Bath Demolition limited

PROJECT INVICTUS

Demolition Method Statement

High-level Overview of the Demolition Works to the Existing BOS plant

TATA STEEL

TATA

Introduction

- Tata Steel UK Ltd are constructing a new 3.2 million tonne per annum plant at Port Talbot Steelworks. Project Invictus as it is named is the construction of the new **electric arc furnace (EAF) based steel production facility,** which entails the construction of an electric arc furnace and associated works, within the existing BOS plant and surrounding external areas**.**

- As a result, there are significant alteration works required to be undertaken to the existing BOS Plant to facilitate the installation of the New Electric Arc Furnace (EAF) and associated equipment.

- The layout of the former BOS Plant needs to be altered to accommodate these new requirements that will need former office space, welfare and changing facilities to be removed including areas of structural podium decks and walkways to create the space required to facilitate the New EAF layout.

- In order to do this, controlled demolition works are required to be undertaken to allow the new civil & structural works to be undertaken to support the new building layout requirements, in which to house the New EAF and associated equipment. In line with the **Approved Demolition Plan ref: A-04001; Rev P03**

- Tata Steel UK have employed Bath Demolition Ltd to undertake the key demolition works associated with the New EAF Project to the BOS Plant.

- To undertake the works safely and considering both the site and environmental considerations when undertaking the demolition works, the following hierarchical constraints will be followed in the demolition methodology to safely undertake the dismantling and alteration works.

Introduction (Cont.)

Existing Structure/ Temporary Works

- Condition of the Existing Structure: Structural condition surveys to be undertaken to determine the feasibility and suitability to alter the existing structure to facilitate the new EAF Load Requirements. From this, any temporary works requirements can be considered and implemented to keep the existing building structure stable in the temporary condition until the new permanent structure is fully installed and performing as it should in its permanent condition.
- Temporary Works requirements also need to be implemented for any major plant requirements such as cranes, brokks, mewps, demolition plant and specialist vehicle haulage requirements to undertake the works. Especially where any pre-prepared working platforms are required to be constructed to facilitate the major plant loadings required to undertake the works,
- Both Temporary Works Co-ordinators & Temporary Works Supervisors will be employed to ensure that any Temporary Works Requirements are undertaken in accordance with Tata Steel UK: Safe Working Practices & Procedures.

Working at Height

- Due to the size and configuration of the former building and its layout, the need to alter the building at height to facilitate the new layout requirements including working at height will be suitably planned and implemented to undertake the works safely.
- To do this safely the following hierarchical controls will be put in place to manage the undertaking of the works.

Introduction (Cont.)

Control Measure 01

- All work wherever possible to be undertaken by machine/ equipment where operatives are not required to work at height. Use of major demolition plant and equipment to be used such as high reach demolition plant and remote-controlled equipment, where operators controlling the equipment are undertaking it safely and remotely outside the Danger/ Drop/ Exclusion Zone depending upon the equipment in use.

Control Measure 02

- All demolition exclusion zones are to be planned, communicated and agreed with all prior to being putting put in place. These will be communicated and co-ordinated at daily activity briefing sessions to all works supervisors so these can be briefed to the workforce at the commencement of each work shift pattern, ensuring the site logistics changes are communicated before each shift, especially where site exclusion zones or restricted access zones/ routes apply

Control Measure 03

- All demolition works will be securely fenced off using either rigid metal Heras fencing or rigid metal pedestrian barriers, clipped together with suitable and relevant signage installed with controlled access/ egress points into the controlled demolition work areas. A permit to enter/ work system will be employed in line with Tata Steel UK Ltd: Health & Safety Policy & Procedures.
- **Note:** Sufficient stand off distances will be required for the fence line positions to be established including signage in line with HSE Guidance, to ensure that controlled zones are of sufficient size and distance away from the works being undertaken to prevent injury from materials/ items falling from height, being blown astray and impacting the ground and subsequently bouncing to a point of rest at an extended distance away from the works being undertaken.

Introduction (Cont.)

Control Measure 04

- Demolition Supervision & Competency is paramount to ensure that the works are safely undertaken at all times.
- All working on the project undertaking the demolition works will be required to be suitably qualified in line with Tata Steel safety requirements.
- Depending upon the role being undertaken on the project, this will determine the level of safety qualification required to allow the person to undertake the role required such as NEBOSH, IOSH, SMSTS, SSSTS, CCDO, CSCS, CPCS and in particular those that are needed to meet the minimum requirements / standards for the **National Federation of Demolition Contractors (NFDC) in the UK.**
- There will also be the need to have other job/ activity specific training to be in place which will be risk assessment based for the work activity to be undertaken such as confined space training, hot works permit control, permit to disturb ground, traffic marshal training, working at height, vehicle/ pedestrian segregation etc.
- This will include attending the Tata Steel Site Wide Induction, Tata Steel BOS Plant Induction and specific Demolition Work Inductions, Briefings, Toolbox Talks, Point of Work Risk Assessments, Daily Activity Briefings, Weekly Integrated Team Logistics Meeting…etc.

Introduction (Cont.)

Control Measure 05

- Control of Noise and Dust whilst undertaking the demolition works will be of key importance. The works will be undertaken utilising the latest plant and equipment to safely undertake the works including both low noise & low fuel emission plant.
- Breaking up of existing concrete slabs and decks (depending upon their location) will be undertaken utilising high reach demolition equipment and heavy excavators with typical attachments for use such as munchers, breakers, shears and where remote control working to be utilised, especially at height. The demolition will utilise typical BROKK equipment.
- The control of dust from undertaking demolition work activities will essentially be undertaken by utilising a combination of “Dust Buster Canons” or “Spray Suppression Attachments” on the end of the machine jib that focus a jet of water directly onto the area of demolition work being undertaken via water supply attachment direct to the machine.
- Removal of any structural steelwork as part of the demolition works will be typically undertaken by utilising cranes to hold the structural member to be removed until it can be safely unbolted or cut utilising burning gear with operatives working out of suitably sized MEWPs or Scissor Lifts to access the work area.
- Emergency Rescue Plans will be put in place to rescue anybody who is working at height especially if the equipment they are in should either break down or there is an incident where somebody gets injured whilst undertaking a specific work activity at height.

Introduction (Cont.)

Control Measure 06

- Any material generated from the demolition works will look to be recycled.
- Concrete debris can be stockpiled on site in readiness for crushing to make suitable stone capping/ fill material for re-use in the works.
- Steel reinforcement, Steel Sections, Cladding or building components made of metal will be removed from the demolition debris and stockpiled out of the way of the construction activities ready for re-use when producing new steel utilising the EAF when in operation.
- Material from any demolition strip out works will be appropriately segregated and placed into the designated skip for disposal off site.
- Any asbestos containing material highlighted in the pre-demolition asbestos survey will be removed by a registered asbestos removal company that has been approved to work for Tata Steel UK on their premises, in advance of any strip out or demolition works commencing, where possible. All demolition operatives, supervisors and their management will have attended asbestos awareness training in recognition that asbestos containing material can come in many forms and all need to be able to recognise material, if not identified in the asbestos surveys that is suspicious of containing ACM, that works stop and the area isolated under controlled conditions. Until the material sample can be undertaken and sent to be tested by an appropriate UKAS accredited test laboratory, to determine its composition.

Introduction (Cont.)

Control Measure 07

- Due to the various work activities that will be ongoing with in the existing steelworks producing steel coil. The interface between the construction of the New EAF and the steelwork production requirements is key to ensuring the site logistics are co-ordinated to allow any planned activities to be communicated and co-ordinated between all relevant parties.

- This will be undertaken by holding daily co-ordination meetings with the relevant site supervision in attendance for the designated work areas to ensure that the planned works can be undertaken or if not, alternative solutions can be agreed, with the order of criticality taking precedence to keep the works moving.

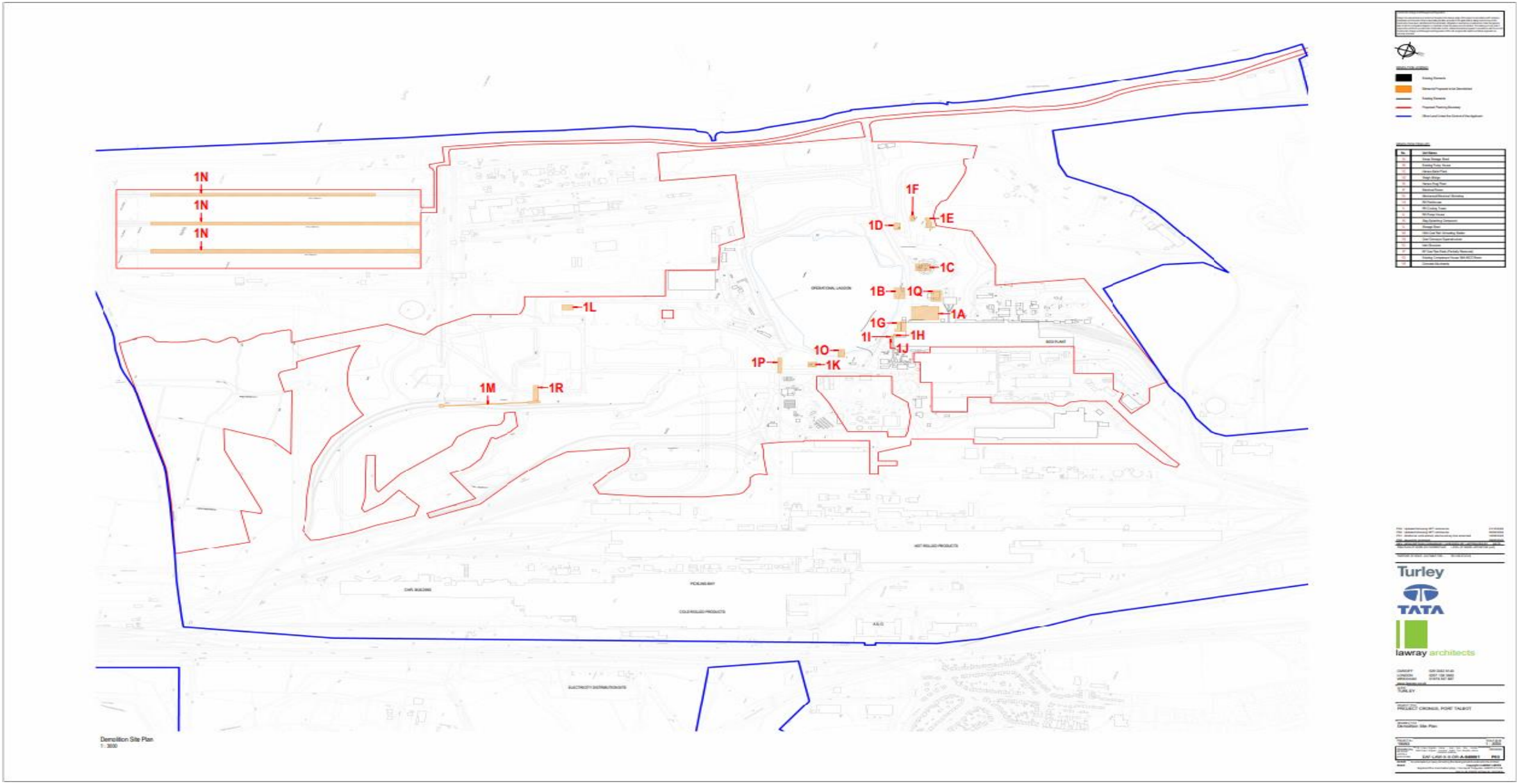
- In particular, the above is critical to ensuring site deliveries of plant, equipment and materials can get to the required workface, along with the above in reverse when required to be removed from site.

- With regards to demolition works, there will be various sizes of deliveries from vans, rigid back lorries, mobile cranes, articulated lorries to and from the various workfaces at the BOS Plant.

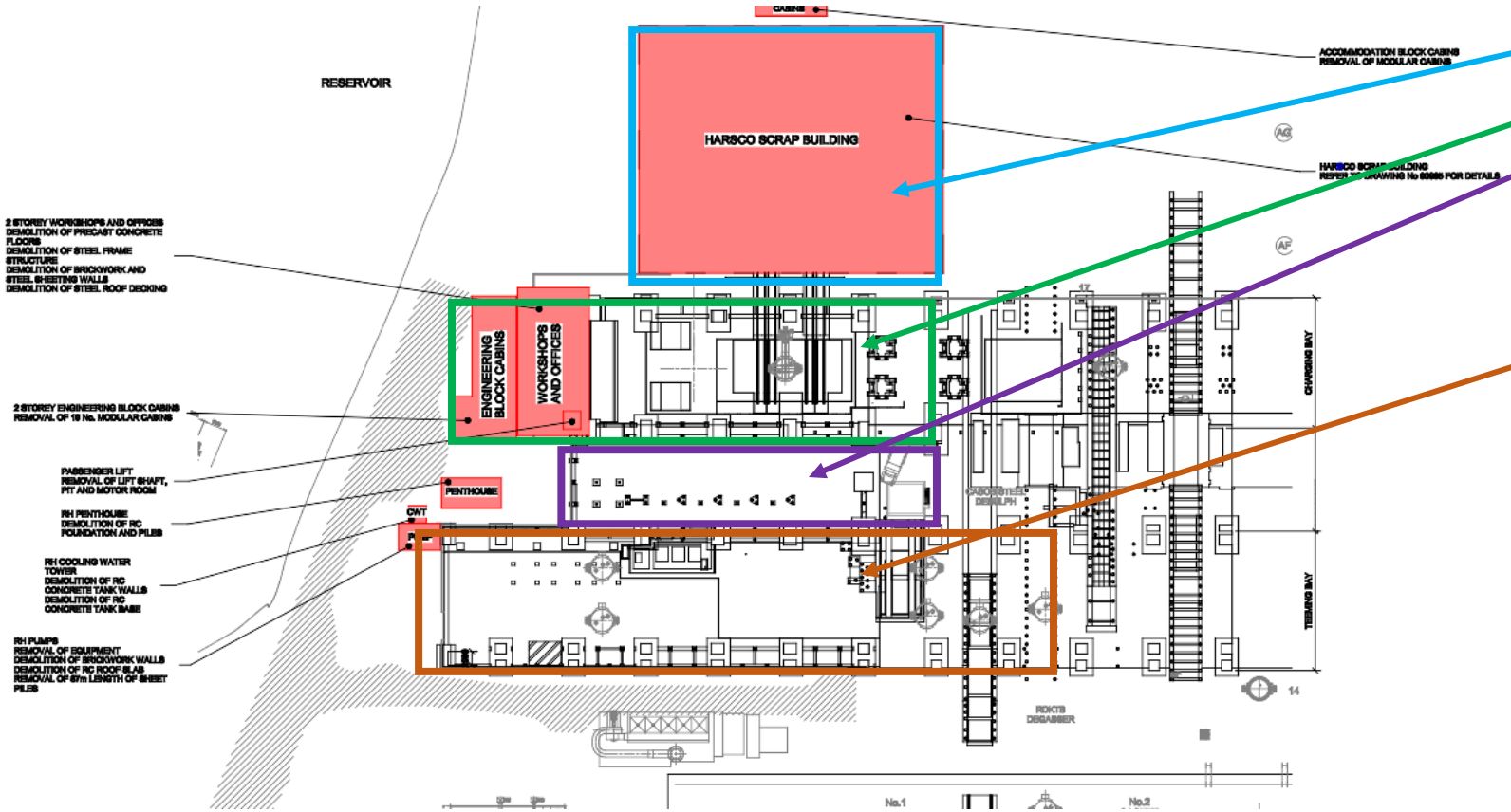
- All deliveries are achievable on the steelworks utilising the good network of existing roads that can cater from small to extremely large delivery requirements and loads. All deliveries will be required be booked in at the Tata Steel Main Gate, a minimum of 24hrs in advance for normal sized deliveries for vans and medium size deliveries. Large or Articulated Heavy Load deliveries will be required to be booked in at least 2 weeks in advance of the planned delivery date, so that these can be co-ordinated and communicated appropriately with in the steelworks.

- Where an emergency occurs that requires the delivery of any key equipment or components, this will be communicated at the earliest opportunity and a meeting called with the relevant parties in attendance to discuss and agree how best to move forward with the situation.

Site Works – Demolition Plan



Site Works – Demolition Plan : Heavy End, BOS Plant



The site demolition work is spilt into four main areas

- Scrap Bay
- EAF Bay (Charging Bay)
- Workshops and Lance service Area Convertor Bay Including High Level PCM Deck and Amenity Block Slab.
- LF Bay (Teeming Bay) – Low Level Buildings.

Also:

- Ground floor slabs and mechanical plinth support structures are to be removed to all areas.
- Demolition/removal of external low level or modular buildings.

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Project Arrangements

Contract Arrangement:

Bath Demolition will be undertaking all works as a works contactor to Tata Steel
Tata Steel are the Principal Contractor and Principal Designer.

Bath Demolition – Management Structure:

Bath Demolition will employ a dedicated and project based Project Manager and Site Mager in addition to a non-working Supervisor.
Monitoring visits will be conducted weekly by :

- Contact Manager – Weekly.
- H&S Manager – Every 2 weeks.

Method Statements and Risk Assessments (RAMS or Job Method Statements (JMS) will be prepared for each individual element of the works.
RAMS (JMS) will be issued to TATA for review and approval prior to any works begin undertaken.
Any necessary Temporary Works Assessments or Lifting Plans will be issued to Tata Steel for review and approval prior to any works begin undertaken.

The Demolition Risk Assessment is outlined in the following slides.

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Project Arrangements (Cont.)

Site Set-Up:
The site once handed over to Bath Demolition, will be established by Heras fencing.

Inside the buildings, we will incur interface with Tata , where this occurs these areas will be fenced off separately to keep all works into separate sites/ works areas.

Bath Demolition will attend the daily Tata Steel Works Coordination/Communication Meeting to ensure any interfaces with other on-going activities are coordinated.

Main Site Welfare will be provided by Tata Steel however, Bath Demolition will provide on site welfare for demolition workers. Welfare will be set up outside the works areas.

Any Exclusion Zones and/or Drop Zones required for demolition or high-level work will be constructed from secure Heras fencings which will be locked and controlled by a nominated site operative.

Temporary lighting will be erected where required to give safe access/egress and workplace lighting.

Site Walkways: Dedicated walkway and vehicles routes will be set up around the works areas.
Signage and direction arrows showing all routes and hazards around site which will all work with the site logistics plan set out by the PC

Emergency Response procedures will be established including the provision of local Fire Points.

Demolition Risk Assessment (1 of 3)

BOS Plant - General Demolition Risk Assessment.

Likelihood Rating Key:	
5	Frequent (1 or more per week)
4	Probable (1 per month)
3	Occasional (1 per year)
2	Remote (1 in 10 years)
1	Improbable (1 in 100 years)

Severity Rating Key:	
5	Multiple or Single Fatality or Collapse of Structure
4	Major Injury or Major Damage to Property
3	Reportable Lost Time Injury or Significant Damage to Property
2	Other Lost Time Injury or Damage to Property
1	Minor Injury

Likelihood Rating	Severity Rating 5	4	3	2	1
5	25	20	15	10	5
4	20	16	12	8	4
3	15	12	9	6	3
2	10	8	6	4	2
1	5	4	3	2	1

Hazard Categorg	Hazard Description	Potential Consequence(s)	Associated Locations	Who at Risk	Initial Risk Likelihood	Initial Risk Severity	Initial Risk Rating	Mitigation/Control Measures	Residual Likelihood	Residual Severity	Residual Risk Rating
Underground Services	Interface with building services underground/under floor slabs.	Injury/potential death. Service disruption.	All Demolition areas where ground	Operatives/Plant Operators	4	5	20	Pre-commencement survey and decommissioning work by Tata - Issue of Decommissioning certification and information pack.	2	5	10
Building Services (above ground)	Building services (electrical and mechanical) including any services retained or installed temporary Services.	Injury/potential death. Unitential release of harmful substances.	All above ground demolition areas.	Operatives/Plant Operators/Managers/Visitors.	4	5	20	Pre-commencement survey and decommissioning work by Tata - Issue of Decommissioning Clearance Certification and information pack. Pre-commencement removal of redundant services by Tata. Physical isolation and severing of electrical services not removed. Identification/Marking/Labelling of any retained services inc. Temp Services.	2	5	10
Uncontrolled Collapse	Unintentional or progressive collapse of structure.	Minor/serious Injury, Potential Death.	All demolition area.	Operatives/Plant Operators/Managers/Visitors.	4	5	20	Structural Integrity assessment undertaken by Tata. Contractor Temporary Works assessment of structure for loadings applied by demolition plant/equipment and material/waste loadings. Review of Contractor Temporary Works Assessment by Tata TW Team. Application of Temporary Works policy including routine checks by competent individuals (Temporary Works Supervisors).	2	5	10
Asbestos	Exposure to asbestos.	Health issues - Asbestosis, Mesothelioma.	All demolition area.	Operatives/Plant Operators/Managers/Visitors.	4	5	20	Refurbishment and Demolition Asbestos surveys undertaken pre-commencement. Removal of all identified Asbestos Material. Post clearance checks. Response plans in place if additional asbestos material found/suspected.	2	5	10
Hazardous Material	Exposure to hazardous material within building.	Potential health issues from exposure/contact with hazardous materials.	All demolition area.	Operatives/Plant Operators/Managers/Visitors.	4	4	16	Removal (pre-commencement) of all material from building. Obtain/review coshh assessments for any remaining materials. Response plans in place if hazardous material found/suspected.	2	4	8
Dust (kish)	Exposure to kish dust.	Potential health issues from exposure with hazardous materials.	All demolition area.	Operatives/Plant Operators/Managers/Visitors.	4	4	16	Building Kish dust clearance in advance of demolition work - Kish removed by vacuum removal and/or water wash down. Provision and use of suitable RPE where required.	2	4	8

Demolition Risk Assessment (2 of 3)

BOS Plant - General Demolition Risk Assessment.

Likelihood Rating Key:	
5	Frequent (1 or more per week)
4	Probable (1 per month)
3	Occasional (1 per year)
2	Remote (1 in 10 years)
1	Improbable (1 in 100 years)

Severity Rating Key:	
5	Multiple or Single Fatality or Collapse of Structure
4	Major Injury or Major Damage to Property
3	Reportable Lost Time Injury or Significant Damage to Property
2	Other Lost Time Injury or Damage to Property
1	Minor Injury

Likelihood Rating	Severity Rating 5	4	3	2	1
5	25	20	15	10	5
4	20	16	12	8	4
3	15	12	9	6	3
2	10	8	6	4	2
1	5	4	3	2	1

Hazard Category	Hazard Description	Potential Consequence(s)	Associated Locations	Who at Risk	Initial Risk Likelihood	Initial Risk Severity	Initial Risk Rating	Mitigation/Control Measures	Residual Likelihood	Residual Severity	Residual Risk Rating
Falls from Height	Falls of operatives from height.	Injury/potential death.	All High Level demolition areas.	Operatives/Plant Operators/Managers/Visitors.	4	5	20	Maintenance of effective edge protection (permanent building structural handrailing's or temporary handrailing/structures. Daily inspection of edge protection (Walkways/any leading edge/voids/holes/shafts and service risers).	2	5	10
Falling Materials	Contact with dropped or falling material from height.	Injury/potential death.	All High Level demolition areas.	Operatives/Plant Operators/Managers/Visitors.	4	5	20	Establishment of effective/physical barriered exclusion zones (with signage).	2	5	10
Plant Interaction (PPI - Crushing)	Impact/crushing of individuals by mechanical plant	Injury/potential death.	All plant operation and delivery/logistic routes.	Operatives/Plant Operators/Managers/Visitors.	4	5	20	Establishment of barriered access walkways. Establishment of effective/physical barriered exclusion zones (with signage) at plant work areas. Adoption of 360 cameras on360 excavators and FLT's/Telehandlers. Use of "Thumbs Up" to confirm communication between plant operator and others if approaching into proximity zones. Use of trained Plant Marshalls to control plant movement including deliveries.	2	5	10
Lifting Operations	Uncontrolled lifting - Failure/overloading of lifting equipment,	Injury/potential death. Failure of lifting operation/lifting equipment/accessories. Contact from falling material/equipment.	All lifting operation areas.	Operatives/Plant Operators/Managers/Visitors.	4	5	20	Identification of lifting requirement - development of specific/individual lift plans. Independent lift plan and temporary works assessment of lifting operations - Tata lift and Temporary Works teams. Provision of competent persons including crane/plant operators, Lift Supervisors and Slinger Signallers. Establishment of exclusion zones at/around lifting operations.	2	5	10
Noise/Vibration	Uncontrolled exposure to excessive noise levels.	Long term health issues including Hearing Loss/Vibration White Finger	All demolition area.	Operatives/Plant Operators/Managers/Visitors.	3	3	9	Use of noise suppression or screening where practicable. Establishment of noise control areas with signage. Noise monitoring. Use of remotely operated equipment to avoid manual demolition thus removing human interface. Provision and use of hearing PPE where required.	2	3	6

Demolition Risk Assessment (3 of 3)

BOS Plant - General Demolition Risk Assessment.

Likelihood Rating Key:		Severity Rating Key:	
5	Frequent (1 or more per week)	5	Multiple or Single Fatality or Collapse of Structure
4	Probable (1 per month)	4	Major Injury or Major Damage to Property
3	Occasional (1 per year)	3	Reportable Lost Time Injury or Significant Damage to Property
2	Remote (1 in 10 years)	2	Other Lost Time Injury or Damage to Property
1	Improbable (1 in 100 years)	1	Minor Injury

Likelihood Rating	Severity Rating 5	4	3	2	1
5	25	20	15	10	5
4	20	16	12	8	4
3	15	12	9	6	3
2	10	8	6	4	2
1	5	4	3	2	1

Hazard Category	Hazard Description	Potential Consequence(s)	Associated Locations	Who at Risk	Initial Risk Likelihood	Initial Risk Severity	Initial Risk Rating	Mitigation/Control Measures	Residual Likelihood	Residual Severity	Residual Risk Rating
Dust (General and Silica Dust).	Uncontrolled exposure to general and Silica Dust.	Long term respiratory health issues.	All demolition area.	Operatives/Plant Operators/Managers/Visitors.	3	3	9	Use of water suppression/on tool extraction where possible. Provision and use of suitable RPE where required. Maintain focus on housekeeping including dust.	2	3	6
Fire.	Fire - Unintentional fire from hot work operations, services damage, plant operations, arson or smoking.	Fire - burns, potential death, damage.	All demolition area.	Operatives/Plant Operators/Managers/Visitors.	3	4	12	Adopt hot works procedures including pre work checks and 2 hour fire watch. Maintenance of good housekeeping. General site security arrangements. No smoking site - site rules/site Induction.	2	4	8
Waste	Uncontrolled or inappropriate d	Uncontrolled or inappropriate disposal of waste material - Potential enforcement action. Public/Environmental nuisance.	All demolition area.	local and General Environment, Organisational Risk. Public.	3	3	9	Pre commencement clear and by Tata. Identification and control of demolition material of recycling - metal and concrete materials to remain on site for re-cycling (for near or long term re-use). Apply standard waste duty of care principals for all materials to be disposed of off site. Material testing to be carried out where required.	2	3	6
Fuel/Chemical Spillages	Unintentional release of fuel or chemical products.	Environmental pollution.	All demolition area.	local and General Environment.	4	3	12	Use bunded containers/bowsers and drip trays. Minimise amount of site sored materials. Storage areas to be 10m from watercourses or unprotected drainage entry points. Training of individuals (spill response teams) and provision of spill kits on site.	2	3	6

Temporary Works

Any necessary Temporary Works Assessments (including Lifting Plans) will be developed by Bath Demolition (In-house Structural Engineer) and issued to Tata Steel for review and approval prior to any works begin undertaken.

Temporary Works checks will be carried following work activities:

- Cutting out steels, what effect will this be on the remaining steels (will supports be required) – maintaining structural integrity of building.
- Floor conditions and loading of floor slabs. On the Convertor Bay PCM deck Amenity Block floor a small 360 excavator, MEWP (scissor lift/cherry picker) and remotely controlled breaker (Brokk) will be lifted onto the floor slabs for access and demolition. Load capacity checks will take material loading into account).
- Any fencing will require checks to prevent collapse.
- Edge Protection at height.
- Stop Blocks – to limit plant movement at leading/slab edges.
- Ground Bearing Capacity - Plate testing of ground will be carried out to determine ground load baring capacity where cranes (lifting Plans) or high reach excavators or MEWPS are to be used.
- Scaffolding works, TG20 or designed works.

PPE

PPE

The minimum requirement on site will be as shown in the poster .
All Bath Demolition employees will ware branded high visibility PPE to clearly identify their organisation identity.

All PPE will be kept clean and tidy and when required replacement PPE will be available in the stores . Coveralls will be available if required.

RPE - Dust is to be monitored by TATA / Bath Demolition as appropriate breathing apparatus may need to be worn due to the high levels of dust

Noise monitoring will be undertaken when undertaking noisy operations (e.g. concrete breaking), Individual noise PPE/ear defenders will be available for use where required. Clearly identified/signed noise protection zones will be established as required.

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Control of deliveries and removal of demolition arising/waste

Mechanical Plant : All plant machinery will only be operated by Bath Demolition trained operatives and booked in with the TATA team before arriving on site.
Compliance checks will be conducted upon delivery to site.

Deliveries and waste removal from site: All items coming to/leaving site will be renotified and booked in with the TATA team. A strict 20mph will be followed by all on site.

Any HIAB unloading or crane/lifting operations will be planned. RAMS and lifting Plans will be prepared and subject to Tata review and approval.

Exclusion zones will be established around any vehicle loading /unloading operations.
Competent Banksmen/Traffic Marshals will be employed to control all vehicular movement including reversing if required.
Banksman will wear highlighted PPE to demarcate their role.

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Environmental Controls

Dust

- Dust monitoring will be undertaken.
- Dust suppression equipment will be used where demolition work results in dust release (Dust busters/cannons or drenching hosed affixed to demolition plant).
- RPE will be available if required (last resort).

Noise

- Noise will be monitored daily. Noise screens will be used where practicable.
- Noise exclusion zones (fencing and signage) will be established where required.
- Hearing protection/PPE will be available for use.

Vibration

- No structural vibration monitoring measure are deemed necessary.
- Individual vibration exposure will be managed by Vibration risk Assessment and exposure monitoring.
- Remotely operated tools/Plant will be used wherever possible to avoid hand demolition.

Water – Spills (Fuel/Chemical) or Run Off

- Water run off will be monitored and diverted away for drainage.
- Spill Kits will be available at the workplace with trained operatives to respond to any spill or run-off issues.

Waste

- Demolition “waste” materials will be retained on site for re-use/recycling by Tata or disposed at appropriate licensed facility (waste duty of care processes to be followed).
- All legacy environmental hazards will have been addressed prior to commencement of demolition works by Tata Steel during site clearance and decommissioning works.

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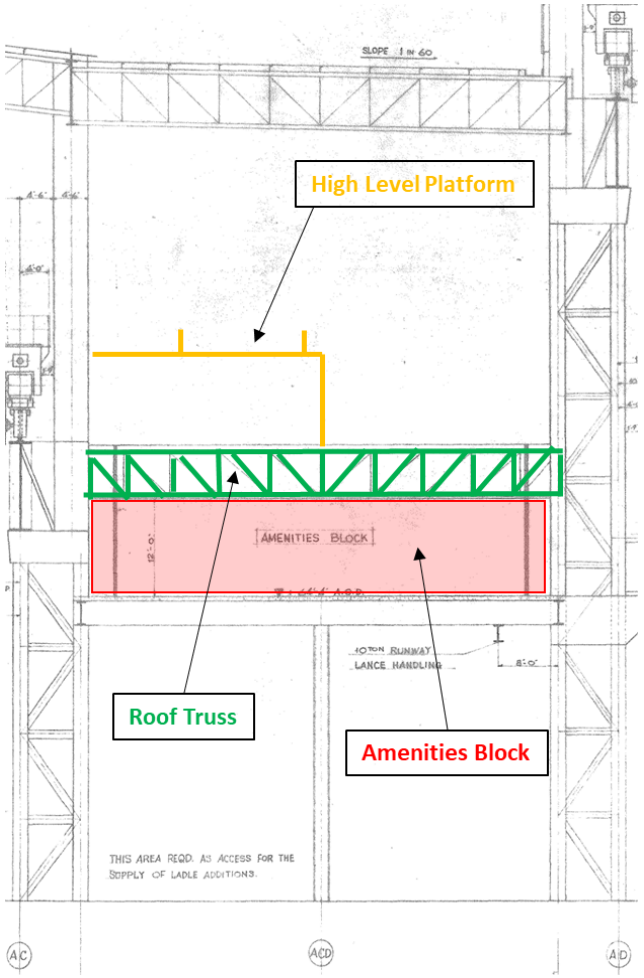
Demolition works - Convertor Bay Amenities Block – Soft Strip:



The Amenity Block, consists of welfare/office etc of masonry and stud partition construction with suspended grid ceilings).
All M&E will be removed prior and service disconnections completed by others (Tata Steel) and clearance certification provided to Bath Demolition.
Demolition surveys have been undertaken and hazardous materials removed (including asbestos).
All operatives will be trained in stripping out material
A safe fenced off drop zone will be constructed (Secured and signed Heras fencing) .
Edge protection will be established to prevent fall of operatives at the drop zone.
The block will be soft stripped of all internal fixtures and fittings before any walls are removed.

Once light weight material have been stripped, a 7t 360 excavator will be lifted on to the slab and used to safely bring down the walls and ceilings in a controlled manner.
A MEWP (electric scissor lift) will also be lifted up for access and to help mitigate the working at height.
Water spray/suppression will used to control dust as required during these operations.
Material from the floor plate will be removed dropped to skip located within the secured drop zone (secure fencing, signage and attendant marshal).
All Waste (apart from concrete steel will be taken off site to a licenced waste facility)

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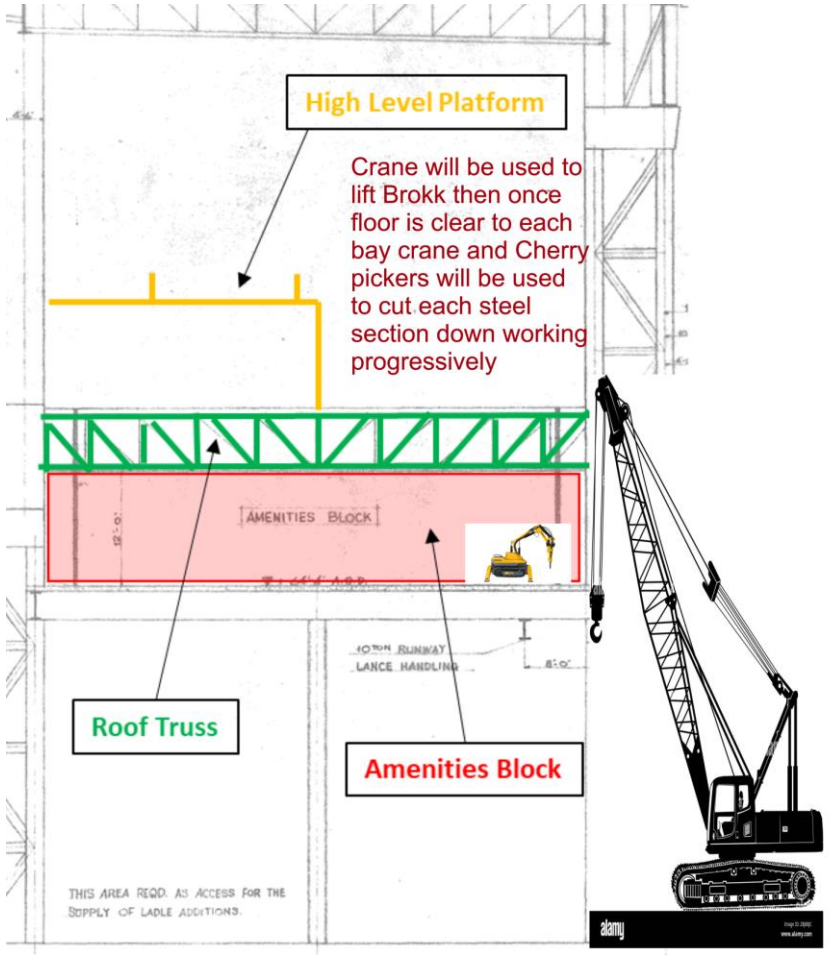
Demolition works Convertor Bay Amenity – PCM Deck and Amenity Block Floor Slab :



High Demolition Works

High level metal platform (PCM Deck) will be removed using Hot Axe to cut the deck into manageable sections. Access will be by MEWP.
Before undertaking any Hot works, Hot works Permit will be signed off by TATA.

Steel plate sections will be secured within the MEWP platform and lowered onto the floor slab below.

The Structural steelwork and roof trusses will be cut down progressively by operatives accessing from Cherry pickers (Steel section cut lines will be agreed with all partied before proceeding).
Steel will be lowered to ground by crane - Crane lifting operations will be based on contract lifts via Davis Cranes.
All removed structural Steel will be removed from site, by Tata, by skip lorry loaded by a 40t machine and grab attachment.

The Amenity Block concrete floor slab will be progressive broken out by means of a remotely controlled Brokk.
Temporary Works checks will have been conducted to ensure structural integrity of the structure is maintained and account for applied loadings from the access equipment, demolition equipment (Brokk) and demolition material.

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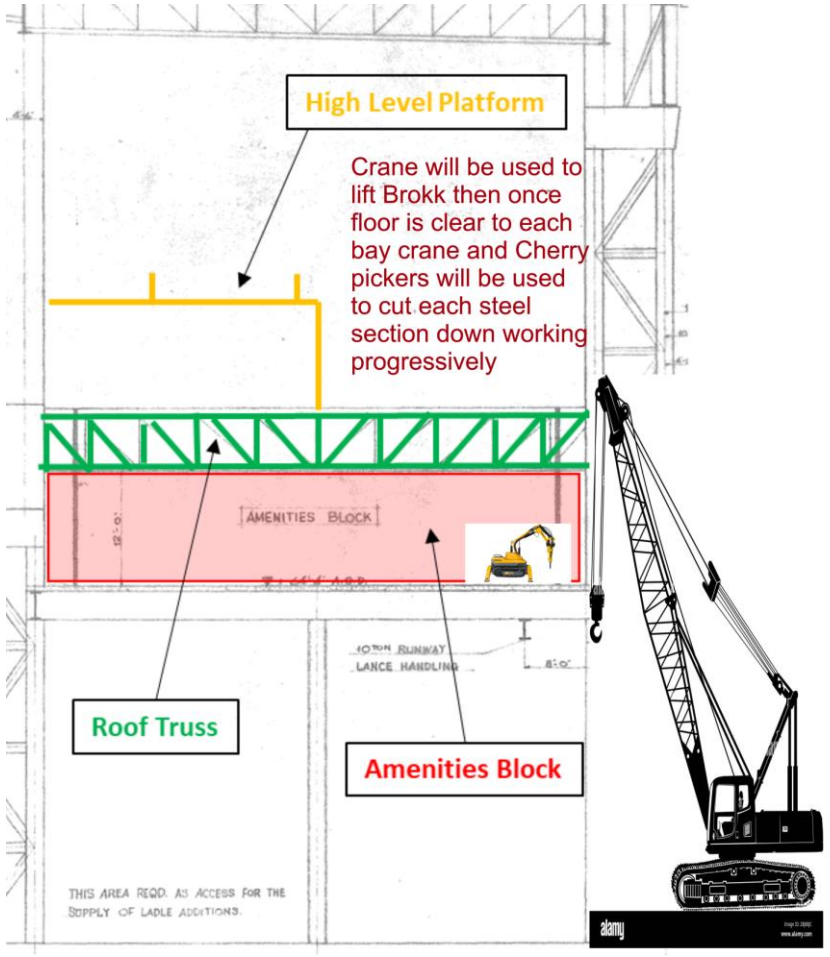
Demolition works Convertor Bay Amenity – PCM Deck and Amenity Block Floor Slab (Cont.):



High Demolition Works (Cont.)

Working from the south to north the machine will break out the concrete leaving the steel in place. The operator will always be stood behind a safe fixed handrail to prevent falls from height, but the Brokk will be working on the open edge.
If at any time the operator is required to access the machine (breakdown), a harness and fall arrest block secured to adequate anchorage (structural steelwork) will be utilised, this will only take place following management notification, review and a completion of a Point of Work Risk Assessment (Emergency Rescue Plan to be in place).

Once the concrete floor slab has been broken out and waste arisings removed; the supporting steel frame will be progressively removed by operatives accessing from Cherry Pickers (Note: Steel section cut lines will be agreed with all partied before proceeding).

All Steel will be lowered to ground by crane - Crane lifting operations will be based on contract lifts via Davis Cranes.
All dismantled structural steel will be removed from site, by Tata Steel, by skip lorry loaded by a 40t machine and grab attachment.

Secure Exclusion Zones (Heras fencing with signage and marshalling by Bath Demolition) will be established to prevent access into the demolition areas – these will extend into adjacent Charging and Teeming Bays.
Dust Bosses will be used to spray fine water mist on the falling debris to control dust release.

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Demolition Works - Charging Bay – Low Level Building Demolition

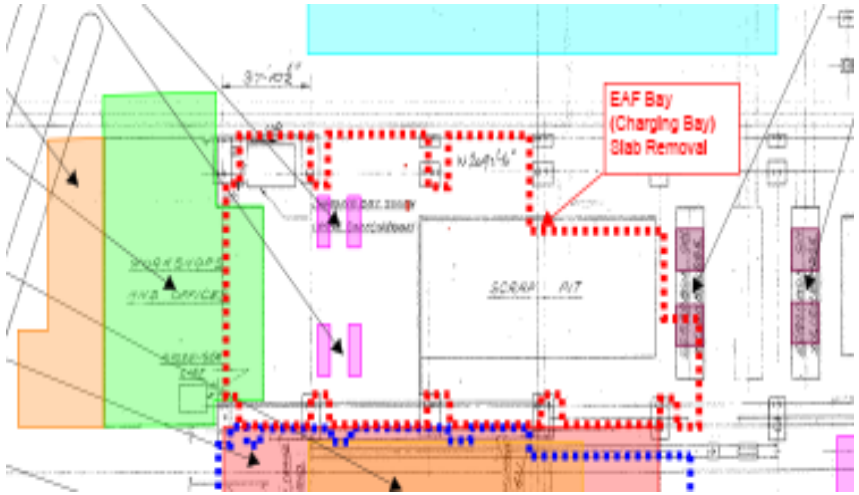
This work consists of the demolition of small single storey masonry and steel frame construction with flat roof structures.
All M&E will be removed prior and service disconnections completed by others (Tata Steel) and clearance certification provided to Bath Demolition.
Demolition surveys have been undertaken and hazardous materials will be removed before demolition works commence (including asbestos).

Works consists of demolition of the structure, including concrete slab and footings.

Demolition will be carried out using an excavator with rehandling grab. The machines will progressively dismantle the buildings with waste material being removed from stockpile by Tata Steel for recycling.

Demolition work will take place within defined exclusion zone (Secured and signed Heras fencing) with marshalling by Bath Demolition.

Dust Bosses will be used to spray fine water mist on the falling debris to control dust release.



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Demolition works - Teeming Bay - Low Level Building Demolition

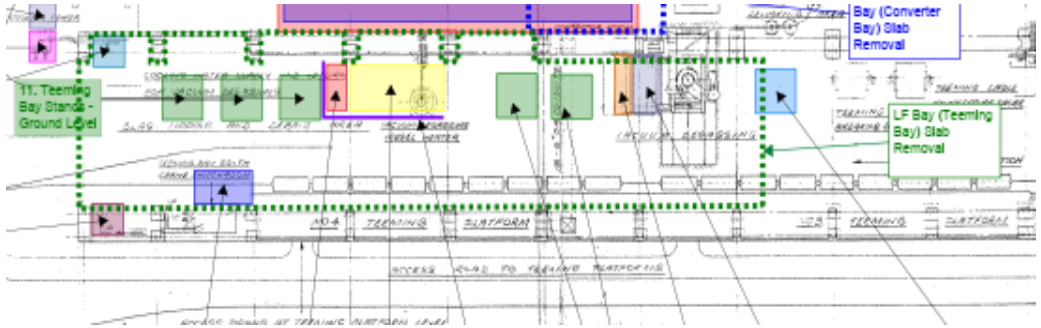
This work consists of the demolition of a number of small single storey masonry and steel frame construction with flat roof structures.
All M&E will be removed prior and service disconnections completed by others (Tata Steel) and clearance certification provided to Bath Demolition.
Demolition surveys have been undertaken and hazardous materials will be removed before demolition works commence (including asbestos).

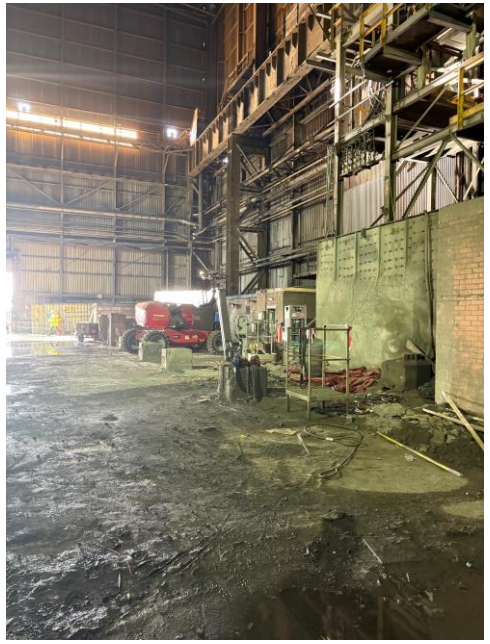
Works consists of demolition of the structures, including concrete slabs and footings.

Demolition will be carried out using an excavator with rehandling grab. The machines will progressively dismantle the buildings with waste material being removed from stockpile by Tata Steel for recycling.

Demolition work will take place within defined exclusion zone (Secured and signed Heras fencing) with marshalling by Bath Demolition.

Dust Bosses will be used to spray fine water mist on the falling debris to control dust release.





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Demolition works – BOS Plant Floor Slabs and Upstand Plinths (All Areas)

The demolition work consists of breaking out floor slabs, upstand plinths and associated foundation structures. Cut lines have been defined with the BOS Plant steel frame structure being identified as being independent of the structures being removed.

All M&E will be removed prior and service disconnections completed by others (Tata Steel) and clearance certification provided to Bath Demolition.
Demolition surveys have been undertaken and hazardous materials will be removed before demolition works commence (including asbestos).

A large excavator with hydraulic impact hammer will be brought in to progressively break out floor slabs, structures and foundations.
A secondary machine will be used then to load away the demolition material and level/make safe any excavations or opening formed by the demolition work.

All work will be undertaken within an exclusion zone (Heras fencing with signage and Bath Demolition marshaling).
Dust Bosses will be used to spray fine water mist on the falling debris to control dust release.

Waste material will be removed from a stockpile by Tata Steel for recycling.

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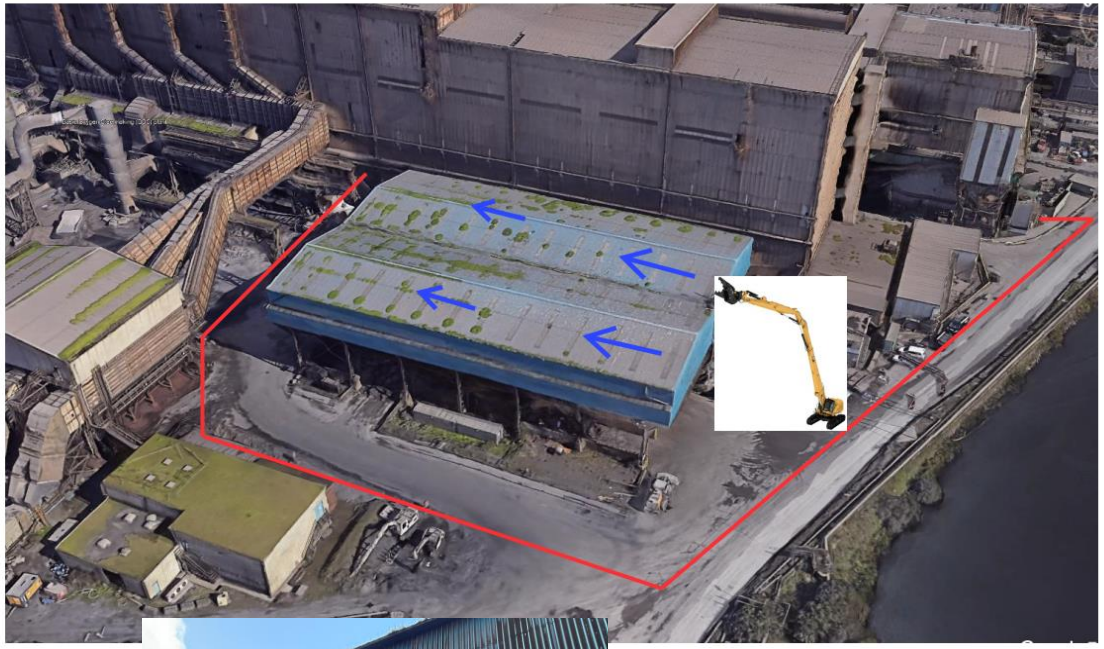
Demolition works - Scrap Building

Site Fencing



The structure consists of a steel frame with profiled metal roof sheeting and large reinforced concrete bund walls, concrete encasing steel columns and floor slab. Bath Demolition's Structural Engineer will inspect the structure to confirm that removing the concrete bund walls does not contribute to the structural integrity and stability of the steel frame and can be removed prior to frame the demolition.

All M&E will be removed prior and service disconnections completed by others (Tata Steel) and clearance certification provided to Bath Demolition.
Demolition surveys have been undertaken and hazardous materials will be removed before demolition works commence (including asbestos).

A Large excavators with hydraulic impact hammer will be brought in first to break out all above ground concrete.
The steel frame and roofing will be progressively cut down using a high reach 360 excavator fitted with a hydraulic shear attachment.
A secondary machine will be used then to load away steel into arctics to be taken off the works area.
Once the structure has been removed, the floor slab and footings are to be removed and taken off for recycling.
All work will be undertaken within an exclusion zone (Note: extent of exclusion zone will be 1.5 times the height of the structure being demolished).
Waste material will be removed from stockpile by Tata Steel for recycling.
Dust Bosses will be used to spray fine water mist onto the demolition works to control dust release.

General Site Wide Demolition Works (By Others)

The information contained with in this demolition method statement has focused on the works associated with the alteration works to the existing BOS Plant to accommodate the New Electric Arc Furnace, which is a significant part of the required demolition works on the Heavy End work front.

If you refer to the site wide demolition plan there are other demolition works to be undertaken some of which are simple low level single storey buildings, which will be undertaken as part of the site clearance works utilising excavators (with the relevant demolition attachments where needed).

As part of the overall demolition strategy the control measures/ demolition principles noted in this document will generally apply across the board, with any demolition work activities specifically risk assessed to determine the safe method of demolition/ de-construction.

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General Notes

- During the construction and demolition activities scheduled to be undertaken on this project for the Heavy End – EAF works, there is no predicted source of odour that would potentially impact on local residents. Therefore, there is no need for management or remediation, however if during the course of the works a source of odour is identified then this will be reviewed and a mitigation plan will be put into place to limit the impact on the local community, where relevant.

- External Temporary lighting fixtures that are task specific, will be focused downwards and avoid illumination of the wider surrounding area during all demolition and construction activities for this project that are undertaken outside of normal daylight hours. This approach will minimise light spill and/or any associated unacceptable adverse impacts on residential and/or ecological receptors in the locality. This is particularly the case when considering the site context of a “24/7 operational steelworks”

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General Notes : (continued)

Demolition and construction dust management, will be dealt with as detailed in this Demolition Method Statement (under Control Measure 05) and as typically noted below:-

- Dust suppression via water dampening down will be in place during all applicable demolition and construction operations.
- Good housekeeping, including sweeping floors will be maintained and debris disposed of in designated bins and skips.
- Any material drop heights will be minimised as far as is possible.
- Vehicle/ Plant access and egress points shall be maintained/ kept clean to ensure dust and mud build up is minimised.
- Vehicles deliveries carrying loose or potentially dusty materials to or from the site, shall be fully sheeted.
- Speed limits will be set on site to minimise dust being generated through vehicle movements.
- Road sweepers shall be employed where necessary, to ensure external roads are maintained clean (i.e., dust and mud free).
- Temporary stockpiles generated on site to be suitably managed “where reasonably practicable” to do so by sheeting over or wetting down.
- Materials will be stored away from the site boundary, wherever possible.
- Large stockpiles of materials will be avoided, wherever possible.
- Use of prefabricated construction components to be considered “where reasonably practicable” to do so to reduce the need for grinding, sawing and cutting on site (dust generation activities).
- Only use cutting, grinding, or sawing equipment fitted with or in conjunction with suitable dust suppression techniques such as water sprays or local extraction.

Note: TSUK & SRM have reviewed the IAQM Guidance on the Assessment of Dust from Demolition and Construction (2024), in assessing practicable dust mitigation and management options for the construction programme. This review has resulted in the following measures noted above being implemented to ensure dust and air quality impact is kept to a minimum.

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Bath Demolition - Company Summary

Since being founded in 1999, Bath Demolition Limited has worked on a wide range of demolition and remediation projects both as contractor and principal contractor for a diverse range of clients.
Our operatives and management have many years of experience and have all undergone specialist demolition and health & safety training via the National Demolition Training Group. We have a formal training plan in place for all employees as part of their ongoing personal development and are members of National Federation of Demolition Contractors (NFDC).

Bath Demolition have a good Health & Safety record and put safety at the top of our priority list. We have Constructionline, CHAS, Safecontractor, CQMS, SMAS and Achilles accreditations as well as ISO 9001, ISO 14001 and ISO 45001. We also employ the services of the Building Safety Group for independent Site Audits and advice.

We encourage sustainable ways of dealing with waste generated from demolition and monitor this through producing SWMP's for all sites and on average recycle in excess of 96% of material generated. Bath Demolition can illustrate its fundamental commitment to carbon efficiency and the consistent reuse and recycling of materials generated through demolition on previous projects. We believe that these credentials are invaluable in helping to deliver sustainable development, which is now a prerequisite for efficient and successful construction projects.

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Accreditations

Achilles BuildingConfidence AUDITED — Exp. 08.11.25

CHAS Accredited Contractor CHAS.co.uk — Exp. 17.10.25

Constructionline Gold Member — Exp. 07.01.26

CQMS Safety Scheme — Exp. 08.11.25

SafeContractor APPROVED — Exp. 22.11.25

smas WORKSAFE — Exp. 08.11.25

ADVANCED CERTIFICATION ISO 9001:2015 / UKAS MANAGEMENT SYSTEMS 8872 — Exp. 10.12.26

ADVANCED CERTIFICATION ISO 14001:2015 / UKAS MANAGEMENT SYSTEMS 8872 — Exp. 10.12.26

ADVANCED CERTIFICATION ISO 45001:2018 / UKAS MANAGEMENT SYSTEMS 8872 — Exp. 10.12.26

NFDC
National Federation of Demolition Contractors
Voice of the Global Demolition Industry

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