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| Student - RAMS Template.  Risk Assessment & Method Statement. | Instructions Before filling in.  Before Filling in this Document you Must read over it first and then replace all the red text with your text. The red text is just a gudie line. You must change it to suit your Operations. Insert company logo into header. Once this is completed correctly you can manage it for further projects easier.  Wayne Floyd  UAV Instructor |

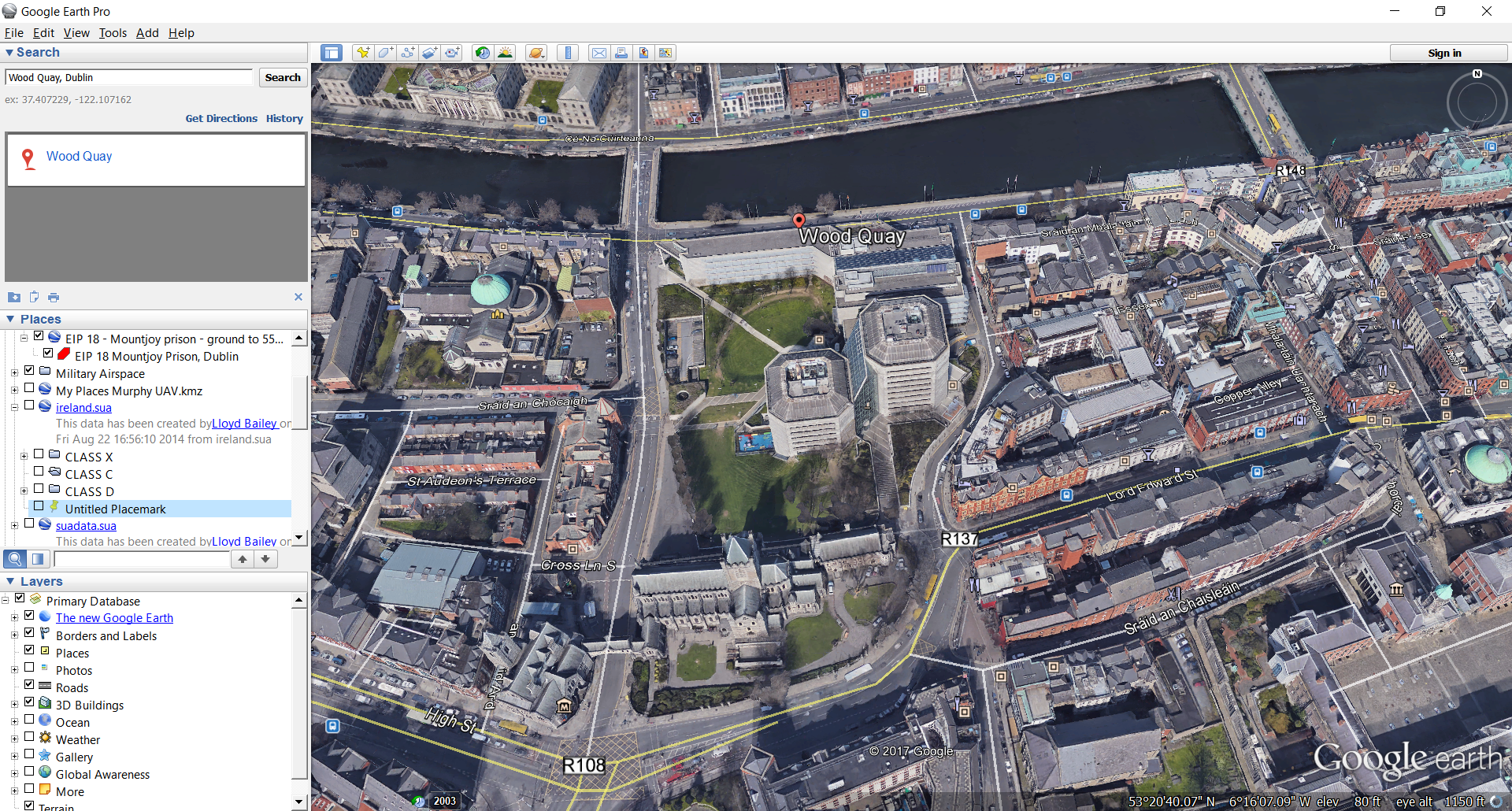
**Project Summary Details**

**Project:** UAV Demonstration for Dublin City Council.

**Reference No.**

**Brief Task Description:** An aerial (drone) topographical survey.

**Location:** Wood Quay, Dublin City center as shown below.



**Field Supervisor**: Wayne Floyd

**Project Manager:** Wayne Floyd

**Start Date:** 30-June-2017

**Scheduled Finish Date:** 30-June-2017

**Proposed Working Hours**: 10:00 – 16:30

**Prepared By:** XXXXXXXXXXXXXXX

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| **Project Reference:**  XXXXXXXX | **Contractor Name:**  Your Company Name | | | | | **Address:**  **Your Company Address** | | | | | | | | | **Tel: XXXXXXXXXX** | | | |
| **E-mail:**  Your Email | | | |
| Project Name: | XXXXXXXXXXXX | | | | | | | | Risk Assessment Attached? | | | | | | Yes | | | |
| Description of the Task/Activity: | An aerial (drone) topographical survey | | | | | | | | | | | | | | | | | |
| Site Address/Locations: | XXXXXXXXXX | | | |  | | | | | | | Start Date/Time: | | | 30-June, 2017 | | | |
| Finish Date/Time | | | 30-June, 2017 | | | |
| Working Hours | | | 10:00 – 16:30 | | | |
| General Project Permits required for the activity  (insert N/Y) | Hot Work | Traffic Management | Excavation | Concrete penetration | | Work at Heights | | OPS | | Confined Spaces | | | Isolations | LO/TO | | General  Permit | MEWP | Access |
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| Others Permits: | Airspace Clearance From Dublin ATC (EIDW) Granted Permission Number - 218*-2017* | | | | | | | | | | | | | | | | | |
| Personnel Involved | Name | | | | | | | | | | Role/Trade | | | | | | | |
| Wayne Floyd | | | | | | | | | | Lead Surveyor / Chief Remote Pilot | | | | | | | |
| Killian Power | | | | | | | | | | Assistant Surveyor / Observer | | | | | | | |
|  | | | | | | | | | |  | | | | | | | |
|  | | | | | | | | | |  | | | | | | | |
| Client Contact: |  | | | | | | Contact Tel No: | | | | +353 (0) 86 8264641  +353 (0) 1 6464565 | | | | | | | |
| Client Contact: |  | | | | | | Contact Tel No: | | | | +353 (0) 87 5514511 | | | | | | | |
| Client Contact: |  | | | | | | Contact Tel No: | | | | +353 (0) | | | | | | | |
| Site Supervisor: | Wayne Floyd | | | | | | Contact Tel No: | | | | +353 (0)86 055561 | | | | | | | |
| Project Manager: | Wayne Floyd | | | | | | Contact Tel No: | | | | +353 (0) | | | | | | | |
| Safety Advisor: | Your Safety Officer – SH&E Officer | | | | | | Contact Tel No: | | | | +353 (0) | | | | | | | |
| Details of Personnel specific certification | Safe Pass  Manual Handling Training | | | | | | | | | | | | | | | | | |
| Key Plant, Tools, and equipment  (Attach Certification as required) | UAV equipment – Falcon 8 Trinity, Ground Station & Batteries | | | | | | | | | | | | | | | | | |
| Other essential Equipment: | Protective Barriers and cones to use around tripods and equipment. ~~Traffic Management provisions i.e. cones / signs / temporary traffic lights.~~ | | | | | | | | | | | | | | | | | |
| Specific Identified Residual Hazards:  (or refer to the task specific risk assessment(s) | Refer to Task Specific Risk Assessments | | | | | | | | | | | | | | | | | |
| Sequence of Operations:  (Include sketches if required) | **Client / site contact**  Liaise with the Client / site contact, and attend site specific Safety Inductions, if necessary. Provisions detailing permit requirements, access/egress arrangements, welfare facilities as well as emergency procedures i.e. emergency routes of escape, assembly points etc. to be obtained prior to starting work.  The project supervisor will liaise with the Client contact on arrival to works.  **Prior to Works Starting on Site**  All works shall be carried out in a safe manner, using only certified equipment, and the work site maintained so that it functions safely and efficiently. All surveying will be carried out during daylight hours only. Only suitably qualified and experienced personnel will carry out all surveying. Surveying shall be carried out to comply with best practice.  Arrive on site with equipment, ensuring work vehicles are parked in safe and secure locations. Sign in to site.  Site specific Safe Plan of Action (SPA) will be completed, signed by all prior to starting work.  **Personal Protection**  All necessary PPE will be worn, at a minimum safety boots and Hi-vis vests. Further PPE may be required depending on site specific tasks.  **Survey Introduction**   * Insert your Company Name here Drone will conduct a Live Demonstration of a UAV in Flight at DCC offices. * Insert your Company Name here will provide the following information:   + Digital copy in Low Resolution 3D format * The Drone survey shall be accurate to 100mm. * Insert your Company Name here will provide the information above to Dublin ATC prior to launching the UAV.   Notes:   * All access to be arranged by Project representative. * The Airspace above Project offices is controlled by Dublin ATC, an application must be applied for by Insert your Company Name here , in order to conduct this demonstration. The UAV Team will have prior approved Permission to Fly in Controlled Airspace (ATC Terms and Conditions Will Apply), the Chief Remote Pilot will ring Dublin ATC Station Master before launch. Dublin ATC will have the final say on whether the UAV can be put into the Air. * Inaccessible, non-visible or covered detail will not be surveyed and will be annotated as such. * Heavily vegetated areas will not be surveyed and will be annotated as such. Insert your Company Name here have not included for vegetation clearance but additional levels will be picked up where possible.   **Aerial Survey**  The methodology proposed by Insert your Company Name here UAV Division is in full compliance with the client specification. It has been utilised successfully on many similar projects carried out by our company on behalf of agencies such as OPW, Private Consultants and Local Authorities. The following details concisely the methods that will be used on this project. All methods are chosen specific to local site conditions, providing the most efficient solutions with reference to safety and satisfaction of the specification.  This SUAs (Small Unmanned Aircraft Systems) Method Statement forms the procedure for Inspection & Survey. Insert your Company Name here developed and approved SUAs SOP’s (Standard Operating Procedures) will be used.   1. Before any flights are to be conducted, discussions between all parties involved will take place ensuring all hazards & risks are understood. A risk assessment is generated (including changes in weather conditions etc.) and is understood by all. 2. The SUAs Method Statement is used to show how the operation of the system will take place this (Includes Flight Planning) 3. Only Insert your Company Name here approved Remote Pilots (RP’s) can conduct any flying tasks 4. An Observer (OB) will be present at all times. 5. All equipment will be checked prior to travel and on arrival at the proposed flying site. 6. Clear communication will be maintained between the OB, RP and client ensuring safe understanding of the operations and the safety of the tasks involved.   *Communication*  Mobile phone communication will be established with all relevant agencies and authorities (e.g. emergency services) if required. Contact will be made prior to arrival on site. Verbal communication between the OB and the client (any personnel involved) will also be established.  *Goal*  The method statement’s goal is to ensure that all parties involved understand the breakdown of the task step-by-step and to define other additional control measures. This document is generated for every demonstration and/or project unless:   1. The project has been flown within a 6month period, a dynamic risk as-assessment must still be conducted on site prior to flight to identify any changes 2. The site is used regularly for SUAs training purposes   *Pre-Op Field Team*  A pre-site assessment will be generated prior to any task. This will be done Insert your Company Name here project management tool and various other mapping tools (i.e. Google/Bing). The RP then generates a flight plan (Survey) and a detailed step by step (Survey & Inspection) procedure on how the task will be conducted. This will then be placed into the Method Statement.  *On-Site*  The UAV team will conduct an on-site risk assessment to see if there are any changes, if there are any differences, they will assess the additional risk. If the additional risk is deemed to be high they will notify the project manager (PM) as soon as possible to update. The PM will then relay the information to the client. If the additional risks are deemed low, then task will still commence.  (If Needed) - The ground control points/markers in this project will be nails with orange survey paint. These will be placed on the day of the flight.  *Precautions*  The RP will monitor the weather conditions and environment every day for 5 days prior to the task.  The RP will inform 72hrs in advance relevant parties on weather changes giving time for any changes to be made.  The RP has full authority and responsibility of the system and if he deems the flight to be unsafe, the task will not be conducted.  The RP will be UAV site manager for the duration of time on the ground. The OB will inform the RP of any site changes during the time on the ground.  *On-Site*  Both the RP and OB will conduct an on-site risk assessment to see if there are any changes, if there are any differences they will assess the additional risk. If the additional risk is deemed to high they will notify the project manager as soon as possible to update, the PM will then relay the information to the client. If the additional risks are deemed low, then task will still commence.  The RP will   1. Update flight plan if required 2. Upload the flight plan to the system 3. Prepare the system for take-off 4. Check the environment once the system is ready, ensuring the observer is ready 5. Ensure all persons are at a safe distance from take-off position 6. Launch the system maintaining a safe altitude of 30m AGL and preform a functions test 7. Once functions test is complete the RP will start the flight plan 8. Through-out the flight the observer and RP will continuously check the environment and ensure the UAV is in a safe position at all times 9. Once the flight is complete the RP will prepare the UAV for landing, ensuring the environment is free of any hazards, persons are in a safe position and then land the UAV 10. Once UAV has landed the RP will prepare the UAV for the next flight 11. The RP will conduct post flight checks after every flight 12. This will happen until all the data has been collected 13. At the end of the task both the observer and RP will pack the system and ensure the site is clear of any rubbish   The OBs will   1. Support the RP through-out the task 2. Secure the flight area and put out any UAV signage required 3. Continuously monitor the environment for any hazards 4. Reduce any distractions for the RP   **UAV Operation**  The RP will fly the UAV in a systematic way to capture all aspects required  Flight for each location:   1. 5x flights will be conducted 2. 1 X launch/landing area will be selected prior 3. Each flight will be generated into a square flight plan which will include cross flights 4. Each flight will be flown at 100m AGL 5. After the flight plan is complete the data will be transferred on the company laptop 6. After the first flight the imagery will be checked to ensure quality & correct camera settings. 7. After the whole project prior to leaving the site all equipment and data quality checks will be conducted. Post field procedures will be carried out in accordance with Insert your Company Name here regulations.   Personal Documents Required  IAA PCC/SOP  RAMS and U.F 101 softcopy.  Deliverables:   * Insert your Company Name here will provide the following information:   + Digital copy in Low Resolution 3D format   The expected horizontal accuracy will be +/-50mm (position). Vertical accuracy (Levels) will be to +/- 75mm. (For hard surfaces). | | | | | | | | | | | | | | | | | |
| Temporary Supports and Props needed to facilitate the works: | N/A | | | | | | | | | | | | | | | | | |
| Method of Access and Egress to the work area: | Via work vans and by foot. | | | | | | | | | | | | | | | | | |
| Fall Protection Measures: | N/A | | | | | | | | | | | | | | | | | |
| Are any Hazardous Substances to be used/present/potentially present for the Activity? | No hazardous substances used Insert your Company Name here as part of works. Client to advise of potential hazards prior to commencement of works. | | | | | | | | | | | | | | | | | |

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| **Required Personnel Protective Equipment:**  **Please Tick if required** | Safety Boots | Hard Hats | Safety Gloves | | Hearing Protection | Eye Protection | Respiratory Protection | M9IECAJFPO8GCAVCM9ULCA1BOIJLCA3S1HCRCADAL1NWCAF0AYJRCAYRJBI2CAE4GHWHCA5HB8QSCA02F6VLCAY6V3E1CADQ8U5QCAEK2ULBCAZA6S3XCAJC8RJMCA0C4F2GCAVMDOLSCAVZKN4QCAFNX3GG  Hi-Vis Clothing |
| YES | YES | YES | | As required | As required | NO | YES |
| **Other:** | N/A | | | | | | | |
| **Emergency Procedures:** | Insert your Company Name here personnel shall agree to and comply with the Emergency procedures in place on site. Reporting of all Accidents/Incidents/Near Misses/Complaints, no matter how minor to Site Supervisor / Management, within 30 minutes of occurrence. Details of this procedure to be detailed at Site Induction.  Insert your Company Name here to comply with Dublin City Council evacuation and emergency directions during an emergency situation.  Dial 999 / 112 for emergency services including Gardaí, Ambulance, or Fire. | | | | | | | |
|  | First Aid Box Location: | | | First aid kit located in all company vehicles. | | | | |
| Location of Nearest Hospitals: | | | Dublin **Mater Misercoridae University Hospital**  Eccles Street, Dublin 7.  Tel +353 (0)1 410 3000 | | | | |
| **Welfare Requirements:** | Local Amenities | | | | | | | |
| **Housekeeping Control Measures:** | All personnel will operate a “clean as the go policy”. No rubbish is envisaged to be generated, but any rubbish/waste will be taken by staff when leaving site.  No tools or equipment will be left unattended.  Area to be cleared prior to completion of shift | | | | | | | |
| **Traffic management requirements:** | Protective Barriers and cones to use around tripods and equipment. Signs to highlight works in progress and direct pedestrian traffic around same. | | | | | | | |
| **Other environmental controls to be put in place:** | N/A | | | | | | | |
| **Services to be supplied by Others:** | N/A | | | | | | | |
| **Other information & Comments:** | Task Specific Risk Assessments attached | | | | | | | |

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| All work will be undertaken by qualified competent persons with experience of the type of work described above, and in all cases in full accordance with safety procedures specified in the company’s Health and Safety Statement and the Project Health & Safety Plan. | | |
| Prepared by: | XXXXXXXXXX | |
| Position: | SH&E Officer | Date: 25th Oct, 2018 |
| Reviewed by: | Wayne Floyd | |
| Position: | Project Manager | Date: 25th Oct, 2018 |

**Methodology**

Insert your Company Name here propose to carry our surveys with a minimum of disruption. Insert your Company Name here Risk Assessment is based on the linking of the probability of occurrence with the severity of loss and/or injury. Here risks are graded "High", “Medium" or "Low". This helps give priority to the employment of controls and the allocation of resources.

**Hazard Identification and Risk Assessment**

The policy of Insert your Company Name here is to identify at the facility; to access the risk to Safety and Health and to control risks as far as is practicable so that they are reduced to an acceptable level. “Hazard” is taken to mean “any substance, article, material or practice which has the potential to cause harm to the safety, health or welfare of employees of Insert your Company Name here “Risk” is taken to mean “the potential of the hazard to cause harm in the actual circumstances of use”.

**Risk Classification**

**High**

An activity or occurrence with the potential to cause serious bodily injury, damage to health or damage to equipment. Possibility of fatality, serious injury, or minor injury to a number of people. Possibility of significant material loss.

**Medium**

An activity or occurrence with potential similar to high risk, but with less severe consequences. Possibility of minor injury or material loss is unlikely although conceivable.

**Low**

A situation where the consequences have low potential to cause injury or damage to health. The possibility of injury or material loss is unlikely although conceivable.

**Risk Assessment**

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| --- | --- | --- | --- |
| **Hazard Checklist** | | | |
| **Hazard** | Tick | **Hazard** | Tick |
| Public |  | Adverse Weather |  |
| Falls From Height |  | Cuts |  |
| Being Hit by Falling Objects |  | Overhead working |  |
| Contact With Mobile Plant |  | Equipment |  |
| Electricity |  | Moving Materials |  |
| Fire |  | Wet / Slippery Surfaces |  |
| Dust |  | Noise |  |
| Explosion/explosive atmospheres |  | Hazardous Substances |  |
| Handling of Loads |  | Working adjacent to live roads |  |
| Confined Spaces |  | Working on railways |  |
| Difficult Access |  | Other |  |

**Risk Rating Matrix**

|  |  |  |
| --- | --- | --- |
| **Numeric Rating** | **Likelihood** | **Severity** |
| 1 | Very Unlikely | Very minor injuries |
| 2 | Unlikely | First aid minor injury/illness |
| 3 | Likely | “3 Day” injury/illness |
| 4 | Very Likely | Major injury/illness |
| 5 | Almost Certain | Permanently disabling injury /illness or fatality |

**Table

Description automatically generated**

**Task Specific** **Risk Assessment**

| **Hazards** | **Risks** | **Risk Rating**  **(Pre-Controls)** | | | **Control Measures** | **Risk Rating**  **(Post Controls)** | | | **Responsibilities** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| L | S | RR | L | S | RR |
| **Slips, trips and falls** | * Slips, trips and falls, falling objects, trailing leads, materials/equipment left lying around. * Inadequate Lighting | 3 | 3 | 9  (M) | * Review entire work areas prior to works and note any potential slip/trip hazards i.e. uneven ground, gradients, loose ground etc. Inspect the walkways to ensure they are clear and safe to access. * Personnel shall review and assess all work areas taking into account weather conditions etc. * All equipment is stored upright in a safe position. Never leave equipment lying around. Never leave the work area unattended. * Never leave equipment unattended. If you need to leave the area, ensure all equipment is restored or that the area is secured and all potential trip hazards are removed. * All waste generated onsite is to be removed and disposed of correctly and safety. | 2 | 3 | 6  (M) | All surveyors |
| **Lifting of Loads** | * Back Injury due to poor lifting techniques | 3 | 3 | 9  (M) | * All Insert your Company Name here Personnel have received Manual Handling Safety Training. * Personnel to keep equipment to a minimum. All equipment will be secured prior to lifting/moving. * Conduct team lifts as required. * Distances to be reduced where possible. | 1 | 3 | 3  (L) | All Surveyors |
| **Emergency Situation** | * Inadequate information regarding emergency situations leading to poor response * Personnel unaware of Safety personnel and/or ERT contact information | 4 | 5 | 20  (H) | * Prior to commencement of works all personnel shall attend a site-specific safety briefing, which will detail the site-specific emergency procedures. The project supervisor shall liaise with the Client/PSCS contact on arrival to site to discuss. * Insert your Company Name here personnel shall adhere to provisions detailed in the Client/PSCS emergency /evacuation procedures. | 2 | 5 | 10  (M) | All surveyors  Project Supervisor  Client to advise |
| **Adverse Weather** | * Hypothermia * Frostbite or cold induced loss of sensation * Poor visibility * Slips, trips, and falls | 4 | 4 | 16  (H) | * Check weather forecast in advance of works. If during project weather conditions become extreme, then the work should be postponed. * Ensure that the correct footwear for the conditions and the environment are worn – ankle support, waterproof, comfortable * In the event of unforeseen adverse weather seek shelter and wait for weather to clear. | 1 | 4 | 4  (L) | All surveyors  Project Supervisor |
| **Use of PPE** | * Incorrect use or non-compliance in the use of PPE | 3 | 3 | 9  (M) | * All staff shall be issued the correct PPE – “right PPE for right job”, proper fit and fit for use. If additional PPE is required for particular activities or sites, inform your supervisor who will arrange for it to be provided. * All PPE shall be of highest standard and purchased from a reputable trader. * Any defects must be reported and PPE replaced * Failure to use wear the correct PPE can jeopardise a project and the client can have the offending individuals removed from the site. * Site requirements Can include: * High Vis clothing * Hard hats * Safety Boots * Safety gloves | 1 | 3 | 3  (L) | All surveyors  Project Supervisor |
| Installation of ground anchors / control points | * Electrocution, damage to equipment, damage to services * Flying particles, debris | 4 | 4 | 16  (H) | * Prior to works, the control/ monitoring points location and number shall be agreed with the Client. * Eye protection and gloves shall be worn when driving and removing pins to protect against flying particles. * Equipment shall not be left unattended at any time. * All locations shall be left in good order following works and removal of points. Employees will advise Client of any damage to surface caused by installation/removal of points. * Temporary control points will be installed and shall installed in an unobtrusive manner,   **Note:** The temporary points are for short term reference only and will not be required long term. | 2 | 4 | 8  (M) | Project Supervisor  Personnel |
| Working near live traffic | * Collision with vehicles, cyclists and pedestrians causing injury and/or fatalities * Flying Objects * Inadequate traffic management provisions * Parking of Vehicles causing obstruction | 4 | 5 | 20  (H) | * All surveying requiring works to be completed on or close to a roadway/carriageway shall be well planned in advance and to determine the actual schedule/duration/scale of the survey. All plans to be discussed with client. Appropriate Traffic Management to be in place. * All TM provisions will be controlled by a competent S, L, G person appointed by Insert your Company Name here * A visual assessment of each day of the survey area/road should be carried out in advance of commencing work. * Wear high visibility clothing and PPE at all times. * Ensure your vehicle is parked safely – apply handbrake, leave in first gear and hazard lights are switched on. Ensure vehicle is secure when unattended. Use appropriate signage and guarding. * Check for debris that may cause hazard. * Do not work in areas at all if you perceive a significant risk to your personal safety. | 2 | 5 | 10  (M) | All Surveyors  Project Supervisor  Project Manager |
| **Overhead Hazards**  Contact with overhead lines  Electrical arching  Electrical Storms | Risk of contact having potential fatal consequences – most likely to occur while working at height, using telescopic camera rig, moving scaffolding and while using MEWP  Arcing can occur within 18m of the overhead power lines or pylon  Electrocution | 4 | 5 | 20 (H) | * All work near overhead power lines must have a site-specific risk assessment undertaken by a competent person in advance of commencing work. * Information on the power source, voltage, current, and height to be sought from the Client. * Staff to perform visual assessment of any works nearing overhead services prior to commencement of works. * Where possible power should be isolated by the ESB or Local Operating authority. * Check weather conditions in advance. * All equipment should be earthed and properly insulated. * Avoid using telescopic camera in the vicinity of power lines, transformers, telephone lines or pylons. * Complete site-specific SPA prior to commencement of works. * Maintenance of the telescopic camera rig to be carried by approved suppliers. Earthing and integrity to be check on a regular basis as recommended by manufacturer. * Care to be taken when using telescopic detail poles in the vicinity of overhead power lines. | 2 | 5 | 10 (M) | All Personnel  Client |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **Urban Surveys**  Housekeeping  Electrical Equipment  Underground services  Anti-social Behavior  Traffic Management  **Urban Surveys cont’d** | Staff and public slipping, tripping or falling  Risk of electrocution  Coming in contact with services, damaging services  Theft, physical abuse, intimidation, threats, flying missiles, assault.  Risk of vehicular collisions with staff or member of the public | 4 | 4 | 16 (H) | * Ensure equipment is not creating a slip/trip/fall hazard. Avoid/minimise trailing cables; maintain good housekeeping on streets and footpaths. Minimise the use of equipment – store in the correct place until needed. Erect barriers and signage where possible. * Where traffic will be affected by activities – follow SRA017 – Road Surveys provisions. * Correct PPE to be worn at all times, especially high visibility clothing. * All vehicles safely parked. Traffic management plan to be in place – erect cones and signage correctly. Notify local authority if further road closure is necessary. Alternatively, co-ordinate with Main Contractor/PSCS. * Obtain plan of underground services if necessary – use CAT scanner to detect underground cables, gas/water lines, and sewerage systems. CSCS accreditation required for the location of underground services (CSCS - LUGS) * Extra care to be taken when working in busy social areas especially at night. Works will be co-ordinated, where possible outside the peak times i.e. pub closing, nightclub closing etc. Where works are necessary during these times, personnel to remain vigilant. * Be courteous and polite to public – avoid conflict. If a person has any grievance, stay calm, limit communication without coming across as rude. Remove yourself from the immediate area and contact management immediately. * Avoid working in antisocial neighbourhoods, particularly at night or in secluded locations – staff are not to engage with unruly conflict. If any staff feels under threat from offenders, suspend work and leave the area immediately. Notify the Gardaí Síochána and management. * All staff to carry mobile phones – keep charged. During out of hours works, Insert your Company Name here that a designated contact person is on call to deal with issues that may arise. * Staff to keep a close eye on equipment when working in urban areas, especially during out of hour works and during peak times i.e. pub/club closures. Never leave equipment unattended. * Staff to be conscious of dangerous stray animals – staff not to approach. | 2 | 4 | 8 (M) | Personnel  Supervisors |
| Weil’s Disease | * Exposure to potential hazardous substances (biological risk) * Exposure to contaminated water/sediment following flood | 4 | 4 | 16  (H) | * Check known and or possible locations with Client prior to commencement of Survey. Consult with the client and/or local authorities prior to commencement to discuss the possible presence of hazardous contaminants. * Minimise need to enter water and/or possible disturbance of mud’s and sediments following flooding * If the type of contaminant known consult with competent authority/Client regarding possible risks * Cover cuts and wear suitable waterproof dressings, gloves, and appropriate PPE * Comply with recommendations from Environmental and Health Authorities * Ensure sufficient and suitable disinfectant cleaning liquid / wipes / Washing facilities are available. * Extreme caution to be ensured when wading into potentially contaminated water, as it may contain raw sewage, syringes etc. * Personnel to assess situation on arrival. If deemed unsafe, cease works immediately and contact your supervisor. To discuss alternative arrangements or methods. | 2 | 4 | 8  (M) | All Personnel |
| Biological Substances | * Normal contamination from the ballast | 1 | 3 | 3  (L) | * PPE and washing facilities | 1 | 3 | 3  (L) | All Personnel |
|  |  |  |  |  |  |  |  |  |  |
| **Working close to water**  Inadequate Safety devices  Inadequate PPE | Slips, trips fall, personal injury, falling into water unprotected.  Poor response in emergency, personal injury, drowning  Personal injury, drowning | 3 | 3 | 9 (M) | * Life jackets/floatation device to be worn at all times when working near watercourses. * All safety devices and PPE to be maintained and serviced (where applicable) and checked prior to each use. * Life buoy and secure rope to be provided at all times when working near watercourses. * Work Rota and exact locations to be agreed daily with project manager. * All surveying teams will carry a minimum of two mobile phones. * Never enter the water unless a full assessment has been completed re: safe access, egress, approximate depth, flow speeds etc. * Teams of two will operate where water levels are low enough not to constitute a safety risk. * All personnel to comply with the Insert your Company Name here Ireland company Procedure (PRO014 – Hydrographical Surveys) | 1 | 3 | 3 (L) | All Personnel  Supervisors |
| **UAV Operations**  Starting propellers of system  Launching of system  People/Animals/Vehicles  Weather  Dropped Object  Environment (Over Salt Water)  RF transmissions/ power lines  sUAS Alarms  Low Light Levels  sUAS Recovery & Landing | Propeller strike  Propeller strike  Property damage/bodily damage/damage to livestock/bird strike  Cause damage to the equipment  Property damage/bodily damage/damage to livestock  Cause damage to the equipment  Cause damage to the equipment. Property damage/bodily damage/damage to livestock. Potential damage to infrastructure.  Lost Link, Battery Low/Empty, Motor Failure, GPS Low/lost which could cause a potential dropped object  Loss of visual with UAV and potential collision with infrastructure/persons/ animals.  Propeller strike (could cause bodily harm and damage to infrastructure/animals | 2  4  4  4  2  2  3  3  1  3 | 1  4  3  4  2  2  3  3  1  3 | 2  (L)  16  (H)  12  (M)  16  (H)  4  (L)  4  (L)  9  (M)  9  (M)  1  (L)  9  (M) | Operator maintains safe distance away from system. OB ensures all relevant parties are behind the RP.  Ensure all parties are at a safe distance from the launch site and RP.  Field team to ensure it is followings IAA SOP rules and regulations. Observer to monitor the environment constantly throughout the operation.  Weather to be checked prior. Monitor environment before launch. High Wind & Rain DO NOT FLY.  RP to ensure there are valid ELS areas. RP to try and maneuver the system away from any persons. Flying site will be clear of any personnel prior to flight.  RP to ensure a valid flight plan is checked to ensure the system is clear of any harm.  RP during flight planning must research the area. While on site a dynamic risk assessment must be conducted to ensure no RF interference. If the hazard is present a spectrum analysis must be used to ensure no frequency de-confliction. Flight Height will be 50meters above Lines  RP to ensure that every flight plan created is to be within system limitations. Only fully charged batteries to be used. RP to ensure that the system does not fly without VLOS. If motor fails RP to try and maneuver the system to an ELS, no persons to be within operating area. RP not to fly if less than 6 GPS satellites, if a GPS is low/lost RP to turn off assist mode and land the system.  RP to ensure no flying during low light.  Operator maintains safe distance away from system. Collision protection around the system. OB ensures all relevant parties are behind the RP. Ensure all parties are at a safe distance from the recovery site and RP. Weather to be checked prior. Monitor environment before recovery/landing. | 1  2  2  4  2  2  2  2  1  2 | 1  2  2  4  2  2  2  2  1  2 | 2  (L)  4  (L)  4  (L)  16  (H)  4  (L)  4  (L)  4  (L)  4  (L)  1  (L)  4  (L) | Remote Pilot  Observer  Remote Pilot  Observer  Remote Pilot  Observer  Remote Pilot  Observer  Remote Pilot  Observer  Remote Pilot  Observer  Remote Pilot  Observer  Remote Pilot  Observer |

**Personnel Sign Off**

We (the undersigned) have read and understood the attached method statement and will comply with the specified requirements and control measures. If the work activity changes or deviates from that originally envisaged, we will seek further advice and request an amended method statement.

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| Name (Print) | Signature | Date |
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OVERALL RISK: Low/Medium/High