

Crawford[®] Environmental Consultancy

CEC 1697760
Scope of Works Document
Georgia Piggott BSc
9th March 2023



**UK & Ireland
Spill Association**
THE VOICE OF THE SPILL INDUSTRY
CORPORATE MEMBER

SCOPE OF WORKS DOCUMENT

CEC Ref: 1697760

Project Title: Ipswich

Site Address: Curtis Farm, Cox Hill, Wicker Street Green, Ipswich, IP7 6EY

Lead CEC Consultant: Georgia Piggott

Date of Issue: 02/02/2023

Date of Second Issue: 09/03/2023

Deadline for Tender Submission: 16/03/2023

Version No.	1.0
Status	Final
Date Issued:	09/03/2023

1. Introduction

Please find enclosed the Crawford Environmental Consultancy (“CEC”) initial investigation data and supporting information relating to a loss of kerosene heating oil at Curtis Farm, Cox Hill, Wicker Street Green, Ipswich, IP7 6EY.

Please carefully consider the information provided in this scope of works document prior to supplying a quotation. Please submit your detailed tender submission via georgia.piggott@crawco.co.uk. All tendered quotations must be received by CEC by 9th February 2023.

Please provide an cost breakdown and estimated start date for these works when the quote is issued.

2. Conditions of Contract

Should you be awarded the works, it is paramount that you contact CEC immediately should unexpected conditions be encountered requiring a change in the scope of works. No significant changes in the scope of works (up to 10% per agreed scope of works, capped at £1,500), should be implemented without prior approval from CEC.

Please note that the agreed supplier contract between CEC & the chosen contractor provides a budget allowance of up to 10% per agreed scope of works, capped at £1500, for unforeseeable variations to the scope of works provided below. Such uplifts in scope must be supported by data driven rationale and full disclosure of all additional expenditure at reporting and invoicing stages of the remediation works. Please keep CEC updated regularly and throughout the completion of works.

CEC Project No.	1697760	Project Title: Ipswich
Supervising Consultant(s):	Georgia Piggott	Consultant Contact Details: 07585 904071 georgia.piggott@crawco.co.uk
Start Date:	TBC	Name of Insured: Sam and Annie Del Mar
Insured Address	Curtis Farm, Cox Hill, Wicker Street Green, Ipswich, IP7 6EY	
Insured Contact details	Sam Del Mar 07703 800370 samandannie@hotmail.co.uk	

3. Site Details

<p>Property description & location:</p>	<p>The property comprises a detached two-storey dwelling of timber frame construction with plaster finish located on the north-eastern boundary of Wicker Street Green, approximately 5-kilometres (km) west of Hadleigh. The site is accessed via a large sweeping gravel drive from Cox Hill and features a series of conjoined outbuildings (creating a 'C' shaped plan) to the north of the main dwelling. The property itself is recorded to be Grade II listed (ref. 1285443) and includes a patio and lawn area to the south-west. There is a well located at the front (east) of the property, small pond and grazing paddocks to the north-east.</p> <p>The oil storage tank (OST) and associated point of loss is located to the north-eastern aspect of the outbuildings. There is a storage barn, used for farm purposes, located opposite the OST. The site features a slight decline in topography towards the south-east towards Cox Hill.</p>
<p>Other relevant features:</p>	<p>Access to the property is via an automatic gate.</p>
<p>Site owners / occupiers:</p>	<p>The site is occupied by Sam and Annie Del Mar, their children and two dogs.</p>
<p>Water supply:</p>	<p>Water supply to the property is unknown at this stage. It is not anticipated that water supply pipes transect the works area.</p>
<p>Electricity supply:</p>	<p>Electric supply to the property is via overhead means from Cox Hill. Underground cables are present adjacent to the works area.</p>
<p>Drainage system:</p>	<p>The site is served by cesspit located within the field opposite the property. Foul drainage is not observed to transect the works area.</p>
<p>Surface water features:</p>	<p>There is a ditch and pond located on site approximately 25 m southwest of the point of loss. Another smaller pond is located approximately 45 m downgradient (southeast) of the point of loss.</p>
<p>Surrounding land use:</p>	<p>The surrounding land use comprises predominantly agricultural arable and grazing land, and residential properties. The site is directly bound:</p> <ul style="list-style-type: none"> - To the north by agricultural fields, Groton Woods Site of Special Scientific Interest (SSSI). - To the east by Cox Hill, and agricultural arable land beyond. - To the south by Cox Hill, a neighbouring residential property including pond, and agricultural fields beyond. - To the west by neighbouring residential land and agricultural fields beyond.

Heating oil tank and associated system:	The OST comprises a rectangular single skinned steel 2,500 litre (L) tank situated on two raised concrete plinths. The tank is directly filled and is located on the northern aspect of the outbuildings. The tank exhibits a sight gauge fitted to the western aspect of the tank with separate isolation valve. The OFL is connected on this aspect and runs in a western direction where it transects the building and was traced to run in a south westerly direction towards the property.
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4. Site Access

The information provided below is indicative only and the contractor is responsible for undertaking their own site access appraisal and corresponding risk assessment

Entrance/approach to property and area to be remediated	The site is accessed via a private gated driveway from Cox Hill. The works area can be accessed via farm track leading to barn at the rear of the outbuildings. Access is good.
Height restrictions	No height restrictions.
Topographic features:	There is a slight decline in gradient towards Cox Hill. This should not impede on works.
Waste Location	Skips can be mobilised to the site and stored on the driveway or hardstanding area to the rear of the barn. Skips to be lined and covered when not in use. Skip location is marked on the site plan below.
Welfare:	A portaloo is to be mobilised to site for use by contractors.

5. Health & Safety

All tasks should be risk assessed by the appointed contractor and appropriate safety measures implemented. Adequate precautions should be made about site specific health and safety requirements whilst on site. Health and safety risk assessments and method statements will be required prior to commencement of works.

Where appropriate the appointed contractor will be responsible for compliance with all CDM 2015 regulations, will act as Principal Contractor. CEC will act as Principal Designer in this regard

The information provided below is indicative only and the contractor is responsible for undertaking their own site access appraisal and corresponding risk assessment

Identified Hazards:	<ul style="list-style-type: none"> - Good housekeeping to be maintained. - Electrics proximal to works area (plug sockets / wiring to rear wall of barn, and large electric cable externally – see photos attached) - Working in or near excavations.
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	<ul style="list-style-type: none"> - Work from height associated with excavation. - Manual handling. - Kerosene contaminated soils. - Adverse weather. - Internal works – dust. - Brickwork replacement – structural considerations. <p>Full CAT & Genny survey must be undertaken prior to excavation.</p>
<p>Reporting of accidents and near misses:</p>	<p>All accidents and near misses involving injury / potential to injury and property damage / potential property damage must be reported to CEC and their respective employers immediately</p>
<p>CDM Requirements & Other Regulations:</p>	<p>Should your tender be successful, you will be contacted by the Crawford CDM unit with details of the PCI and a request for CPP documentation for review and approval.</p> <p>Where the full provisions of the CDM Regulations apply and the project is deemed to be notifiable, the contractor is to allow for all costs associated with complying fully with the Regulations which shall include but not be limited to the preparation and submission of a Construction Stage Health & Safety Plan and all appropriate method statements.</p> <p>Where Part 2 of the CDM Regulations applies and the project is non-notifiable, the contractor is to allow to fully comply with their duties under the Regulations.</p> <p>Allow for complying with all other relevant regulations pertaining to the safe execution of the Works, including the Health and Safety at Work Act 1974, COSHH Regulations, RIDDOR.</p>
<p>Special Instructions:</p>	<p>Please ensure the following points are also considered prior to commencing works:</p> <ul style="list-style-type: none"> - Adequate measures must be taken to protect all property, including but not exclusively driveways, lawns and any thoroughfares from the effects of the use of machinery, skips and the storage and conveyance of materials. - All waste arising to be disposed of in accordance with current Waste Management Regulations and also best practice. - Excavation work must not undermine the stability of structures such as oil tanks or buildings. - Please ensure that the occupier / owners are made aware of the work programme at all times. - Should the extent of contamination be more or less than anticipated/proposed then please inform CEC immediately. <p>Please keep CEC updated throughout and bring to our attention any matter which may require additional works or has implications for our client. Approval must be required from CEC prior to any changes in the scope of works.</p>

6. Waste

<p>Soil Analysis & Disposal</p>	<p>We are currently awaiting further laboratory test results, which the contractor should use to confirm waste classification and appropriate disposal routes in line with waste management guidance (WM3, 2015). Once received we will issue these.</p> <p>In order to control costs and for sustainability purposes, CEC ask that all contractors endeavour to avoid disposing of waste via landfill and seek a suitable waste treatment centre within a pragmatic distance of the subject site. Should the contractor deem the waste only suitable for disposal via landfill, detailed supporting rationale must be provided. No waste should be disposed of via landfill without CEC guidance.</p>
<p>Other Waste</p>	<p>All other waste (either contaminated or 'inert') arising from the remediation works should be suitably separated at source and recycled where possible. This can include (but not exclusive to) building materials (metal, timber, plasterboard, glass etc), plastic wastes.</p>

7. Incident Details

<p>Description of oil spill incident, estimated volume of loss and how it was discovered:</p>	<p>The Insured (Mr. Del Mar) appointed Whitwell Services to install a new 2,500 litre steel oil storage tank (OST) in November 2021 after discovering a hole in his old tank, which caused an unknown volume of kerosene to be lost to ground. The homeowner recently got in touch with Whitwell Services following reported hydrocarbon odours persisting within the external barn, which is located directly adjacent to the oil tank installation.</p> <p>The Insured initially appointed an environmental consultancy (OHES Environmental Ltd) to undertake a walkover of the site. They reported no initial visual evidence of hydrocarbon impact externally or internally within the barn. However, upon entering the barn, OHES noted a hydrocarbon odour with an indicative reading of 2 ppm within the ambient air using a photo-ionisation detector (PID).</p> <p>Following this, the Insured contacted his insurers (NFU), who appointed CEC via Crawford & Company Adjusters (UK) Ltd on 6th December 2022. CEC completed an initial investigation on 14th December 2022, which included ambient air monitoring of the internal rooms of the house and barn, as well as completing intrusive external investigation works comprising the advancement of hand-augured boreholes. Samples were screened on site using a calibrated PID.</p> <p>This intrusive investigation revealed contamination was present in shallow soils surrounding the tank, and volatiles were recorded within the barn. Further intrusive investigation was deemed necessary.</p>
<p>Odours within property:</p>	<p>Ambient odours recorded within the barn. 29th November 2022 – 2.0 ppm 14th December 2022 – 0.0 ppm (snow present – volatiles)</p>

	reduced) 27 th January 2023 – 1.2 ppm
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8. Details of Required Works

Please state **names, qualification and experience** of the nominated persons who will be undertaking the remediation works. Please detail the nominated persons within your tender submission.

To improve the environmental sustainability of oil spill remediation works, please also state the **office location** of all persons who will be undertaking the remediation works and/or site visits.

Finally, please state an **estimated date for commencing works** following receipt of instruction and an **estimated timescale** for completion of the remediation works within your tender submission.

8.1 Site Preparation

It is vital that every effort is made to protect the Insured’s property from further damage because of the remediation works outlined below. Therefore, a pre-condition photographic survey and pre-start site meeting with the homeowner will be required by the contractor prior to commencing works.

On completion of the pre-condition survey and meeting with the homeowner, should the contractor identify any additional protection measures that they believe are required, please contact CEC immediately to discuss further. No additional protection measures will be undertaken without prior approval from CEC.

Should any further damage to the Insured property occur because of contractor site activities and in lieu of the protection measures outlined below, CEC reserve the right to require that the appointed contractor completes additional repair works in lieu of any further damages incurred as a result of contractor activities.

No.	Description
1	Provision of surface protection materials to external working areas including waste storage area, and access / egress routes.
2	Deployment of suitable waste storage and welfare to site. Storage to be covered when not in active use to prevent migration of contaminants and rainwater ingress.

No.	Description
3	Provide dust sheets / flooring protection to working areas inside property (likely not required for barn room due to absence of flooring currently, tiling in hallway requires protection – see photographs included).
4	Provide suitable means of dust extraction as necessary due to lack of windows present within barn space.
5	Provision of fencing for external dig, and signage for internal works to prevent unauthorised access.
6	Remove OST from existing location to enable access to work area. Temporary tank likely required for works duration due to nature of metal tank installation.
7	Dismantle tank piers and base to expose ground below.
8	Undertake full-service scan using CAT and Genny and mark services on site plan. NB electrics cable present adjacent to works area (see attached photos). Internally plug sockets and cables present against wall. Isolate electrics and make safe as necessary to allow access to brickwork for replacement.

8.2 Remediation

No.	Description
1	Internal excavation area of identified impacted ground measuring 6.0 m X 1.0 m to a depth of 1.0 m bgl to expose brickwork for validation, excavation not to undermine footings. CEC to inspect and validate excavations before reinstating. No reinstatement works are to be completed prior to CEC approval. NB electrics to be suitably isolated where necessary. Brickwork replacement to follow as per structural engineer's report.
2	External excavation area of identified impacted ground measuring 2.5 m X 1.5 m to a depth of 1.0 m bgl. NB electric cable transecting works area.
3	Undertake drill point survey of exposed brickwork below ground brickwork.
4	Pause and allow CEC to validate excavation, and screen below ground brickwork.
5	Structural engineer to advise scope for brickwork replacement. NB double skinned wall. Cost for this phase to be priced according to structural engineer's report when received.

No.	Description
6	All excavated areas to be left clean and tidy after each working day. Please ensure the working/excavated areas area safely boarded over and 'sealed' with plastic sheeting after each working day.

Phase 2 Remedial Works / Further Investigation

No.	Description
1	Extension of external excavation according to site plan, measuring approximately 2.5 m X 1.5 m to footing level. NB two brick plinths to be dismantled. See Photograph 11.
2	Up to 4 no. additional trial pits within the barn to assess migration along the side walls. CEC to advise extension of internal excavation based on findings.
3	Removal of internal brickwork skin (maximum extents 1.6 m X 6.0 m) as per Photograph 12 in line with structural engineers' method statement to facilitate screening of outer skin from internal side.
4	Pause and allow CEC to screen brickwork, trial pits and excavation.

8.3 Reinstatement

To be amended following further investigation and remedial works.

No.	Description
1	Replace brickwork as per structural engineer's method. Known extents requiring replacement measure 1.6 m X 6.0 m. Installation of pipework into cavity at 4 no. locations across wall to facilitate passive venting.
2	Provision of bentonite pellet layer to base of excavation.
3	Excavated areas to be suitably backfilled in line with industry standards, with installation of vapour membrane internally and 4 no. perforated pipes beneath, to be threaded through wall, to facilitate later connection if necessary.
4	Reinstate concrete flooring on like for like basis internally in line with industry standards, reinstate electrics and skirting board on a like for like basis.
5	Tank base and supporting plinths to be replaced on a like for like basis to allow reinstatement of OST.

No.	Description
6	Temporary OST to be removed, and new OST to be reconnected.
7	All working areas to be cleaned down on completion and waste, welfare, and equipment to be removed from site at to the satisfaction of the insured.

Enclosed:

Appendix A – Site Location and Access

Appendix B – Site Diagram & Impacted Area

Appendix C - Site Photographs

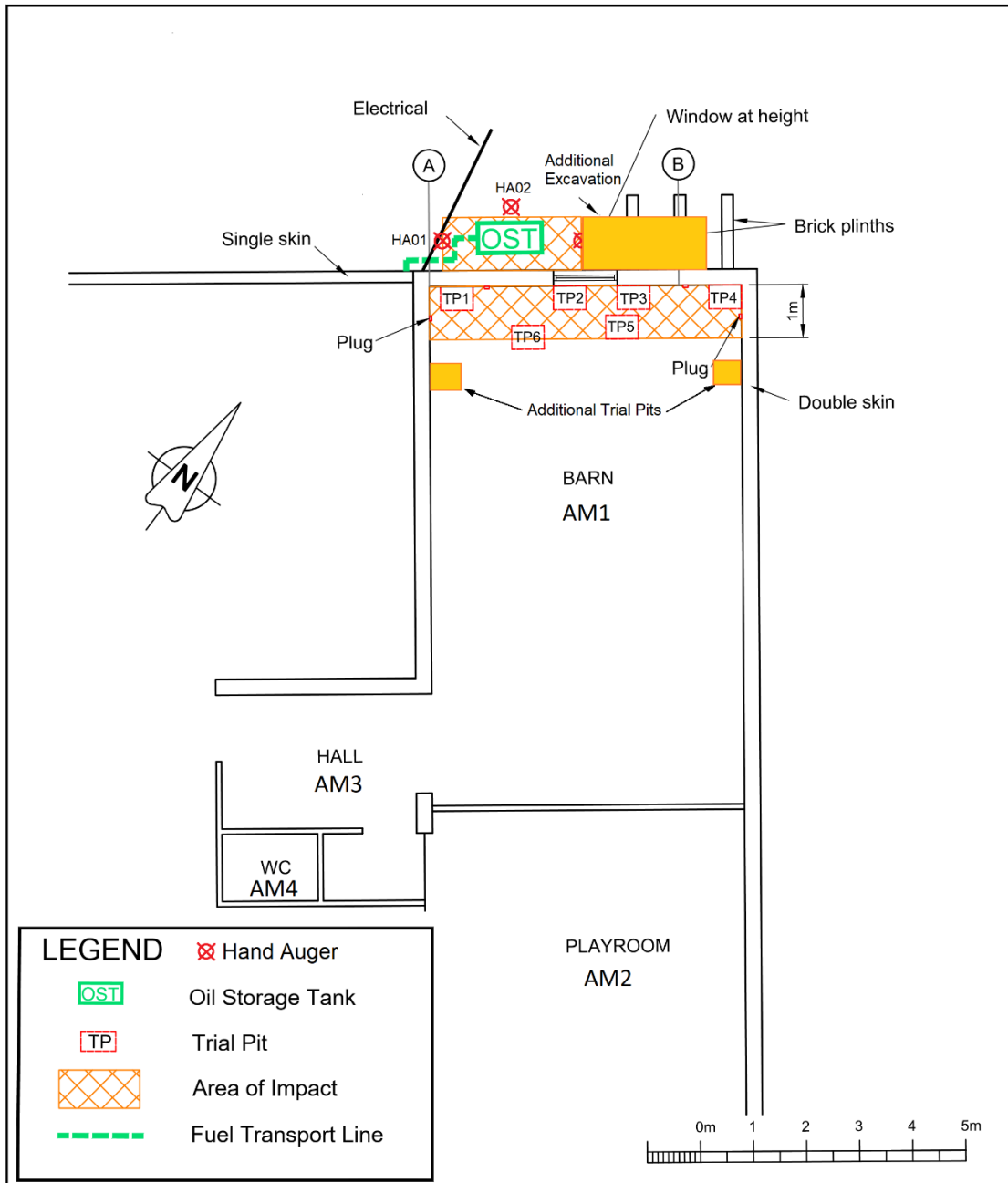
Appendix D - Laboratory Test Results for Waste Assessment & Disposal Purposes

Appendix A – Site location and access (blue) including main dwelling (yellow), works area (red) and skip placement (orange)



Appendix B – Site Diagram

Additional excavation and trial pits in block orange



LEGEND	
	Hand Auger
	Oil Storage Tank
	Trial Pit
	Area of Impact
	Fuel Transport Line

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Rev	Date	Drawn	Designed	Checked																						
Client MR DEL MAR	Drawing Title SITE OVERVIEW AND SAMPLING LOCATIONS	<table border="1"> <tr> <td>Project No</td> <td>1697760</td> <td>Division</td> <td>CEC</td> <td>Scale at A4</td> <td>1:100</td> </tr> <tr> <td>Date</td> <td>FEB '23</td> <td>Drawn</td> <td>DP</td> <td>Designed</td> <td>GP</td> </tr> <tr> <td>Checked</td> <td>MR</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Drawing number</td> <td colspan="2">CEC-1697760-01</td> <td>Revision</td> <td colspan="2">00</td> </tr> </table>	Project No	1697760	Division	CEC	Scale at A4	1:100	Date	FEB '23	Drawn	DP	Designed	GP	Checked	MR					Drawing number	CEC-1697760-01		Revision	00	
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Appendix C – Photographs



Photograph 1 – Entrance to property



Photograph 2 – Driveway into property



Photograph 3 – Front aspect of property



Photograph 4 – Front aspect of outbuildings / works area with possible skip location



Photograph 5 – Entrance to works area



Photograph 6 – View of internal works area



Photograph 7 – Trial pitting locations



Photograph 8 – Track to external works area



Photograph 9 –View of tank location



Photograph 10 – Possible skip location (TBC with Insured)



Photograph 11 – Extension of external excavation



Photograph 12 – Internal brickwork replacement

Appendix D – Laboratory Results

Please find attached to email issuing scope.