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|  Issue: 7 Date: 01/04/2017 | <table style="width: 100%; border: none;"> <tr> <td style="width: 30%; border: none;">VS(CHORUS)-SWM-004</td> <td style="width: 70%; border: none; text-align: right;">NZ SHEWMS – v7</td> </tr> <tr> <td colspan="2" style="border: none; text-align: center;"> <h2 style="margin: 0;">SAFETY, HEALTH AND ENVIRONMENT WORK METHOD STATEMENT</h2> <h3 style="margin: 0;">Working at Heights – Hardware install / Cable hauling</h3> </td> </tr> </table> | VS(CHORUS)-SWM-004 | NZ SHEWMS – v7 | <h2 style="margin: 0;">SAFETY, HEALTH AND ENVIRONMENT WORK METHOD STATEMENT</h2> <h3 style="margin: 0;">Working at Heights – Hardware install / Cable hauling</h3> | |
| VS(CHORUS)-SWM-004 | NZ SHEWMS – v7 | | | | |
| <h2 style="margin: 0;">SAFETY, HEALTH AND ENVIRONMENT WORK METHOD STATEMENT</h2> <h3 style="margin: 0;">Working at Heights – Hardware install / Cable hauling</h3> | | | | | |


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| Project: (CIRCLE) <u>UFB / M&P / NGA / BAU / RBI / OTHER:</u> | Project Office Address: <u>1. Auckland – Patch 7, 8, 9</u> <u>2. Whangarei – Patch 10</u> | |
| Project No: _____ | Client or Principal: CHORUS | |
| Field Manager: _____ | PH: _____ | Safety Coordinator: _____ |
| SHEWMS Valid From: <u>01/04/2017</u> | SHEWMS Valid To: <u>01/04/2018</u> | Location / Area of Works: <u>1. Auckland – Patch 7, 8, 9</u> <u>2. Northland – Patch 10</u> |

SHEWMS Re-Induction Schedule (Click appropriate check box):
 Daily ☐ Weekly ☐ Monthly ☐ Quarterly ☒ **STRIKE reporting: 027 523 1251**

| TELECOMMUNICATIONS SAFETY ESSENTIALS: (Check box for those relevant to this work activity) | | | | | | | | | |
|--|-------------------------------------|--|-------------------------------------|---|-------------------------------------|--|-------------------------------------|--------------------------|-------------------------------------|
| 1. Confined Spaces | <input type="checkbox"/> | 3. Driver Alertness | <input checked="" type="checkbox"/> | 5. Excavation Works | <input checked="" type="checkbox"/> | 7. Working in and around Mobile Plant | <input checked="" type="checkbox"/> | 9. Heavy Lifting | <input checked="" type="checkbox"/> |
| 2. Working at Heights | <input checked="" type="checkbox"/> | 4. Working in the Vicinity of Utility Services | <input checked="" type="checkbox"/> | 6. Working in the Vicinity of Vehicular Traffic | <input checked="" type="checkbox"/> | 8. Working Remote and Isolated Locations | <input checked="" type="checkbox"/> | 10. Exposure to Asbestos | <input type="checkbox"/> |

- Aerial Minimum Approach Distances (MAD) must be maintained at all times. The VPL MAD from Low Voltage is 500mm
- Only a competent person may enter inside the MAD, and only if a Close Approach Consent has been requested and approved by the Utility Owner. Only the Utility Owner Rep may deem an individual competent, and all conditions stipulated in a Close Approach Consent must be followed
- All works above 5m are 'Notifiable' to Worksafe New Zealand (WSNZ). A minimum 48hrs notice must be given to WSNZ prior to starting works
- A VPL 'Working at Heights' permit must also be completed, AND approved, by a VPL Field Manager, prior to starting works above 5m
- M/EWP (Mobile/Elevated Work Platforms) must have a Secondary Protection (SPS) when working under 'Hard Structures', or it must have ground based controls (as found on a truck mounted EWP). Hard structures may include, but are not limited to: Inside any premise or building, under any deck areas or balconies, under eaves or similar protrusions that may extend out from the building edge
- If an M/EWP with SPS is not available, a specific SHEWMS must be developed with VPL. A VPL FLL must also act as spotter during the operation
- Only staff with the relevant WTC qualifications may undertake work at heights, or operate MEWP's (Mobile Elevated Work Platforms)
- ONLY a certified Asbestos specialist may handle, break, remove, and/or dispose of Asbestos. DO NOT touch Asbestos unless you are certified
- All 'Hot Works' inside a 'Confined Space' MUST have an approved Hot Works permit, as well as an approved Confined Space entry permit

MANDATORY SITE PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS

| | | | | | | | |
|---|---|---|--|---|---|---|---|
|  |  |  |  |  |  |  |  |
| X | <input type="checkbox"/> | X | X | X | X | <input type="checkbox"/> | X |

SPECIFIC ACTIVITY PPE REQUIRED (fall arrest systems, confined spaces equipment, respiratory protection, etc.)

| TYPE: | OPERATOR'S NAME |
|-------|-----------------|
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WORK PERMITS REQUIRED

| | | | | | | | |
|----------------------|--------------------------|-------------------|-------------------------------------|-----------------------------|--------------------------|--------|--------------------------|
| Confined Space Entry | <input type="checkbox"/> | Working at Height | <input checked="" type="checkbox"/> | Excavation / Drill | <input type="checkbox"/> | Other: | <input type="checkbox"/> |
| Live Electrical Work | <input type="checkbox"/> | Hot Work | <input type="checkbox"/> | Environmental / Land Access | <input type="checkbox"/> | Other: | <input type="checkbox"/> |

RELEVANT SAFE WORKING PROCEDURES (SWP)

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|---|--|
| <ul style="list-style-type: none"> VS-HS-SWP-002 Asbestos Management Safe Work Procedure VS-HS-SWP-004 Remote/Isolated Locations Safe Work Procedure VS-HS-SWP-005 Traffic Management VS-HS-SWP-009 Working at Height Safe Work Procedure VS-HS-SWP-011 Confined Spaces Safe Work Procedure VS-HS-SWP-021 Electrical Work Safe Work Procedure | <ul style="list-style-type: none"> VS-HS-SWP-022 Driver alertness Work Safe Work Procedure VS-HS-SWP-023 Vicinity of Utility Services Safe Work Procedure VS-HS-SWP-024 Excavations Safe Work Procedure VS-HS-SWP-025 Vicinity of Mobile Plant Safe Work Procedure VS-HS-SWP-026 Mechanical Lifting Safe Work Procedure |
|---|--|

NOTE: All Power/Hand Tools, Electrical/Motorised/Hydraulic Equipment, Heights Platforms (Ladders/Scaffolds/EWP), or PPE, must be:

Certified as required, compliant with relevant AS/NZ S standards, be 'within test' date, be used in accordance to manufacturer's recommendation's, meets VPL on-boarding requirements, is inspected and registered as specified, and is fit for use

RISK MATRIX

Task 1: Determine Impact of Event

| Impact | Substantial | Major | Moderate | Minor | Negligible |
|--------------------|--|---|---|---|---------------------------------------|
| Safety | Class 1 (Fatal Incident) | Class 1 (Permanent Injury) | Class 2 (Lost Time Injury) | Class 3 (Minor injury, medical treatment required) | Class 3 (Slight injury, First Aid) |
| Environment | Permanent widespread ecological damage | Heavy ecological damage, costly restoration | Major but recoverable ecological damage | Limited but medium term damage | Short term damage |

Task 2: Determine Probability of Event Occurring

| | Almost Certain | Likely | Possible | Unlikely | Rare |
|--------------------|--|---|--|--|---|
| Probability | The threat can be expected to occur 75% - 99% | The threat will quite commonly occur 50% - 75% | The threat may occur occasionally 25% - 50% | The threat could infrequently occur 10% - 25% | The threat may occur in exceptional circumstances 0% - 10% |

Task 3: Assess Level of Risk Using Matrix (Combine highest impact with probability)

| Probability | Impact | | | | |
|----------------|------------|---------------|----------------|----------------|----------------|
| | Negligible | Minor | Moderate | Major | Substantial |
| Almost Certain | Low (5) | Moderate (10) | Very High (18) | Extreme (23) | Extreme (25) |
| Likely | Low (4) | Moderate (9) | Very High (17) | Very High (20) | Extreme (24) |
| Possible | Low (3) | Moderate (8) | High (13) | Very High (19) | Very High (22) |
| Unlikely | Low (2) | Low (7) | High (12) | High (15) | Very High (21) |
| Rare | Low (1) | Low (6) | Moderate (11) | High (14) | High (16) |

| Hierarchy or Preferred Order of Control | | |
|---|--|-----------|
| Australia | NZ | |
| Eliminate | Eliminate the hazard, remove the hazard or process from the workplace. | Eliminate |
| Substitute | Substitute or replace the hazard or hazardous work practice with a less hazardous one | Isolate |
| Isolate | Isolate the hazard, i.e. installing screen or barriers, marking off hazardous areas | |
| Engineering Controls | Engineer the hazard out, i.e. modification to tools or equipment, guarding machinery | |
| Admin Controls | Introducing work practices that reduce the risk, i.e. limiting the amount of time a person is exposed to a particular hazard | Minimise |
| Personal Protective Equipment (PPE) | PPE, last and least effective option | |

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|--|---|--|--|--|---|
| Task 1 | | | | | |
| Travel and access to site | Travel distance, driver Alertness (Safety Essentials no.3) <i>Driver alertness Work Safe Work Procedure (VS-HS-SWP-022)</i> | Driver fatigue | 16 | <ul style="list-style-type: none"> Scheduling and planning of job tasks for the day is to be completed in a way which minimises travel times and driving Driver to ensure a travel plan discussed/agreed to with relevant person. During normal hours of operation, this may be a staff member's direct manager (or higher). During after-hours operations (for repair/call-out staff), this may be the despatch centre staff. A travel plan would typically include the intended travel route, an ETA, regular rest breaks, and have scheduled check-in times. If a scheduled check-in time is missed then an emergency response plan should be initiated Driver to operate within management guidelines stipulated in Working Hours and Fatigue Safe Work Instruction Driver must be given 24 hours' notice prior to long distance travel for planned works. Long distance would be any trip typically longer than 4 hours in one direction, as this would likely mean a night away from home. A minimum 15min rest period is to be taken every 2 hours Driving in excess of two hours after a full shift must only be undertaken if the driver has had an adequate rest period. Stop at least every 2 hours for a minimum break of 15 minutes Adequate time must be allocated for sleep and rest between shifts and/or each leg of long distance travel. Avoid driving when normally asleep Drivers must follow road rules (including speed, drugs, alcohol, mobile phones and other hand held devices) Avoid driving when normally asleep | Project Manager / Immediate Manager / Supervisor / Operator/s |
| | Isolated or remote location (Safety Essentials no.8) <i>Remote/Isolated Locations Safe Work Procedure (VS-HS-SWP-004)</i> | Delayed emergency response | 16 | <ul style="list-style-type: none"> Limit time spent or avoid working in isolated or remote location Use of EPIRB may be required (person must be trained in use). This would be at the discretion of the staff member's manager. Generally a travel plan would be acceptable as a safety control. In elevated instances, a 2man team could be implemented. Only in extreme circumstances would an EPIRB be deemed necessary Develop and activate travel plan prior to travel commencing. During normal hours of operation, this may be a staff member's direct manager (or higher). During after-hours operations (for repair/call-out staff), this may be the despatch centre staff. A travel plan would typically include the intended travel route, an ETA, and have scheduled check-in times. If scheduled check-in times are missed then an emergency response plan should be initiated Have an appropriate vehicle for the terrain. Carry adequate supplies (water, fuel, appropriate clothing), and tools/equipment working in a remote/isolated area All persons must be appropriately trained to work in isolation or a remote location including check in procedures, first aid, map reading / navigation, communications, as deemed necessary | Project Manager / Immediate Manager / Supervisor / Operator/s |
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|--|---|--|--|---|---|
| | Isolated or remote location | Delayed emergency response | 16 | <ul style="list-style-type: none"> A mobile phone must be carried that is charged, working, and has a signal at all times. If in doubt, access to a landline (in conjunction with an appropriate travel plan) to be utilised. Access to the copper network, or telephone exchanges would be acceptable as a means of communication | Project Manager / Immediate Manager Supervisor Operator |

Task 2

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|----------------------------------|---|--|-----------|--|---|
| Set up traffic management | Working in the Vicinity of Vehicular Traffic (Safety Essentials no.6) <i>Traffic Management (VS-HS-SWP-005)</i> | Struck by moving vehicles, vehicle collision, pedestrians safety | 21 | <ul style="list-style-type: none"> Implement the Traffic Management Plan (TMP), which has been developed by an accredited TM provider, complies with CoPTTM regulations/standards, and approved by the local governing body (e.g.: AT - Auckland Transport). All L2 roads must have an approved TMP which will have specific traffic management plans, and pedestrian movement plans. L1 roads may use generic traffic/pedestrian management plans. All equipment and resources to be set-up exactly as per the approved TMP. An assessment of the TMP must be made to ensure that it remains appropriate for the conditions. All staff must be briefed on the TMP prior to works starting Review the adequacy of traffic controls during the course of the work to ensure ongoing effectiveness and communicate changes if required. Use physical barriers where practicable or if a requirement of the approved TMP (e.g. concrete barriers or water-filled barriers) with crash attenuators to separate workers from live traffic. Physical Barriers composition/installation must be CoPTTM compliant Apply signage and barriers that direct members of the public away from or around the work site, as per the approved TMP. Traffic management personnel to wear high visibility clothing that complies with AS/NZ S 4501.1 VPL and CoPTTM standards | STMS Provider / Supervisor / Operator/s |
|----------------------------------|---|--|-----------|--|---|

Task 3

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|------------------------------------|--|---|-----------|--|-------------------------|
| Accessing aerial structures | Working at Heights (Safety Essential no. 2) <i>Working at Height Safe Work Procedure (VS-HS-SWP-009)</i> | Injuries from falls, falling objects, plant roll overs, crush injuries, electrocution | 16 | <p>Visionstream's Minimum Approach Distances (MAD) must be maintained at all times. The MAD for working in the vicinity of Aerial Low Voltage power is 500mm</p> <p>If working within 4m of overhead conductors, a Close Approach Consent is required.</p> <p>Only a competent person may enter inside the MAD, and only if a Close Approach Consent has been requested and approved by the Utility Owner prior to undertaking works. Only the Utility Owner Rep may deem an individual competent, and all conditions stipulated in a Close Approach Consent must be followed</p> <p>MAD's are based on the ECP (Electrical Code of Practice – Safe working distances) documentation. The guidelines for working safely in the vicinity of power can be found in the SM-EI 1, 2, & 3 released by the EEA (Electricity Engineers' Association). They are the recommended reference documents for NZ electricity. Regardless of the ECP/EEA MAD's – Visionstream MAD's <u>MUST</u> be followed</p> | Supervisor / Operator/s |
|------------------------------------|--|---|-----------|--|-------------------------|

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|--|---|--|--|--|---|
| Accessing aerial structures <ul style="list-style-type: none"> • Use of ladder • Use of scaffolding • Use of MEWP (Elevated Work Platform) | Working at Heights (Safety Essential no. 2) <i>Working at Height Safe Work Procedure (VS-HS-SWP-009)</i> | Injuries from falls, falling objects, plant roll overs, crush injuries, electrocution | 16 | <p>Prior to climbing a Pole, a 'Pre-Climb Pole Inspection' must be carried out. Four step pre-climb process: 1. Visual inspection / 2. Probe test 300mm below ground level / 3. Probe test 300mm above ground level / 4. Hammer test. Do not carry out a push test, if in doubt – DO NOT CLIMB. Contact VPL FLL to arrange a Pole Specialist to assess.</p> <p>The following pole MUST NOT be climbed: Vierendeel #1 poles, Spun poles (round), Yagi poles (antenna), Fibre glass poles, Poles with Power Transformers, and any damaged or condemned poles (Tagged – Caution or Do Not Climb)</p> <p>All works above 5m are 'Notifiable' to Worksafe New Zealand (WSNZ). A minimum 48hrs notice must be given to WSNZ prior to starting works. A VPL 'Working at Heights' permit must also be completed AND approved, by a VPL Field Manager, prior to starting works above 5m</p> <p>ANY work at Heights requires a risk assessment to be completed. This may include:</p> <ul style="list-style-type: none"> • Assessing the activity risk, identifying and implementing the correct Critical Risk controls • Ensuring the correct equipment is being used for the activity, and in accordance to Visionstream safety standards, industry code of practice, and current legislation • A completed and approved emergency response rescue plan <p>MEWP plant must have a Secondary Protection System (SPS) fitted an operational when working under 'Hard Structures', or it must have ground based controls (as found on a truck mounted EWP). Hard structures may include, but are not limited to: Inside any premise or building, under any deck areas or balconies, under eaves or similar protrusions that may extend out from the building edge</p> <ul style="list-style-type: none"> • A SPS device automatically shuts the EWP down and reverses the last action. This would happen if the operator accidentally came into contact with a hard structure (from behind) and is forced against the 'collapsible safety bar', triggering the SPS • If a MEWP with an SPS is not immediately available for reactive works, further controls MUST be implemented. This MUST include: <ul style="list-style-type: none"> ○ A site/job specific SHEWMS developed for the activities intended ○ A senior Manager level sign off of the intended methodology ○ A VPL FLL (Front Line Leader) must remain on site during the entire operation and act as the safety spotter. Clear comms between operator & spotter is crucial • Signage indicating that heights work is underway ('Linesman', 'Working at Heights', or similar signage) | Supervisor / Operator/s |

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| Aerial structures <ul style="list-style-type: none"> • Use of ladder • Use of scaffolding • Use of MEWP (Elevated Work Platform) | Working at Heights Carrying tools & installing hardware (Safety Essential no. 2) <i>Working at Height Safe Work Procedure (VS-HS-SWP-009)</i> | Injuries from falling objects | 16 | <ul style="list-style-type: none"> • Undertake as much of the work activity on the ground, prior to ascending • An exclusion zone must be established around the immediate work space (ladder/Scaffold/EWP). A minimum of 2m around the work space is ideal • No 'Work at Heights' should be undertaken in adverse weather conditions • When working on structures/poles with live power, fire retardant overalls (AS/NZ S 4602.1:2011) are required to be worn (as well as minimum standard PPE) • Ensure a clear line of ascent/descent No work is to be undertaken above live traffic or pedestrian corridors • EWP booms/buckets must never pass above a live traffic or pedestrian corridor when getting into work position or returning to its transporting position • All tools should be carried aloft in a tool bag/pouch, which is lifted into position with use of a belay rope • A tool belt or body harness/sling may be used to carry tools aloft so long as both hands remain free to ensure 3 points of contact at all times while climbing • When working at Heights, all tools should be attached to an appropriate lanyard or secured/tethered to an appropriate anchor point. This may be an approved anchor point on a personal body harness, or a fixed anchor point on the scaffold/EWP • Mobile scaffolds and EWP baskets must have appropriate toe/kick boards installed | Supervisor / Operator/s |
| | Working at Heights from a Ladder (Safety Essential no. 2) <i>Working at Height Safe Work Procedure (VS-HS-SWP-009)</i> | Gravitational fall from height, injuries from falling objects | 16 | <p>SPARK and CHORUS assets may not have suitable fit for purpose ladders on site. When working on these sites ensure you have an appropriate heights access system which meets all Asset owner, Visionstream and Legislative safety requirements.</p> <ul style="list-style-type: none"> • The utility owner MAD must always be maintained • When working on structures/poles with live power, fire retardant overalls (AS/NZ S 4602.1:2011) are required to be worn (as well as minimum standard PPE) • Ladder must be AS/NZ S 1892 (Reinforced plastic) • Ladders must be fit-for-purpose, industrial strength SWL 150kg, non-metallic, inspected prior to use and in good condition (AS/NZ S 1892-Reinforced plastic), with the relevant AS/NZ S Ladder standards clearly labelled/stickered • Check ladder for any evidence of damage prior to mounting each time • When working on structures/poles with live power, correct minimum standard PPE must be work which includes fire retardant overalls (AS/NZ S 4602.1:2011) • Ladders must be tested and recorded in the Ladder/Rack checklist register • An exclusion zone must be establish around the ladder, with signage indicating that heights work is underway ('Linesman', 'Working at Heights', or similar signage) • Work from the ground or a solid platform where possible • A full body harness attached to a certified anchor point must be used where the potential to fall is two metres or more AS/NZ S 1891 | Supervisor / Operator/s |

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| | Working at Heights from a Ladder (Safety Essential no. 2) <i>Working at Height Safe Work Procedure (VS-HS-SWP-009)</i> | Gravitational fall from height, injuries from falling objects | 16 | <ul style="list-style-type: none"> Anybody working above 2m must be trained and competent to do so If working up a pole, a pole strap must be used with a full body harness AS/NZ S 1891 No work shall be carried out above the safe working height for ladders, i.e. not above the 3rd rung top from top of ladder The angle of slope from of ladder to the structure must be 1:4 (ladder 1m out from base of structure, for every 4m the ladder extends upwards) Ladders must include a secondary control at the base. This can either be a person securing the base of the ladder, chocking it, or tying off with a 'footer' rope | Supervisor / Operator/s |
| | Working at Heights from a Mobile Scaffold (Safety Essential no. 2) <i>Working at Height Safe Work Procedure (VS-HS-SWP-009)</i> | Gravitational fall from height, injuries from falling objects | 14 | Works above 5 meters become 'Notifiable Works'. Worksafe NZ (DoL) must be advised of Notifiable Works at least 48hrs prior to works starting <ul style="list-style-type: none"> All mobile scaffolds must be approved by Visionstream prior to being used on a Visionstream site. Only Fibre Glass Mobile scaffold units are to be used Mobile scaffold must be erected as per manufactures instruction, on stable flat secure ground, with toe/kick boards installed (AS/NZ S:1576) Mobile scaffold is to be tied off to the pole as per Working at Heights Procedure (VS-HS-SWP09). The top of the scaffold must not exceed 5 metres Four stabilizers are required under the feet of the scaffold units to minimise scaffold movement. Pads must be used under scaffold feet when erected on grass/soft ground to prevent sinking A full body harness and lanyard must be worn at all times when accessing/working on the platform. Lanyards may only be connected to anchor points on the scaffold A lanyard must not be hooked back on itself, unless that use is as per manufacturer's instructions Only a tag line may be looped around the wrist or in a sling around the body to carry tools, allowing full use of both hands at all times Scaffolds must not have a canopy attached on or above them that contravenes manufacturers recommendations, or enters inside the MAD at any time The SWL (Safe working load) for the configuration must be available on site Mobile scaffold must be 'within' test dates and certified | Supervisor / Operator/s |
| | Working at Heights Roofs - Exposed heights (Safety Essential no. 2) | Gravitational fall from height, injuries from falling objects | 14 | <ul style="list-style-type: none"> Works undertaken within 2m of an unprotected edge require; <ul style="list-style-type: none"> A full body harness attached to a certified anchor point must be used where the potential to fall is greater than 2m The harness, and lanyard must be AS/NZ S 1891 compliant and 'within test' Lanyards may only be connected to specifically engineered anchor points A lanyard must not be hooked back on itself, unless that use is as per manufacturer's instructions | Supervisor / Operator/s |

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| | Working at Heights Roofs - Exposed heights (Safety Essential no. 2) <i>Working at Height Safe Work Procedure (VS-HS-SWP-009)</i> | Gravitational fall from height, injuries from falling objects | 14 | <ul style="list-style-type: none"> • Lanyard must be attached to a certified Fixed Anchor Point (FAP) • If a FAP is not present, a Temporary Anchor Point (TAP) may be used • TAP's must be AS/NZ S 5532 compliant. TAP's may be installed by a competent 'Working at Heights' professionals • Staff with the required working at heights WTC's and training could be deemed competent. If in doubt, a certified builder or engineer may install a TAP • Access on/off rooflines must be via an approved ladder, or a roofline access hatch or door • Ladder must be AS/NZ S 1892 (Reinforced plastic) • Ladders must be fit-for-purpose, industrial strength to minimum 150kg, non-metal, inspected prior to use and in good condition • Check ladder for any evidence of damage prior to mounting each time • Use a tool bucket with rope to be used to lift tools up/down ladder, or in a 'tool pouch' sling that allows both hands to be free at all times. If roof access is via a door, and the work space can be safely traversed and hands are not required to assist in climbing, tools may be carried manually | Supervisor / Operator/s |
| | Entering and exiting the EWP basket (Safety Essential no. 7) <i>Vicinity of Mobile Plant Safe Work Procedure (VS-HS-SWP-025)</i> | Entanglement in moving parts of plant | 11 | <ul style="list-style-type: none"> • An exclusion zone must be establish around the mobile plant, with signage indicating that heights work is underway ('Linesman', 'Working at Heights', or similar signage) • All walking surfaces and steps must be clear of obstructions • All walking surfaces and steps must have permanently secured grip mats • Face the machine and watch footing • Maintain three points of contact when climbing steps, entering and exiting the EWP basket • The gap between the EWP platform and the landing area to be as small as possible, but not exceed 300mm. AS/NZ S 2550.10 specifies 100mm, this should be the aim at all times • If for any reason the basket needs to be lowered for entry/exit, please check the insulation integrity of the bucket caused by scratches before use • If for any reason the basket needs to be lowered for entry/exit, please check the insulation integrity of the bucket caused by scratches before use • The gap between the EWP platform and the landing area to be as small as possible, but not exceed 300mm. AS/NZ S 2550.10 specifies 100mm, this should be the aim at all times • No personnel are permitted to enter/exit a EWP basket by climbing over the basket wall/railings. If the basket has no gate, access must be via the ground • Access and egress does not take place unless a safety harness is properly worn, and connected to an FAP at all times. Use a double lanyard system when entering or exiting the EWP cage at heights above 2m | Supervisor / Operator/s |
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|---|--|--|---|---|--|
| | <p>Working at Heights</p> <p>Operating a Mobile Elevated Work Platform (M/EWP) in the Vicinity of Utility Services</p> <p>(Safety Essential no. 7)</p> <p><i>Working at Height Safe Work Procedure (VS-HS-SWP-009)</i></p> | Entanglement in moving parts of plant, gravitational fall from height, injuries from falling objects | 21 | <p>Vector MAD's (Minimum Approach Distances) MUST be maintained at all times</p> <p>The MAD for working in the vicinity of Low Voltage power is 500mm</p> <p>Close approach distances must be maintained at all times, with a minimum approach distance of 4 Metres</p> <ul style="list-style-type: none"> • If working within 4m of overhead power, a Close Approach Consent is required • An exclusion zone must be establish around the M/EWP with signage indicating Heights work is underway ('Linesman', 'Working at Heights', or similar signage) • A competent person must complete the lift risk assessment, determine the safe method to lift, nominate the required equipment and approve the Lift Plan • Cranes/EWP must only be set up on approved suitable ground. A certified geotechnical engineer may be required to assess the ground conditions and advise on appropriate ground protection to ensure suitable support of Plants outriggers • All outriggers are to be packed/supported as per manufacturers' and/ or engineer's recommendations and be protected from traffic/disturbance by physical barriers • Only equipment that is marked with the SWL and designed for the purpose and use on the specific crane will be used (this includes the use of extensions such as fly jibs and other extension) • All rigging equipment e.g. slings, chains, spreader bars and the like are to be inspected, tagged and certified for use by a competent person prior to use • When working on structures/poles with live power, fire retardant overalls (AS/NZ S 4602.1:2011) are required to be worn (as well as minimum standard PPE) • Plant must be set-up exactly as per an approved TMP • EWP must be inspected by a competent person prior to use using the VPL M/EWP Checklist • A M/EWP must be used and maintained in accordance with AS/NZ S2550 requirements, manufactures' instructions and specifications or approved design document <ul style="list-style-type: none"> ○ M/EWP's must be operated and maintained by competent personnel ○ Set up an exclusion zone around the M/EWP ○ Full body harness and lanyard must be worn at all times ○ Operator must always keep both feet in the M/EWP • Works above 5 meters become 'Notifiable Works'. Worksafe NZ (DoL) must be advised of Notifiable Works at least 48hrs prior to works starting • Avoid working in close proximity to overhead power lines where practicable • Assess weather conditions at all times and ceasing work immediately when the risk becomes too high (high winds, rain, storms) • M/EWPS are not to be used as a access tool to Heights (climbing in/out cage), unless it is being used to manufacturer instructions, and meets VPL rules, and Legislation | Supervisor / Operator/s |

| Activity Steps List the sequence of steps needed to do the activity | Potential Hazards Against each step, list the potential safety and environmental hazards that could cause injury or harm (E.g. work at height) | Potential Risk List the potential risk associated with the hazard (E.g. fall from height) | Residual Risk Assess risk level of hazard using risk matrix | Controls For each hazard, identify control measures to eliminate or effectively control associated risks. A combination of above the line and below the line control measures are required for high risks, with an emphasis on above the line controls. | Person Responsible for Control Implementation |
|--|---|--|--|---|---|
| Task 4 | | | | | |
| Working at Heights Hardware install Cable Hauling | Working in and around Mobile Plant (Safety Essential no. 7) <i>Vicinity of Mobile Plant Safe Work Procedure (VS-HS-SWP-025)</i> | Plant rollover, struck by moving plant | 21 | <ul style="list-style-type: none"> • M/EWP's MUST be certified by a Registered and appropriate Engineer. The Plant must be 'stickered' appropriately with the Engineers registration number • If the EWP has been hired, it must be hired from a reputable Hire Company. The Hire Company must have a comprehensive maintenance program, and the Plant hired must be Certified and fit for purpose • Use physical (solid barriers) to separate mobile plant from workers, members of the public, buildings or structures, or other mobile plant and vehicle • An exclusion zone must be barriers, not building faces, private fences, hedges etc. • Establish exclusion zone and implement the Authority to Enter procedure (to be implemented by crew managing the plant(s) and covered in pre-start) • Where separation is not possible delineation and exclusion zones must be established • Prepare a Vehicle Movement Plan for movement of mobile plant and implement. Mobile plant movements must be managed by a reliable means of positive communication (e.g. two way radio) • Engineering detection systems are to be implemented where practical An authority to work procedure in conjunction with increased supervision is required • Plant should be set/chocked so it cannot creep backwards while in operation • Load shifting and earth moving plant must be fitted with ROPS / FOPS • Plant should be fitted with guarding around rotating or moving parts • Wearing of seat belts is mandatory • Plant must have been risk assessed and approved prior to entry to site • Staff and operators must be trained and verified competent to operate plant • A competent person should complete daily pre-checks on all mobile plant to ensure plant is in good working condition and fit-for-purpose. Plant must locked-out / tagged if found defective • Plant must have working warning devices fitted (Beepers, lights and flashing lights) • Workers, Spotters and Plant Operators to maintain eye contact when working in close proximity or must be managed by a reliable means of positive communication (e.g. two way radio) • Hard hats, high visibility clothing, appropriate ear protection must be worn in the within 3 meters (radius) of operating plant • Workers must not place themselves within 3 metres of the front or rear of a vehicle until that vehicle is isolated (isolated means stopped, turned off, vacated and keys removed from the ignition). | Supervisor / Operator/s |

| Activity Steps List the sequence of steps needed to do the activity | Potential Hazards Against each step, list the potential safety and environmental hazards that could cause injury or harm (E.g. work at height) | Potential Risk List the potential risk associated with the hazard (E.g. fall from height) | Residual Risk Assess risk level of hazard using risk matrix | Controls For each hazard, identify control measures to eliminate or effectively control associated risks. A combination of above the line and below the line control measures are required for high risks, with an emphasis on above the line controls. | Person Responsible for Control Implementation |
|--|---|--|--|--|---|
| Working at Heights Hardware install Cable Hauling | Working in and around Mobile Plant (Safety Essential no. 7) <i>Vicinity of Mobile Plant Safe Work Procedure (VS-HS-SWP-025)</i> | Plant rollover, struck by moving plant | 21 | <ul style="list-style-type: none"> Vehicles must not be left unattended with keys still in ignition and/or with ignition still on. Any vehicle that is not 'isolated' must have the driver / operator in the vehicle with seat belt firmly fastened prior to engine being switched on and then the vehicle being moved Positive communication must be maintained which can include, but is not limited to, two way radio Load and unload plant on solid even ground and secure with wheel chocks and or hand brakes Staff must clearly communicate with plant operator when they are attaching adjusting or removing lifting equipment | Supervisor / Operator/s |
| Manual Lifting | Heavy Lifting <ul style="list-style-type: none"> Crane Hoist Gantry (Safety Essentials no.9) | Plant rollover, struck by moving plant, injuries from falling objects | 16 | MANUAL- Ensure you maintain a straight back, while bending at the knees when lifting heavy object. See the VPL 'Manual Handling' SWI for correct lifting technique <ul style="list-style-type: none"> ONLY lift items that are well within your physical capabilities. If in doubt of your capability to safely lift an object, then undertake as a two person lift A two person lift is required for any load over 20kg Clear communication is required before and during any two person lifts If a two person lift is not possible, a mechanical aid may be required. If a mechanical aid is not possible, an alternative methodology will be required | Supervisor / Operator/s |
| Mechanically Assisted Lifts | Heavy Lifting <ul style="list-style-type: none"> Crane Hoist Gantry (Safety Essentials no.9) | Plant rollover, struck by moving plant, injuries from falling objects | 16 | MECHANICAL - An Excavator is not an acceptable means of lifting, unless the SWL of the machine and the related manufacturer's documents can be provided. These MUST be on site. Chains, strops, and lifting points must ALL be certified with a SWL <ul style="list-style-type: none"> All mechanical plant used for lifting purposes must be assessed by VPL prior to being used. It must also have the necessary legislative certifications (COF etc) The Plant used must be designed for the purpose of lifting, and clearly display the SWL (Safe Working Load) All heavy lifts (all lifts above 75% of the SWL) must be risk assessed, with a documented lift plan developed and implemented Only a competent person may complete a lift risk assessment, determine the safe methodology, nominate the appropriate equipment, and approve the lift plan Lifting plant must be set-up safely on suitable firm stable ground, with out-riggers correctly deployed if they are present on plant. A certified engineer must assess the ground conditions and advise on appropriate ground protection to ensure suitable support All rigging equipment (slings, chains, spreader bars) must be inspected prior to use and deemed fit for purpose, have the SWL clearly displayed, and be within test date | Supervisor / Operator/s |

| Activity Steps List the sequence of steps needed to do the activity | Potential Hazards Against each step, list the potential safety and environmental hazards that could cause injury or harm (E.g. work at height) | Potential Risk List the potential risk associated with the hazard (E.g. fall from height) | Residual Risk Assess risk level of hazard using risk matrix | Controls For each hazard, identify control measures to eliminate or effectively control associated risks. A combination of above the line and below the line control measures are required for high risks, with an emphasis on above the line controls. | Person Responsible for Control Implementation |
|---|--|---|---|--|--|
| Mechanically Assisted Lifts | Heavy Lifting <ul style="list-style-type: none"> Crane Hoist Gantry (Safety Essentials no.9) | Plant rollover, struck by moving plant, injuries from falling objects | 16 | <ul style="list-style-type: none"> An exclusion zone must be set-up prior to lifting to ensure no persons are struck by a load should the lift fail in any way A dog-man with a dog-line may be utilised to stabilise a load and may be inside the exclusion zone, but they must remain outside the fall/swing path of the load should the lift fail in any way Prior to a heavy or complex lift, a competent person must check all safety devices are operational, and all equipment being used is operating within its SWL Only a suitably qualified and competent person may operate the Plant undertaking the lift All load lift points must be designed to carry the load, and or engineer certified | |

| LABOUR RESOURCES REQUIRED | |
|---------------------------|--|
| TYPE | QUALIFICATIONS & TRAINING |
| WTC 1 | Underground Network (with Confined Spaces), ECP34 & SM-EI |
| WTC 1a | Underground Network (without Confined Spaces) ECP34 & SM-EI |
| WTC 2 | Operating M/EWP |
| WTC 3 | Overhead Network, ECP34 & SM-EI |
| WTC 4 | Confined Spaces only |
| WTC 5 | Working at Heights (Proprietary fall arrest training – Riggers only) |

| RELEVANT LEGISLATION AND STATUTORY REQUIREMENTS: | | |
|---|---|--|
| Act | Regulations | Code of Practice |
| Health and Safety at Work Act 2015 | Health and Safety in Employment Regulations 2015 | |
| Resource Management Act 1991 | Latest reprint: 3 rd March, 2015 | |
| New Zealand Transport Agency (NZTA) | Latest version: 4 th Addition, 1 st February, 2015 | CoPTTM |
| RELEVANT AS/NZ S (Australia / New Zealand Safety Standards) REQUIREMENTS : | | |
| <ul style="list-style-type: none"> AS/NZS 4501.2: 2006 Occupational protective clothing - General requirements AS/NZS 4501.1:2008 Occupational protective clothing - Guidelines on the selection, use, care and maintenance of protective clothing AS/NZS 2161.2: 2005 Occupational protective gloves - General requirements AS/NZS 2210.1: 2010 Occupational protective footwear - Guide to selection, care and use AS/NZS 4399:1996 Sun protective clothing - Evaluation and classification (Amendment 1-1998) AS/NZS 2397:1993 Guide to safe use of lasers in the building and construction industry AS/NZS Standards AS/NZS 1891.4:2009 – Industrial fall arrest systems and devices | <ul style="list-style-type: none"> AS/NZS 1270: 2002 Acoustics - Hearing protectors AS/NZS 1715: 2009 Selection, use and maintenance of respiratory protective devices AS/NZS 1716: 2012 Respiratory protective devices AS/NZS 1891.4:2009 Industrial fall-arrest systems and devices - Selection, use and maintenance AS/NZS 4836:2011 Safe working on or near low voltage electrical installations and equipment AS/NZS 4602: 2011 High visibility safety garments AS/NZ S 1892.1.1996 Portable ladder – Metal AS/NZ S 1892.2.1996 Portable ladders – Timber AS/NZ S 1892.3.1996 Portable ladders – Reinforced plastic AS/NZS IEC 60825.14:2011 Safety of laser products - A user's guide | <ul style="list-style-type: none"> AS/NZS 1336:1997 Recommended practices for occupational eye protection (Amendment 1-1997) AS/NZS 1337:1992 Eye Protectors for Industrial Applications AS/NZS 1337:1: 2010 Eye and face protectors for industrial applications (Amendment 1-2012) AS/NZS 1338.1: 2012 Filters for eye protectors - Filters for protection against radiation generated in welding and allied operations AS/NZS 1800: 1998 Occupational protective helmets - Selection, care and use AS/NZS 1269.3: 2005 Occupational noise management - Hearing protector program |

*For further information related to the relevant legislation and statutory requirements refer to **VS-HS-REG-001 SHE Related Legislation Register**.

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| VS(Chorus)-SWM-004 | NZ SHEWMS – v7 (01/04/2017) | |
| | Page 14 of 16 | |

SHEWMS INDUCTION RECORD

| Name | Company | Signature | Date | Inductor | Initials |
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Please note: All personnel on site are to be inducted into this SHEWMS prior to carrying out the activity. By signing, it indicates you have read, understand and will follow its contents to the best of your ability.

In addition, the Telco Take 5 Booklet (or equivalent) is to be completed daily by each individual and any new identified hazards or changes to the task or work conditions are to be managed through this process initially and the impact of these hazards / changes assessed to identify possible changes to the SHEWMS. Any hazards / changes shall be immediately brought to the attention of any persons who may be potentially exposed to these hazards / changes.

SHEWMS RE-INDUCTION RECORD

| Name | Date | Initials | Date | Initials | Date | Initials | Date | Initials | Date | Initials | Date | Initials | Date | Initials |
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Please note: A person must first be inducted into this SHEWMS and sign the SHEWMS induction Record on the previous page before being able to re-review the SHEWMS using the SHEWMS Re-induction Record. A SHEWMS must be formally reviewed & updated (where required) whenever:

- a significant change to the activity is identified
- an incident occurs relating to the activity
- a significant hazard is identified relating to the activity that is not already covered in the SHEWMS and Take 5
- periodically as required and stipulated on Page 1