

DESIGN RISK REGISTER

This review pro-forma can be used when acting as either Principal Designer or Designers advisor to record the process by which design risk issues are considered throughout the design of a project. All design health and safety benefits are recorded to establish a clear audit trail of decision making.

Project: Re-Roofing Works 2024-25 – Ryelands Estate, Lancaster

Notes: A programme of design risk review will be carried out during design meetings to ensure co-ordinating of design risk management work. The aim is to record an audit trail of decision making throughout the project.

| Work item/ hazards | | Period C - Construction O - Occupancy M - Maintenance D - Demolition | Potential hazards and challenges The ongoing hazard issues and considerations to establish the design solution with demonstrable design safety benefits. Avoid – Combat - Control | Essential controls Measures to be conveyed to relevant parties (contractors/ designers), to enable adequate controls and mitigation of the residual risks. Essential controls information | Date Actioned by | Health and Safety File Y/N |
|--------------------|---|--|--|---|----------------------|----------------------------|
| 01 | Site Set-up Contractors Facilities | C | Danger to site operatives due to poor planning of site facilities. Danger/inconvenience to local residents due to poor location of site compound | Contractor to ensure site facilities are erected in agreed locations considering the vehicular access route and delivery of materials and removal of waste. Proper signage is to be provided around the site directing site personnel vehicles and visitors to the site office. Considering movement around the site and compound, | PRINCIPAL CONTRACTOR | N |
| 02 | Access and Egress Points | C | Danger to site operatives, visitors & members of the public including occupants/building users. | Properly supervise all entrance/exit points. Consideration to be give to the timing of deliveries. Provide signage on and within the site warning site staff vehicle drivers and members of the public of the danger. | PRINCIPAL CONTRACTOR | N |
| | Scaffolding on Highway | C | Danger to site operatives, visitors & members of the public including occupants/building users. | Take appropriate actions to erect and maintain scaffold in accordance with safe practice, Ensure adequate vehicle signage and compliance with Safe Street Works and Road Works Code of Practice | PRINCIPAL CONTRACTOR | N |

| Work item/ hazards | | Period C - Construction O - Occupancy M - Maintenance D - Demolition | Potential hazards and challenges The ongoing hazard issues and considerations to establish the design solution with demonstrable design safety benefits. Avoid – Combat - Control | Essential controls Measures to be conveyed to relevant parties (contractors/ designers), to enable adequate controls and mitigation of the residual risks. Essential controls information | Date Actioned by | Health and Safety File Y/N |
|--------------------|--|---|---|--|--|----------------------------|
| 03 | Materials Storage and delivery | C | Risk to tenants, site operatives from poorly positioned and badly organised delivery and storage of materials. | Ensure materials are delivered in suitable locations on site, where possible material delivered close to point of use. Materials to be delivered on a when needed basis and to avoid over storage of materials. Materials not to be stored on public roads or highway and stored on scaffolding to reduce risk to tenants and allurements of children. All site deliveries to be supervised with the use of banks man. Traffic Flows to be routed in accordance with a Traffic Management Plan | PRINCIPAL CONTRACTOR | N |
| 04 | Welfare | C | Biological hazard, general hygiene hazard due to lack of appropriate facilities. | Provide mess facility, sanitary accommodation, and other welfare facilities. | PRINCIPAL CONTRACTOR | N |
| 05 | Strip off and removal of redundant materials | C | Removal of debris | Operatives to wear appropriate PPE Debris to be safely deposited into waste skips via refuge chutes. The throwing of debris from roof level to ground level to be strictly prohibited. Skips to be removed when full. Skips to be carefully located so as not to effect local traffic and pedestrians around the estate | CLIENT/ PRINCIPLE DESIGNER/ PRINCIPAL CONTRACTOR | N |
| 06 | General | C | Slips, trips and falls due to dusty, wet surfaces, trip over materials | General good house keeping on site, avoid use of trailing cables, remove trip hazards, clean spilled liquids and warn of slippery surfaces. | PRINCIPAL CONTRACTOR | N |
| | | C | Site behaviour of operatives – horse play, supervision of trainees/inexperienced operations. | Ensure appropriate supervision of inexperienced operatives, enforce site rules, ensure site induction and toolbox talks regarding behaviour and hazards. | PRINCIPAL CONTRACTOR | N |

| Work item/ hazards | | Period C - Construction O - Occupancy M - Maintenance D - Demolition | Potential hazards and challenges The ongoing hazard issues and considerations to establish the design solution with demonstrable design safety benefits. Avoid – Combat - Control | Essential controls Measures to be conveyed to relevant parties (contractors/ designers), to enable adequate controls and mitigation of the residual risks. Essential controls information | Date Actioned by | Health and Safety File Y/N |
|--------------------|---------------------------|---|---|---|----------------------|----------------------------|
| 07 | Loading/Delivery | C | Injury to people/damage to buildings, services, etc. due to being struck by a vehicle. | Agree specified delivery/loading times and procedures. Make use of designated delivery/loading areas, make use of warning signs and competent banks men. Comply with LOLER for lifting operations. | PRINCIPAL CONTRACTOR | N |
| 08 | Crane/Lifting Operations. | C | Particularly the delivery of steel beams, roof trusses, etc. | Provide risk assessments/method statement, comply with LOLER, make use of competent banks men, crane operators, plant/equipment, and warning signs. Isolate lifting/delivery areas. Permit to work system. | PRINCIPAL CONTRACTOR | N |
| 09 | Manual Handling. | C | Moving materials – particularly demolition materials, scaffolding, etc. - Muscular/Skeletal injuries, cuts and abrasions. Lifting to roof level Photovoltaic Roof Panels | Use recommends lifting techniques, reduce distances from loading/delivery areas to working area, make use of mechanical lifting aids, split loads, etc. Use of PPE such as safety foot ware, gloves, and other protective clothing. | PRINCIPAL CONTRACTOR | N |
| 10 | Noise | C | Mechanical cutting of roof tiles - Hearing damage due to excessive exposure to high noise levels. | Make use of ear defenders, restrict access to areas of high noise levels, provide warning signs, provide acoustic baffles, | PRINCIPAL CONTRACTOR | N |
| 11 | Dust | C | General builders work, mechanical cutting of roof tiles, rainwater goods and fascia/soffits, timber. | Separate working areas (dust screening), ventilate working areas, damp down after cutting and wet items prior to cutting, provide dust masks, protective eye ware and other protective clothing. | PRINCIPAL CONTRACTOR | N |
| 12 | Vibration | C | Cutting of roof tiles – hand arm/whole body vibration injuries. | Make use of plant and equipment with dampers, limit exposure of operatives to vibration, make use of PPE such as anti-vibration gloves/boots. | PRINCIPAL CONTRACTOR | N |
| 13 | Insulation | C | During installation of Insulation - Irritation of skin, etc. | Isolate working area, use of protective clothing such as gloves, overalls, masks, googles, etc. | PRINCIPAL CONTRACTOR | N |

| Work item/ hazards | | Period C - Construction O - Occupancy M - Maintenance D - Demolition | Potential hazards and challenges The ongoing hazard issues and considerations to establish the design solution with demonstrable design safety benefits. Avoid – Combat - Control | Essential controls Measures to be conveyed to relevant parties (contractors/ designers), to enable adequate controls and mitigation of the residual risks. Essential controls information | Date Actioned by | Health and Safety File Y/N |
|--------------------|--------------------|---|---|--|---|----------------------------|
| | | M | During access to roof voids - Irritation of skin, etc. | Include advice in H&S File. Isolate working area, use of protective clothing such as gloves, overalls, masks, goggles, etc. | PRINCIPAL CONTRACTOR/ PRINCIPAL DESIGNER | Y |
| 14 | Electrical | C | Electric shock. | Carry out survey of working area to identify electrical installation prior to commencing works, refer to health and safety file to identify locations of power/lighting cable routes, Isolate power supply prior to commencing works, use competent person to undertake electrical works. | PRINCIPAL CONTRACTOR | Y |
| | | M | Electric shock – cutting/drilling/severing concealed cables. | Update as built service location drawings where services are altered because of the works. Carry out survey of working area to identify electrical installation prior to commencing works, refer to health and safety file to identify locations of power/lighting cable routes, Isolate power supply prior to commencing works, use competent person to undertake electrical works. | PRINCIPAL CONTRACTOR/ PRINCIPAL DESIGNER | Y |
| 15 | Fire | C | Fire risk where flammable products and hot work are proposed – design out and use alternatives. Operatives smoking. | No smoking site, avoid use of flammable products/materials, avoid hot work, provide fire fighting equipment, advise operatives and occupants of emergency procedures. Use cold applies roofing felt | PRINCIPAL CONTRACTOR | N |
| 16 | Falls From Height. | C | Falls from roof areas during works, falls from scaffolding and/or ladders. | Use of appropriate ladders, scaffolding access with handrails/guards, protection to roof edges, provision of temporary platforms and decks. | PRINCIPAL CONTRACTOR | N |
| | | M | Falls from roof, ladders, scaffolding during maintenance works. | Include advice regarding safe work on new roof in Health and Safety File. | PRINCIPAL CONTRACTOR/ PRINCIPAL DESIGNER | Y |

| Work item/ hazards | | Period C - Construction O - Occupancy M - Maintenance D - Demolition | Potential hazards and challenges The ongoing hazard issues and considerations to establish the design solution with demonstrable design safety benefits. Avoid – Combat - Control | Essential controls Measures to be conveyed to relevant parties (contractors/ designers), to enable adequate controls and mitigation of the residual risks. Essential controls information | Date Actioned by | Health and Safety File Y/N |
|--------------------|---|---|---|---|---|----------------------------|
| 17 | Falling Objects. | C | Objects/materials falling from roofs, scaffolding, ladders, platforms, etc. | Provide appropriate guards, toe boards, netting, etc. to below working areas and restrict access below working areas, make use of PPE such as hard hats and protective foot ware. | PRINCIPAL CONTRACTOR | N |
| | | M | Objects/materials falling from roofs, scaffolding, ladders, platforms, etc. during maintenance works. | Include advice regarding safe work on roofs in Health and Safety File. | PRINCIPAL CONTRACTOR/ PRINCIPAL DESIGNER | Y |
| 18 | Cement/Lime. | C | Cement burns/ dermatitis – include dry verge and ridge systems to avoid the need for pointing and bedding with mortar. During repointing works | Make use of PPE such as gloves, overalls, inform operatives of hazard. | PRINCIPAL CONTRACTOR | N |
| 19 | Unauthorised Access | C | Slips, trips, falls, falling objects, cuts, abrasions, etc. | Isolate the works, make use of fences, hoardings, Remove and secure ladders giving access to scaffolding when not in use and at the end of each working day | PRINCIPAL CONTRACTOR | N |
| 20 | Asbestos | C | Release of /exposure to airborne asbestos fibres. | Consultation of surveys provided prior to commencing work on site, ensure operatives have had up to date awareness training and notify contract administrator of any suspect material | CLIENT/ PRINCIPAL CONTRACTOR | Y |
| 21 | Vehicle Impact / Working Adjacent to Highway Railway Street Cemetery Lodge Scaffolding over footways. | | Vehicle impact from Traffic passing near scaffolding | Plan works /footpath diversions and traffic signage in accordance with Safety at Street Works and Road Works | PRINCIPAL CONTRACTOR | Y |

Notes:

1. The aim is to review and add design consideration as the project progresses.
2. The issues identified must be project specific

3. Any residual risks must be highlighted in the relevant section of the health and safety file.

Prepared By: D Howard

Date: July 2023.

Reviewed: 12-03-24