agreement constitutes the entire agreement between the parties and supersedes and extinguishes all previous agreements, promises, assurances, warranties, representations and understandings between them, whether written or oral, relating to its subject matter.
  - Each party acknowledges that in entering into this agreement it does not rely on any statement, representation, assurance or warranty that is not set out in this agreement.
  - Each party agrees that it shall have no claim for innocent or negligent misrepresentation based on any statement in this agreement.
  - Nothing in this clause shall limit or exclude any liability for fraud.

## APPROXIMATE DISPATCH DATE AND PAYMENTS TERMS

### UK

Milestone	Payment	Expected Duration	Payment Terms and Key Customer Deliverables (Any customer deliverables that are not ready, per the programme of works, and outside of CDEnviro's control, will have an extension of time and will be communicated to the customer by CDEnviro's Proman.)
Live	30%	Project 'Live'	"Live" date is considered when the last of the following is received; <i>Order acknowledgement is signed</i> <i>Full deposit is received.</i>
Plant Signoff		1-2 Weeks	Lead time commences upon; <i>Finalized Layout Signed</i> <i>All contractual requirements finalized and signed off</i> <i>(Typically 2 weeks)</i>
RFAT	70%	18-20 working weeks	RFAT This is when the equipment is Ready for Final Assembly and Testing. With our present programme we anticipate the time to RFA as noted in the PoW and commences after 'Live'
GRN	Customer FAT Test if required	2-3 working weeks to Dispatch	GRN This is the goods readiness note and is when the equipment is ready for dispatch If for any reason outside of the seller's control, the buyer is unable to facilitate delivery of the goods on the scheduled GRN date, storage rates calculated at 1% of the contract price per week (or part thereof) will be levied or double handling charges can be quoted as an alternative to storage.
Transport		Customer Dependant	Transport (and Customer controlled Customs Clearance)
Installation		1 working weeks	Installation Requirements; <i>Civils Complete</i> <i>Water supply</i> <i>Power Supply</i> Payment due upon the sooner of mechanical installation or 45 days from Goods Readiness Note (i.e. prior to material processing / commissioning);
Commissioning & Completion		1 working weeks	Commissioning Requirements; <i>Feed Material</i> <i>Dosing Chemicals including (Coagulant, Polyelectrolyte and antifoam as required)</i> <i>Load Shovel, Driver and Plant Operator in place</i>  Customer Take Over Upon the sooner of 75 days from Goods Readiness Note or completion (i.e. 3 weeks after material is first processed through the plant, irrespective of any other performance criteria, a single "Issue Register" will be compiled by the customer and agreed with CDEnviro. Once all concerns from this Issue Register are satisfactorily resolved then the plant will be deemed to have reached completion. In the event that an Issue Register is not presented within this time period, then CDEnviro will draw up an Issue Register and it will be deemed that this list is accepted as being final by all parties)

- See Programme of Works for Estimated Schedule at each milestone

- Expected duration and the PoW is to be reviewed and confirmed just before going 'Live' to ensure validity.

## WARRANTY

- There is a 12 month or 2000 hours (whichever is sooner) warranty on all mechanical and electrical components (but no later than 18 months from date of Goods Readiness Notification)
- CDEnviro will replace any faulty component which fails through normal use during this period from date of final commissioning, including labour
- Although every effort has been made to design for wear, no warranty is given on wear parts
- A copy of our standard warranty conditions is available on request

*CDEnviro equipment complies with rigorous Health & Safety Standards based on our experience over many years. Given the differences in opinion amongst our Customer base regarding H&S compliance, the Customer must satisfy himself at the outset that the Equipment supplied satisfies their own Company H&S Standards. In this regard, CDE will make available, upon request, the relevant manuals; pictures and site visits to demonstrate current standards adhered to prior to confirmation of the Order. Any requests, after the Order is agreed and signed, for amendments to equipment regarding compliance to individual company standards will be charged on a mutually agreeable fee*

## PRICING SCHEDULE

Item #	Description	Price
1	CDEnviro D:MAX	
<b>TOTAL (including additional services)</b>		<b>£ 338,600</b>

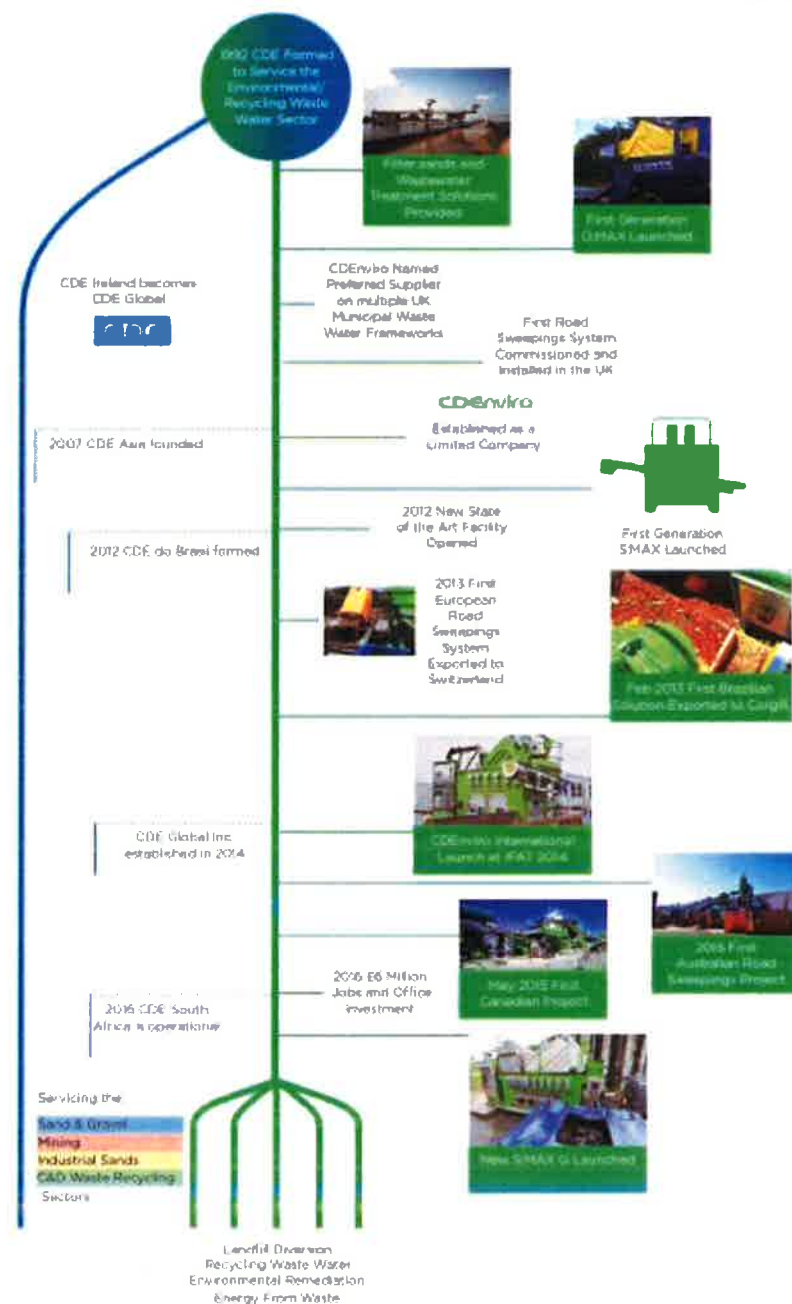
## OUR STORY

**CDE was formed in 1992 to service the Environmental waste water sector in the UK and Ireland. The CDE Group of Companies now employs over 350 people across 8 regions.**

CDEnviro provides solutions for clients across 4 sectors; Landfill Diversion, Recycling Waste Water, Environmental Remediation and Energy from Waste.

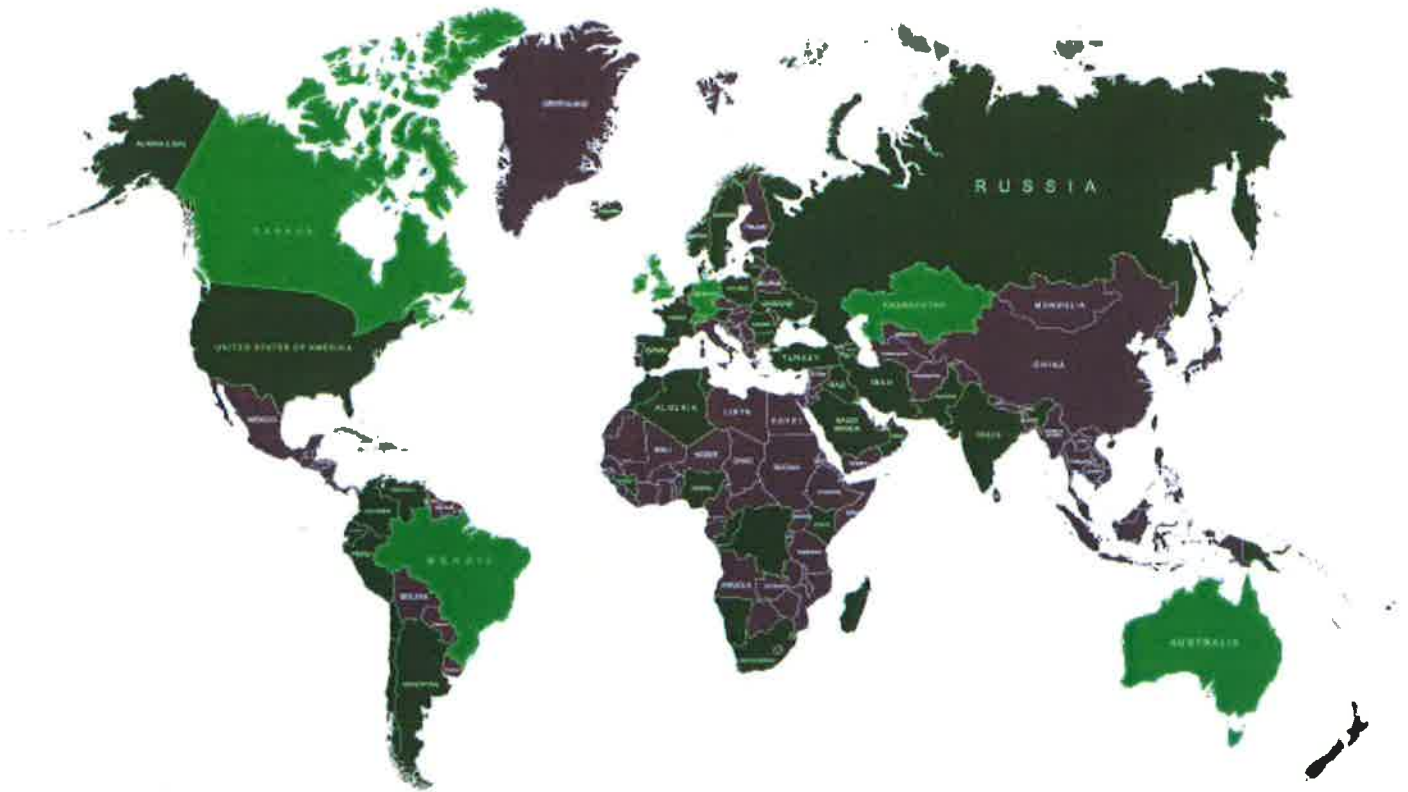
CDEnviro's high efficiency materials recovery and recycling systems have been developed to substantially reduce waste to landfill and maximise the production of commercial grade products from a number of waste streams.

At CDEnviro we believe zero waste is possible. By asking the difficult questions and taking on the difficult challenges we will continue to create new ways to turn today's waste products into tomorrow's assets.





## THE 0% RISK OPTION



- CDEnviro Installations
- CDE Group of Companies Installations

We've delivered exceptional solutions again and again for major water utility companies in the UK and for some of the world's largest environmental consultancies including SITA/Suez and Veolia.



## OUR CAMPUS AND INNOVATION CENTRE

The CDE Group HQ is in Cookstown, Co. Tyrone, Northern Ireland. Our Campus facilities include:

- An Innovation Centre dedicated to Research and Development, Product Testing, 3D Design and FEA Structural Testing.
- A bespoke, multi-functional Laboratory providing controlled conditions in which technical testing and analysis of your material can be carried out.
- Extensive production facilities equipped with outstanding Quality and Health and Safety systems and processes, including 2 custom-built factories for efficient assembly and dispatch of your system.





## ENERGY FROM WASTE

The ability to deliver the most efficient and effective waste management solution for your business is founded on the principle of direct contact between CDEnviro and our clients – this approach has been proven over the last two decades to be the only way to effectively deliver waste management projects which demonstrate the quickest return on investment and recover maximum materials for re-use.

All of this combines to move our company closer to the objective that defines us – to achieve a zero waste society.



AB Produce  
Leicestershire, England

Vegetable Washwater  
Processing Plant

G:MAX, HYDRO:FLO



Cargill  
Goiania, Brazil

Tomato Washwater  
Processing Plant

PRO:DEC

"The increase in production from the CDEnviro solution has been really important for us; however, the increase in reliability is invaluable."

**Tim Metcalf**

General Manager for Aggregate and Asphalt with FM Conway



## LANDFILL DIVERSION

The ability to deliver the most efficient and effective waste management solution for your business is founded on the principle of direct contact between CDEnviro and our clients – this approach has been proven over the last two decades to be the only way to effectively deliver waste management projects which demonstrate the quickest return on investment and recover maximum materials for re-use.

All of this combines to move our company closer to the objective that defines us – to achieve a zero waste society.



Citywide  
Melbourne, Australia

Road Sweepings Recycling  
System



Vesta Environmental Services  
Rugby, England

Road Sweepings & Gully  
Waste Recycling System



C & O Chapuis SA  
Courmayinge, Switzerland

Road Sweepings & Gully  
Waste Recycling System



Biffa Waste Services  
Brighton, England

Road Sweepings Recycling  
System

"CDEnviro brought a new, innovative approach to our processing of waste. The new solution effectively screens, classifies and dewateres our waste streams allowing us to divert 99% of road sweepings material from landfill. The effective recovery and re-use of materials from this solution ensures we are providing the most creative and sustainable waste management service in the UK."

**Mark Harley**

National Development Manager at Biffa



"The end products are being used in a variety of construction applications including trench fill, pipe bedding and non-structural concrete mixes."

**Jason McPolin**

Owner at Irish Waste



"We are very pleased with the performance of the plant to date and we have received superb service and support from CDEnviro. Prior to purchasing the plant we examined the other recycling plant offerings in the market but after visiting other CDEnviro installations we were satisfied that theirs was the technically superior option."

**Tim Hughes**

Strategic Development Manager at SITA/SUEZ UK



## RECYCLING WASTE WATER

The ability to deliver the most efficient and effective waste management solution for your business is founded on the principle of direct contact between CDEnviro and our clients – this approach has been proven over the last two decades to be the only way to effectively deliver waste management projects which demonstrate the quickest return on investment and recover maximum materials for re-use.

CDEnviro provides solutions for clients in the wastewater treatment industry that transform organisations into environmental leaders.

Our solutions under our Recycling Waste Water sector include Grit Recovery, Rag Removal and the recycling of Industrial Waste Water.



United Utilities  
England

Sludge Screening System  
Across 5 Sites

SHAKU



MTS Cleaning Services Ltd.  
Kent, England

Wastewater and Grit  
Recovery System

DMAX



Irish Waste Services Ltd.  
Lurgan, Northern Ireland

Lagoon Cleaning

PRODEC



Andidrain  
Rockliffe, Scotland

Wastewater and Grit  
Recovery System

DMAX

"We are now sending 50% less waste to landfill than was previously the case. We are recovering a range of materials from the waste and converting them to commercial products, which have uses in a variety of applications including the recycled construction materials market and waste to energy projects."

**Nick Williams**

Digester Manager, with Severn Trent Water





## ENVIRONMENTAL REMEDIATION

The ability to deliver the most efficient and effective waste management solution for your business is founded on the principle of direct contact between CDEnviro and our clients – this approach has been proven over the last two decades to be the only way to effectively deliver waste management projects which demonstrate the quickest return on investment and recover maximum materials for re-use.

CDEnviro has delivered exceptional solutions again and again for major waste management companies globally. These include solutions for processing Hydro Excavation, NDD and Dredging detritus.



## CONTACT DETAILS

**Your CDEnviro Representative**  
**Mobile Number**  
**Email address**

:Chris Zammit  
:+44 738 704 9671  
:[czammit@cdenviro.com](mailto:czammit@cdenviro.com)

**Correspondence address**

:CDEnviro Ltd.,  
Ballyreagh Industrial Estate,  
Cookstown, Co. Tyrone,  
Northern Ireland, BT80 9DG

**Office telephone**  
**Office fax**

:+44 28 8676 7900  
:+44 28 8676 1414

*Please note that this is a Budget quotation only. Any final agreement on price will be subject to review by our Technical department and may require a site visit by same.*

*Please note that any images contained within this quotation are for illustrative purposes only and may not be an exact replica of the supplied plant.  
All specifications are current, but are subject to change.*



