

Old Kent Road IWMF Technology overview



Two major waste treatment processes

- MRF – Materials Recovery Facility
- MBT – Mechanical Biological Treatment

MRF

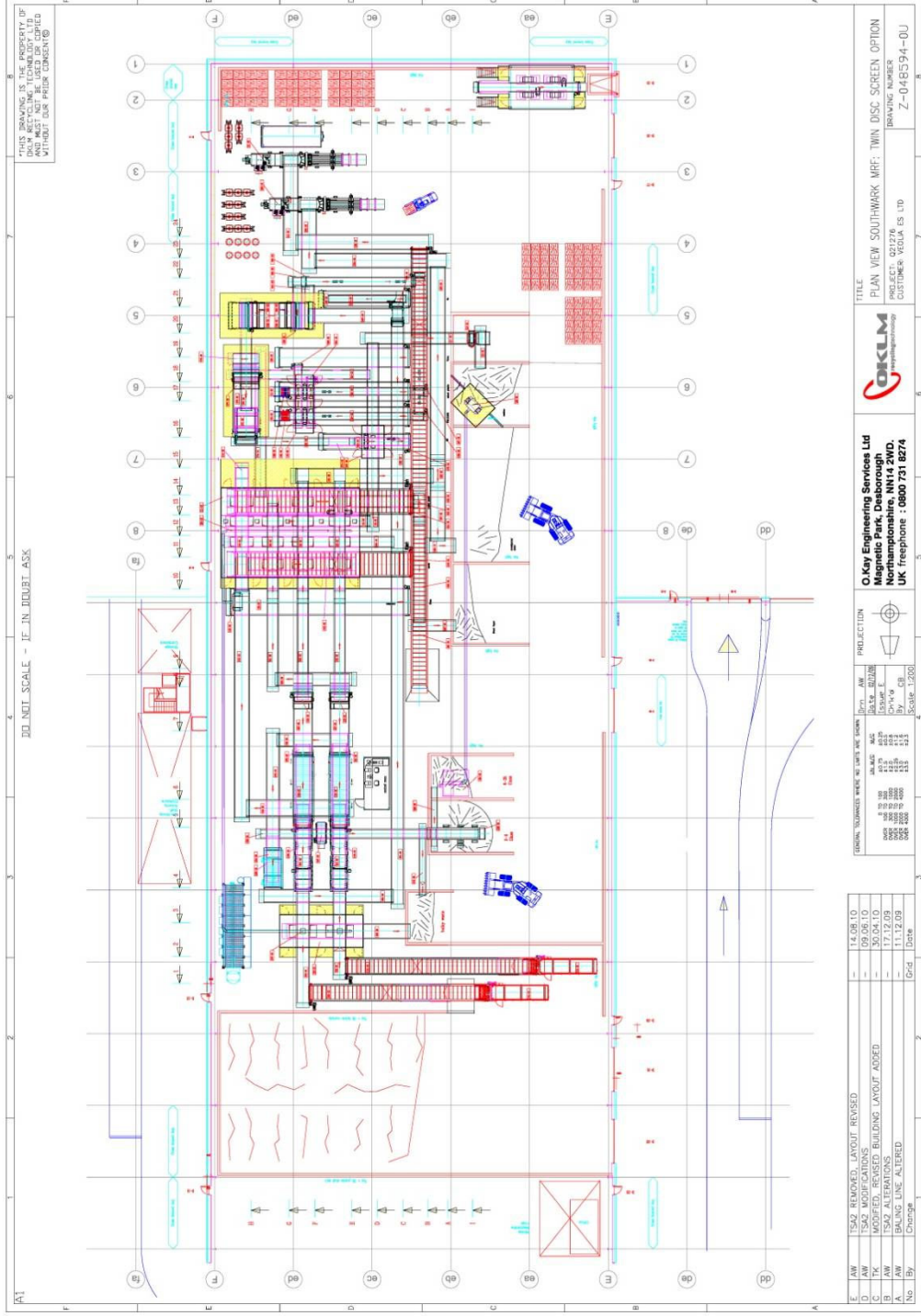


Materials Recovery Facility

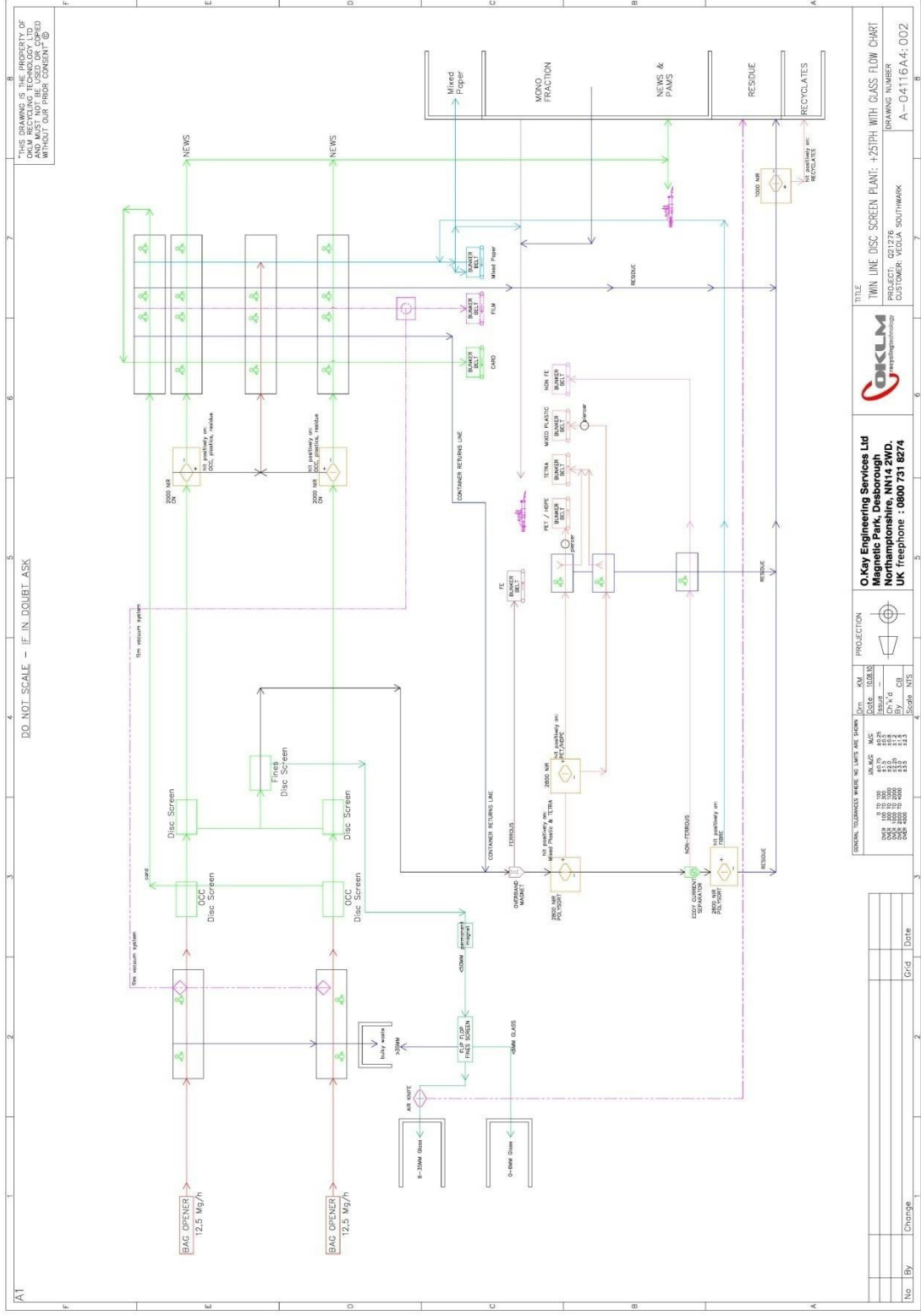
What does a MRF do?

- Old Kent Road MRF is a dry commingled MRF
- Recovers and separates paper, card, plastics, cans and glass
- Physical processes only

MRF Layout



Process Flow



Improving MRF technology

- The most recently built Veolia MRFs are Mansfield (Notts) and Hollingdean on the south coast.
- The Mansfield MRF is similar to Southwark's and has helped Notts to increase recycling.
- Southwark's is an improvement on Mansfield.
- Added technology to reduce waste from landfill, funded by VES.

Green measures

- Flexibility in paper outputs: loose or baled
- Baler turned off if loose – saves energy
- Looking into incorporating a heat reclaim system



MBT

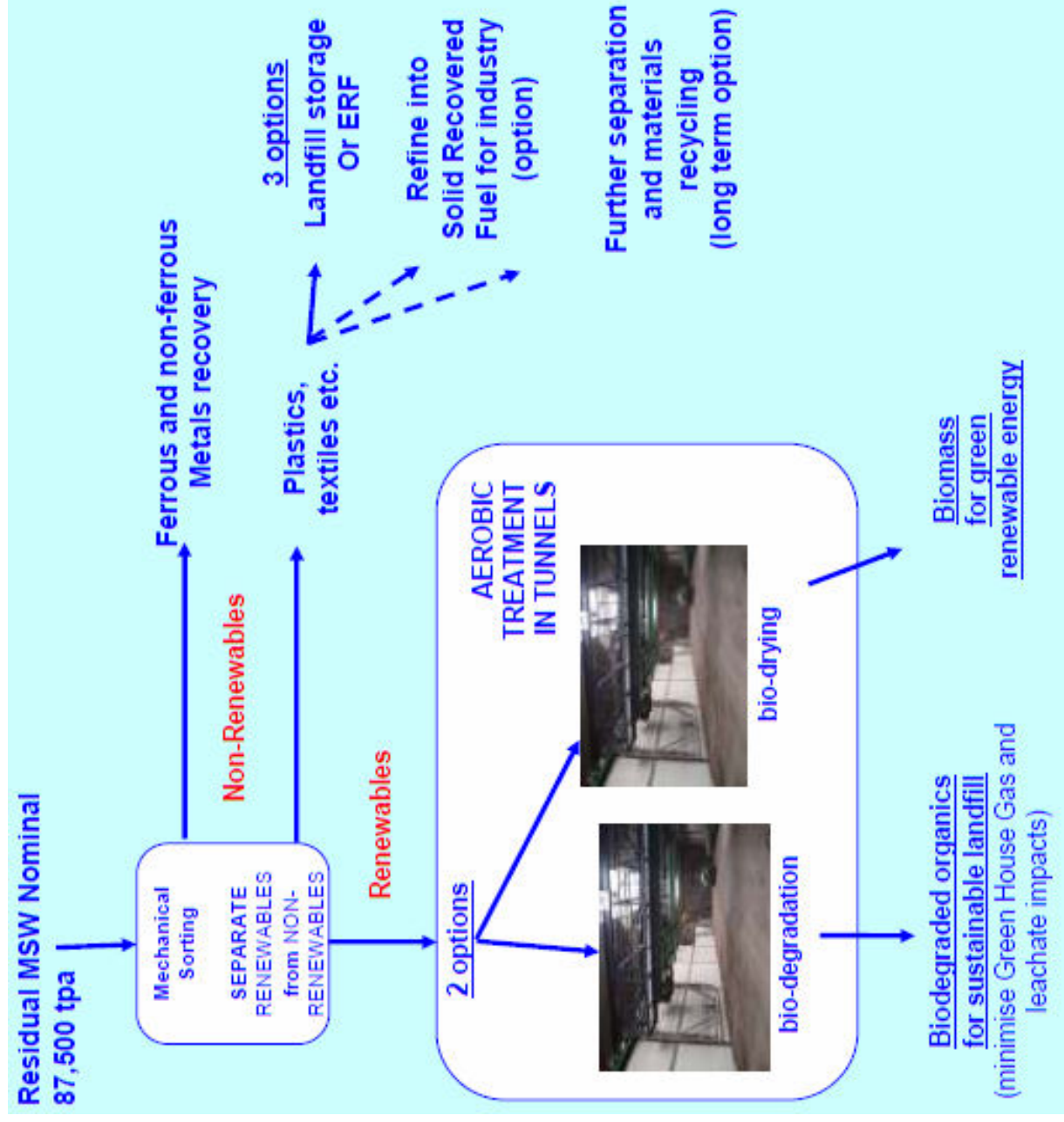


Mechanical Biological Treatment

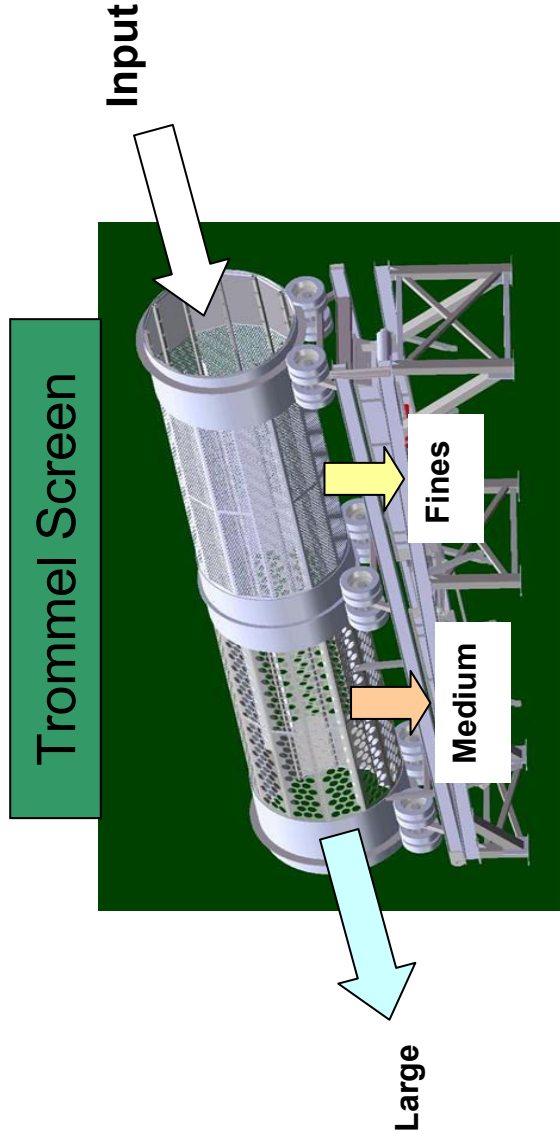
What does MBT do?

- Extracts plastic bottles, steel cans, aluminium cans for recycling
- Diverts biodegradable material from landfill
- Produces SRF for energy recovery
- Produces stabilised residue – safe to landfill

Summary



Mechanical Processes

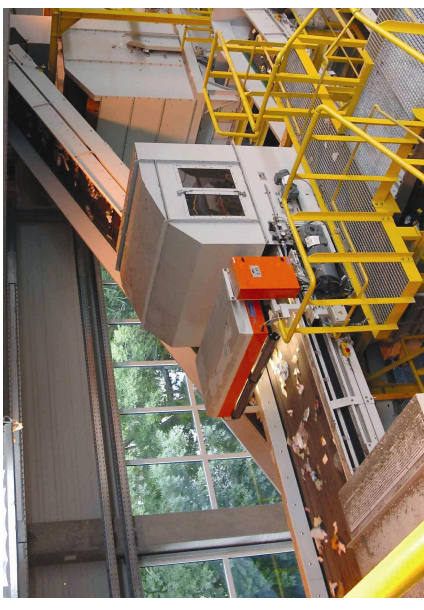
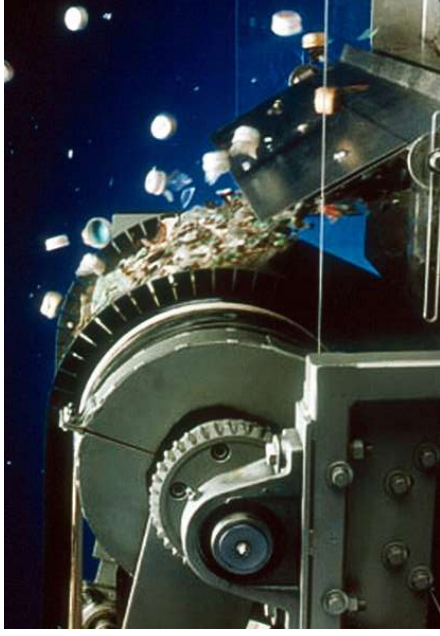


Breaks solid waste
into smaller pieces

Extracts recyclables

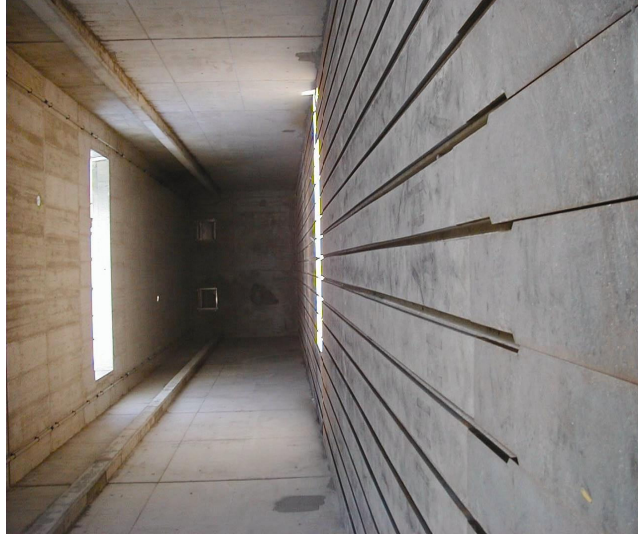
Mechanical Processes

- Overband magnet removes ferrous metals (steel)
- Eddy current removes non-ferrous metals (aluminium)
- NIR (Near Infra Red Spectrum) sorts paper and plastics

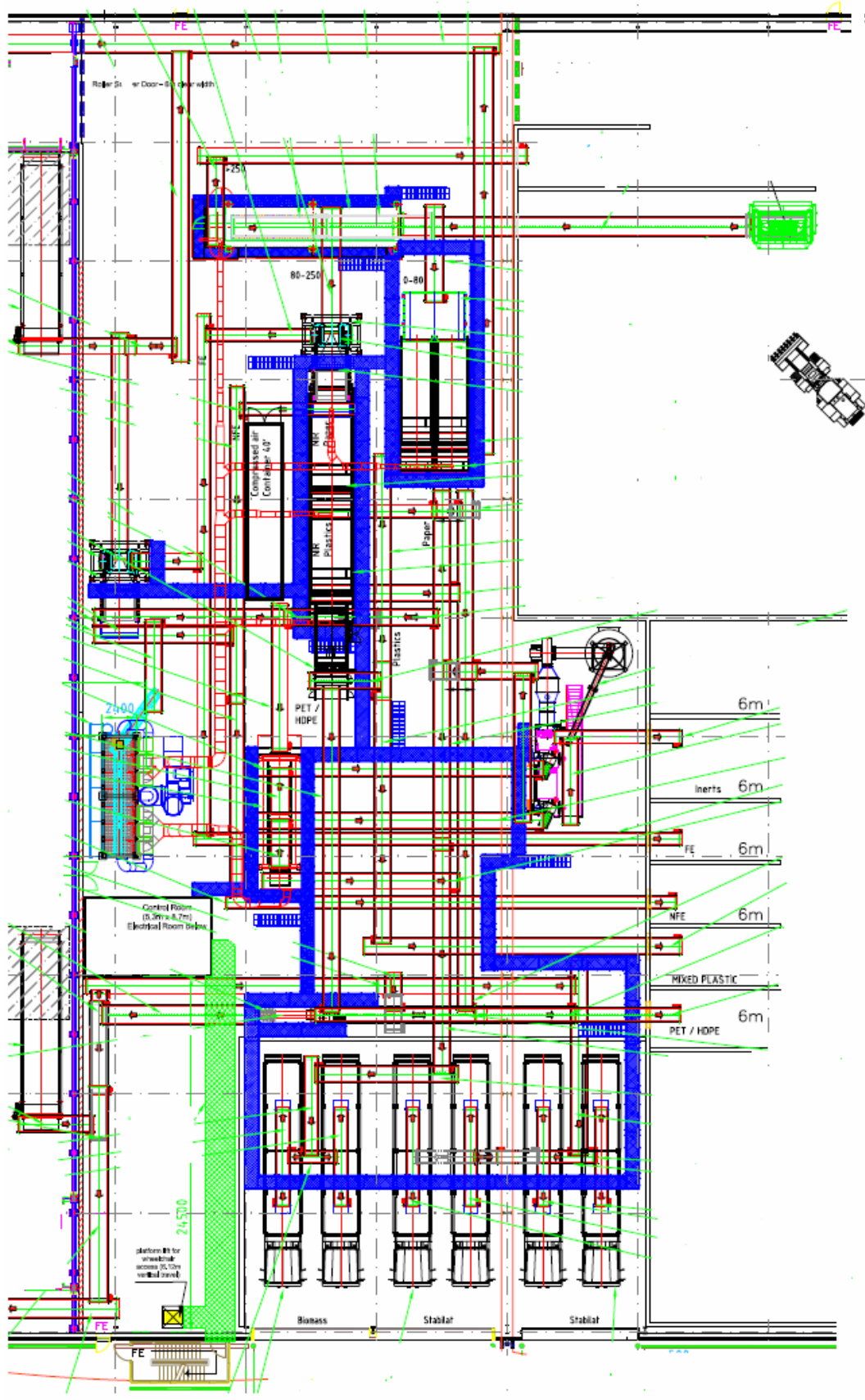


Biological Treatment Process

- Biodrying Tunnels reduce moisture content
- Bio-stabilisation Tunnels for waste to landfill



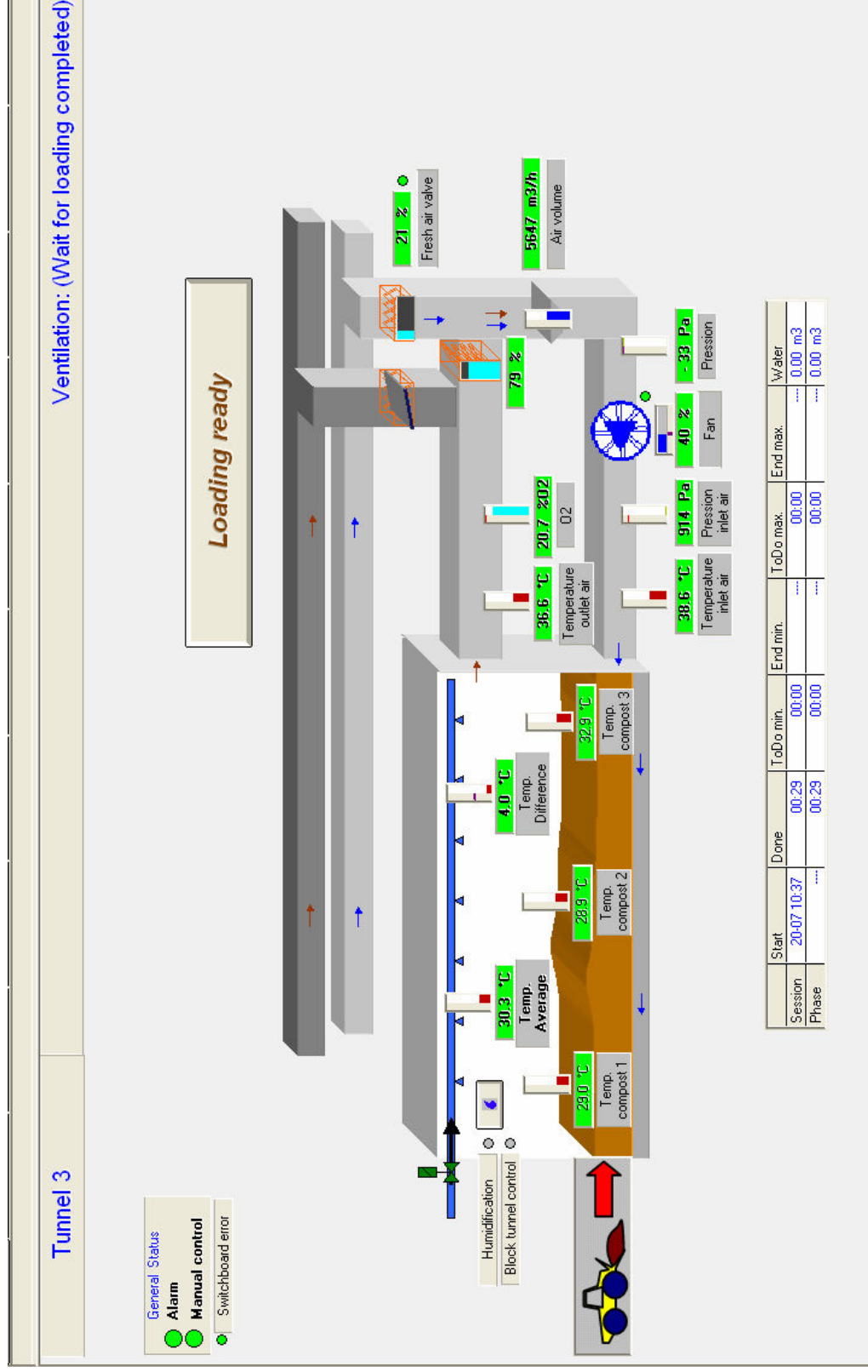
Layout- Mechanical Process



Water and air treatment system

- Acid Scrubbers remove ammonia from the air
- Humidifier mixes air and removes dust
- Biofilters reduce odour
- Rain water is harvested and used in the process
- Water is filtered and reused

Automation and Control System



Health and Safety

- H&S of paramount importance to VES.
- No pickers employed on the MBT, pickers employed on MRF
- Risk assessments to be carried out
- Continuous improvement on noise and dust levels
- Workers trained and given H&S induction.
- H&S requirements on site adhered to – warning signs etc.

Thank you very much.

Any questions?