18th May 2018 2018

Our Ref: NRS/ABM/1

FAO Mr Mike Sanderson

ABM Precast Solutions
Ollerton Road,
Tuxford,
Newark,
Nottinghamshire,
NG22 0PQ

Dear Mike

Re: Pre Cast Concrete Batch Plant – ABM Scunthorpe

The following terms are a summary of Hanson UK's understanding for the concrete supply to a precast factory to be established in Scunthorpe utilising a dedicated site plant.

1. Working hours have been discussed as 0600hrs to 2200hrs Monday to Friday using a twin shift system. As well as the personnel required for the two shift system we have also allowed for a dedicated manager essential to co-ordinate the IMS and QA systems required on such projects and relief person to cover holidays and sickness. Access for maintenance will be required on weekends, preferably Saturdays

2. The actual plant to be installed is yet to be decided and will be dictated by the requirements you may feel appropriate to ensure a continued and uninterrupted supply of quality concrete.

   At present there are three options we can consider whilst maintaining the ability to alter the plant specification as necessary to ensure the plant can perform and deliver to the expectations required.

   All options would utilise a Command Alkon computer batch system with all batch records being available in both soft and hard versions.

   Option 1; fully reconditioned and refurbished Steelfields similar to that used for Crossrail precast segments shown in Appendix 1. The plant will have 2m3 planetary mixer, 200t overhead aggregate storage with canopy, twin 100t ground silos, radial belt

   Option 2; fully refurbished SIMEM MMX 5000 as per Appendix 2 with 3m3 twin shaft mixer. 4 in line aggregate hoppers with drag out weigh belt and twin 100t silos

   Option 3. A brand new plant with planetary mixer. Appendix 3 shows an option that could be installed with indicative aggregate area.

3. The chosen concrete batch plant will be operated using a Command Alkon fully integrated computer system. We need to know of all additions required in the concrete and should consider the option to future proof for additional work that could include for fibre additions, hot water, various admixture types as well as the standard

aggregate and powder features (the proposed prices include for poly fibre additions but not steel fibres).

4. We recommend a wash out recycle and reclaim system be implemented to capture wash water from the plant wet area as well as plant an truck mixer wash out. The exact location and type of system to be adopted needs further discussion however we have included in our rates for the provision of the equipment.

5. Mobilisation and decommissioning costs for the operation are included in the price. We require 8 weeks written notice to remove the plant

6. Utilities are to be provided by ABM Precast, power and telecoms to be provided to the batch cabin and a 2" fresh water feed to the fresh water tank. Hanson will connect and pay for metered usage.

7. We have not at this stage allowed for any civils work associated with the installation.

8. We would anticipate agreeing a general arrangement for a plant, understand operational requirements for logistics and environmental impacts and then obtain quotes for the civils implementation. Along with the plant foundations there will need to be dedicated ground aggregate storage with dividing walls, wedge pit to capture water from below the plant and possibly integrate with the reclaim system and drying bay, running areas for the trucks between plant and factory.

9. The plant is a stand-alone proposal with a fully incorporated maintenance regime by a third party to supplement the daily and weekly maintenance planner required by the Hanson IMS procedures.

10. The proposal is based on a volume of around 145,000m3 of concrete over a two year period for sections required for the Green tunnels associated with HS2 sections C2 and C3. It is hoped the plant and relationship will continue beyond this first enterprise.

11. The price will include for the provision of a fully operational computer controlled, wet batch concrete plant with QSRMC accreditation, integrated Hydronix system for workability control, all admixture and water tanks.

12. QSRMC testing requirements only have been allowed in the proposed rates, any further testing will need to be carried out by ABM unless otherwise agreed.

13. A loading shovel will be provided to manage ground aggregate stocks and feed the concrete plant aggregate hoppers is included.

14. A daily rate of concrete supply of around 300m3 is anticipated for the majority of the period over a period from 0600hrs to 2200hrs 5 days per week

15. Due to the proximity of the factory to the plant and the type of discharge arrangement anticipated we have based our proposal on 3 truck mixers to carry concrete from the plant to the moulds. We can call on our external fleet in case of breakdown emergencies or replacement when servicing is necessary.

16. All method statements, risk assessments and crane lift plans will be submitted by the relevant company depending on the plant option chosen.

17. Welfare facilities – it is common for Hanson to provide a toilet and wash facility plus a tea cabin with fridge/microwave close to our operation. We are unsure as to the arrangements required at Scunthorpe.

18. The coarse aggregate for the precast works are to be confirmed but will either be limestone or granite coarse with a sharp sand. Material properties will be provided to comply with the HS2 specification. Ordinary Portland cement will be Ex Ketton works and GGBS ex Scunthorpe works

19. Admixtures will be via Sika. We recommend utilising their technical expertise and laboratory to design mixes appropriate for your application. We would encourage that ABM Precast to attend the trial designs to review mix properties including rheology, consistency, open life, set times and strength development

20. As this is a new facility we would expect the plant to be erected and operated prior to the factory requiring concrete. This allows any teething issues to be addressed before going into precast production. The concrete produced is generally used to finish the civils work on site but allows the anticipated concrete for the precast operation to be tested to verify the plant produced concrete replicates the laboratory produced trial concrete

21. QSRMC accreditation is obtained once the plant is ready to operate following calibration and a further inspection carried out once in full production.

22. Hanson and ABM will need to decide the future of the operation toward the culmination of the HS2 requirement and agree on what is to happen with the assets employed. As the HS2 contract nears this stage we would expect to discuss either extension figures or agree dates for removal of plant.

23. The following price structure has been established based on the information discussed and included above with an S4 workability delivered by truck mixer into your beam moulds

    Plant Option 1 - Steelfields

    Plant Option 2 – SIMEM

    Plant Option 3 – new plant

    The prices are based on full loads. It is anticipated waiting time will not be applicable. Part loads are included in the rates, however if these become excessive we reserve the right to discuss and recover cost.

24. Hanson are not responsible for the removal of any concrete bases required to set the plant up or the removal of slabs created for aggregate storage.

I trust the above meets with your approval and we can meet to discuss the project further

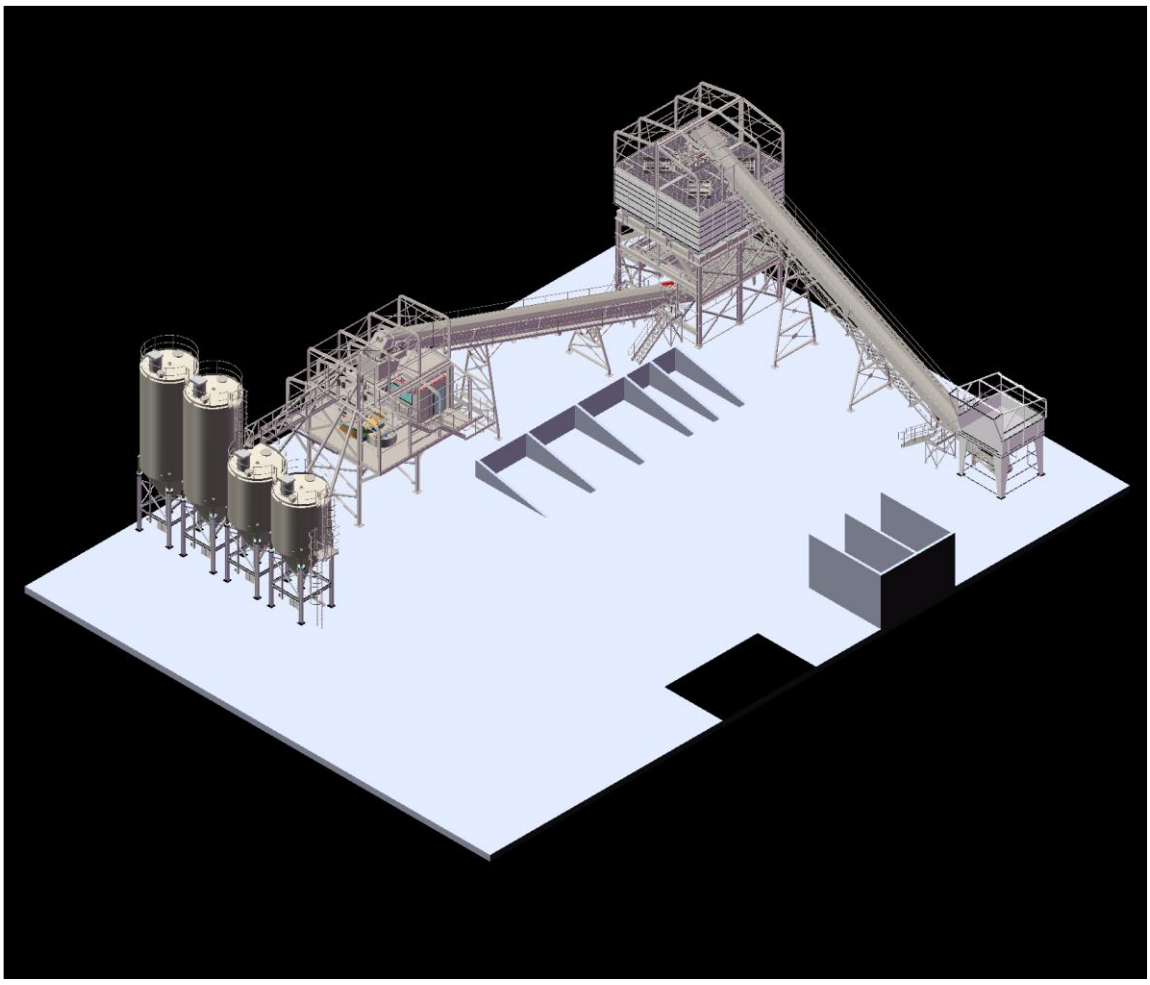
Regards

Neil Spence –
Major Projects & General Manager site plants
07977 251114

Steelfields Major 60 Old Oak Common Precast Facility

Old Oak Common Precast facility

MMX 5000 currently in use at Theale



Possible layout depicting new plant option