

# MEMORANDUM

<b>To:</b>	Mark Forrester	<b>Organisation:</b>	Worcestershire County Council
<b>cc:</b>	Simon Lewis	<b>Organisation:</b>	Worcestershire County Council
<b>From:</b>	Kerry Booth	<b>Our Ref:</b>	S1291-2300-0005KSB
<b>Date:</b>	9 <sup>th</sup> March 2016	<b>No. of Pages:</b>	3
<b>Subject:</b>	Mercia LTA Construction Progress Summary – March 2016		

## 1 INTRODUCTION

Mercia Waste Management Limited ("Mercia") is constructing the 200,000 tonnes/year, 18 MWe Mercia EnviRecover EfW Plant in Hartlebury, Worcestershire. Fichtner Consulting Engineers Ltd (Fichtner) has been appointed as lender's technical advisor (LTA) for the construction phase of the plant. This summary memo covers relevant activities and progress based on review of latest available reports from the Owner's Engineer (OE) and Mercia (covering 1<sup>st</sup> – 31<sup>st</sup> January 2016).

## 2 PROJECT PROGRESS

The current programme shows a target Take Over date of 28<sup>th</sup> February 2017, which is in line with the contractual Take Over date. Current progress suggests this remains achievable. This is an improvement compared to the progress at the time of our previous summary memo, when a delay of one month compared to the contractual Take Over date was predicted.

Construction of the bunker base slab was completed in January 2016, in line with the programme date. Pouring of the tipping hall foundations, installation of steelwork to support the tipping hall floor, and construction of the bunker lining wall has commenced. Despite some delays due to high winds, the second waste crane and final bunker roof module have been lifted into place. Following completion of these lifts, HZI confirmed that the tower crane would be demobilised. This was expected in February 2016, but we have not confirmed this activity has been completed.

Painting and fire boarding of the bunker west core rooms has progressed well in January, although works elsewhere on the admin block have been slow.

There has been a slight delay to commencement of the main building cladding on north side to avoid overhead working and disruption to the final structural steel works. This has required resequencing of the road construction. HZI maintain that both the cladding installation and road construction works will still be completed in line with the programme dates.

Installation of water steam cycle (WSC) pipework has progressed well and is close to completion in many areas. Installation of cable tray for the 11kV cables to the e-houses is now complete and cable pulling was due to commence in February 2016.

There have been issues with agreement of the wayleave between Western Power Distribution (WPD) and the trading estate which have caused a delay to pulling of the 66kV cable to site. As a result, it has been agreed with HZI that the contractual date for provision of an energised grid connection will be revised to 15<sup>th</sup> April 2016.

## 3 KEY PROJECT RISKS AND OBSERVATIONS

Afcon were appointed as the building services contractor in December 2015. Detailed drawings by Royal Haskoning have been reviewed and comments returned to HZI. A building services design review meeting was held on 2<sup>nd</sup> February 2016 at which all open comments were discussed. A follow up meeting was planned for late February 2016, to try and resolve the key outstanding points. Details of that meeting have not yet been provided to the LTA for review. Due to the tight timescales involved, prompt resolution of issues and timely installation works are key risks which the Owner's Engineer is closely monitoring.

There has been good progress in regard to the bunker and tipping hall civil works this month. With the exception of road construction at the -8m level, it is considered that civil works construction now represents a much lower risk to the completion date.

Health and safety on site is also currently considered a key risk, and is discussed further below.

#### 4 FINANCIAL AND COMMERCIAL

Payments have now been made for twenty four milestone events. The cumulative amount which has been certified to date is £79,382,899.55. The LTA has issued eight payment certificates to allow drawdown on the senior loan.

To date thirty four Variation Orders have been issued. To date the net reduction to the contract price is £38,192, which covers all Variation Orders. There has been no extension of time for any Variation Orders issued to date.

#### 5 HEALTH AND SAFETY

In November and December of 2015, there was a steady decline in health and safety standards on site. This was evident from the poor rigging practices and housekeeping observed on site. However, there was some improvement in January 2016, although further work is needed to regain the high standards attained earlier in the project.

Although HZI consider that the standard of health and safety on site is good when compared with other construction sites, they acknowledge that there is further room for improvement. As such, they have outlined a number of measures to be implemented though the coming months.

The Owner's Engineer will continue to monitor the situation and put pressure on HZI to further improve the situation through the weekly site meetings, and weekly health and safety audits.

Key performance indicators for January 2016 show that two injuries were reported, one of which required an ambulance to attend site. There was also a serious near miss where petrol leaked from a Stihl saw onto an operatives clothing and caught fire. The fire was quickly put out using a nearby extinguisher and the operative was unhurt, although shaken.

52 Site Safety Observation Reports (SSORs) were raised in January, with the most common categories of report concerning safe access and egress, work at height, and the use of personal protective equipment. Five yellow cards and one red card were issued in January. One yellow card was issued in relation to personnel protective equipment (PPE) while the others concerned issues associated with working at height. The red card related to smoking on site.

#### 6 PLANNED ACTIVITIES NEXT PERIOD

The following activities are planned from February 2016:

- Detailed engineering of remaining packages (including update of the HAZOP file, pedestrian footbridge, traffic impact study, external services layout, gatehouse steel structure, etc);
- Factory inspections for the WSC piping and maintenance hoists, which will conclude the manufacturing works of the main packages and the factory inspection programme;
- Continued work on civil packages including construction of access roads, fire hydrant mains, drainage, tipping hall, boiler hall, admin building, and completion of snagging and outstanding works on the turbine hall; and
- Continued work on process packages including boiler hall steelwork installation, closing of snags in the boiler assembly, continued installation of the FGT system, continued installation of turbine hall pipework and closing out of turbine hall snags.

Yours sincerely  
FICHTNER Consulting Engineers Limited



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