

		Foreman	4. Isolation	29	βCheck formulas in L2-L7 if you add rows to ensure range is correct Delete Legislation / Codes not applicable to your jurisdiction	
Workplace Location:	Gipp St Wollongong	Contracts Administrator	3. Engineering	55		
Issue Number:	1	EHSQ Co-Ordinator	2. Administration	8		
Issue Date:		Project Engineer / Site Engineer	1. PPE	0		
Activity Description	Hazard / Impact (Worst Credible Consequences)	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Status	Legal and other requirements
All Trades	Electric Shock	Electrical equipment to be tested and tagged by competent person minimum 3 monthly. RCD's to be tested by a qualified person monthly and trip times to be recorded and given to PBS. Lead stands or insulated hooks must be used to elevate leads above head height.	Contractors to provide test and Tag register.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide;
All Trades	Manual Handling Injury	Ensure load is close to the chest and bend the knees to pick up the load. Lift with legs keeping back straight. Bend the knees to lower the load then release the load to final position without over extending the back. Contractor to ensure all workers are inducted into the trade specific safe working procedures for manual handling. (eg subcontractor WHS Plan, Training Register.)	Use Mechanical Aids. Team Lifts to occur.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Hazardous manual tasks COP.
Concrete Coring	Fall of Person	Platform ladders or EWP's are to be used in the first instance. Work trestles a minimum width of 450mm can be used. Step Ladders may only be used for minor works which take less than 15 minutes to complete and 3 points of contact must be maintained. Ladders to be stepped back from any edges of a building/balconies at least 3m or 1:1 ratio if a full perimeter screen/scaffold has been installed.	Work trestles with a maximum height of 1m to be used only.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Concrete Coring	Hit by Falling Objects	Concrete Coring Work Permit to be issued. Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools underneath the area being cored. Area to be bunted off with signage to prevent unauthorised access. Authorised person only to be in direct workzone.		4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Concrete Coring	Dust Inhalation	Internal Risk - P1/P2/P3 dust mask to be worn. External Risk - Constant Hosing down with water to be undertaken.	Power tools to have vacuum /water attachments	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Concrete Coring	Contact with Live Existing Services	Concrete Coring Work Permit to be issued. If services located in direct coring zone then additional Energisation/Isolation Permit to be issued and completed. Visual inspection to be conducted for underslab services.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing electrical risk in the workplace COP
Concrete Placement	Environmental Contamination from Spill of Hazardous Chemicals/Substances	Designated washout / recycling areas for concrete and concrete equipment with regular monitoring.		4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP

Activity Description	Hazard / Impact (Worst Credible Consequence)	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Status	Legal and other requirements
Concrete Placement	Exposure to Hazardous Material	Correct PPE to be worn. SDS to be communicated to all workers involved in the task via TBT, training register or SWMS. Hazardous Materials to be stored in designated storage area immediately after use.	Hazardous Materials and Dangerous Goods sub plan to be in place.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Concrete Placement	Fatigue	Rotate work crews. Monitor number of workers and hours worked. Contractors to provide ways home for workers that may be too fatigued to drive home. Site to have designated rest areas. Min 10hr break between shifts.	Contractor to provide fatigue management plan.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Concrete Placement	Hit by Falling Objects	A system must be in place to alert workers of changed boom position. Concreters not to collect any loads by crane. Dogman to land loads i.e. helicopters etc. Authorised person only to be in direct workzone.	Visual check to confirm suitable barrier in place in formwork to prevent concrete slurry falling to ground. Exclusion zone to be set up below deck that is being poured with a nominated person below.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Concrete Placement	Working in Cold, Inclement or Windy Weather	Heated amenities to be provided. Suitable Access / Egress to be provided to work areas. Concrete Placing Boom not to work outside the manufacturer's recommendations regards extreme weather (wind speed) If lightning is present in the near sky or immediate sky above then concrete booms must be lowered and persons to remain under cover in lunch sheds until the weather passes.	Inspection to be conducted prior to gates of site open by PBS Site Manager/ EHS Committee to assess all access routes. Any unsuitable work areas are to be barricaded off with physical barrier until deemed safe to enter.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP
Concrete Placement	Dust Inhalation	Workers required to cut (includes grind, drill or polish) concrete containing crystalline silica with a power tool must wear respiratory protective equipment and at least one of the following controls must be in place: • a water delivery system that supplies a continuous feed of water over the area being cut to suppress the generation of dust; • a prescribed extraction system that is attached to the tool used for the cutting to capture the dust produced by the cutting; • a local exhaust ventilation system that captures the dust produced by the cutting and transports the dust to a safe emission point or to a filter or scrubber. Only workers directly involved in the activity to be in the area when cutting being undertaken.	Cutting area separation screens to be installed. Workers required to use respiratory protective equipment (RPE) must have a correctly fitted and tested face mask using either a quantitative or qualitative test. All tight-fitting respirators must have fit testing completed.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Concrete Pump	Plant Over-Turning	Set up in an area that is approved by PBS Site Manager. Plant is not to be set up or traverse within the zone of influence of a service trench/ excavation or on a service trench. Outriggers must be set up on stable ground. Licenced operators to operate boom/satellite pumps only.	Penetration covers to be mechanically secured with signage and be of sufficient strength to support likely plant or equipment in the area. If sizable penetration, load & point limits to be displayed. Compaction test is required prior to set up of outriggers on disturbed soil. Hardwood timbers or proprietry pads to be used under outriggers.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Concrete Pump	Plant Failure	Ensure safety pins are installed to line connectors. Monthly pipe thickness tests to be conducted and checked to ensure minimum density allowance is not exceeded. Servicing and maintenance to be done as per manufacturer's specifications		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Concrete Pump	Hit by Moving Plant	Linesman to have positive communication with pump operator when positioning the line. Pump operator to have full sight of where concrete boom is being positioned.	Tyres/trestles to be used on deck to raise rubbers/pipes. Line stands to be used where pipes are situated in access ways or public areas.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP

Activity Description	Hazard / Impact (Worst Credible Consequence)	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Status	Legal and other requirements
Workplace Location: Gipp St Wollongong		Foreman	4. Isolation	29	Delete Legislation / Codes not applicable to your jurisdiction	
Issue Number: 1		Contracts Administrator	3. Engineering	55		
Issue Date:		EHSQ Co-Ordinator	2. Administration	8		
		Project Engineer / Site Engineer	1. PPE	0		
Concrete Pump	Environmental Contamination from Spill of Hazardous Chemicals/Substances	Designated washout / recycling areas for concrete with regular monitoring.		4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Concrete Pump	Working in Cold, Inclement or Windy Weather	Heated amenities to be provided. Suitable Access / Egress to be provided to work areas. Concrete Placing Boom not to work outside the manufacturer's recommendations regards extreme weather (wind speed) if lightning is present in the near sky or immediate sky above then concrete booms must be lowered and persons to remain under cover in lunch sheds until the weather passes.	Inspection to be conducted prior to gates of site open by PBS Site Manager/ EHS Committee to assess all access routes. Any unsuitable work areas are to be barricaded off with physical barrier until deemed safe to enter.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP
Demolition	Dust Inhalation	Correct PPE to be worn by workers during the removal process. All potential ACM and Hazardous Material to be removed and clearance certificate received from licenced assessor prior to demolition.	Asbestos Register to be requested off of the client. Competent person to inspect residential premises prior to demolition. Licenced person to conduct destructive testing and provide results prior to demolition.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Demolition	Uncontrolled Collapse of Structure	Demolition Plan to be developed outlining sequence of demolition. Where applicable, any structural engineers sign-offs needs to be obtained. Physical Barriers to be in place as an exclusion zone to prevent unauthorised access. "Demolition in progress" signage to be installed. Only licenced contractors to perform works.	Notify Regulator in writing at least 5 days before commencing works.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Demolition COP
Demolition	Environmental Contamination from Spill of Hazardous Chemicals/Substances	Contractor to provide, and have readily available access to, a spill kit which is appropriately sized for the risk of spill when refuelling or if damage was to occur to a piece of plant and equipment. Workers must be trained in the use of spill kits and the SDS's for chemicals/substances that they are using on this project.	Sediment fencing to be installed to prevent run off into lake.	2. Administration	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Demolition	Dust Inhalation	Internal Risk - P1/P2/P3 dust mask to be worn. External Risk - Constant Hosing down with water to be undertaken.	Use of Fans for internal risk.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Demolition	Cuts and Lacerations	All guards to be fitted to power tools. All PPE requirements shall be assessed in the contractors HR SWMS	225mm grinder permit to be issued when applicable	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

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Workplace Location:	Gipp St Wollongong	Foreman	4. Isolation	29	Delete Legislation / Codes not applicable to your jurisdiction	
Issue Number:	1	Contracts Administrator	3. Engineering	55		
Issue Date:		EHSQ Co-Ordinator	2. Administration	8		
		Project Engineer / Site Engineer	1. PPE	0		
Demolition	Destruction of Heritage Structures or Aboriginal relics or places	Heritage Management Sub Plan to be in Place. All heritage listed areas are to be barricaded off and/or signage displayed.	Concrete barriers to be put in front of heritage gate. All trucks are to enter / exit in a forward moving direction.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Electrical	Fall of Person	Platform ladders or EWP's are to be used in the first instance. Work trestles a minimum width of 450mm can be used. Step Ladders may only be used for minor works which take less than 15 minutes to complete and 3 points of contact must be maintained. Delivery drivers or workers are NOT to access the back of trucks unless; *There is a handrail system incorporated onto the back of the vehicle or, *A portable handrail system is provided by the project and, *The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending. Ladders to be stepped back from any edges of a building/balconies at least 3m or 1:1 ratio if a full perimeter screen/scaffold has been installed.	Competent person to only use EWP below 11m. Ticketed Personnel required for operation of EWP over 11m. Harness to be worn and connected to boom EWP type prior to bucket being raised. Harness to be inspected daily before use and maintained as per manufacturer specifications. Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder. Work Trestles at a maximum height of 1m can be used only.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Electrical	Electrocution	Install RCD protected temporary boards at each level in nominated location being hard wired with 4mm cable (i.e. no spider / wander boards allowed). Temporary boards must be physically secured to prevent overturn of board and front covers must be lockable. Temporary boards must have locked covers over circuit - breakers and RCDs associated with outgoing circuits apart from the main switch/isolating switch which must be readily accessible in the event of an emergency. Temp Boards must have signage installed on the front cover Lock out/Tag out system to be used when isolation of electrical feed required. <u>Isolation / Energisation Permit to be issued</u> . Live temporary electrical cabling must be identified with yellow tag tape every 3m, where cabling is accessible. Competent Persons must carry out electrical inspection, testing and tagging of leads 3 monthly and a Qualified person must test RCD's monthly. All temporary electricity provided to socket (general purpose) outlets must be protected by a Residual Current Device. Each Temporary Board & all construction wiring installations must have a completed copy of ACT CES/ NSW CCEW / QLD CTC provided to PBS following each energisation. Electrical apprentices and trade assistants must work under the supervision of a licenced electrician at all times. All electrical work (other than inspection and testing of portable equipment) must be carried out by a licenced electrician & each electrician must verify their licence before they commence electrical works. Calibration of all testing equipment must be carried out as per manufacturers instructions. Cordless tools are encouraged to be used before power tools. Every cable end (i.e. awaiting termination) must be folded over itself and taped to prevent eye damage and electric shock (in the event of inadvertent energisation). RCD Trip Times to be recorded monthly on a register. HR SWMS to include emergency procedure.		4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing electrical risks in the workplace COP
Electrical	Hit by Falling Objects	Authorised person only to be in direct workzone. Authorised person only to be in direct workzone.	Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools. Area to be bunted off with signage to prevent unauthorised access.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Electrical	Hit by Moving Plant	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach and the excavator bucket has been lowered to the ground. All plant to have flashing beacons operating. Mobile phones not to be used when operating plant and equipment.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control light weight &/or large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn at all times where fitted. <u>Refer to mobile crane operations activity and excavation activity in this PRR.</u>	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Electrical	Cuts and Lacerations	All guards to be fitted to power tools. All PPE requirements shall be assessed in the contractors HR SWMS		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

Activity Description	Hazard / Impact (Worst Credible Consequence)	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Status	Legal and other requirements
Workplace Location:	Gipp St Wollongong	Foreman	4. Isolation	29	βCheck formulas in L2-L7 if you add rows to ensure range is correct	Delete Legislation / Codes not applicable to your jurisdiction
Issue Number:	1	Contracts Administrator	3. Engineering	55		
Issue Date:		EHSQ Co-Ordinator	2. Administration	8		
		Project Engineer / Site Engineer	1. PPE	0		
Electrical	Fire/Explosion	Isolation / Energisation Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn.	Hot works Permit to be sought by contractors from PBS	2. Administration	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP
Electrical	Exposure to Hazardous Material	Correct PPE to be worn. SDS to be communicated to all workers involved in the task via TBT, training register or SWMS.	No HSDG to be stored onsite.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Emergency Planning	Emergency Risk Assessment	Fire extinguisher to be located at every exit point and/or every 500 square metres. Nurse Call point and/or air horn to be located every 500 square metres. Spill Kits to be located at all designated refuelling areas and hazardous chemicals / dangerous goods storage areas. Contractors are to provide their own spill kit relevant for their own, refuelling or other, activities.	PBS will have a multipurpose spill kit available as a back up.. 1 fire extinguisher (to suit class a,b,c & electrical fire) on each storey adjacent to each exit or temporary stairway at all times. After building reaches 12m effective height, required fire hydrants & fire hose reels must be operational every storey (except the 2 uppermost floors). Emergency Evacuation Map to be installed on every level / at each exit point.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP, First aid in the workplace COP
Excavation	Exposure to Hazardous Dust	Unexpected finds protocol to be followed if unknown. If Known, and less than 10m2 PBS to engage an asbestos removalist and monitor tracking of waste to certified waste treatment plant. If Asbestos waste is over 10m2 then relevant authorities shall be notified and an Asbestos removalist shall be engaged. Any health monitoring shall be conducted as per the advice of the Asbestos removalist occupation hygienist. Test holes of soil conditions to be completed by consultant and results provided to PBS. All PPE requirements are to be worn i.e Masks, jump suits. Decontamination of any exposed clothing/PPE shall be undertaken before leaving the effected area.	Contaminated areas to be bunted off using physical barriers and signage installed. Plastic to be installed over contaminated areas to prevent risk of dust arising until removal process is initiated.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Excavation	Exposure to Hazardous Dust	Workers required to cut (includes grind, drill or polish) concrete containing crystalline silica with a power tool must wear respiratory protective equipment and at least one of the following controls must be in place: • a water delivery system that supplies a continuous feed of water over the area being cut to suppress the generation of dust; • a prescribed extraction system that is attached to the tool used for the cutting to capture the dust produced by the cutting; • a local exhaust ventilation system that captures the dust produced by the cutting and transports the dust to a safe emission point or to a filter or scrubber. Only workers directly involved in the activity to be in the area when cutting being undertaken.	Cutting area separation screens to be installed. Workers required to use respiratory protective equipment (RPE) must have a correctly fitted and tested face mask using either a quantitative or qualitative test. All tight-fitting respirators must have fit testing completed.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Excavation	Contact with In-Ground Services	Excavation Permit required when penetrating the ground 200mm or more. DBYD to be reviewed. Known services are to be identified and Summary Of Services Location Plan (SOS LP) to be updated on weekly basis including services that are being installed progressively by service trades. Digging by mechanical means is not to be carried out within 1m of a known live service unless EHSQ Manager has been consulted	As buits to be received from the client to confirm existing services. Service Locator to be engaged to conduct survey of site and provide to PBS. Pot Holing via hand digging every 5m to determine direction of service. Energise/Isolate Permit may also be required.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Excavation COP, Managing electrical risks in the workplace
Excavation	Collapse of Excavation / Trenching	Excavation Permit required when penetrating the ground 200mm or more. Excavation / Trench must be either benched, battered, shored or a combination of all if deeper than 1.5m; otherwise proceed as per Geotech report requirements. Any amendments outside geotech report must be signed off by relevant qualified engineer prior to works occurring. Physical Barrier to be installed along top of excavation / trench to prevent plant / vehicles entering the zone of influence. Any spoil must not be stored within zone of influence and must be stored on down slope side.	Shoring Boxes to provide suitable access in/out of excavation. Adjacent structures, roads and footpaths must be supported or protected to prevent collapse.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

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Issue Number:	1	EHSQ Co-Ordinator	2. Administration	8		
Issue Date:		Project Engineer / Site Engineer	1. PPE	0		
Activity Description	Hazard / Impact (Worst Credible Consequence)	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Status	Legal and other requirements
Excavation	Fall of Person	Visual barrier to be installed minimum of 2m back from edge of excavation or Physical barrier installed if closer than 2m to edge which will take the fall of someone against it. Suitable access to be provided to excavation that does not expose workers to risk of fall. "Deep Excavation" signage to be installed around edge of excavation where deeper than 1.5m		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Excavation	Hit by Moving Plant	When using an excavator - Spotter to have positive communication with operator (via hand signals or UHF radio) at all times. No one is allowed in the swing zone of the piece of plant. No one is to approach plant unless the bucket/arm has been lowered and confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not to be used when operating plant and equipment.	Delineation barriers / flagging to be erected in work areas where multiple trades are for the separation of plant and people. Plant Operating Zone signage to be installed.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Excavation	Plant Over-Turning	ROPS/FOPS to be installed on all plant involved in the work activity. Physical Barrier to be installed along top of excavation / trench to prevent plant / vehicles entering the zone of influence. The SWL of plant and its attachments is not to be exceeded. Seat Belts to be worn where fitted.	Penetration covers to be physically secured with signage and be of sufficient strength to support likely plant or equipment in the area. If sizable penetration, load & point limits to be displayed.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP, Excavation COP
Excavation	Fire/Explosion when refuelling plant and equipment	Hazardous Materials to be stored in designated storage area immediately after use. Fire Fighting equipment to have tag in date of 6 months and be readily accessible to the refuelling area. Refuelling area to be clear of any combustible material.	Plant/Equipment to be turned off prior to refuelling and not in proximity to other operating plant	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Excavation	Environmental Contamination from Spill of Hazardous Chemicals/Substances	Contractor to provide, and have readily available access to, a spill kit which is appropriately sized for the risk of spill when refuelling or if damage was to occur to a piece of plant and equipment. Workers must be trained in the use of spill kits and the SDS's for chemicals/substances that they are using on this project.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Excavation	Working in High Temperatures - Heat Stress/Heat Exhaustion	Drinking water is readily available close to work areas. Regularly rotate workers who perform more strenuous activities with less demanding tasks. Take regular work breaks in cooler areas such as air conditioned sheds.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP
Excavation	Working in Cold, Inclement or Windy Weather	Heated amenities to be provided. Suitable Access / Egress to be provided to work areas.	Inspection to be conducted prior to gates of site open by PBS Site Manager/ EHS Committee to assess all access routes. Any unsuitable work areas are to be barricaded off with physical barrier until deemed safe to enter.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP
Excavation	Works affect neighbouring structures	Dilapidation survey to be undertaken by consultant.	Weekly plan for impacted areas to neighbouring properties that might be affected by works. Stakeholder Communication Sub Plan to be in place. Noise Management Sub Plan to be in Place.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

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Issue Number:	1	EHSQ Co-Ordinator	2. Administration	8		
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Activity Description	Hazard / Impact (Worst Credible Consequence)	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Status	Legal and other requirements
Excavation	Unexpected Find	PBS Unexpected Finds protocol to be followed. Contractor to include unexpected finds protocol in their HR SWMS.		2. Administration	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Mobile Crane Operations (includes Vehicle Mounted Crane/Telehandler/Franna/Crawler)	Hit by Moving Plant	Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not to be used when operating plant and equipment. Dogman and Operator to sign into Crane Management Sub Plan. Use Tag Lines when appropriate to control light weight &/or large panel lifts in windy conditions.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside crane operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Mobile Crane Operations (includes Vehicle Mounted Crane/Telehandler/Franna/Crawler)	Hit by Falling Objects	Dogman and Operator to sign into Crane Management Sub Plan. All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. Authorised person only to be in direct workzone.	Tag Lines to be used when appropriate to control light weight &/or large panel lifts in windy conditions	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Mobile Crane Operations (includes Vehicle Mounted Crane/Telehandler/Franna/Crawler)	Plant Over-Turning	Dogman and Operator to sign into Crane Management Sub Plan. Seat belts to be worn at all times where fitted. The SWL of the plant and its attachments is not to be exceeded. Set up in an area that is approved by PBS Site Manager. Lift study to be completed for any loads 20 Tonne or when expecting to use crane over 95% capacity. Plant is not to set up or traverse within the zone of influence of a service trench or on a service trench. Outriggers must be set up on stable ground.	Penetration covers to be physically secured with signage and be of sufficient strength to support likely plant or equipment in the area. If sizable penetration, load & point limits to be displayed. Crane to work lower than 95% capacity. Compaction test is required prior to set up of outriggers on disturbed soil. Routes for pick and carry operations to be assessed and designated by the PBS Site Manager.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Mobile Crane Operations (includes Vehicle Mounted Crane/Telehandler/Franna/Crawler)	Plant Failure	All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. Daily inspection to be completed by operator prior to operation. Plant to serviced and maintained as per manufacturers specifications.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Piling	Fall of Person	Exclusion zone to be in place using physical barriers around each pier. Piers must be covered if work is not being conducted.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Piling	Plant Failure	All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. Daily inspection to be completed by operator prior to operation. Plant to serviced and maintained as per manufacturers specifications.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Plumbing	Fall of Person	Platform ladders or EWP's are to be used in the first instance. Work trestles a minimum width of 450mm can be used. Step Ladders may only be used for minor works which take less than 15 minutes to complete and 3 points of contact must be maintained. Delivery drivers or workers are NOT to access the back of trucks unless; *There is a handrail system incorporated onto the back of the vehicle or, *A portable handrail system is provided by the project and, *The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending. Ladders to be stepped back from any edges of a building/balconies at least 3m or 1:1 ratio if a full perimeter screen/scaffold has been installed.	Competent Personnel required for operation of EWP. Harness to be worn and connected prior to bucket being raised. Harness to be inspected daily before use and maintained as per manufacturer specifications. Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

		Foreman	4. Isolation	29	βCheck formulas in L2-L7 if you add rows to ensure range is correct Delete Legislation / Codes not applicable to your jurisdiction	
Workplace Location:	Gipp St Wollongong	Contracts Administrator	3. Engineering	55		
Issue Number:	1	EHSQ Co-Ordinator	2. Administration	8		
Issue Date:		Project Engineer / Site Engineer	1. PPE	0		
Activity Description	Hazard / Impact (Worst Credible Consequence)	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Status	Legal and other requirements
Plumbing	Fire/Explosion	Hot Works Permit to be in place. Area to be clear of combustible materials.PPE as per approved HR SWMS to be worn. Flash back arrestors to all oxy sets.	Flashback arrestors to be tested annually.	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP
Plumbing	Cuts and Lacerations	All guards to be fitted to power tools. All PPE requirements shall be assessed in the contractors HR SWMS		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Plumbing	Hit by Moving Plant	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Plumbing	Hit by Falling Objects	Authorised person only to be in direct workzone.	Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools. Area to be bunted off with signage to prevent unauthorised access.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Plumbing	Environmental Contamination from Spill of Hazardous Chemicals/Substances	Contractor to provide, and have readily available access to, a spill kit which is appropriately sized for the risk of spill when refuelling or if damage was to occur to a piece of plant and equipment. Workers must be trained in the use of spill kits and the SDS's for chemicals/substances that they are using on this project.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Plumbing	Dust Inhalation	Internal Risk - P1/P2/P3 dust mask to be worn as per approved SWMS. External Risk - Constant Hosing down with water to be undertaken. Power tools required for drilling into concrete slab/grinding pipe within close proximity of concrete slab to have vaccum /water attachments/ P2 or higher masks.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Plumbing	Exposure to Hazardous Material	Correct PPE to be worn. SDS to be communicated to all workers involved in the task via TBT, training register or SWMS.	HSDG to removed from site daily	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Steel Fixing	Hit by Moving Plant	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside crane operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles.	4. Isolation	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Steel Fixing	Fire/Explosion	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP

		Foreman		4. Isolation	29	8. Check formulas in L2-L7 if you add rows to ensure range is correct Delete Legislation / Codes not applicable to your jurisdiction
Workplace Location:	Gipp St Wollongong	Contracts Administrator		3. Engineering	55	
Issue Number:	1	EHSQ Co-Ordinator		2. Administration	8	
Issue Date:		Project Engineer / Site Engineer		1. PPE	0	
Activity Description	Hazard / Impact (Worst Credible Consequence)	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Status	Legal and other requirements
Steel Fixing	Cuts and Lacerations	All guards to be fitted to power tools. Install bar caps on all exposed steel bars. Wear gloves when working with sharp steel edges.		3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Traffic Control	Hit by Moving Vehicular Traffic	Consultant holding correct tickets to provide Traffic Management Plan (including Traffic Control Plan) which is specific to the works on site. Signage and Devices to be set up in accordance with approved Traffic Control Plan by workers who hold the correct tickets. Traffic Controllers to position themselves where an escape route is accessible at all times.	Wheel stops and fence to be set up in between workers and road users. Signage to be held down with weights and/or other appropriate methods to prevent them blowing over. Traffic and Vehicle Management Sub Plan to be in Place	3. Engineering	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Traffic Control	Impact on current Traffic Conditions	Traffic Management and Traffic Control Plan to be in place which has been selected or created by a competent person. Traffic Control signage and devices to be installed as per approved TCP.	No contractor parking on site. Workers are advised to utilise public transport. Work Zone on the road is only to be utilised for delivery of material and tools. Traffic and Vehicle Management Sub Plan to be in place	5. Substitution	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Traffic Control	Vehicle / Plant Collision	Traffic Management and Traffic Control Plan to be in place which has been selected or created by a person holding the correct tickets if works conducted outside PBS Perimeter Fencing. Traffic Control signage and devices to be installed as per approved TCP.	Traffic and Vehicle Management Sub Plan to be in place. No contractor parking on site.	2. Administration	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide