

Construction Phase Plan

Mechanical



Contract Name:	2793 – Yapton		
Client Name	Bovis Homes Southern Counties		
Site:	Burndell Road Yapton		
Site Postcode/Grid reference	BN18 0TT	SU 98282 02989	
Ebsford Contract no	2793		
Method Statement No.:	001	No. of Pages	20
Scope of work (Operation to carry out work)	Excavation and Removal of Japanese Knotweed and Installation of root barrier		
Number of Ebsford Personnel:	1		

Statutory Notifications	Yes	No	Comments
Is a F10 Required			TBC
Working on or near water course, floodplain? Notify Environment Agency		No	
Notify Local Authority (works including tree work, TPO's, hedgerows, county wildlife sites, non-statutory nature conservation designations)		No	

Prepared by: Ebsford Environmental	Thomas Boot	Date	03/12/18
Reviewed by: Ebsford Environmental	Ben Thornton	Date	03/12/18
Client review by:		Date	

Revision No	Date	Description

The following members of the Management Team have been fully briefed in the content of this document. To execute their respective roles and responsibilities in delivery of the Work Package in a safe manner.

Key Personnel, Supervision & Responsibilities			
	Name	Company	Contact
Principle Contractor	TBC		
Client	James Hammond	Bovis Homes Southern Counties	07811988798
Site Contact	James Hammond	Bovis Homes Southern Counties	07811988798
Ebsford Health & Safety	Ricky Seres	Ebsford Environmental	07940 953324
Ebsford Contracts Manager	Ben Thornton	Ebsford Environmental	07944 202597
Ebsford Site Manager	TBC	Ebsford Environmental	
Site First Aider	TBC	Ebsford Environmental	
Sub-Contractors Involved	NA		

Construction Phase Plan

Mechanical



Proposed date and times to commence work	12 th December 2018
Target completion date	20 th December 2018
Site access	Via Burndell Road
Keys/lock code	NA
Parking available on site	Yes
Site Induction	Needs confirming who and when
Distance to work area	Entrance to site within 10 m
Size of infestation m2	69m2 Japanese's Knotweed, other invasive plants accumulate to 63.27m2, also an area could not be surveyed due to access.

Include all applicable document references/unique Identification (i.e. subcontractor RAMS etc.)	
COSHH assessments	Oil
	Diesel

In the event of an emergency if required the emergency services will be called immediately and the Site supervisor/ Manager will be notified. All work will cease, and the area made safe. The site Manager/Supervisor will make the decision when work can continue. If the emergency is reportable under RIDDOR Ebsford Environmental will notify the HSE and send the client a full report.

Construction Phase Plan Mechanical



Contents

A Work Package Details	4
A.1 Emergency Details	4
A.2 Methodology	5
A.3 Resources.....	9
A.3.1 Personnel.....	9
A.3.2 Plant and Equipment	9
A.3.3 Materials and Tools	9
A.3.4 PPE.....	9
A.4 Inspection and Testing	10
A.5 Project Specific Environmental Considerations	10
B Site Details	10
B.1 Protection of Services	10
B.2 Materials, Handling and Storage.....	11
B.3 Plant/People Interface	11
B.4 Welfare/ Toilet Facilities	11
C. Waste Management Information	12
D. Risk Assessment	13
E. CPP Briefing Sign off.....	19
F. CPP Deviation Form	20

Construction Phase Plan Mechanical

A Work Package Details

A.1 Emergency Details

St Richards Hospital.

Tel: (01243) 788122
Spitalfield Lane
Chichester
West Sussex
PO19 6SE

Closest Hospital (Map and Directions)



20 min (9.0 miles)

via B2233 and Arundel Rd/A27

Fastest route, lighter traffic than usual



BN18 0TT

Yapton, Arundel

- > Continue to Burndell Rd/B2233
14 s (69 ft)
- > Follow B2233, Nyton Rd and Arundel Rd/A27 to Spitalfield Ln/B2178 in Chichester
17 min (8.6 mi)
- > Continue on Spitalfield Ln/B2178 to your destination
2 min (0.4 mi)

PO19 6SE

Chichester

Construction Phase Plan Mechanical

A.2 Methodology

A.1 Description and Sequence of Work

If the following sequence of works cannot be followed then works must stop, inform a supervisor to plan a new safe working method.

Please note the CPP will be updated accordingly once an agreed approach to the works are in place, all RA/mitigation relating to the live services will be added once we have received more information

Site Mobilisation

The Ebsford site manager will complete all inductions and any required paperwork including the permit to dig. Welfare and all plant and machinery will be provided by Ebsford

Project Works

The aim of the project is to remove all material contaminated with Japanese knotweed as per the plan below, root barrier will be installed to the boundaries where necessary



Construction Phase Plan Mechanical



The above photo shows a more intensive overview of the Japanese Knotweed infestations and other invasive species present.

Enabling works

The following enabling works will be required before works start

- Vegetation clearance of infested areas to allow access and to create a temporary footpath so excavation works can commence.
- Heras fencing of our works area to make it secure and to stop access from the general public.
- Footpath diversion to allow access (TBC)
- A plan and mitigation process to allow works to be conducted under and around pylons and HV overhead cables.

Phase 1

Works will begin by taking a scrape of the infested areas to establish the extent of the JK rhizomes. Once the extent of the JK is apparent the excavations will begin from the furthest identified infestation.

The JK material will be excavated from its current location and loaded directly into the dumper and transported to a designated stockpile area (to be confirmed)

This will be achieved by excavating in 200mm layers with the sides and formation of each layer being visually inspected by our onsite supervisor, each pull will be loaded directly into the dumper.

The above process will be repeated until the Ebsford supervisor is satisfied all contaminated material has been removed.

As the excavation deepens it is essential the sides of the excavation are battered to a safe angle of repose or stepped to a 1 in 1 minimum, if this is unachievable then no pedestrian access is allowed at any time.

The area must be CAT scanned before any works start and at regular intervals during the excavations by our onsite supervisor.

Construction Phase Plan

Mechanical

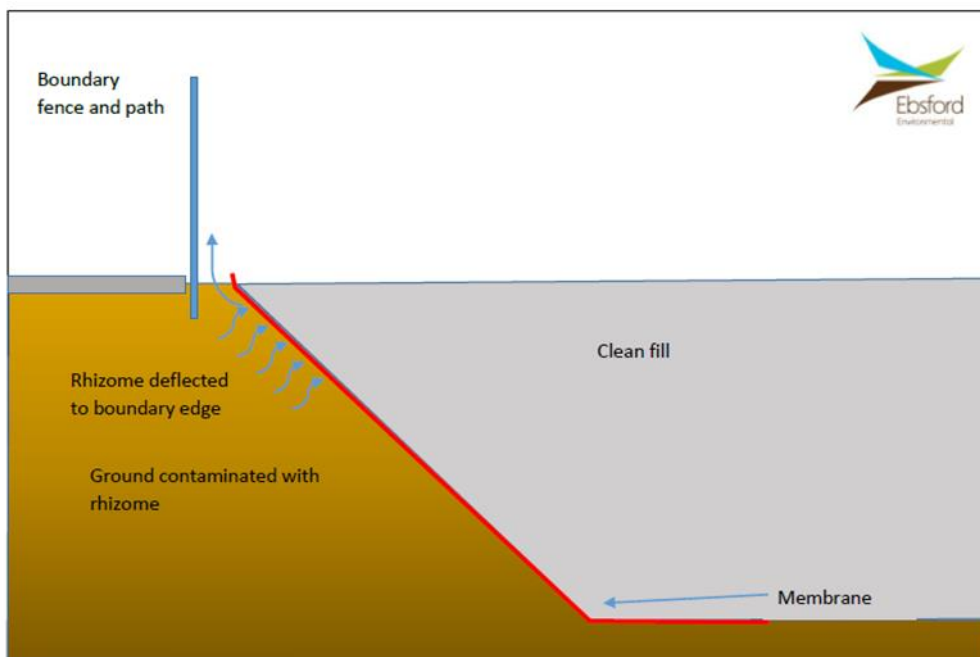
the excavations can be made safe using site won material or we can install fencing and signage around the excavations, this will need to be confirmed.

The points below must be adhered too at all times.

- Always follow the instructions of the Ebsford site manager
- Do not track any machinery into contaminated areas
- Before the material is loaded into the dumper the excavator operator will shake the bucket of the machine to ensure no loose material can spill out during the loading
- The dumper will only be loaded $\frac{3}{4}$ full to avoid spillages during transit
- A pre-agreed route for the dumper must be agreed prior to starting and the area must remain free from obstructions at all times.
- When the dumper deposits the material in the holding area it must not drive over previously tipped loads, when this becomes unavoidable the excavator will move the material and create a clean area for the dumper to use.
- Upon completion, the excavation area and route of the dumper will be checked for spillages, any contaminated material found will be placed in the holding area.

Phase 2

Upon completion of the excavations a root barrier will be installed to the boundaries where the infestation crosses into neighboring properties . (see below)



The Picture above shows a cross section of how the root barrier will look, the 45-degree angle is to ensure the integrity of the boundary fence is maintained. The area of contaminated material left in situ should not cause any concern as the root barrier will stop any new growth appearing on site. Any new growth within the contaminated area will naturally grow up to gain sunlight, it will achieve this by chasing the root barrier to the surface. Should any new growth appear it will do so on the site boundary behind the root barrier, any growth found will be treated as part of the warranty conditions.

clean site won material from the surrounding area will be used to backfill the excavations and ensure the integrity of the root barrier is not compromised.

Construction Phase Plan

Mechanical



Phase 3, offloading of contaminated material

upon completion of the above works, Ebsford will supervise the contaminated material being loaded from the holding area into wagons to be removed from site.

The following points must be adhered to at all times.

- Always follow the instructions of the Ebsford site supervisor
- The excavator must not track onto the stockpile, the material will be loaded from clean ground
- The excavator operator will shake the bucket of the machine to ensure no material spills out during the loading
- Do not overload the wagons
- After each wagon has been loaded and left site the area will be checked for any spillages, any contaminated material found will be placed in the next wagon
- Use a banksman at all times to control this.
- If the stockpile area is hard standing the remaining material will be swept up and loaded into the bucket with a shovel. If the material has been placed on a membrane on the ground a final 100mm scrape of the whole area will be required

Sequence of works

- Site induction
- Tool box talks to anyone involved explaining the working method for the excavation and removal of the Japanese Knotweed material
- Excavation and transportation of material
- Root barrier installation
- Removal of contaminated material
- Clean down all machinery

Management plan

Upon completion of the works a 10 year warranty will be issued to cover the original infestation. Ebsford will carry out monitoring visits during the growing season for the duration of the warranty to ensure no re growth occurs. Our customer service department will notify you of these visits and issue a post site visit form with a brief description of the findings onsite.

Construction Phase Plan

Mechanical



A.3 Resources

A.3.1 Personnel

Title	Specific Requirements
Site Manager	CSCS, CITB SMSTS, First Aid, Asbestos Awareness, CAT and Genny training
Plant Operators	CSCS, CPCS and relevant certification. Internal competencies for Enviroscreen 20-20
Site Operatives	CSCS and CPCS where relevant

All qualifications to be checked at induction phase and details recorded in project specific photo stream and site file.

A.3.2 Plant and Equipment

Item	Specific Requirements
Excavator	TBC size, boom restrictions etc
Dumper/ Dump truck	TBC
Wagons for disposal of contaminated soils	25 wagons in total, 1 load each per day
Enviroscreen and conveyors	NA
CAT Scan	Yes

A.3.3 Materials and Tools

The materials and specialist tools required over and above standard hand tools are as follows

Item	Specific Requirements
Root barrier	Yes 100m2
Jointing tape	Yes
Netlon fencing	2 rolls
Shovels	Yes
brush	Yes
Road pins	Yes 30

A.3.4 PPE

Item	Activity
Waders/Dry suits	N/A
Safety Wellingtons	To be assessed on site
Life Jackets	N/A
Throw Line	N/A
Standard PPE	
Helmet	EN 397:1995+A1, EN 397:2012+A1:2012
Hi Vis	EN20471:2013 Class 2

Construction Phase Plan

Mechanical



Gloves	EN 388
Safety Boots/Wellingtons	EN ISO 20345
Safety Glasses	EN166

A.4 Inspection and Testing		Inspection and test procedure must be following for all site works	
Operation	Inspection/ Test	Responsibility	Details
Plant and equipment	Inspection/ Test	Site Manager	Check testing certificates upon delivery, daily checks completed on sheet and recorded in site file
Work area organisation and cleanliness	Inspection	Site Manager	Daily.

A.5 Project Specific Environmental Considerations		Ebsford Environmental staff will consider the environment always when undertaking their work and have an Environmental Policy.	
Environmental Risks and other hazards	Yes	No/NA	Details
Working at Height		No	
Overhead lines	Yes		Mitigation to be confirmed
Confined Spaces		No	
Waste Management		Yes	See details below
Business Driving		Yes	Take regular breaks when required
Environmental Emergency Plan		Yes	Re fuelling of machines with drip trays and spill kits
Bird Nesting (March to June)		NA	
Protected Habitats-SSSI, SPA, SAC, CWS or NNR		NA	
Invasive Species		Yes	Japanese Knotweed, Cottoneaster, Russian Vine, Montbretia
Protected Species & other Ecology considerations		NA	
COSHH		Yes	See COSHH details on page 2
Noise		Yes	Use adequately silenced machinery
Light		Yes	Daylight hours only
Tree Protection (TPO)		NA	

B Site Details

B.1 Protection of Services	
Identify potential locations of services-	Must review service drawings before works start
Identify hidden services	Area to be CAT scanned by client
Is a 'Permit to Dig' required	Yes, issued by client

Construction Phase Plan

Mechanical



Any additional fire precautions e.g. Fire drills	
Any additional personal health precautions (Working in cold weather)	

B.2 Materials, Handling and Storage
Materials to be stored in vans

B.3 Plant/People Interface				
Is a site plan required?		TBC	If no how will you control plant & people interface, please detail.	
<u>Under no circumstances does this document allow any personnel the right to stop or alter the flow of Traffic on the public highway.</u>				
Delivery Route	TBC			
Site Traffic Plan	TBC			
Delivery Management	TBC			
Pedestrian Routes	TBC			
Vehicle parking	TBC			
Vehicle Manoeuvring	TBC			
Highways permit requires	Yes		No	
Offsite management	TBC			
Restrictions	TBC			

B.4 Welfare/ Toilet Facilities
TBC

Construction Phase Plan Mechanical



C. Waste Management Information	To be completed on site
---------------------------------	-------------------------

Landfill	Nearest Landfill	Site Address:	FCC Sutton Courtney
		Contact No:	
		Copy of their PPC Permit or Waste Management License:	
	Person designated to take waste to land fill	Name:	Mark Prout
		Company:	Ebsford Environmental
		Waste Carriers License number:	CBDU198868
Skip	Skip Company details	Company Name:	
		Contact No:	
		Waste Carriers License number:	
Re-use on site			

Construction Phase Plan Mechanical



D. Risk Assessment

Hazards	Risk (Consequences)	Who might be injured	Risk value: Initial risk value	Low	Medium	High	Residual risk value
				Slightly harmful –Trivial impact / damage quickly repaired	Harmful – Moderate impact / partial loss of operations	Very harmful – Intolerable with very serious consequences	
Precautions / control measures required to reduce the level of risk to the lowest practicable level							
3 rd Party / Public on site	- Interface - Aggressive/ violent/ threatening behaviour - Physical attack - Intolerance	- Visitors to site - Public - Site operatives - Subcontractors	High	- All visitors must sign into site on arrival and be briefed by Site Manager on daily site risks. - Visitor are not to be left to walk around site alone. - Public walk ways to be barriered off to prevent public coming into contact with site activities. - hazards to be highlighted and if necessary fenced to prevent unauthorized access - Display a friendly, honest, courteous, consistent, fair and efficient attitude - Stay calm, speak clearly, and try to diffuse the situation - Remember- self-defence is never an offensive first strike. It is to be used only after actual physical attack. Be aware that it can make a violent situation worse. - If possible get away, report occurrence, and get help - Keep a safe distance - Assess possible means of escape			Low
Working with heavy plant	- Crush injuries, - broken limbs, - death	- Visitors to site - Site operatives - Subcontractors	High	- Trained and competent operator, - Machines not to enter exclusion zone (1m from top of bank) - Machines selected to avoid need to over-reach, - Extra vigilance and precaution if erosion/scour/slip could be present in the bank. - Suitably Trained personnel to stay visible to plant operator always, - Suitably trained personnel never to be under the boom/dipping arm/bucket of excavators - hitch process carefully controlled, - hazards to be highlighted and if necessary fenced to prevent unauthorized access, - All vehicles and plant will be immobilized when not in use,			Low

Construction Phase Plan

Mechanical



Quick hitch/ Excavator bucket handling	• Loss of load • Loss of bucket • Trapping • Crush • Death	• Visitors to site • Site operatives • Subcontractors	High	• Operatives to be familiar with specific quick hitch, • Bucket to be kept and changed away from all site personnel • All quick hitches to be inspected daily for wear and tear, leaks and damages. • Security of bucked to be checked before commencing work. • Semi-automatic and manual quick hitch require the safety pin to be fitted and secure be for commencing work. Do not carry on work if safety pin is missing. • Ensure buckets not in use are placed flat on ground, without risk of falling or coursing damage.	Low
Existing Traffic/ Road	• Collisions by vehicles/ pedestrians • Broken Limbs, death	• Visitors to site • Public • Site operatives • Subcontractors	Medium	• Heras fencing to segregate site from public • Road to be closed before works commence to ensure no traffic enter the work area • Suitably training personnel to assist and guide plant operators	Low
General site activities	• Slip and Trip hazards • Uneven/ unstable terrain/ ground conditions • Working on slopes • Strains, sprains, broken limbs	• Visitors to site • Site operatives • Subcontractors	Medium	• Slips and Trips • Wear protective footwear with good grip and slip resistant soles • Keep alert to the immediate area you are walking over • Avoid obvious slip/trip hazards • Assess ground condition before starting work especially after recent rain, frosts or very dry conditions all of which can reduce grip or cause ground to slip or give way • Keep alert to general light conditions and stop work if visibility is seriously reduced	Low
Lifting and Handling	• Loading / unloading vehicles • Moving on uneven ground • Crushing, broken limbs, death	• Site operatives • Subcontractors	Medium	• Mechanical aids should be used wherever possible. • A Manual Handling Site Assessment must be completed before commencement of work • Operatives to have Manual Handling training. • Plan each lift in advance. • Split loads where possible to reduce risk. • Assess lift prior to lifting and always seek assistance with large/heavy items e.g. 2-man lift. • Keep distance for handling to as small as possible. • Ensure good underfoot conditions. • Apply good kinetic lifting techniques. • Strenuous activities are to be rotated between operatives to reduce fatigue. • Manual Handling tasks should not be outside the individual's physical capability.	Low

Construction Phase Plan

Mechanical



Fuelling plant	- Fuel Spill - Pollution	- Visitors to site - Public - Site operatives - Subcontractor - Wildlife	Medium	- Spill kits to be kept in all plant on site along with one located at the designated refuelling area. - Drip tray to be placed under plant during fuelling. - Fuel bowsters to be double banded, lockable and set a minimum of 10meters away from any watercourse.	Low
Existing services	- Service strike - UXO's - Collapse of excavation	- Visitors to site - Site operatives - Subcontractors	High	- Implement a permit to dig regime. Obtain plans of services from utility suppliers to use as a guide only. - Carry out a survey of the site using a cable and pipe locating device (CAT & GENNY) operated by trained and competent personnel. - Mark out the route of any detected service with pegs. - Dig trial pits using hand tools only. - Implement a hand dig only zone along the route of any detected services. - Advise and inform all personnel involved in excavation work of the site procedure. - Consult HSE guidance HSG47 for further information. - Site induction to cover presence of potential UXO's, locations to be identified prior to works starting, must include emergency procedure, response plan and awareness training as per Fellows report.	Low
Working near invasive species	Spreading of plants	- Visitors to site - Site operatives - Subcontractors	Med	- Work areas to be surveyed for the presence of invasive species before work commences - Invasive species are to be barriered off to prevent unauthorised access. - Plant to be cleaned off before leaving the area with invasive species, along with tools and work boots.	Low
Use of hand tools	Cuts / lacerations	- Site operatives - Subcontractors	Med	- Tools to be selected to fit the task been carried out. - Operatives to trained and competent in the use specific tools - Suitable PPE to be worn correctly and maintained to carry out works - Small tools to be checked for wear and tear, damage and in date inspections - Equipment inspection sheet to be filled out to keep register of all tools on site	Low

Construction Phase Plan

Mechanical



Lone Working	- Slipping - Health problem - Accident	- Visitors to site - Site operatives - Subcontractors	High	- Lone working shall be as little as possible - If assistance is needed in a safety critical situation, then report to a supervisor - If working in an area where public or traffic is working, then a banksman shall be required to ensure public are out of reach of the machine area - Report back to a supervisor regularly to ensure all is ok - If feeling unwell then report to a supervisor	Low
Emergencies	Spillages and leaks from equipment and operations	- Visitors to site - Public - Site operatives - Subcontractors - Wildlife	High	- Keep a spill kit to hand including inert, absorbent material brush, shovel, plastic bags and ties - Put on level one PPE as minimum – gloves, coveralls, boots, hard hat, glasses - Block drains if the spill might reach them - Collect all sweepings/ contaminated materials in a strong impermeable container and dispose of via a specialist waste disposal contractor - Have a copy of the product label to give to the emergency services - Tools, chemicals and materials properly stored.	Low
	Leaking from damaged containers		High	- Put the entire leaking container into an impermeable larger one and label it with the product name - Transfer the contents of the damaged container into a sound one that held the same product originally - If the product can be used, do so at the earliest opportunity taking care to avoid further spillage or contamination - If not useable, dispose of via a specialist waste contractor	Low
	Personal contamination		Med	- Carefully remove contaminated clothing immediately - Wash contaminated skin and hair thoroughly with clean water - If eyes are contaminated, flush with clean running water for at least fifteen minutes - Seek medical attention as soon as possible - Take the product label and safety data sheets with you and give to the medical staff	Low
	Fire		High	- Raise the alarm - Call the fire brigade telling them that agro chemicals are involved - Tackle the fire yourself only if it is safe to do so using a dry powder extinguisher - Give the fire Officer the product label and safety data sheets - Fire extinguishers to be in place during hot work activities	Low

Construction Phase Plan

Mechanical



	• Theft of pesticides from vehicle on site		Medium	• Notify your supervisor immediately • Contact the police and provide full details of products, active ingredients, and quantities stolen • Overnight storage of plant in secure compound • Integrity of site fencing maintained	Low
Pollution incidents	• Concrete mixing • Diesel & Oil leaks	• Visitors to site • Public • Site operatives • Subcontractors • Wildlife/ Aquatic Organisms	Medium	• Concrete to be mixed 10meters away from watercourse, care to be taken to place concrete or mortar to ensure not to contaminate the watercourse, see COSHH assessment for cement • Plant to be filled up away from watercourse, amphibious excavator shall fill up on land and not near the water, spill kits to be placed near or on each item of operated plant, where possible excavators shall run with bio hydraulic oil. • Complete Environmental Incident form, forward to quality@ebsford.co.uk	Low
Excavations	• Collapse of excavation • Trapping • Crushing	• Visitors to site • Site operatives • Subcontractors	High	• Ground conditions to be assessed before each shift and monitored throughout excavation. • Excavations to be fenced off and signed to eliminate unauthorised access. • No operatives to enter any excavation unless safe to do so. • Ensure excavations are shored/shuttered when excavations are too deep to enter. • Ladders/ steps to be used to access excavations. • sides of excavations to be battered to a grade of 1in1 to prevent collapse or 1 in 1 step, if this is unachievable no pedestrian access is allowed into excavation.	Low
Weil Disease / leptospirosis	• Sickness • Illness • Death •	• Visitors to site • Site operatives • Subcontractors	Medium	• Gloves to be worn always during work activities • Food to be kept in canteen and not to be eaten onsite. • Hands are to be washed before eating and at the end of each shift. • Drink bottled water and water from a tap clearly marked 'drinking water' • All operative to be briefed on Weil Disease via a TBT and carry an information card.	Low
Needle stick injuries	• Hepatitis • HIV	• Visitors to site • Site operatives • Subcontractors	Medium	• Work areas to be checked before work can start for the presence of sharps. • If sharps are found, they are to be barriered and local authorities are to be informed to remove from site. • Only operatives who are trained and competent can remove sharps and place in a biohazard sharps container and sealed.	Low

Construction Phase Plan Mechanical



Asbestos	Mesothelioma	Anyone on site	High	- Asbestos awareness training - Client to inform of affected areas - Emergency preparedness and response procedure - If any asbestos is identified stop works immediately and notify the site manager.	Medium
Radioactive paint	Radiation poisoning	Anyone on site	High	- Client to inform of affected areas - Awareness training at site induction - If any radioactive paint is identified stop works immediately and notify the site manager.	Medium

Construction Phase Plan Mechanical



E. CPP Briefing Sign off

Name of Person Briefing CPP	
Job No.	
Date	

This is to certify that all personnel listed below have read or had communicated to them and understand the requirements of the CPP pertaining to the above works.

Name	Signature	Date

Construction Phase Plan Mechanical



F. CPP Deviation Form

Name	
Job Number	
Date	

Details of Changes

--

I confirm I have received and understood a briefing against the deviation from the original RAMS/CPP.

Name	Date	Signature