



MS/ C1615

79 FitzJohn Avenue

Sheet Pile/ Kingpin Installation

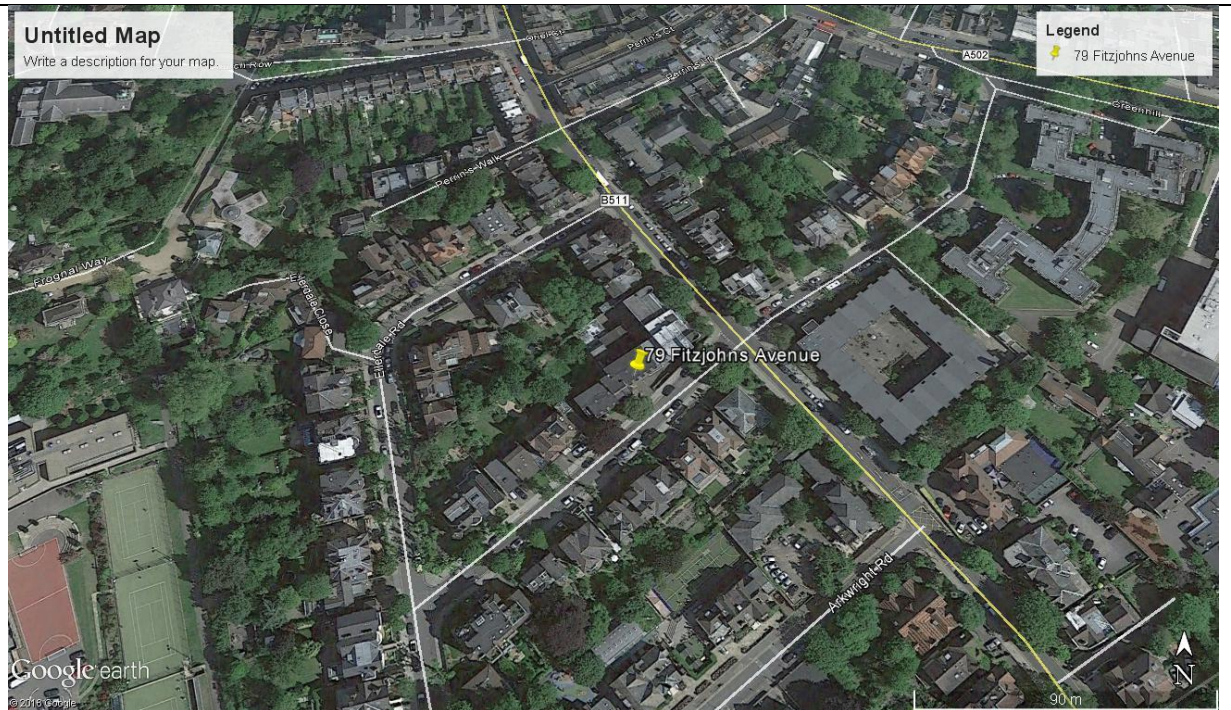
24/03/2016

Author: Liam Tucker

Checker: Ali Maidman

Ref	Pile Installation
01/01	<p style="text-align: center;">Description of the Works or Process</p> <ul style="list-style-type: none"> • This method statement covers the operations associated with the installation of sheet piles & kingpin posts with concrete panels.
01/02	<p style="text-align: center;">Access & Egress</p> <p>The site should be prepared to a level stable platform for the piling equipment required for the works. The rig will be delivered to site on a low loader trailer and there should be room for this to safely access and egress site. Similarly sheet piles & kingpins will be delivered on flat bed rigid or articulated road lorries.</p>
01/03	<p style="text-align: center;">Control Measures (Permits etc)</p> <ul style="list-style-type: none"> • Hot works permit to be completed prior to any cutting or burning works. • All plant & equipment to be inspected daily & daily inspection book completed & signed by operator. • Piling records to be completed for all piles. • Via a permit to pile/excavate, personnel should be made aware of proximity to any underground or overhead cables that are in the vicinity.
01/04	<p style="text-align: center;">Associated Risk Assessments</p> <p>Task based risk assessments are attached to this method statement.</p>
01/05	<p style="text-align: center;">Emergency Arrangements</p> <ul style="list-style-type: none"> • Pollution control – Spill kits to be available on site. • Fuel bowser to be double bunded • Bunds for concrete operations • Local hospital route in case of an emergency – to be posted in main contractors site welfare accommodation <p><u>Note:</u> Above procedures to be advised to all personnel prior to commencement of works and recorded</p>

<p>01/06</p>	<p style="text-align: center;">Monitoring & Compliance</p> <p>Monitoring and compliance is achieved through agreement with employing contractor's site management.</p> <ul style="list-style-type: none"> • Pile record sheets to be completed for all locations. • Survey of surrounding properties to be completed by main contractor prior to commencement of vibratory piling.
<p>01/08</p>	<p style="text-align: center;">Roles & Personnel</p> <p>The following personnel are involved in this process;</p> <p>Off site;</p> <ul style="list-style-type: none"> • Contracts Director – Joe Paine – 07872 373690 • Contracts Manager- Liam Tucker- 07595651565 • Engineer – Ali Maidman – 07887415669 <p>On site;</p> <ul style="list-style-type: none"> • Rig Operator x 1 • Pile Hand x 2 • Concrete pump operator x1 • Gieken operator x1 • Movax operastor x1
<p>01/09</p>	<p style="text-align: center;">Site Address</p> <p>Woodmace Site Compound Fitzjohn's Ave, London NW3</p>



Site Deliveries and Equipment

Materials & Equipment Deliveries and Collections during These Operations

- Klemm 709 C/W 600 Augers
- 50T Crane
- F301 Giken Silent Piler
- Agitator
- Assorted hand tools
- Welder
- Concrete pump
- Piles
- Kingpin Steels
- Jetwash
- Movax unit
- 20T Excavator
- Concrete panels
- C35 Concrete

01/10	Methodology	HAZARD CONTROL MEASURES
	<p>All personnel will be given a site induction by the client's site staff on site limits and site hazards, including all known services. All Suttle Projects operations will be conducted in accordance with current PUWER and LOLER regulations.</p> <p><u>Sheet pile line setup</u></p> <p>The correct pile line will be achieved using measurement by tape off pegs or pins. The pile line will be set out by the client prior to the piling works.</p> <p>Only CPCS operatives are to drive the MEWP and harnesses are to be worn at all times when in the man basket.</p> <p>Sheet piles have been chosen to be used on the East & West boundary consisting of 9m L600 series piles, the chosen method of installation is vibration less piling with a Gieken silent piling rig, 3 no piles will need to be installed by vibration methods so that the Gieken has something to start from, it will be lifted into position by a Mobile crane, method of installation is as follow;</p> <p><u>Installation of Sheet Piles (MOVAX and Giken Silent Piler)</u></p> <p>The Giken silent piler will be lifted, utilising A 50T crane, onto the pile line (onto the piles which were installed by vibratory means before the change to the method of installation) in such a position as to allow the silent piler the grip 3nr of these piles which act as 'Reaction Piles' (See diagram below) in this instance.</p>	

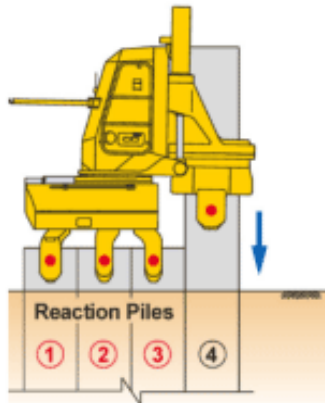


Image taken from <http://atsunewgiken.com/services/>

The MOVAX then lifts the next pile up to the drive unit of the silent piler where the pile is then gripped by the silent piler and driven to the required depth (4).

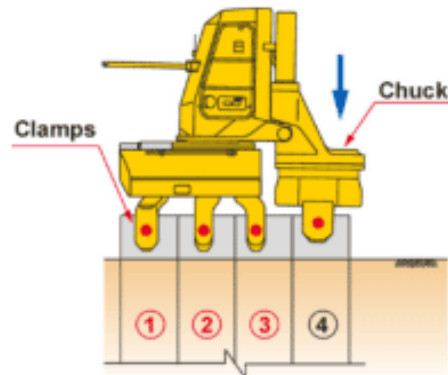


Image taken from <http://atsunewgiken.com/services/>

Once the driven pile has been installed the silent piler moves onto the installed pile and re grips the piles. The process for installation is then repeated until the line of piles is completed.

Should it be deemed necessary by the site conditions installed pile clutches will be linked by welding to increase the driving reaction force.

The silent piler will rest on the pile line between shifts unless the security of the site deems that it must be removed.

Once complete the silent piler will be removed from the pile line utilising the 50T crane and removed from site.

Mobilisation

All deliveries will be unloaded using the a excavator which will be supplied by Suttle Projects and with the use certified chains and appropriate slinger signaller, some items will be towed to site for example the jet wash bowser, the equipment will be set up in the appropriate manner to which the site allows, the 709 drill rig will be delivered by a low loader with 13m of 600mm diameter augers,

Where there is any reversing of plant there is to be a banksman with the vehicle/machine at all times.

The agitator will be delivered on a roll on roll of skip lorry and placed in a position in the centre of the site next to or in an area where the concrete pump will be located. The UC steel sections will be delivered on a flatbed lorry and unloaded by utilising a machine and a slinger/signaller

Pile Installation

Once the services search has been undertaken and pile locations have been verified and marked out by the client and the relevant machine safety checks have been carried out the rig operator will position the rig over the first hole and plumbed and align his mast and will commence drilling to the required depth which is between 9-12m with 600mm diameter augers the Klemm 709 is fitted with a safety cage around the mast to stop any persons coming into contact with the rotating augers.

For the depth of pile proposed the cage should not need to be opened. If, however, the cage is opened while drilling this will break the contact of the solenoid and reduce the flow to the hydraulic rotational pump and slow the rotation of the augers down to minimise injury the cage is also fitted with emergency stop buttons around it so in case of an emergency once these are pressed it will shut the whole machine down.

Once at the required depth the operator will bring the auger up about 250mm and rest the auger on a plate, the auger will then be un-attached from the drill rig in order to pop the bung out of the bottom of the auger this is done with a metal bar attached to some rope once the bung is popped the drill rig operator will reattach the drill head and give the instruction to the pump operative to commence with the concreting procedures. As the concrete is pumped into the bore the operator will simultaneously bring the augers up the bore until it is

filled to the required level. Taking care so as to keep the level of concrete above the cutter head for maximum support of the bore

Placing UC steel sections

The excavator will be situated behind the piling rig to minimise the risk of interfering with piling operations. The designated UC section will then be pitched utilising the Movax rig; the Movax hammer unit will be articulated over the steel section & side-grip jaws will clamp onto the web of the steel. The Movax rig will then lift the steel vertically & position over the concrete filled bore for insertion to depth. Line & level will be controlled throughout the steel pitching process to ensure the correct positioning.

Concrete pumping procedure

The concrete/grout pump operator will undertake daily checks of the pump and hoses ensuring all connections are fit for use and that all whip check components are connected properly. The operator will then record and report any defects when doing his daily checks. The operator will then line the hoses with a product called prima pump (COSHH sheet is attached) this is only required at the start of each shift.

A bund will be set up around the agitator comprised of 75mm bog matts and bulk timbers lined with membrane to contain waste allowing for easy disposal upon completion of the works.

Where concrete is to be used, it will be delivered ready-mixed & in an agitator lorry & transferred via the concrete pump into a 6m³ static agitator holding drum for use as-and-when required.

The agitator lorries will be set aside a lined skip in the entrance/exit to the site to wash out into.

The concrete/grout pump operator will undertake daily checks of the pump and hoses ensuring all connections are fit for use and that all whip check components are connected properly. The operator will then record and report any defects when doing his daily checks. The operator will then line the hoses with a product called prima pump (coshh sheet is attached) this is only required at the start of each shift.

Where concrete is to be used, it will be delivered ready-mixed & in an agitator lorry & transferred via the concrete pump into a 6m³ static agitator holding drum for use as-and-when required.

Once the signal has been given the pump operator will transfer the concrete from the agitator to the pump, pumping will commence and will be monitored until the pile is filled no pile should be started without enough concrete to complete the pile.

Once the pump has been used the hoses become pressurised and should be back wound before unclipping them.

The equipment will be jet washed and cleaned at the end of every shift and cleaning balls will be pushed through the hoses using a compressor they will do this 3 times for any excess concrete there will be a separate bund made to stop any contamination with any other materials, the operator will be wearing the correct gloves at all times to stop any contact with the concrete stop any burns/skin diseases, he will also have full length sleeves on upper body, correct eye protection to be worn at all times.

Cleaning out of hoses procedure

To maintain a safe system of cleaning out of hoses the following measures need to be adopted and followed;

1. Only a CPCS trained pump operative to blow the hoses out.
2. The rig must be positioned as far away from the site boundaries as possible
3. The auger of the rig must be placed in a bund made from pile arising's which surrounds the auger, a sheet of ply will be used on the front of the auger and held in place by bund material, this will stop any debris from being projected
4. A blow out canon will be used at the pump end of the hoses, this is attached to a compressor, a cleaning ball will be inserted into the hoses and the canon will be attached and secured in place with a clip and pin, the CPCS operative will give the signal for an operative to turn the compressor on, when the compressor is ready the Pump operator will release the tap on the canon building up pressure in the line allowing the ball to be pushed through clearing out the concrete, the pump operator will determine the appropriate amount of pressure based on hose length and training received, once cleaned water will be discharged into the hoses and another ball placed in the hoses and the process repeated.
5. On completion the concrete discharged will be allowed to harden and disposed of accordingly.





	<p><u>MANUAL HANDLING</u></p> <p>Where there is need to do any manual handling the operatives must assess the load and where possible use a machine to do the lifting.</p> <p><u>Installation of concrete sections</u></p> <p>Concrete sections will be brought to site in road lorries. The section of embankment between the king posts will be excavated to the required depth, using the Woodmace excavator, and stock piled or removed from site to an appropriate place of tipping by Woodmace. The bottom concrete section will then be lowered onto the prepared bottom of excavation using the excavator and propriety lifting tackle. All lifting equipment is to be in date and with the correct certificates. The second section placed on top. This process is repeated until section is complete before moving onto the next section.</p> <p>Above process will be repeated for remaining sections of embankment. The specially designed lifting attachments will be removed at higher levels utilising a scissor lift or similar.</p>	
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PERSONNEL TRAINING & CERTIFICATION	
Plant operators	CPCS or equivalent Card. Manufacturer’s certification of competence for pile rig.
All operatives	CSCS Card. Method Statement Briefing & Site Induction.


COSHH ASSESSMENT	
Diesel	Yes
Engine Oil	Yes
Hydraulic Oil	Yes
Concrete	Yes
ENVIRONMENTAL IMPACTS	


Pollution Control	<ul style="list-style-type: none">• Spill kits to be available on site at all times.• Machines to be turned off when not in use.• Bunds for excess Concrete
Tracking Damage	<ul style="list-style-type: none">• If required, tracks/paths/hard landscape areas will be protected when moving the rigs.
Noise & Vibration	<ul style="list-style-type: none">• Monitored during initial phase of operation – measures taken accordingly

COSHH Data Sheets

Substance: DIESEL (As fuel)	
Supplier & Phone No:	Upton Fuels 01425 472659
Description of Product	Diesel. Hazardous Content Polycyclic aromatic hydrocarbons
Classification (Delete as appropriate)	 Harmful  Irritant  Corrosive  Highly Flammable
Requirements For Use	
Area on site	All areas
Activity on site	Fuel for diesel powered plant and machinery
Hazards	
Warning	Continuous skin contact can cause skin diseases (dermatitis) Possible long term risk of skin cancer Inhalation of mist/vapours – aspiration into lungs
Duration	As required to suit site conditions
Risk to Health	Eye contact Ingestion Skin contact
Control Measure	Wear suitable protective clothing, gloves and eye/face protection Use barrier cream to provide additional protection Wash regular with clean warm soapy water
Storage	Approved containers in a flame proof lock-up
Disposal	In accordance with the general requirements of the regulations made under the environmental protection act (epa) 1990 and the control of pollution (amend) act 1989
First Aid Treatment	
Inhalation	Remove victim from area. If respiratory any problems persist seek medical advice. Administer first aid
Eye Contact	Irrigate copiously with clean fresh water obtain medical advice if symptoms persist
Skin Contact	Remove contaminated clothing wash areas with clean soapy water Clean skin with cleaning cream, soap and water. Do not use solvents, thinners or white spirits to clean skin/hands
Ingestion	Rinse out mouth with clean water. Do not induce vomiting

Substance: Engine Oil		Reference No.: 002			
Supplier & Phone No:	Upton Fuels 01425 472659				
Description of Product	Engine Oil	Hazardous Content	Zinc alkyldithiophosphate, phenates, hydrocarbon polymers		
Classification (Delete as appropriate)					
	Harmful	Irritant	Corrosive	Highly Flammable	Toxic
Requirements For Use					
Area on site	All areas				
Activity on site	Lubricating oil for automotive, plant, tools etc.				
Hazards					
Warning	Mild skin and eye irritant. Harmful to aquatic organisms				
Duration	As required to suit site conditions				
Risk to Health	Unlikely to cause eye irritation. Unlikely to cause immediate irritation but prolonged and repeated contact may be harmful to the skin. Can cause occupational skin diseases (dermatitis). It is not likely to be an inhalation hazard at normal ambient temperatures. If overheated, fumes and vapours can be irritating to the breathing.				
Control Measure	Wear clean long sleeve suitable robust protective body covering clothing. If there is a risk of splashing use protective chemical resistant gloves (en 374). Wear chemical goggles or faceshield (en 166). Prolonged and repeated skin contact should be avoided by use of clean gloves and clean overalls. For good refuelling practices use funnels etc.				
Storage	Keep away from food and drink. Keep container tightly closed. Keep only in original container.				
Disposal	In accordance with the general requirements of the regulations made under the environmental protection act (epa) 1990 and the control of pollution (amend) act 1989				
First Aid Treatment					
Inhalation	Remove patient to fresh air. Obtain medical advice.				
Eye Contact	Rinse immediately with plenty of clean fresh water for at least 5 minutes. Obtain medical advice if symptoms persist.				
Skin Contact	Wash contaminated skin with plenty of clean soapy water. Wash contaminated clothing before reuse.				
Ingestion	Rinse out mouth with clean water. Do not induce vomiting or give fluids. Obtain medical advice				

Substance: Prime a pump		Reference No.: 019	
Supplier & Phone No:	Lansdowne Products Ltd Tollgate House Pen-Y-Cefn, Caerwys Flintshire, CH7 5BP UK Tel : 0845 300 8073		
Description of Product	Concrete pump primer	Hazardous Content	Sodium Carbonate
Classification (Delete as appropriate)	 Irritant		
Requirements For Use			
Area on site	All Sites		
Activity on site	Priming concrete hoses		
Hazards			
Warning	Avoid contact with eyes and contains fine particles that could be inhaled.		
Duration	As required to suit site conditions		
Risk to Health	Repeated contact may cause dryness to skin. Large doses ingested may burn gastrointestinal tract. High concentrations may irritate respiratory system May cause some irritation to eyes..		
Control Measure	RESPIRATORY PROTECTION, Wear appropriate dust mask EYE PROTECTION, Wear appropriate safety goggles SKIN PROTECTION, Wear appropriate overalls HAND PROTECTION , Wear gloves HYGENIC WORK ROUTINES, Wash at the end of each shift and before eating, smoking and using the toilet.		
Storage	Ambient temperature and dry conditions		
Disposal	PRODUCT, Via an authorised disposal agent to an approved disposal site. Observe all local, national and international regulations. PACKAGING, Dispose of empty containers in accordance with local and national regulations.		
First Aid Treatment			
Inhalation	N/A		
Eye Contact	Immediately and gently irrigate with clean water for 15 minutes. Seek medical attention.		
Skin Contact	Wash with plenty of water. Remove contaminated clothing		
Ingestion	Rinse out mouth with water and give plenty of water to drink. Do not induce vomiting. Seek medical attention.		

Substance: Fuchs Bio-Degradable Hydraulic Oil		Reference No.: 004	
Supplier & Phone No:	Fuchs Lubricants 08701 200400 (emergency number)		
Description of Product	Biodegradable hydraulic oil.	Hazardous Content	Sodium Solphonate, fatty acids, alcohols, ethanol.
Classification (Delete as appropriate)	 Irritant		
Requirements For Use			
Area on site	All areas		
Activity on site	Hydraulic oil for machines.		
Hazards			
Warning	Petrol is extremely flammable, avoid sources of ignition when refuelling engines, avoid splash loading.		
Duration	As required to suit site conditions		
Risk to Health	Unlikely to cause eye irritation. Unlikely to cause immediate irritation but prolonged and repeated contact may be harmful to the skin. Can cause occupational skin diseases (dermatitis).		
Control Measure	Wear clean long sleeve suitable robust protective body covering clothing. If there is a risk of splashing use protective chemical resistant gloves (en 374). Wear chemical goggles or faceshield (en 166). Prolonged and repeated skin contact should be avoided by use of clean gloves and clean overalls. For good refuelling practices use funnels etc.		
Storage	To be stored in appropriate containers, out of direct sunlight in well ventilated conditions.		
Disposal	In accordance with the general requirements of the regulations made under the environmental protection act (epa) 1990 and the control of pollution (ammend) act 1989, under no circumstances should oil be discharged into the public drainage system, marine and inland waterways.		
First Aid Treatment			
Inhalation	Remove to fresh air, get medical advice if the symptoms continue.		
Eye Contact	Wash out immediately with large amounts of water, if redness and / or irritation continues get medical advice.		
Skin Contact	Wash skin as soon as possible with soap and water, change contaminated clothing immediately and launder before reuse, get medical advice if irritation persists.		
Ingestion	Wash out mouth with water. Do not induce vomiting because of the danger of aspiration.		

Contract								Client													
Contract No.								Date:													
Activity: Operations								Risk Assessment No:				Rev 00									
Activity affecting (Tick appropriate box)		Employee		Y		Third party		Y		Vehicle		Plant		Property		FREQUENCY X SEVERITY					
N0	HAZARD		POSSIBLE CONSEQUENCES						PRE- CONTROL F X C = R			CONTROL MEASURES				POST-CONTROL F X C = R					
1	Trip & slips		Impact Injuries						3	5	15	Ensure access points are kept clear of debris Do not store tools or materials in the work areas or around access points Make sure all work areas are well lit.				2	5	10			
2	Falling objects		Head Injury						3	5	15	Hard Hats must be worn at all times. Operatives not involved in the lifting operations must keep clear.				2	5	10			
3	Manual lifting		Back injury & other strains						4	4	16	Where possible use mechanical assistance. Only lift in the recommended way. Never strain yourself when lifting.				2	4	8			
FREQUENCY OF OCCURRENCE		SCORE		SEVERITY OF: INJURY / DAMAGE OR LOSS				SCORE		RISK RATING			ACTION				TIMESCALE				
Improbable = Infrequent		1		Trivial injury(ies)				1		Low			1 – 6		<u>Review Risk & Existing Controls</u>				12 – 18 Months		
Possible = Annual		2		Minor injury (ies)				2		Medium			7 – 12		Review Risk & Existing Controls				3 – 12 Months		
Occasional = 2 – 3 Times per Year		3		Major injury				3		High			12 – 19		Review Risk & Existing Controls				0 – 3 Months		
Frequent = Monthly		4		Amputation				4		Major			19 – 25		Review Risk & Existing controls				Immediately		
Regular = Weekly		5		Death				5													
Compiled By: A España Zamora								Date: 15/10/15				Reviewed by: L Tucker								Date	
Signature(s) : AEspaña												Signature: L Tucker								15/10/15	

Contract				Client									
Contract No.				Date:									
Activity: Piling Operations				Risk Assessment No:			Rev 00						
Activity affecting (Tick appropriate box)	Employee	Y	Third party	Y	Vehicle	Y	Plant	Y	Property	Y	FREQUENCY X SEVERITY		
N0	HAZARD	POSSIBLE CONSEQUENCES			PRE- CONTROL F x C = R			CONTROL MEASURES			POST-CONTROL F x C = R		
4	Unstable loads	Crushing injury			3	5	15	Competent Slinger / Signaller to be employed. Slinger / Signaller to have visual contact with the load and visual or radio contact with the crane operator. Operatives to keep clear of all lifting operations			2	5	10
5	Incorrect Slings	Crushing injury			4	5	20	All webbing slings to have 6 month test and to have visual inspection by Slinger / Signaller prior to use Chain slings to have a current 6 monthly test certificate and to have visual inspection by Slinger / Signaller on a daily bases. Never exceed the sling angle specified. All slings to be stored in site lockup. Operatives to keep clear of any lifting operations			2	5	10
FREQUENCY OF OCCURRENCE		SCORE	SEVERITY OF: INJURY / DAMAGE OR LOSS		SCORE	RISK RATING		ACTION			TIMESCALE		
Improbable = Infrequent		1	Trivial injury(ies)		1	Low		1 – 6			Review Risk & Existing Controls		12 – 18 Months
Possible = Annual		2	Minor injury (ies)		2	Medium		7 – 12			Review Risk & Existing Controls		3 – 12 Months
Occasional = 2 – 3 Times per Year		3	Major injury		3	High		12 – 19			Review Risk & Existing Controls		0 – 3 Months
Frequent = Monthly		4	Amputation		4	Major		19 – 25			Review Risk & Existing controls		Immediately
Regular = Weekly		5	Death		5								
Compiled By: A España Zamora				Date: 15/10/15		Reviewed by: L Tucker				Date:			
Signature(s) : AEspaña						Signature: L tucker				15/10/15			

Contract				Client							
Contract No.				Date:							
Activity: Piling Operations				Risk Assessment No:			Rev 00				
N0	HAZARD	POSSIBLE CONSEQUENCES		PRE- CONTROL F X C = R			CONTROL MEASURES		POST-CONTROL F X C = R		
6	Swinging loads	Crushing injuries		3	5	15	Always attach tag lines when possible. Never lift when it is too windy. Only lift from a vertical position		1	5	5
7	Operating with Excavators	Crushing Injury		3	5	15	All site personnel to wear high visibility jackets. Area of operation to be well illuminated. No other operations within the slewing area of the machine.		2	5	10
8	Public Access	Injury/minor		3	3	9	Pedestrian routes to be clearly marked. No public access to be allowed in the areas of operations.		1	3	3
FREQUENCY OF OCCURRENCE		SCORE	SEVERITY OF: INJURY / DAMAGE OR LOSS	SCORE	RISK RATING		ACTION		TIMESCALE		
Improbable = Infrequent		1	Trivial injury(ies)	1	Low	1 – 6	Review Risk & Existing Controls		12 – 18 Months		
Possible = Annual		2	Minor injury (ies)	2	Medium	7 – 12	Review Risk & Existing Controls		3 – 12 Months		
Occasional = 2 – 3 Times per Year		3	Major injury	3	High	12 – 19	Review Risk & Existing Controls		0 – 3 Months		
Frequent = Monthly		4	Amputation	4	Major	19 – 25	Review Risk & Existing controls		Immediately		
Regular = Weekly		5	Death	5							
Compiled By: A España Zamora				Date: 15/10/15		Reviewed by: L Tucker				Date:	
Signature(s) : AEspaña						Signature: L tucker				15/10/15	

Contract								Client							
Contract No.								Date:							
Activity: Piling Operations								Risk Assessment No:						Rev 00	
Activity affecting (Tick appropriate box)		Employee	Y	Third party	Y	Vehicle	Y	Plant	Y	Property	Y	FREQUENCY X SEVERITY			
N0	HAZARD	POSSIBLE CONSEQUENCES				PRE- CONTROL F x C = R			CONTROL MEASURES				POST-CONTROL F x C = R		
9	Service checks	Electrocution Explosions				3	5	15	All our site areas should be previously checked and <u>signed off by our Client</u> before our works commence. All known obstructions are to be clearly marked. A visual check for obstructions above ground is required by Suttle Projects Supervisor before commencing work.				2	5	10
10	Moving lorries	Run over				4	5	20	All deliveries escorted into site with Banks men and escorted out onto the road.				2	5	10
FREQUENCY OF OCCURRENCE		SCORE	SEVERITY OF: INJURY / DAMAGE OR LOSS			SCORE	RISK RATING		ACTION				TIMESCALE		
Improbable = Infrequent		1	Trivial injury(ies)			1	Low	1 – 6	<u>Review Risk & Existing Controls</u>				12 – 18 Months		
Possible = Annual		2	Minor injury (ies)			2	Medium	7 – 12	Review Risk & Existing Controls				3 – 12 Months		
Occasional = 2 – 3 Times per Year		3	Major injury			3	High	12 – 19	Review Risk & Existing Controls				0 – 3 Months		
Frequent = Monthly		4	Amputation			4	<u>Major</u>	<u>19 – 25</u>	Review Risk & Existing controls				Immediately		
Regular = Weekly		5	Death			5									
Compiled By: A España Zamora					Date: 15/10/15			Reviewed by: L Tucker					Date:		
Signature(s) : AEspaña								Signature: L tucker					15/10/15		

Contract							Client							
Contract No.							Date:							
Activity: Concrete pumping						Risk Assessment No:					Rev 00			
Activity affecting (Tick appropriate box)		Employee	Y	Third party	Y	Vehicle	Y	Plant	Y	Property	Y	FREQUENCY X SEVERITY		
N0	HAZARD	POSSIBLE CONSEQUENCES				PRE- CONTROL F x C = R			CONTROL MEASURES			POST-CONTROL F x C = R		
1	Bursting of concrete hoses and or Hose joint	Impact injury, burns				3	3	9	Hoses to be inspected by competent pump man daily at start of shift. Damaged Sections are to be replaced. All concrete hoses fitted to the mast of the piling rig must have whip checks Fitted at all times. Joints to be secured by R Clips or Split Pins. Correct ppe and long sleeves to be worn Separation of hoses from the general public to be in a box if unavoidable.			2	3	6
2	Clearing concrete pumping lines and auger at the end of a shift by compressed air.	Impact injury				2	3	6	All blowing out operations are to be under direct control of a competent rig opp, Rig opp to remain at piling rig during procedure, competent pump opp to control the compressor. Rig lines to be blown out away from the perimeter fencing at all times.			1	3	3
3	Engine noise	Loss of hearing				4	3	12	Ear defenders to be worn if noise over 85 dba			3	3	9
FREQUENCY OF OCCURRENCE		SCORE	SEVERITY OF: INJURY / DAMAGE OR LOSS		SCORE	RISK RATING		ACTION			TIMESCALE			
Improbable = Infrequent		1	Trivial injury(ies)		1	Low	1 – 6	<u>Review Risk & Existing Controls</u>			12 – 18 Months			
Possible = Annual		2	Minor injury (ies)		2	Medium	7 – 12	<u>Review Risk & Existing Controls</u>			3 – 12 Months			
Occasional = 2 – 3 Times per Year		3	Major injury		3	High	12 – 19	<u>Review Risk & Existing Controls</u>			0 – 3 Months			
Frequent = Monthly		4	Amputation		4	<u>Major</u>	<u>19 – 25</u>	<u>Review Risk & Existing controls</u>			Immediately			
Regular = Weekly		5	Death		5									

Contract							Client								
Contract No.							Date:								
Activity: Augured piling						Risk Assessment No:			01		Rev 00				
Activity affecting (Tick appropriate box)		Employee	X	Third party	X	Vehicle		Plant		Property		FREQUENCY X SEVERITY			
N0	HAZARD	POSSIBLE CONSEQUENCES				PRE- CONTROL F X C = R			CONTROL MEASURES			POST-CONTROL F X C = R			
1	Falling into augers	Death				4 5 20			Cage around rotating augers			2	5	10	
2	Cage removal for tight drilling areas	Death				4 5 20			2metre exclusion zone around augers			2	5	10	
3	Engine noise	Loss of hearing				4 3 12			Ear defenders to be worn if noise over 85 dba			3	3	9	
4	Buried services	Death, explosions				5 5 25			Services search and drawings required before drilling			2	5	10	
5	Hydraulic oil	Hot oil into eyes from a burst hose				3 3 9			Eye protection to be worn to minimize contact with eyes Daily inspection of winch cable			2	3	6	
6	Winch breaking	Major injuries possibly death from falling objects				3 5 15			Inspections of drive chain daily before work commences			2	5	10	
7	Gearbox falling	Death				2 5 10						1	5	5	
FREQUENCY OF OCCURRENCE		SCORE	SEVERITY OF: INJURY / DAMAGE OR LOSS		SCORE	RISK RATING			ACTION			TIMESCALE			
Improbable = Infrequent		1	Trivial injury (ies)		1	Low			1 – 6	<u>Review Risk & Existing Controls</u>			12 – 18 Months		
Possible = Annual		2	Minor injury (ies)		2	Medium			7 – 12	<u>Review Risk & Existing Controls</u>			3 – 12 Months		
Occasional = 2 – 3 Times per Year		3	Major injury		3	High			12 – 19	<u>Review Risk & Existing Controls</u>			0 – 3 Months		
Frequent = Monthly		4	Amputation		4	Major			19 – 25	<u>Review Risk & Existing controls</u>			Immediately		
Regular = Weekly		5	Death		5										
Compiled By: A España Zamora					Date: 28/08/15		Reviewed by: L.Tucker					Date:			
Signature(s) : AEspaña							Signature: Ltucker								

