

RAPIDMIX 400C CASE STUDY

Rapid Mobile Continuous Mixing Plant Speeds up Production in Soil Stabilisation Project

"I can say with confidence that the Rapid Mix plant is far superior to our original plant it replaced on site in many significant ways. Reliability has been flawless. Process controls regarding reagent mix consistency have been equally dependable. Daily clean-up design considerations could not have been more well done. The mill operates at noticeably low noise levels and the production rate has left me with only the problem of keeping the reagent deliveries scheduled quickly enough."

**Bill Haynes- Project Manager, AECOM,
Glenn Allen, Virginia USA**



The Mobile Continuous Mixing Plant, the Rapidmix 400C, supplied by Rapid Intl USA has been commissioned by sub-contractors, AECOM, to perform soil stabilisation on ground from a county owned park in Arlington, Virginia, USA.

The machine, sold to AECOM by Rapid Intl USA, is proving to be far superior to AECOM's original plant and has certainly increased production and facilitated the smooth running of the project. Rapid International USA worked closely with the client to understand the application and ensure that delivery of the product met the project requirements.

The overall project objective is construction of a county owned park in Arlington, Virginia, USA. The park will include three lighted soccer fields, multi-story parking garage, esplanade with walkways and scenic overview.

The sub-contractors, AECOM, are performing the following jobs:

- Environmental pre-characterization of lead contaminated soils to determine levels of contamination.
- Excavate approximately 48,000y³ soil in any of four categories based on levels of contamination.
- Relocate soils to engineered placement zones on site.
- Stabilize approximately 25,000y³ highly contaminated soils using 8.5% Portland Cement blend by weight using Rapidmix400 and relocate to prescribed placement zones on site.
- Perform confirmation sampling on stabilised soils as necessary to insure compliance with target stabilization of .75 mg/L for TCLP Lead EPA method SW6010C.

The Rapidmix 400 is sold by Rapid Intl USA which specializes in mixing equipment for the paving, civil and environmental contractors. The plant is totally mobile and completely self-contained with its own power source. It is fitted with a self-erecting system, using hydraulics, which means that the plant can change from travel mode into a fully operational within a few hours.



METHOD USING RAPIDMIX 400C:

- Untreated material goes through aggregate bins
- Neutralising additives are added from the on-board silo
- All materials mixed through twinshaft continuous pugmill mixer
- Mix is transferred onto the outgoing conveyor and discharged through the gob hopper.

On major projects such as this one with AECOM, traceability is important and the proportioning of different materials can all be carried out through the control panel. A printer is fitted for tickets or reports to be generated. Variable speed drives, allow the feed rates of materials to be adjusted according to the recipe.

Other uses for the Rapidmix 400C are utility waste; reclamation, Roller Compacted Concrete and benotoite for lining quarries & dams.

Contact:

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PROJECT:

Arlington County Park

LOCATION:

Arlington, Virginia, USA

PRODUCT USED:

Rapidmix 400 - Mobile Continuous Mixing Plant

FEATURE OF THIS PROJECT:

High Production Rate and Superior Plant to Customer's Previous Equipment

