

METHOD STATEMENT

This procedure should be read in conjunction with all relevant specifications and standards for Safety, Environment, Engineering, Construction and Reinstatement. The specifications below are those of Utility Support Solutions Limited, however, the specifications of the adopting authorities shall have precedence where they differ from those indicated

Method Statement Title	Gas Kiosk Construction Using Concrete		
Scope	To provide a safe and efficient method of building and installing concrete gas kiosks to required specifications. The procedure covers works in both public and private land.		
Procedure Reference	MS07	Issue Number	02
Issue Date	02/08/24	Review Period	Annually
Originated By	Robin Wilkes	Approved By	Ian McDonald

This method statement has been developed, and must be read, in conjunction with the risk assessment manual. Particular attention should be given to the following risk assessments:

RA #1 – Underground Services	RA #63 – Loading and Unloading
RA #2 – Overhead Services	RA #79 – Lifting Equipment
RA #12 – Gas Escapes	RA #E1 – Water from Excavations
RA #24 – Use of Vibrating Hand Tools	RA #E3 – Excavated Materials
RA #26 – Manual Handling	

Relevant Documentation

HSE Guidance Note HS (G) 47 – Avoiding danger from underground services

HSE Guidance Note GS6 – Avoidance of danger from overhead electric lines

Safety at Street Works and Road Works – A Code of Practice

NJUG – Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees.

Emergency Arrangement Details

			
Fire/Evacuation	First Aid	Pollution/Spill	Other
SP08 – Emergency Preparedness & Response	HSEI01 - Emergency Information	MS04 – Spill Response	SP08 – Emergency Preparedness & Response

Personal Protective Equipment (PPE) Requirements

							
Head (EN397)	Foot (BS EN345-1)	Protective Clothing	Hi-Vis Jacket	Hand (BS EN388)	Eye (EN166)	Hearing (EN 352-1)	Dust Mask (EN149)
✓	✓	✓	✓	✓	✓	✓	✓

Other PPE Requirements: Barrier cream to protect skin. Dust masks & ear protection only needed during cutting. Based on risk assessment (PAM's).

Construction Dust (Note: construction dust is harmful and can lead to fatal lung diseases such as silicosis)

Will the work create dust or fumes?	Yes, during loading/unloading and compaction
Identify control measures to minimize dust/fumes:	Water suppression for dust in addition to dust mask, operatives clean shaven and face fit tested.
If dust cannot be avoided, identify required RPE:	EN149 dust mask during dust creating operations

Hazardous Materials

Are hazardous materials to be used?	yes
Are COSHH/DSEAR data sheets available?	Yes

Relevant COSHH Risk Assessments Reference should be made to the USS COSHH Manual.

COSHH #3 – Cement	
COSHH #4 – Ready-Mixed Concrete	

Permit to Work	
Identify any Permit to Work required for this activity?	Permit arrangements under SCO.
Description of Safe Working Method	
All team leaders must have Operative qualifications under New Roads and Street Works Act for reinstatement of Concrete surfaces. All plant operators must have suitable training for the equipment being utilized (NPORS or similar) All operational supervisory staff must have Supervisory qualifications under New Roads and Street Works Act for Excavating. Additionally, all supervisory staff will be provided with a copy of the appropriate documentation detailed above to enable the appropriate advice to be provided if required. This method statement is aimed at providing a safe and efficient method of installing concrete gas kiosk's within the confines of a Gas compound to assist in the refurbishment of the reinstated surfaces within the specified areas of work. This Method Statement covers works in both public highway and private land. This Method Statement should be read in conjunction with all relevant specifications and standards for Safety, Environment, Engineering, Construction and Reinstatement. - Each day all vehicles, plant, tools, materials and equipment (including lifting equipment) should be checked for safety, soundness and fitness for purpose prior to commencement of work. - Ensure that the flashing beacon on the vehicles are in operation well in advance of always entering the site and during operations on site. Park the vehicles safely within the working space. - Before any work is commenced on site a Site-Specific Risk Assessment should be carried out. - Inspect Sign, Lighting and Guarding to ensure the site is in accordance with Chapter 8 and any permit conditions. - Ensure the works are safely barriered off and remain so for the duration of works. - An inspection of the installation area should be carried out to ensure that they provide a suitable surface for building the gas kiosk. - Any water must be removed prior to placing any materials. - Sweep/ clean or jet wash existing surface to be laid upon if required. - The selection of materials and the correct dimensions and methods should be those specified in the specification for the specific gas kiosk to be constructed. - Place and secure pre-built timber frame in agreed location adjacent to the gas equipment. - Frame should match the dimensions for the specific size of gas kiosk requested. - Ready-mix concrete materials to be tipped directly into timber frame from rear of supply lorry where possible. - If there are access difficulties materials shall be disbursed to laying areas by mechanical means i.e. mechanical shovel or by manual means i.e. wheelbarrows. - Materials to be poured into frame until full and level with top of frame. Float materials to uniform finish. Concrete Pumping - Identify Services Overhead known to be within the locations and isolate areas ensuring safe working distance for boom and associated controls. - Identify and set out the areas of lay down for the Plant trailers, rollers units and associated plant. - Vehicles to be banked at all times. - Work area to be supervised at all times by Site supervisor and Slinger/banksman. Vehicle mounted Pump. - Walk-round inspection of vehicle, to ensure road worthiness, to include:- general visual check of pump turret and fixed steel pipes, hydraulic hoses (to check for any leaks), tyres, mirrors & lights, operation of remote control operator's system, hopper guard grid is secure and serviceable. - Park safely outside site compound and report to site manager. - Go through site induction process.	

22. Fill out plant inspection record sheet/book.
23. Walk to area designated for pump setup area, and visibly assess environment. Check for ground stability (responsibility for suitable preparation is down to the site manager/hirer); overhead obstructions; visibility to work area; access conditions and route for delivery lorries.
24. Establish a code of signals between the pump operator and concrete laying gang/foreman prior to commencement of pumping works.

Pump setup

25. Deploy machine stabilisers (using sole plates if necessary).
26. Level up and support the pump using the hydraulic jack stabilisers.
27. Unfurl boom and manoeuvre into pour starting position.
28. Check wire safety lanyards are attached between end of boom (knuckle bend) and first flexible pipe.
29. Remove steel and rubber pipes (necessary to reach pour starting point) from bed of pump, and carry to lay-out position.
30. Layout necessary pipes in approximate assembly locations.
31. Join pipes together using couplings with rubber sealing rings.
32. Position any mobility pans under couplings (as necessary) to aid with hose movements during pour.
33. Fix suitable rope handling cord onto last section of pipework ready for work to commence.
34. Once all hoses have been connected, conduct a final walk-through check of all hoses and couplings starting at point of pour and finishing at pump hopper.
35. Acquire 50kg of cement (client to supply) for every 20m of pipeline to be used, for pipe grouting, and position by hopper prior to delivery lorry arrival.

Priming hoses

36. On arrival of 1st delivery lorry, mix up grout for lining pump hoses.
37. Empty 1/2 a bag of cement into bucket containing @ 20lts. of water and mix using a small paddle to combine water and cement into a flowable grout.
38. Pour mixture into top of connecting knuckle on rear of hopper.
39. Repeat above steps for remaining cement.

Commencement of pumping

40. Reverse concrete delivery lorry up to hopper ready for discharge.
41. Ensure that hopper grid is in lowered position, prior to approach of mixer lorry, and at all times during discharge and pumping operations.
42. Allow delivery vehicle to agitate mixer drum for a couple of minutes to avoid initial aggregate separation on discharge.
43. Discharge concrete into hopper to check slump and suitability of concrete prior to starting to pump through hoses.
44. Establish a suitable position of work – to be able to see concrete discharge into hopper and point of delivery from hose. This may involve the use of the remote control pack.
45. Should a remote control pack be used, then any other operating controls, mounted on the pump body, must be disabled.
46. Commence pumping of concrete at a suitable rate to allow for site operators to spread concrete; and for lorry to discharge concrete at a rate to keep hopper 3/4 full. Until concrete is flowing smoothly out of the end of the delivery hose, or when a blockage occurs in the boom pipeline, all personnel should remain clear of the delivery hose and the placing boom. (The danger zone is the area around the delivery hose in which the delivery hose can strike out. The diameter of the zone is twice the length of the delivery hose).
47. If a blockage occurs during the pour, the concrete pump operator must stop pumping immediately and instruct personnel to move to a safe position before attempting to remove the blockage.
48. If the concrete pump operator needs to open the delivery pipeline to clear a blockage, he must first release the pressure inside the pipeline as much as possible, e.g. by reversing the pumping action. The pipeline must be treated as being pressurised at all times. Appropriate and adequate eye protection must be worn when opening the pipeline.
49. Ensure that site personnel DO NOT under any circumstance open or attempt to open the pipeline under pressure.

50. Use horn to signal to concrete lorry driver to stop discharge if the need arises to move hoses, disconnect hoses, or to stop pour for any other reason.
51. Move boom as necessary to making a suitable progress across pour area.
52. On completion of lorry discharge lower boom to allow end of delivery hose to rest on floor.
53. At the end of discharge of each load remove any disconnected hoses and wash out immediately to avoid concrete drying inside hoses and pipes.
54. If the concrete pump has to be left unattended, the operation of the boom and pump must be isolated.
55. Between concrete lorry deliveries
56. Agitate the contents of the hopper should the need arise – long intervals between delivery vehicles, rise in ambient temperature, etc.
57. If the concrete in the pump should need circulating or boom should need moving to another part of the site, correct blanking of boom should be used, i.e. blanking cap or squeeze bag activated if fitted.

Completion of concrete pour

58. Concrete in the hopper should be discharged until the only a small amount is left in the hopper (just covering the ram inlet chambers)
59. The pressure in the pipeline should be released by retracting concrete into the hopper.
60. The access point in the rear knuckle (immediately after the hopper) should be opened, a wetted sponge ball inserted into the line, and the access cover re-secured.
61. A cage, or protective back board, should be erected at the end of the delivery hose (to receive and confine the cleaning ball).
62. The end of the discharge hose should be secured to avoid any whiplash.
63. All laying gang members should be moved away from the discharge hose, to a safe area.
64. The cleaning ball should then be advanced through the remaining pipes and hose, At reduced engine revs, until it emerges at the discharge point.
65. The ball should then be recovered and thoroughly cleaned and washed off.
66. All hoses should be thoroughly washed out and stored on the lorry bed.
67. All couplings should be cleaned, washed and stored on the lorry bed.
68. The boom should then be retracted and stored on the purpose-made cradle on the lorry bed.
69. A suitable site for emptying the remaining concrete from the hopper should be identified, and the pump moved to this location.
70. The retaining lever on the lower door of the hopper is then released, and the door swung away to allow the remaining concrete to be discharged from the hopper.
71. Flush out all the intake rams, pistons and thoroughly rinse all concrete and grout from the hopper. Once fully flushed, close the lower door of the hopper and secure with the retaining level.
72. Ensure all pipes, clips, hoses, wash out lines sole plates are stowed in their respective areas on the lorry bed, and ready for road travel
73. On completion of concrete pour, concrete should be protected from the elements with tarpaulin and barriered off to avoid 3rd party footprints in the wet concrete.
74. Concrete should be allowed to cure and once hard the timber frame should be dismantled with care.
75. Surrounding areas to be cleared and areas to be swept clean at the end of each job.
76. Before leaving site ensure that all Sign, Lighting and Guarding is compliant, and the site is left in safe condition.

Risk Assessment No		RAMS-07		Activity		Gas Kiosk Construction Using Concrete		Location		NGN Governor sites		
Assessment Undertaken by		R. Wilkes		Assessment Date		Aug 2024		Review Date		Aug 2025		
Risk Ratings												
Persons at risk (PAR)		Severity / Harm Rating (S)				Likelihood (L)						
E	Employees /Contractors	1	Negligible injury or no injury				1	Extremely unlikely to occur at any time				
P	Members of Public	2	Minor injury requiring First Aid				2	A rare combination of factors would be required for an incident to occur				
V	Visitors	3	Lost time injury				3	Could happen, but considered unlikely under normal circumstances				
C	Clients	4	Single serious injury or single death				4	Not certain, but an additional factor may result in an incident				
		5	Multiple deaths and or serious injuries				5	Almost inevitable that an incident will result - Highly likely to occur				
Tolerance rating												
15 - 25		DANGER - Task/activity should not proceed. Further control measures are to be put in place to reduce risk. When in place the level of risk should be re-assessed for adequacy before the work recommences.										
7 - 14		SIGNIFICANT RISK is attached to this task/activity. Look critically at ways of reducing the level of risk to a more tolerable level by improving existing control measures or by introducing new controls.										
1 - 6		TOLERABLE RISK - Consider if risk is "as low as reasonably practicable", If not try to reduce risk further by improving control measures. Keep under review and continue with task/activity, but with caution										
NB. Full PPE will be utilised as a matter of course during any works undertaken												
Initial Assessment No controls						Risk Mitigation Measures						
Item No	Hazard Identification	PAR	S	L	Score	Control Measures	S	L	Revised Score	Risk Acceptable		
1	Pedestrians & vehicles - Inadequate clearance between equipment and individuals , causing cuts, lacerations, bruising, entrapment loss of	E,P,V,C	4	4	16	Operatives to wear high-visibility clothing and hard hats. Signing and guarding to comply with Chapter 8 and Method Statement and Risk Assessment for 'Signing and Guarding'. Use lookouts / banks men to ensure that vehicles and the public are kept away from the working area Substantial guard rails must be provided to prevent falls into the excavation, e.g. Heras fencing. Where there is a risk of children gaining access ensure that the area is either backfilled, guarded with Heras fencing or securely covered.	4	1	4	Yes		

	digits and limbs. Death.					Walkways must be provided for pedestrians Vehicle parking to be planned and vehicle doors that may obstruct pedestrians and traffic kept closed Working area to be arranged to provide sufficient width for pushchairs and electrically powered scooters for the elderly – secured ramps are to be provided on kerbs. Areas where the customers and the public may walk must be kept free from tools and materials Work is to be stopped and supervisor consulted when customers/public are violent or aggressive				
2	Other Contractor Employees, Members of the Public, Vehicular Traffic.	E,P,V,C	4	3	12	Operatives to wear high-visibility clothing. Signing and guarding to comply with Chapter 8 requirements Use lookouts / banksmen to ensure that vehicles and the public are kept away from the working area when setting out. Utilise Beacons on Vehicles when undertaking all works. Backfill excavations, however where this is not possible place skid-resistance footway board over excavations in the footway. Where road plates are used, they must have a skid resistance surface, they must also be rigidly secured into position. Road plates must be either sunk into the surface of the road or a suitable bitumastic material should be used to provide a ramp to the plate level. Ramp signs must be positioned to warn drivers.	4	1	4	Yes
3	Poor lighting. Slips trips and falls, broken bones.	E,P,V,C	4	4	16	Place Road Danger lamps next to signs which are on, or partially on the footway. Operatives must wear long sleeve high-vis clothing. Hazard warning lights and flashing beacons must be in use.	4	1	4	Yes
4	Excavation / Deep Excavations - Excavation collapse causing crush injuries asphyxiation and death	E,P,V,C	4	5	20	Excavations deemed deep will require Confined Space control measures Works must stop and an alternative SSOW If working in poor ground conditions it may be required to shore excavations. The excavation must be securely guarded with scaffold guarding or crowd control barriers Ensure safe access and egress is maintained via ladders that are footed and secured at the top.	4	1	4	Yes

						Prior to the commencement of any work a risk assessment must be carried out in relation to each excavation If poor ground conditions are experienced then appropriate shoring must be installed. Ensure that a continuous atmospheric monitoring takes place and the results recorded. Inspection of the excavation must take place, in accordance with the inspection schedule. All excavated areas must be protected with a suitable barrier. Safe digging practices must be observed. Works to be Supervised at all times Spoil from the excavation must be stored away from the edge of the excavated area				
5	Hazardous substances, Dusts (Silica / Asbestos) Contact, Skin contact over a long period can lead to severe dermatitis and skin cancer.	E	4	4	16	A material Health & Safety Datasheet is obtained for every substance prior to it being used within the business. Data Sheet transposed into COSHH assessment outlining the correct use of the substance. No employee will undertake any work liable to expose him or her to hazardous substances unless a suitable and sufficient assessment of the risk has been prepared and the steps needed to comply with the regulations has been implemented. Where risks can not be avoided or engineered out suitable and adequate personal protective clothing will be provided as a last resort. Appropriate equipment and maintenance procedures will be implemented with records being kept. Where required appropriate medical surveillance will be provided undertaken by an appointed occupational Doctor. Employees exposed to substances hazardous to their health will be provided with such information, instruction and training as is suitable and sufficient for them to know the health risks associated with the substances they are using. Use hydraulic flag and block cutters where possible Water sprays on cutting saws are to be used to control dust from cutting operations – concrete, flags etc. If no water is available disposable half mask respirators to minimum of FFP3 standard should be used and fit tested to the individual	4	1	4	Yes

6	Noise - Lack of concentration caused by noise possibly causing injury, Deafness.	E,P,V,C	3	3	12	Ensure equipment has been maintained in line with manufacturers recommendations Ensure the correct cutting drill is utilised for the materials being cut Any canopies / Mufflers must be closed when the equipment is in operation Operatives must wear suitable ear protection when noise levels exceed 85db.	3	1	3	Yes
7	Hand / Arm Vibration Causing VWF or carpal tunnel syndrome	E	3	3	9	Operatives are advised not to grip controls too tightly. Operatives must keep their hands and arms warm i.e. wear gloves and suitable clothing to maintain blood supply to the hands, fingers and arms. Periodically rotate the use of vibratory equipment with other operatives by carrying out other operations. Monitor vibration levels daily and report any excessive exposure. Ensure guidance on Vibration assessments is followed.	3	1	3	Yes
8	Working at Height, falls and falling material	E,P,V,C,	3	4	12	Avoid the need to work at height whenever possible. Ensure access ladders are secure at top of excavations. Ensure access steps/ ladders are free from debris and detritus.	3	1	4	Yes
9	Manual Handling - Strains and Sprains to back and muscles.	E	3	3	9	Manual handling to be avoided or reduced as much as possible. Consider the use of mechanical lifting aids before carrying out any lifting activity. Keep any carrying distances to a minimum. Undertake a Manual Handling assessment before lifting. Two operatives or mechanical means must be used if the equipment is assessed as too heavy for one operative Manual Handling training for all site personnel	3	1	3	Yes

10	Electricity and Electric shock activation of Strike alert. Shock and Burns, Death.	E	5	4	20	Contact with underground / overhead apparatus can cause an electric shock if an electric cable has been struck or damaged. Do not touch the equipment. Vacate area immediately.	5	1	5	Yes
11	Slips, Trips and Falls	E,P,V,C	4	4	16	Access to the working area to be kept clear of tools and materials at all times Working area to be maintained in a tidy condition as work progresses Mud to be cleaned from boots when leaving the working area and mud swept off footpaths Check the condition of stairs or places slips or trips may occur Take extra care in wet or freezing conditions Footwear must fit well - soles to be in good condition and kept clean – Boots must provide ankle support Steps into the vehicle to be kept clear and free from mud. Extra care to be taken if there is no step	4	1	4	Yes
12	Defective or unsuitable plant/tools and equipment	E	4	5	20	All items are to be checked by the user BEFORE use Hand tools to be cleaned and inspected by the user All plant and powered equipment to be regularly maintained and inspected by a competent person Defective or broken tools are NOT to be used and are to be immediately repaired or replaced Lifting equipment & Tackle must be inspected regularly – see Working with Hiabs and Grabs	5	1	5	Yes
13	Contact with concrete	E	3	4	12	Overalls or long sleeves and full length trousers should be worn as well as impermeable gloves and boots Do not wear clothing that is saturated with concrete Wash off any concrete that gets on the skin as soon as possible Wash thoroughly with water and seek medical advice if any concrete gets into the eyes Follow good hygiene practice	4	1	4	Yes

14	Tools striking live services Tools Striking Services once exposed	E	5	4	20	Rubber grips to be fitted to all jack hammers Mechanical tools not to be used within 0.5 m of any service. Hand dig with spades not forks or picks within 0.5m of any service Protect exposed services with Rubber mats, Split Ducts etc. Never Utilise Exposed services as Steps to exit the excavation Consider utilising Air Pick	5	1	5	Yes
15	Dust inc Silica dust	E,P,V,C	4	4	16	Use hydraulic flag and block cutters where possible Water sprays on cutting saws are to be used to control dust from cutting operations – concrete, flags etc. If no water is available disposable half mask respirators to minimum of FFP3 standard should be used and fit tested to the individual	4	1	4	Yes
16	Cutting of rebar / mesh	E	4	4	16	"Signage and area cordons should be provided where cutting or operations are taking place. Certain areas may need to be checked with a cable detector before any cutting operation can take place. Only authorised persons that have been trained in the use of abrasive wheels are permitted to change cutting discs and use cut off saws. Operation instructions for each saw will be made available. Permit to work for hot work and fire fighting equipment may be required depending on the location of the cutting operation and the materials used (Consult Supervisor). The operator must visually inspect the saw for signs of damage, the operator must ensure guards are correctly adjusted and secured. The operator must ensure cutting discs have max rpm displayed. DO NOT USE DEFECTIVE EQUIPMENT, any defective equipment must be isolated and brought to the attention of the supervisor. Protective goggles conforming to BS EN 166, ear defenders, dust/fume masks, operators must wear gloves and safety footwear. "Use only cutting discs that is at least as high as the no load speed on the machine. Ensure disc is correct for the task i.e. metal, stone. Operators must observe manufactures instructions for the mounting and use of the equipment.	4	1	4	Yes

						Before switching on the machine, check that the disc is properly mounted and can turn freely. Test run new discs for at least 60 seconds before use. DAMAGED DISCS must not be used. Ensure the work piece is secure before cutting. Keep loose clothing, feet and hands away from the rotating disc. Discs must be protected from shock and grease etc.(Discs must be stored correctly) When cutting masonry operators must use dust suppression kits Operators must consider that sparks and fumes are generated when cutting metals. Cutting should take place in a well-ventilated area; operators should pay attention to the direction of sparks ensuring that the cutting area is free from other persons and combustible material. Discs must not be touched until they have cooled Ensure machine is switched off and allowed to cool before refuelling. Refuel in a well-ventilated area using a drip tray. NO SMOKING OR NAKED LIGHTS DURING REFUELLING. "				
17	Steel Fixing	E	3	4	12	Wear gloves and goggles when cutting steel Use mushroom heads on steel bar ends for eye protection Avoid making contact with exposed cables or pipework	3	1	3	Yes
18	Psychosocial (Work related stress)	E	4	4	16	General notice board displays mental health first aiders and mental health committee members. Administrators to check impact from previous job including driving and working hours. Supervisors to highlight any booked jobs that may cause concern for the week ahead at the Operations meeting and monitor any last minute additions to their teams workload. Line managers to actively communicate with reporter's and highlight any concerns.	4	1	4	Yes

