

HIGHLINE STRUCTURE

Deconstruction Method Statement

Asset Integrity-Pre-Engineering Department
TATA STEEL STRIP PRODUCTS UK LTD
PORT TALBOT WORKS, PORT TALBOT, SA13 2 NG

1. Background information

During standard inspections carried by the Tata Asset Integrity team, severe corrosion was identified in many structural members of the *Highline* raising concerns around safety of the Plant. Throughout its length, the structure supports many live services such steam, nitrogen, blast furnace gas pipes which are vital to maintain the production of liquid steel in the Blast Furnaces. Tata is planning to deconstruct the critical structural members to maintain stability of the live services. This project has been divided in phases due to its complexity.

HIGHLINE PHASE A	FROM TOWER WEST TO TOWER 'B'
HIGHLINE PHASE B	FROM TOWER EAST TO TOWER 'B'
HIGHLINE TOWER B	BETWEEN PHASE A & B
HIGHLINE PHASE C	FROM TOWER 'B1' TO TOWER 'C'
HIGHLINE TOWER C	BY PHASE 'C'
HIGHLINE PHASE D	OLD BUNKERS
HIGHLINE PHASE E	GCI 'M' TOWER

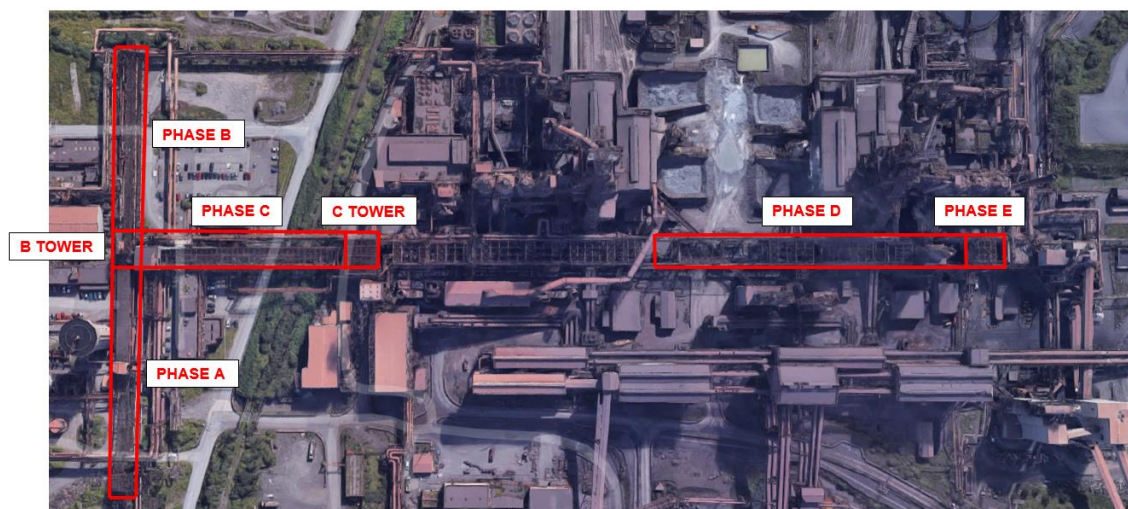


Figure 1: Highline Phases Red Plan

2. Deconstruction Method Statement

All deconstruction of the highline phases will be under the CDM regulations. Depending on the area, the work might need to be completed during the Plant shut down and services isolations are required to be in place.

2.1 CDM Site

Preparation of CDM site including facilities, connection with Tata services, electricity, ground cleaning, barriers, etc. Accessing if the structural members and existing services contain asbestos, risk assess it and plan secure deconstruction and correct disposal.

2.2 Deconstruction of the structural members/ defunct pipework

1. Access to the structure could be done by erection of scaffolding, MEWP or mobile crane with men basket.
 - By Scaffolding: design to be completed by specialist contractor, access of the ground level to check if the leg loading can be safely transfer to the ground. Temporary works documentation should ensure all checks are done. Site clearance required.
 - By MEWP: Temporary works documentation should check if the ground can take the loading. Site clearance required.
 - By Crane: Access of the area to check if any obstructions are in place. Crane lifting plan should be design by specialist contractor to ensure that the selected crane can support and lift safely the deconstructed members. Temporary works documentation should ensure all checks on the ground are done. Site clearance required.
2. The deconstruction of any phases will be done from top to bottom approach. The sequence is decided based on overall stability of the structure. The structure galleries will be safely cut, lifted in pieces and transported to storage area for further disposal.
3. Temporary steelwork might be required to be installed prior dismantling to support the existing services in case their supports are also needed replacement. All design and calculations should be done by specialist contractor and temporary works documentation should be in place.
4. The majority of the work to be deconstructed is above ground. If there is any requirement to dismantle column trestles or foundations, the ground will be made safe after the dismantling. The foundations will be covered to be used in the future if required.
5. All the area should be cleared and all temporary works should be taken out.

3. Planning

The work is normally carry out during weekdays 8hrs per day. If there is any requirement of full isolation of the Plant, the work can be planned during Blast Furnaces shutdowns, to arrange with Plant engineers.

4. Environment

The deconstruction should be risk assessed before any works starts. An asbestos survey should be carried out in each phase to check requirement of asbestos control during the execution. Appropriate control of asbestos should be done if found.

The full highline is not located by the main access road however the phases A, B, Tower B and C are near the CSI admin offices. Appropriate controls should be in place to mitigate or prevent the environment hazards such as dust. The contractors should wear appropriate PPE's during any activity.

Noise can be controlled during the deconstruction, accessing the dBs to ensure the work is within the accepted levels.

All the work should take into consideration safe diversion of any pedestrians and vehicles routes.

Any deconstructed steel should be rightly disposed. The materials should be classified hazardous and non-hazardous waste so they can be disposed in the HAA.