Expanded Polystyrene (EPS)

LIGHTWEIGHT FILL CONSTRUCTION

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Overview

- Introduction
- A little bit about me
- Background to Te Rapa Project Lightweight Fill
- Construction Methodology
- Problems and solutions
- Lessons Learnt
Introduction
About me
Te Rapa Section – Waikato Expressway
Construction Methodology

Excavation
Construction Methodology Cont.

Drainage Blanket & Placing EPS
Construction Methodology Cont.

Upgrade Sewer Manhole
Construction Methodology Cont.

Install High Density Polyethylene (HDPE) Liner
Construction Methodology Cont.

Backfilling
Problems

- Clash with services
- EPS blocks did not meet specification
- Delayed supply of HDPE liner due to complications at the port
Problems cont.

Clash with services
Problems cont.
EPS blocks did not meet specification

30 OGPA10
120 AC14
300 CBSB
150 Sand protection layer
820 EPS100
370 EPS70
Sand Subgrade

30 OGPA10
170 AC14
Gr. 5 Membrane Seal
350 CBSB
Combi-Grid
50 Sand protection layer
EPS100
Lessons Learnt

- Ensure all services are accurately located well in advance if possible
- Ensure all material testing is completed and signed off prior to installation
- Allow enough lead times for materials being sourced from overseas allowing for complications
Questions?