PBS	S Project Risk Registe	er			Acronym	PBS Project Reak Register (PRR)  Responsible Positions	Hierarchy of Control		Control Selections		<b>•</b> PBS
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	92%	
					SM	Site Manager	5. Substitution	5	%Controls < Engineering	8%	
					FM	Foreman	4. Isolation	39	Engineering		
Workplace Location	on: 32 Dolphin Ave, Mermaid Beach				CA	Contracts Administrator	3. Engineering	63	ßCheck formulas in	1 2-1 7 if vou	
Issue Numb	per: 1				EHSQ	EHSQ Co-Ordinator	2. Administration	9	add rows to ensu	re range is	
Issue Da	ate: 9/04/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0	_		Delete Legislation / Codes not applicable to
Activity Description	High Risk Construction Work	Hazard / Impact	Likelihood	Consequence		Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Contro (Highest Level	Responsible	Status	your jurisdiction  Legal and other
		(Worst Credible Consequence)						Control)			requirements
Air - Conditioning	Risk of Person Falling more than 2m	Fall of Person	C Possible	3 Medium	9	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.	Ticketed 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 specificiations. Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder.	3. Engineering	SS/SM	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
Air - Conditioning		Fire/Explosion	D Unlikely	3 Medium	6	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn. Flash back arrestors connected to all oxy sets.	225mm Grinder Permit to be in place	3. Engineering	SS/SM/FM	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
Air - Conditioning	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	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. Operator to be appropriately Trained / Ticketed.	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 ∨ 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. Refer to mobile crane operations activity in this PRR	4. Isolation	SS/SM/FM	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
Air - Conditioning		Cuts and Lacerations	C Possible	2 Small	6	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges. Eye Protection to be worn when cutting metalwork.	225mm grinder permit to be issued when applicable	3. Engineering	SS/SM/FM	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
Air - Conditioning		Plant Failure	D Unlikely	3 Medium	6	All duct lifters and portable type hoists must have a breaking system so that in the event of a hoisting wire failure the load cannot fall. In addition, outriggers where fitted must be used, SWL must be clearly marked & only propriety attachments are used and only in accordance with manufacturers instructions.		3. Engineering	SS / SM	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
Air - Conditioning		Hit by Falling Objects	D Unlikely	4 Large	8	Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. 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 burtled off with signage to prevent unauthorised access.	4. Isolation	SS/SM/FM	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		Electric Shock	B Likely	3 Medium	12	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.		3. Engineering	SS/SM	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	C Possible	3 Medium	9	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 postion 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, Trailning Register,)	Use Mechanical Aids. Team Lifts to occur.	3. Engineering	SS/SM	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.
Asbestos Removal	Carried out in an area that may have a contaminated atmosphere	Exposure to Hazardous Dust	A Almost Certain	3 Medium	15	Asbestos Register for relevant building to be requested from Client. Asbestos Removal Control Plan to be in place. Workers and Subcontractor must hold the correct class of licence for the type of asbestos identified to be removed (i.e. over 10m2). Health Monitoring to be done for all workers involved in the task prior to works commencing. Physical barriers to be set up around asbestos removal area with signage. Correct PPE to be worn. Enter Restricted Areas work permit to be issued. HR SWMS to outline methodology for controlling all asbestos dust and loose particles Hold Point - Clearance Certificate to be recieved prior to any other works occurring.	Surveillance air monitoring to be done by competent person and results to be entered into monitor register.  Asbestos Sub Plan to be developed to outline further controls. Notify Regulator in writing at least 5 days before commencing activity if over the 10m2 or friable.	6. Elimination	SS/SM/FM/SE/ CA	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, How to safely remove as
Asbestos Removal	Carried out in an area that may have a contaminated atmosphere	PPE, Tools and Waste Contamination	B Likely	3 Medium	12	Waste to be sealed in a container and labelled in accordance with the Globally Harmonised System of Classiffication and labelling to indicate it contains asbestos. Waste must be brought to an Licenced waste disposal facility which accepts asbestos waste. PBS to be given evidence of correct disposal at facility (i.e Tipping Dockets)		4. Isolation	SS/SM/FM	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, Labelling of workplace hazardous chemicals COP, How to safely remove asbestos COP
Concrete Coring	Carried out in an area that may have a contaminated atmosphere	Dust Inhalation	A Almost Certain	2 Small	10	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. Power tools to have vaccum /water attachments	3. Engineering	SS/SM	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 hazard



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Workplace Locatio	n: 32 Dolphin Ave, Mermaid Beach				CA	Contracts Administrator	3. Engineering	63	ßCheck formulas in L2-l		
Issue Numbe	er: 1				EHSQ	EHSQ Co-Ordinator	2. Administration	9	add rows to ensure ra correct	ange is	
Issue Dat	e: 9/04/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible S	Status	Legal and other requirements
Concrete Coring	Is carried out on or near energised electrical installations or services	Contact with Live Existing Services	B Likely	4 Large	16	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	SS/SM/FM/SE/ CA	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	C Possible	2 Small	6	Designated washout / recycling areas for concrete and concrete equipment with regular monitoring.		4. Isolation	SS/SM/FM	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 hazard
Concrete Placement		Failure of Structure	D Unlikely	5 Very Large	10		Securing requirements, load points, bracing and fixing details must be verified to be in accordance with an approved design and include suitable structural fixings that account for wind load considerations based on locality.	4. Isolation	SS/SM/FM/SE/ CA	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, Safe Design of Structures COP
Concrete Placement		Exposure to Hazardous Material	C Possible	2 Small	6	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	SS/SM	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 hazard
Concrete Placement		Fatigue	C Possible	2 Small	6	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	SS / SM	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	B Likely	3 Medium	12	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 helecopters etc. Authorised person only to be in direct workzone.	Documented check to confirm suitable barrier in place with no gaps in containment screens / scaffold to prevent concrete slurry falling to ground.	3. Engineering	SS / SM	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	C Possible	2 Small	6	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 barricaded off with physical barrier until deemed safe to enter.	4. Isolation	SS/SM/HSR	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		Working in High Temperatures - Heat Stress/Heat Exhaustion	C Possible	2 Small	6	Sufficient quantities of cool 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	SS/SM/HSR	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 Pump	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Plant Over-Turning	C Possible	4 Large	12	Set up in an area that is approved by PBS Site Manager. Plant is not to set up or traverse within the zone of influence of a service trench. Outriggers must be set up on stable ground. Licenced operators to operate boom/satellite pumps only.	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. Compaction test is required prior to set up of outriggers on disturbed soil. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles.	3. Engineering	SS / SM	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	C Possible	4 Large	12	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	SS / SM	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	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	B Likely	4 Large	16	Linesman to have postive communication with pump operator when positioning the line. Pump operator to have full sight of where concrete boom is being positioned.	Line Pump stands to be used on deck and for static lines on the ground.	3. Engineering	SS / SM	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
Demolition		Hit by Falling Objects	C Possible	3 Medium	9	Demolition Plan to be developed. Physical Barriers to be in place as an exclusion zone to prevent unauthorised access and must take the arc, bounce and deflection of materials into consideration. "Demolition in progress" signage to be installed. Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. B Class Hoarding installation for public protection.  Scaffold to be installed by a licenced scaffolder.	4. Isolation	SS / SM	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 Work COP,



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Workplace Location	n: 32 Dolphin Ave, Mermaid Beach				CA	Contracts Administrator	3. Engineering		ßCheck formulas ir add rows to ensu	re range is	
Issue Numbe	r: 1				EHSQ	EHSQ Co-Ordinator	2. Administration	9	correct		
Issue Date		Harand / Immast	Libelihaad	C	PE/SE	Project Engineer / Site Engineer	1.PPE	0 Hierarchy of Control	Decreasible	Chatus	Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	RISK Rating	Mandatory Control Measures	Site Specific Control Measures	(Highest Level Control)	Responsible	Status	Legal and other requirements
Demolition	Is carried out on or near pressurised gas distribution mains or piping; is carried out on or near chemical, fuel or refrigrant lines; is carried out on or near energised electrical installations or services	Contact with Live Existing Services	A Almost Certain	4 Large	20	PBS Isolation/Energisation Permit to be used. An Excavation Permit may also be needed. Any live services that remain inside PBS fence line above grade are to be identified using robust barricading and signage. DBYD to be reviewed by PBS and provided to Demolition Contractor. In ground services are to visually marked.	As builts to be received from the client to confirm existing services. Evidence and As Built drawings from client to identify any live and disconnected services within the project boundaries. Service Locator to be engaged to conduct survey of site and provide to PBS.	6. Elimination	SS/SM	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, Demolition Work COP
Demolition	Is carried out on or near energised electrical installations or services	Contact with Overhead Power Lines	B Likely	4 Large	16	No unloading / loading of trucks to happen in the vacinity of these powerlines. All plant to remain at a minimum approach distances to powerlines. Up to 132,000 volts = 3m. 132,000 - 330,000 volts = 6m.  Above 330,000 = 8m.	Tiger Tails to be installed by relevant authority as a visual reminder. Install height/location indicators. Non conductive barrier to be installed between building/plant and power lines. Competent Spotter to have postive communication with plant (UHF radios) and observe plant movements when design envelope has the potential to reach closer than 3 metres to power lines. Install signage as visual reminder.	4. Isolation	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety sisks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Demolition Work COP, Managing the risks of plant in the workplace COP, Managing electrical risks in the workplace COP
Demolition		Environmental Contamination from Spill of Hazardous Chemicals/Substances	C Possible	2 Small	6	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.		2. Administration	SS/SM	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	C Possible	3 Medium	9	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	SS / SM	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 hazard
Demolition		Cuts and Lacerations	C Possible	1 Very Small	3	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	SS/SM/FM	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		Works affect neighbouring structures	C Possible	2 Small	6	Dilapidation survey to be undertaken by consultant. Prior to works starting	Vibration Monitoring to be in place. Noise monitoring to be in place. Letter box drop to occur in 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	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety soks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Electrical	Risk of Person Falling more than 2m	Fall of Person	C Possible	4 Large	12	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 specificiations. Mobile scaffold to be used.  Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder.	3. Engineering	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety siks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Electrical	Is carried out on or near energised electrical installations or services	Electrocution	A Almost Certain	4 Large	20	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/solating 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. Isolation / Energlisation Permit to be issued. 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 CEW / 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 at all testing equipment must be carried out as per manufacturers instructions. Cordies 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.	Permanent House Distribution Boards diplayed power supplier / Authority compliance labels which allow power connection area a higher control level confirming 'test and tag' requirements. Permanent House Distribution Boards must be fitted with machanical protection to prevent leads being damaged before use by contractors.	4. Isolation	SS/SM/FM	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	B Likely	3 Medium	12	Authorised person only to be in direct workzone. Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. 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	SS/SM	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	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	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. Operator to be appropriately Trained / Ticketed.	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 plantivehicles. Use Tag Lines when appropriate to control light weight ∨ 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. Refer to mobile crane operations activity and excavation activity in this PRR.	4. Isolation	SS/SM	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



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Workplace Location:	32 Dolphin Ave, Mermaid Beach				CA	Contracts Administrator	3. Engineering	63	ßCheck formulas ir		
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Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	(Highest Level	Responsible	Status	
		Consequence)						Control)			requirements
Electrical		Cuts and Lacerations	C Possible	2 Small	6	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	SS/SM/FM	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
Emergency Planning		Emergency Risk Assessment	A Almost Certain	5 Very Large	21+	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. Site team to input sizeflitre of spill kit required revelant to the risk. 1 fire extinguisher (to suit class a,b,c & electrical fire) on each storey adjacent to each exit or temporary stainway 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	SS / SM	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	Involves, or is likely to involve, the disturbance of asbestos	Exposure to Hazardous Dust	C Possible	3 Medium	9	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 hygeinist. 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. All workers to hold as	3. Engineering	SS / SM	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	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	B Likely	4 Large	16	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 be used when operating plant and equipment.	Exclusion zone to be in place to prevent unauthorised entry to work area.	3. Engineering	SS / SM	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	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Falling Objects	C Possible	3 Medium	9	Any spoil must be stored at least 1m back from edge and on down slope side. All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be tesked a monthly and documented on a register. Chains are to be tested yearly and documented on a register. The SWL of lifting equipment is not to be exceeded. Weight of load to be lifted to be predetermined by a qualified person and marked on load. Selection of sling & ellinging techniques for load is predetermined by a competent person. Lifting points are to be predetermined by a competent person and marked on the load. Standard lifting procedures must be documented within HR SWMS. Authorised person only to be in direct workzone.	Physical Barriers to be in place around edge of excavation to prevent the fall of materials / tools into	3. Engineering	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safely risks COP, Work health and safely consultation, coordination and cooperation COP, PBS Safety Guide, Excavation COP
Excavation	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Plant Over-Turning	C Possible	4 Large	12	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.		3. Engineering	SS / SM	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, PSS Safety Guide, Managing the risks of plant in the workplace COP, Excavation COP
Excavation		Fire/Explosion when refuelling plant and equipment	C Possible	3 Medium	9	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 combustable material.	Designated refuelling area to be identified with signage on site. Hazardous Chemicals and Dangerous Goods Management Sub Plan to be in place.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consulation, 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	C Possible	2 Small	6	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	SS / SM	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 hazard
Excavation		Working in High Temperatures - Heat Stress/Heat Exhaustion	C Possible	2 Small	6	Sufficient quantities of cool 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	SS/SM/HSR	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	C Possible	2 Small	6	Heated amenities to be provided. Suitable Access / Egress to be provided to work areas. 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 barricaded off with physical barrier until deemed safe to enter.	3. Engineering	SS/SM/HSR	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	C Possible	3 Medium	9	Dilapidation survey to be undertaken by consultant. Prior to works starting	Vibration Monitoring to be in place. Noise monitoring to be in place. Letter box drop to occur in 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	SS/SM	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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PBS Unexpected Finds protocol to be followed. Contractor to include unexpected finds protocol in their HR SWMS.

2 Small

Unexpected Find

Excavation



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

SS / SM

DRC	Project Risk Registe	ar.			Acronym	PBS Project Risk Register (PRR)  Responsible Positions	Hierarchy of Control		Control Selections		<b>A</b> DDC
F 53	r roject Kisk Kegisti	<b>51</b>					,		%Controls ≥		PBS
					SS	Sub-Contractor Supervisor	Elimination     Substitution	3	Engineering  %Controls <	92%	
					FM	Site Manager  Foreman	Substitution     4. Isolation	39	Engineering	8%	
Workplace Location	32 Dolphin Ave, Mermaid Beach				CA	Contracts Administrator	3. Engineering	63			
Issue Number					EHSQ	EHSQ Co-Ordinator	2. Administration	9	ßCheck formulas ir add rows to ensu correct	re range is	
					PE/SE		1. PPE	0			Delete Legislation / Codes not applicable to
Activity Description	High Risk Construction Work	Hazard / Impact	Likelihood	Consequence		Project Engineer / Site Engineer  Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control	Responsible	Status	your jurisdiction  Legal and other
,		(Worst Credible Consequence)						(Highest Level Control)			requirements
Fencing	Is carried out on or near pressurised gas distribution mains or piping; is carried out on or near energised electrical installations or services	Contact with In-Ground Services	B Likely	4 Large	16	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 builts 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 sucker truck/hand digging every 5m to determine direction of service Energise/Isolate Permit may also be required.	3. Engineering	SS/SM/FM	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
Fencing		Hit by Falling Objects	C Possible	3 Medium	9	No unsecured components to be left outside PBS fence line.	Semi - Permanent Fencing to be installed.Temporary Fencing to be erected in accordance with AS4687 requirements. Handover to be received from contractor that installs fence to confirm installation to australian standards and manufacturer requirements.	3. Engineering	SS/SM	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
Fire Services		Cuts and Lacerations	D Unlikely	1 Very Small	2	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges. Eye Protection to be worn when using explosive power tool. No high velocity/direct action Explosive Power Tool to be used on site unless approved by PBS Site Manager and the controls required are communicated to workers via a toolbox. Explosive Powered Tool charges must be stored in a locked metal box marked "explosives".  Used charges must be disposed of immediately after use.	225mm grinder permit to be issued when applicable	5. Substitution	SS/SM/FM	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
Fire Services		Noise	C Possible	2 Small	6	Hearing Protection to be worn.	Signage to be in place when using Explosive Power Tools.	2. Administration	SS/SM	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 noise and preventing hearling loss at the work COP
Formwork		Failure of Structure	B Likely	5 Very Large	20	Structural engineer to provide documented authorisation prior to concrete pour & stripping. Engineer to include in drawing or provide written instruction where all load points are on deck. Where material is designed to an international or another standard, engineer must certify that it conforms to relevant australian standard. Evidence verifying formwork sheets conform to Australian Standards must be kept on site. Provide Formwork Documentation in accordance with Section 2.4 of AS3610.1-2010. Hold Point-PBS pre-pour checklist to be completed prior to pouring any decks.	Formwork framing to be protected against impact from moving plant & equipment.	3. Engineering	SS/SM/FM/SE/ CA	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, Safe Design of Structures COP
Formwork		Cuts and Lacerations	B Likely	3 Medium	12	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges.	Frames and timbers are not to obstruct access ways, temporary power boards or emergency exits.  225mm grinder permit to be issued when applicable	3. Engineering	SS/SM/FM	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
Formwork	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	D Unlikely	3 Medium	6	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. Operator to be appropriately Trained / Ticketed.	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. Use Tag Lines when appropriate to control light weight &/or large panel lifts in windy conditions. Dogma and Operator to sign into Crane Management Sub Plant. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS/SM	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
Frames and Trusses	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Platform Ladders or EWP to be used in the first instance. Work trestles of minimum 450mm width 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. Ensure framing packs are stable & stacked at a workable height. Upper floor level are not to be accessed until edge protection and stair void protection are installed and handover certificate has been received and displayed. Sultable access must be provided to upper levels which ensures there is no exposure to worker of risk of fall (swing gate/hatch at top of ladder or similar). All openings from which a person can fall must be adequately protected (such as window and door openings, stair voids etc). No walking on external top plates or within 2 metres of external top plate unless external fall protection is in place. Ensure clear access way from stack to place of erection. 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.	Ceiling joists and upper level joists must be installed from the floor underneath. The laying of floor sheets should begin adjacent to an internal or external access point which provides initial fall protection for workers. Laying of sheets should then proceed using a methodology outlined in the HR SWMS which prevents workers from falling over the edge. Unpacking of trusses must be undertaken off of a suitable work platform from the level underneath. Fall Protection must be in place on Party Wall side prior to works commencing on party wall. When trusses are erected at up to 600 mm centres, persons working between the trusses to fix or brace them can use the erected trusses as a form of fall protection under controlled conditions that must be set out in the HR SWMS. When the spacings of trusses exceed 600mm centres, suitable fall protection must be in place (mobile scaffold, safety nets, catch platform, use of EWP etc) and methodology must be outlined in the HR SWMS.	3. Engineering	SS / SM	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
Frames and Trusses		Failure of Structure	D Unlikely	4 Large	8	Ensure all standing frames are suitably braced to prevent potential falling frames. If truss spacing is more than 900mm fix longitudinal bracing as each truss is being stood.		3. Engineering	SS/SM	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, Safe Design of Structures COP
Frames and Trusses		Hit by Falling Objects	B Likely	3 Medium	12	Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. 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	SS/SM	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
Frames and Trusses	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	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. Operator to be appropriately Trained / Ticketed.	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 llight 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. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS/SM	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
Frames and Trusses		Cuts and Lacerations	C Possible	2 Small	6	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges. Eye Protection to be worn when using explosive power tool. No high velocity/direct action Explosive Power Tool to be used on site unless approved by PBS Site Manager and the controls required are communicated to workers via a toolbox. Explosive Powered Tool charges must be stored in a locked metal box marked *explosives*.  Used charges must be disposed of immediately after use.	225mm grinder permit to be issued when applicable	5. Substitution	SS/SM/FM	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
Frames and Trusses		Noise	C Possible	2 Small	6	Hearing Protection to be worn.	Signage to be in place when using Explosive Power Tools.	2. Administration	SS/SM	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 noise and preventing hearling loss at the work COP

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PBS	S Project Risk Regist	er			Acronym	PBS Project Risk Register (PRR)  Responsible Positions	Hierarchy of Control		Control Selections		<b>●PBS</b>		
		-			SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥	92%	UPD3		
					SM	Site Manager	5. Substitution	5	## Controls <	8%			
					FM	Foreman	4. Isolation	39	Engineering				
Workplace Locatio	n: 32 Dolphin Ave, Mermaid Beach				CA	Contracts Administrator	3. Engineering	63		1 2-1 7 if you			
Issue Numbe	er: 1				EHSQ	EHSQ Co-Ordinator	2. Administration		add rows to ensur				
Issue Dat	te: 9/04/2021				PE/SE	Project Engineer / Site Engineer	1. PPE 0						Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact	Likelihood	Consequence		Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level	Responsible	Status	Legal and other		
		(Worst Credible Consequence)						Control)			requirements		
Landscaping	Is carried out on or near pressurised gas distribution mains or piping; is carried out on or near energised electrical installations or services	Contact with In-Ground Services	B Likely	4 Large	16	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 builts 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 sucker truck/hand digging every 5m to determine direction of service Energise/Isolate Permit may also be required.	3. Engineering	SS/SM/FM	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		
Landscaping	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	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 be used when operating plant and equipment.	Exclusion zone to be in place to prevent unauthorised entry to work area. Emergency stop button to be	4. Isolation	SS / SM	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		
Landscaping	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Plant Over-Turning	D Unlikely	4 Large	8	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.	4. Isolation	SS / SM	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		
Landscaping		Fire/Explosion when refuelling plant and equipment	C Possible	4 Large	12	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 combustable material.	Designated refuelling area to be identified with signage on site. Hazardous Chemicals and Dangerous Goods Management Sub Plan to be in place.	4. Isolation	SS / SM	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 hazard		
Landscaping		Environmental Contamination from Spill of Hazardous Chemicals/Substances	D Unlikely	3 Medium	6	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.		2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety siks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP		
Landscaping	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Falling Objects	D Unlikely	4 Large	8	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. The SWL of lifting equipment is not to be exceeded. Where a dogman is not available - Weight of load to be lifted to be predetermined by a competent person and marked on load. Selection of sling & slinging techniques for load is predetermined by a competent person. Lifting points are to be predetermined by a competent person and marked on the load. Standard lifting procedures must be documented within HR SWMS. Authorised person only to be in direct workzone.		3. Engineering	SS/SM	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		
Landscaping		Working in High Temperatures - Heat Stress/Heat Exhaustion	E Rare	2 Small	2	Sufficient quantities of cool 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	SS/SM/HSR	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		
Landscaping		Working in Cold, Inclement or Windy Weather	E Rare	2 Small	2	Heated amenities to be provided. Suitable Access / Egress to be provided to work areas. 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 barricaded off with physical barrier until deemed safe to enter.	3. Engineering	SS/SM/HSR	Open	COP  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		
Masonry		Hit by Falling Objects	B Likely	4 Large	16	Physical barriers to be in place as an exclusion zone to prevent access adjacent to or behind the uncured wall and must take into consideration the arc, fall and bounce of materials and tools.	Tools to be on lanyards when working above 2m fall risk.	4. Isolation	SS / SM	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		
Masonry		Cuts and Lacerations	C Possible	2 Small	6	All guards to be fitted to power tools. Brick saw to be locked on solid bench.	225mm grinder permit to be issued when applicable	3. Engineering	SS/SM/FM	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		
Masonry		Failure of Structure	B Likely	4 Large	16	Temporary bracing of all 'green walls' above 1.5m to be installed prior to any additional courses being laid.  Contractor supervisor to ensure scaffold decks not overloaded with max loading signage visible. Masonry walls must be designed by a qualified and registered engineer. Masonry walls must not be erected in adverse weather conditions.		3. Engineering	SS/SM/FM/SE/ CA	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety siks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Safe Design of Structures COP		
Masonry		Noise	C Possible	2 Small	6	Hearing Protection to be worn. Brick Saw to be set up in an isolated cutting area with signage	Brick saw to be encapsulated by materials which reduce the level of noise emitted.	4. Isolation	SS / SM	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 noise and preventing hearing loss at the work COP		
Masonry		Environmental Contamination from Spill of Hazardous Chemicals/Substances	D Unlikely	2 Small	4	Designated washout / recycling areas for concrete and concrete equipment with regular monitoring. Waste water must be controlled from flowing across walkways, work areas and outside site boundaries.		4. Isolation	SS / SM	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 hazardo		



						PBS Project Risk Register (PRR)					
PBS Proj	ect Risk Registe	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections		<b>•</b> PBS
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	92%	
					SM	Site Manager	5. Substitution	5	%Controls < Engineering	8%	
					FM	Foreman	4. Isolation	39	3 3		
Workplace Location: 3	32 Dolphin Ave, Mermaid Beach				CA	Contracts Administrator	3. Engineering	63	ßCheck formulas in	L2-L7 if you	
Issue Number:	1				EHSQ	EHSQ Co-Ordinator	2. Administration	9	add rows to ensur correct		
Issue Date:	9/04/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description High	h Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements
· · · · · · · · · · · · · · · · · · ·	ed out in an area at a ace in which there is any nent of powered mobile plant	Hit by Moving Plant	A Almost Certain	4 Large	20	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 be used when operating plant and equipment. Dogman and Operator to sign into Crane Management Sub Plan. Use Tag Lines when appropriate to control flight weight &/or large panel lifts in windy conditions. Operator to be appropriately Trained / Ticketed.	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	SS/SM	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/Cr awler)		Hit by Falling Objects	B Likely	4 Large	16	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. Chairs 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	SS / SM	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
•	ed out in an area at a ace in which there is any nent of powered mobile plant	Plant Over-Turning	B Likely	4 Large	16	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	SS / SM	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
1 - 1	ed out on or near energised cal installations or services	Contact with Overhead Power Lines	C Possible	4 Large	12	Dogman and Operator to sign into Crane Management Sub Plan. No unloading / loading of trucks to happen in the vacinity of these powerlines. All plant to remain at a minimum approach distances to powerlines. Up to 132,000 volts = 3m. 132,000 - 330,000 volts = 6m. Above 330,000 = 8m.	Tiger Tails to be installed by relevant authority as a visual reminder. Install height/location indicators. Non conductive barrier to be installed between plant and power lines. Competent Spotter to have postive communication with plant (UHF radios) and observe plant movements when design envelope has the potential to reach closer than 3 metres to power lines. Install signage as visual reminder. Non conductive tag lines to be used to control load.	3. Engineering	SS / SM	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, Managing electrical risks in the workplace COP
Mobile Crane Operations (includes Vehicle Mounted Crane/Telehandler/Franna/Cr awler)		Plant Failure	C Possible	4 Large	12	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.	Work box available for rescue	3. Engineering	SS / SM	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
Perimeter Screens Risk of	Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Install handrails & mesh prior to lifting screens. Documented emergency procedure for retrieval of injured workers to be included in HR SWMS.	Use of Harness Work Permit to be issued. Harness to be inspected daily before use and maintained as per manufacturer specifications. Person with working at heights ticket to conduct works involving use of harness only.	6. Elimination	SS/SM/FM	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
Perimeter Screens		Hit by Falling Objects	A Almost Certain	4 Large	20	Lifting control by competent person. Lifting screens handover certificate to be provided prior to works being allowed to commence on decks. Authorised person only to be in direct workzone.		2. Administration	SS / SM	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
Perimeter Screens		Failure of Structure	B Likely	5 Very Large	20	Structural engineer to approve design and erection to be done by competent personnel. Lifting control by qualified person.		2. Administration	SS/SM/FM/SE/ CA	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, Safe Design of Structures COP
Plumbing Risk of	Person Falling more than 2m	Fall of Person	C Possible	4 Large	12	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.	Ticketed 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 specificiations. Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder.	3. Engineering	SS / SM	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		Fire/Explosion	C Possible	3 Medium	9	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn. Flash back arrestors to all oxy sets.	Flash/welding Screens to be installed to protect the public and other workers.	3. Engineering	SS/SM/FM	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	C Possible	2 Small	6	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	SS/SM/FM	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 Is carrie	ed out in an area at a						Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to				WHS Act 2011, WHS Regulations 2017.

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. Operator to be appropriately Trained / Ticketed.

Authorised person only to be in direct workzone.

Hit by Moving Plant

Hit by Falling Objects

Is carried out in an area at a workplace in which there is any

movement of powered mobile plant

4 Large

2 Small

B Likely

C Possible

Plumbing

Plumbing



4. Isolation

SS/SM

SS/SM

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

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

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 llight weight Xor 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. Refer to mobile crane operations activity and excavation activity in this PRR.

Tools to be on lanyards when working above 2m fall risk. 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.

PBS	Project Risk Registe	er			Acronym	PBS Project Roak Register (PRR)  Responsible Positions	Hierarchy of Control		Control Selections	5	●PBS
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	92%	
					SM	Site Manager	5. Substitution	5	%Controls < Engineering	8%	
					FM	Foreman	4. Isolation	39	Liginosing		
Workplace Location:	32 Dolphin Ave, Mermaid Beach				CA	Contracts Administrator	3. Engineering	63	ßCheck formulas i	n I 2-I 7 if vou	
Issue Number:	1				EHSQ	EHSQ Co-Ordinator	2. Administration	9	add rows to ensu	ure range is	
Issue Date:	9/04/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0	1		Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other
		(Worst Credible Consequence)						Control)			requirements
Plumbing		Environmental Contamination from Spill of Hazardous Chemicals/Substances	E Rare	2 Small	2	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	SS/SM	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 hazard
Plumbing		Exposure to Hazardous Material	D Unlikely	2 Small	4	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	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety siks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Roof Hand-Rail Installation	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Erected in accordance with suppliers installation manual to full perimeter of structure. Handover Certificate to be completed and provided to PBS. Scaff Tag (or equivalent signage) to be displayed on rail adjacent to entry point. HR SWMS to be developed by installer.		3. Engineering	SS / SM	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
Roof Rail Installation		Hit by Falling Objects	B Likely	4 Large	16	If no continous toe board installed, a barricaded isolation zone must be in place below where person are working. Authorised person only to be in direct workzone.		4. Isolation	SS / SM	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
Roofing	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Heavy Duty sarking or safety mesh with adequate overlap and tie points or intermediate battens must be installed. Authorised access to roof only. 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.	Safety Mesh to be signed off by competent person and handover to be given to PBS. Voids to be adequately protected prior to accessing roof level (i.e skylights) Where the slope of a roof exceeds 35 degrees the roof is an inappropriate surface to stand on, even with guardrailing or a catch platfrom. In these circumstances, roof workers need a system to prevent both sliding and falling from the perimeter and this must be documented in the HR SWMS. Use of Harness Work Permit to be issued. Harness to be inspected daily before use and maintained as per manufacturer specifications. Person with working at heights ticket to conduct works involving use of harness only. Safety catch netting installed under potential fall zones. Perimeter scaffolding installed around the perimeter.	3. Engineering	SS/SM/FM	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
Roofing		Hit by Falling Objects	B Likely	4 Large	16	Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. 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	SS/SM	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
Roofing		Noise	D Unlikely	2 Small	4	Hearing Protection to be worn.	Signage to be in place when using Explosive Power Tools.	2. Administration	SS/SM	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 noise and preventing hearing loss at the work COP
Roofing		Cuts and Lacerations	E Rare	2 Small	2	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges. Eye Protection to be worn when using explosive power tool. No high velocity/direct action Explosive Power Tool to be used on site unless approved by PBS Site Manager and the controls required are communicated to workers via a toolbox. Explosive Powered Tool charges must be stored in a locked metal box marked "explosives".  Used charges must be disposed of immediately after use.	225mm grinder permit to be issued when applicable	5. Substitution	SS/SM/FM	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
Roofing	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	D Unlikely	4 Large	8	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. Operator to be appropriately Trained / Ticketed.	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 Stor 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. Refer to mobile crane operations activity	4. Isolation	SS/SM	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
Scaffold	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Non - compliant areas of scaffold are to be isolated with signage (i.e Danger - incomplete scaffold).  Sequential erection / dismantle method to ensure fall prevention for scaffolders at all times. Scaffolder working platforms to be min 450mm wide with access & handrails above 1.5m fall. No trades to modify any scaffold components / arrangements nor overload platforms.	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.	3. Engineering	SS/SM	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
Scaffold		Hit by Falling Objects	A Almost Certain	4 Large	20	Exclusion zone using physical barrier to be in place for erection / dismantle / altering of scaffold activities.  All platforms shall be closely decked such that a gap between individual decking components in a bay is not greater than 10mm - this applies to platforms greater than 2m above ground. Authorised person only to be in direct workzone.		3. Engineering	SS/SM	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
Scaffold		Failure of Structure	A Almost Certain	5 Very Large	21+	Ensure that person/s are nominated to co-ordinate number of scaffold working decks (i.e close off access to current non working decks) & material loading on each deck at any one time. Scaffold to be erected in accordance with manufacturer's instructions &/or in accordance with approved scaffold plan. Handover certificate to be provided and scaff tags to be updated at each access point / change of duty loading every 30 days. No trades to modify any scaffold components / arrangements nor overload platforms. Allowable loading limits to be signed or marked on scaffold decks. Provide protection to scaffold components adjacent to areas where mobile plant is operating.	Use designated loading platforms with loading limit signage displayed.	3. Engineering	SS / SM	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, Safe Design of Structures COP
	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	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. Operator to be appropriately Trained / Ticketed.	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 plantivehicles. Use Tag Lines when appropriate to control light weight &/or large panel lifts in windy conditions. Oogman 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 if available. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety siks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP



**PBS Project Risk Register** Acronym **Responsible Positions** Hierarchy of Control 92% SS Sub-Contractor Supervisor Engineering 8% SM Site Manager Substitution 5 FM Foreman 4. Isolation 39 Workplace Location: 32 Dolphin Ave, Mermaid Beach CA Contracts Administrator 63 Engineering ßCheck formulas in L2-L7 if you add rows to ensure range is correct **FHSO** FHSQ Co-Ordinator 2. Administration 9 Issue Number ete Legislation / Codes not applicable to 9/04/2021 PE/SE Project Engineer / Site Engineer 1. PPE Legal and other Risk Rating **High Risk Construction Work** Consequence **Mandatory Control Measures Site Specific Control Measures Activity Description** (Worst Credible Consequence) WHS Act 2011, WHS Regulations 2017, Sufficient quantities of cool drinking water is readily available close to work areas. Regularly rotate workers Norking in High Temperatures 3. Engineering D Unlikely 2 Small who perform more strenuous activities with less demanding tasks. Take regular work breaks in cooler areas such as air conditioned sheds. Shade Covers to be installed. Workers to wear broad brimmed hats and sunglasses for UV protection SS / SM / HSR Open 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 barricaded off with physical barrier until deemed safe to Heated amenities to be provided. Suitable Access / Egress to be provided to work areas. Following Working in Cold. Inclement of SS / SM / HSR D Unlikely 2 Small 4. Isolation Open adverse weather conditions a full inspection to be conducted by a competent person of the scaffold Is carried out in an area at a Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to workplace in which there is any ensure no personnel inside crane operating areas. Outriggers of crane to be protected by jersey kurbs or No one is to approach plant unless confirmation has been received by the operator that it is ok to movement of powered mobile plant similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control light weight Hit by Moving Plant C Possible 3 Medium approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed. Salmai to prevent in the intermediate plantveniones. Use l'ag Lines when appropriate to control light weight &for large panel lifst invindy 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 if available. Refer to mobile crane operations activity in this PRRI. 4. Isolation SS / SM Open Fire/Explosion C Possible Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worm Flash/welding Screens to be installed to protect the public and other workers. SS / SM / FM 3 Medium All guards to be fitted to power tools. Install bar caps on all exposed steel bars. Wear gloves when working SS/SM/FM 225mm grinder permit to be issued when applicab 3. Engineering

Scaffold 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 Scaffold 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 facilitie COP Steel Fixing 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 Steel Fixing WHS Act 2011 WHS Regulations 2017 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 Steel Fixing 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 Structural Steel Risk of Person Falling more than 2m EWP or Scaffold to be used for access for install of structural steel. Platform ladders may also be used of even surfaces. 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, WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder. Ticketed Personnel required for operation of EWP. Harness to be worn and connected prior to bucket Fall of Person SS / SM B Likely 4 Large \*A portable handrail system is provided by the project and, 3. Engineering \*The use of a portable loading bay platform would be the ideal control measure eing raised. Harness to be inspected daily before use and maintained as per manufacturer specificia nealth and safety consultation, coordination and cooperation COP, PBS Safety Guide When one or more of these controls are implemented, workers may use the access ladder and maintain points of contact when ascending or descending. WHS Act 2011, WHS Regulations 2017, Structural Steel Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide. Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn. Flash/welding Screens to be installed to protect the public and other workers. 225mm Grinder Permit to A Almost Certain SS / SM / FM Fire/Explosion Flash back arrestors to all oxy sets. Welding processes COP Structural Steel 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 Tools to be on lanyards when working above 2m fall risk. Physical barriers to be in place as an exclusion Hit by Falling Objects C Possible 3 Medium Authorised person only to be in direct workzone 4. Isolation SS / SM WHS Act 2011, WHS Regulations 2017, 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. 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. Refer to mobile crane operations activity in this PRR. Structural Steel Is carried out in an area at a Construction Work COP, How to manage work health and safety risks COP, Work 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. Operator to be appropriately Trained / Ticketed. workplace in which there is any SS/SM C Possible health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace movement of powered mobile plant Hit by Moving Plant 4 Large COP Structural Steel 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 Cuts and Laceration D Unlikely 2 Small 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 SS / SM / FM Open 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. Traffic control signs and devices are to be checked daily to confirm Traffic Contro Is carried out on, in or adjacent to a WHS Act 2011, WHS Regulations 2017 Physical Barrier which will take the force of a vehicle crashing into it to be set up in between workers are 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 Construction Work COP, How to manage work health and safety risks COP, Work road that is in use by traffic other 4 Large Hit by Moving Vehicular Traffic 3. Engineering SS / SM than pedestrians health and safety consultation, coordination and cooperation COP, PBS Safety Guide they are still erected as per TCP and documented using PBS Traffic Controls Daily Checklist Traffic Control Is carried out on, in or adjacent to a WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage road that is in use by traffic other Traffic Management and Traffic Control Plan to be in place which has been selected or created by a No contractor parking on site. Workers are advised to utilise public transport. Work Zone on the road is only Impact on current Traffic 15 SS / SM C Possible 5 Very Large Substitution Open work health and safety risks COP. Work competent person. Traffic Control signage and devices to be installed as per approved TCP to be utilised for delivery of material and tools. Traffic and Vehicle Management Sub Plan to be in place than pedestrians health and safety consultation, coordinatio and cooperation COP, PBS Safety Guide Traffic Control Is carried out on, in or adjacent to a road that is in use by traffic other WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage Traffic Management and Traffic Control Plan to be in place which has been selected or created by a pers than pedestrians: Is carried out in an holding the correct tickets if works conducted outside PBS Perimeter Fencing. Traffic Control signage and devices to be installed as per approved TCP. Traffic control signs and devices are to be checked daily to confirm they are still erected as per TCP and documented using PBS Traffic Controls Daily Checklist Vehicle / Plant Collision C Possible Traffic and Vehicle Management Sub Plan to be in place. No contractor parking on site 2. Administration SS / SM 5 Very Large Open work health and safety risks COP, Work health and safety consultation, coordination area at a workplace which therre is and cooperation COP. PBS Safety Guide any movement of powered mobile plant. Suitably qualified and experienced person only to climb tree's and remove/top tree branches. Qualified Arborists to confirm tree sutable for climbing. Use of Harness Work Permit to be issued. Harness to be inspected daily before use and maintained as per manufacturer specifications. Ticketed Personnel required WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work Tree Trimming and Removal Risk of Person Falling more than 2m B Likely 4 Large 3. Engineering 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 specificiations. health and safety consultation, coordination and cooperation COP, PBS Safety Guide



s						PBS Project Risk Register (PRR)					
PBS	Project Risk Registe	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections	;	<b>PBS</b>
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	92%	
					SM	Site Manager	5. Substitution	5	%Controls < Engineering	8%	
					FM	Foreman	4. Isolation	39			
Workplace Location:	32 Dolphin Ave, Mermaid Beach				CA	Contracts Administrator	3. Engineering	63	ßCheck formulas in		
Issue Number:	1				EHSQ	EHSQ Co-Ordinator	2. Administration	9	add rows to ensu correc		
Issue Date:	9/04/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements
Tree Trimming and Removal Work		Hit by Falling Objects	B Likely	4 Large	16	Tools to be on lanyards when working above 2m fall risk. Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools. Trained and competent operators (as per national unit of competency) to undertake tree felling work only. Authorised person only to be in direct workzone.	Physical Barriers to be in place as an exclusion zone. Spotters in place at every possible entry point to prevent access to danger area.	4. Isolation	SS/SM	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
Tree Trimming and Removal Work		Damage to protected flora or fauna	C Possible	3 Medium	9	Tree Protection zones using robust barricading to be in place with signage. Flora and Fauna Managmenet Sub Plan to be in place.	Timber batten protection to be placed directly onto the tree trunks in High Pedestrian traffic areas (I.e. public locations in the street near PBS hoardings)	4. Isolation	SS / SM	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
Tree Trimming and Removal Work		Projectiles hitting personnel	C Possible	3 Medium	9	Correct PPE to be worn. Trained and competent operators of plant and equipment. All guards as per manufacturer specifications are to be on chipping machines, chainsaws and general plant. Only specified tree/branch sizes to be placed into chipping machines.	Physical Barriers to be in place as an exclusion zone. Spotters in place at every possible entry point to prevent access to danger area.	4. Isolation	SS/SM	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
Tree Trimming and Removal Work		Cuts and Lacerations	C Possible	4 Large	12	All guards to be fitted to power tools. Only competent (as per national unit of competency) and trained operators to use chainsaw. Chainsaw should not be used above shoulder height. Select chainsaw with the shortest practicable bar length for each work task undertaken. Chainsaw to be operated and maintained in accordance with manufacturers instructions. Chainsaw to be started on level ground and be secure when pulling the starter.	225mm grinder permit to be issued when applicable	5. Substitution	SS/SM	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
Windows	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	Scaffold or EWP to be used. Platform ladders may be used on ground floor. 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.	Ticketed 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 specificiations. Mobile scaffold to be used. Any mobile scaffold over the needs to be erected by a toketed scaffolder. Loads to arrive pre-slung to eliminate the need for workers to stand on the truck tray. Internal edge protection needed when installing windows from inside the building on any level above ground.	3. Engineering	SS / SM	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
Windows		Hit by Falling Objects	B Likely	3 Medium	12	Approved, regularly inspected lifting frames to be used. Check suction and battery strength prior to lifting if applicable. Engineered lifting frames to be inspected annually by boiler maker or other competent person to ensure suitability for purpose and be recorded on plant and equipment register. Authorised person only to be in direct workzone.		4. Isolation	SS/SM	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
	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	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. Operator to be appropriately Trained / Ticketed.	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 llight 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. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS / SM	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, PSS Safety Guide, Managing the risks of plant in the workplace COP
Windows		Cuts and Lacerations	D Unlikely	2 Small	4	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	SS / SM	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
Local Traffic Condition						PBS will either communicate directly (through Letter drops, Public Notice Boards or Consultation sessions) with these entities, or through the client established communication protocols for feedback when assessing HIRAC to be implemented when reducing any potential risks(s) posed.					
Neighbouring Residents						De Bitymentented when reducing any potential risk(s) posesu.  PBS will either communicate directly (through Letter drops, Public Notice Boards or Consultation sessions) with these entities, or through the client established communication protocols for feedback when assessing HIRAC to be implemented when reducing any opential risk(s) posed.					
Local Council Requirements						De implemented when reducing any potential risk(s) posed.  PBS will either communicate directly (through Letter drops, Public Notice Boards or Consultation sessions) with these entities, or through the client established communication protocols for feedback when assessing HIRAC to be implemented when reducing any potential risk(s) posed.					

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