When you think with a global mind problems get smaller

Ravenhall Prison Project

Presented to
ACLCA / EIANZ Seminar
October 2014



Ravenhall Prison Site



Proposed Development

Intended to be developed as Ravenhall PrisonNEPM A (2013)

Historic Uses

- •Former Defence Rocket testing Facility
- •Former Defence Munitions Storage WWII
- •Used for a variety of potentially contaminating practices

Located in a former rural setting adjacent to sensitive grasslands, between two prisons and the western bypass.

Assessment Criteria

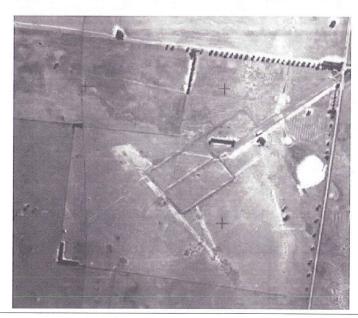
- •A Prison requires assessment HILs equivalent to residential BU criteria for soil
- ·Segment C groundwater.
- Site Specific ABC for metals EILs

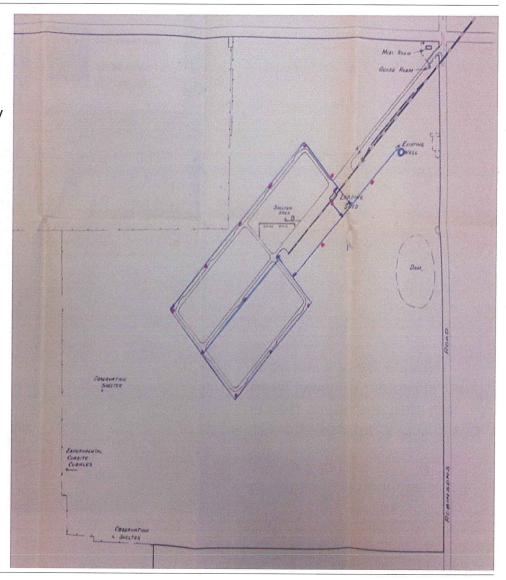


Assessment Goals - Contaminated Land/Geotechnical



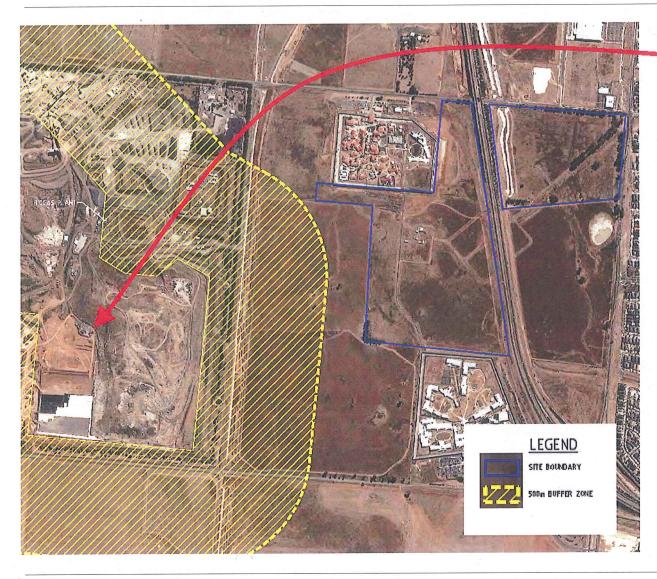
- Collect and review data relevant to potentially contaminating activities at the site.
- Develop a works EMP that met the requirements of the overarching Flora and Fauna EMP (Biosis)
- Assess site conditions to allow completion of a Statutory Environmental Audit (completed by Warren Pump of ERM).
- Complete Hazmat, Geotechnical, Landfill Gas and soil and groundwater assessments within project timelines and without impeding other stakeholders and service providers.





Landfill Gas Assessment





- Christies Road Landfill adjacent to site.
- The potential for landfill gas to impact on the site from the Boral Western Landfill is found to be low and acceptable.

Hazardous Materials Surveys

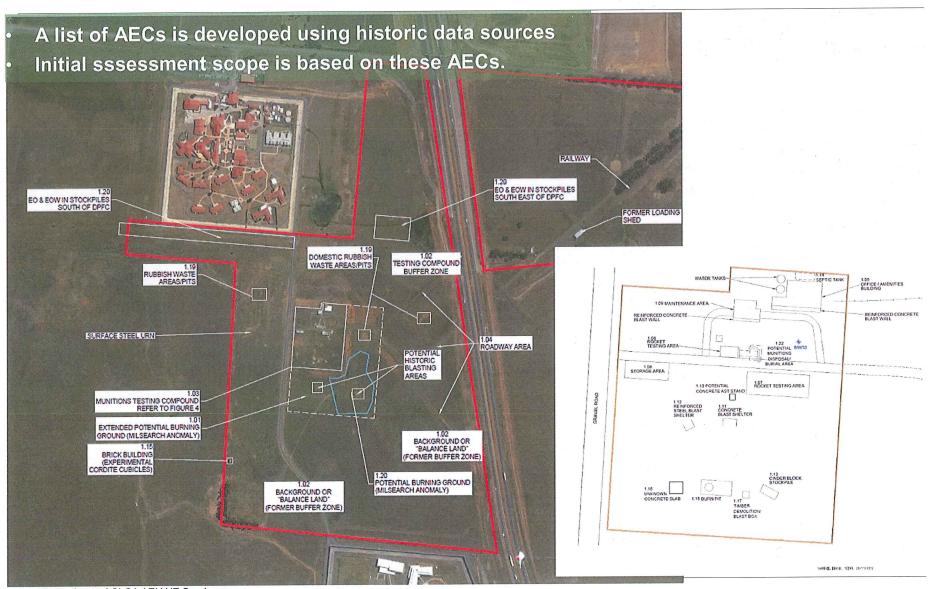


Identified Asbestos containing materials



Initial Phase 1 ESA works - Areas of Environmental Concern



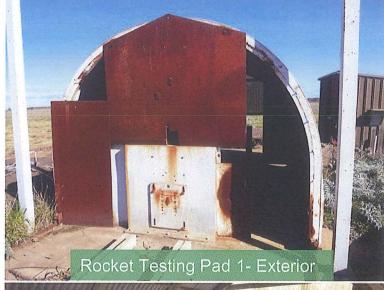


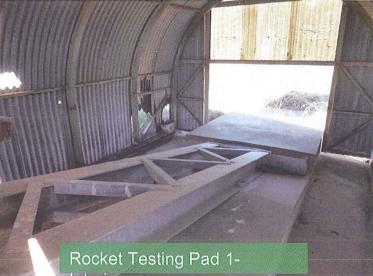
AEC Identification – Required Pre Demolition Works.











Demolition



Demolition identified significant and unexpected footings and foundations

Demolition of all structures on the site (which included our AECs)

- ·Administration Buildings,
- 2 Rocket Testing Pads
- AST stands
- Demolition Boxes
- •Burn Pits
- Septic Tank
- Experimental cordite building
- Several storage sheds



Demolition Works



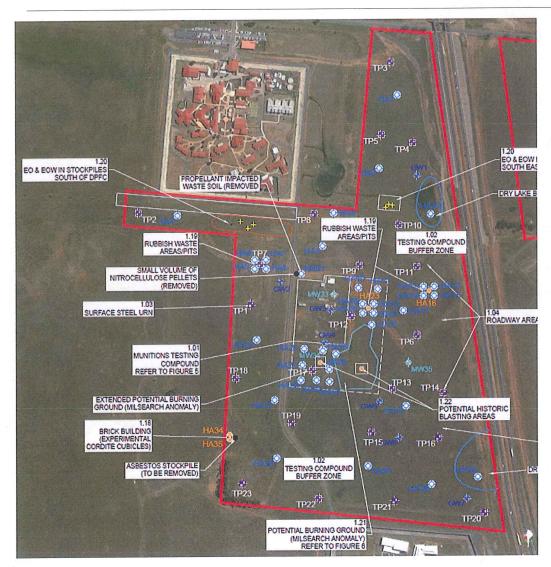


- Completed following UXO clearance of the compound area
- Allowed for removal and assessment of several key AECs providing assessment access.



Phase 2 ESAs and Geotechnical Assessments.







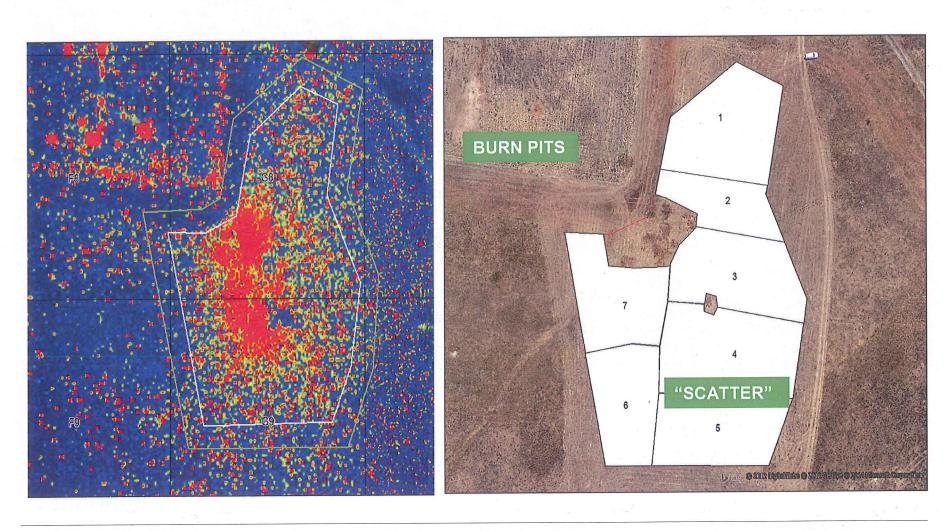
Ravenhall Sites 1 and 2 – Demolition and UXO/EOW Works in Compound





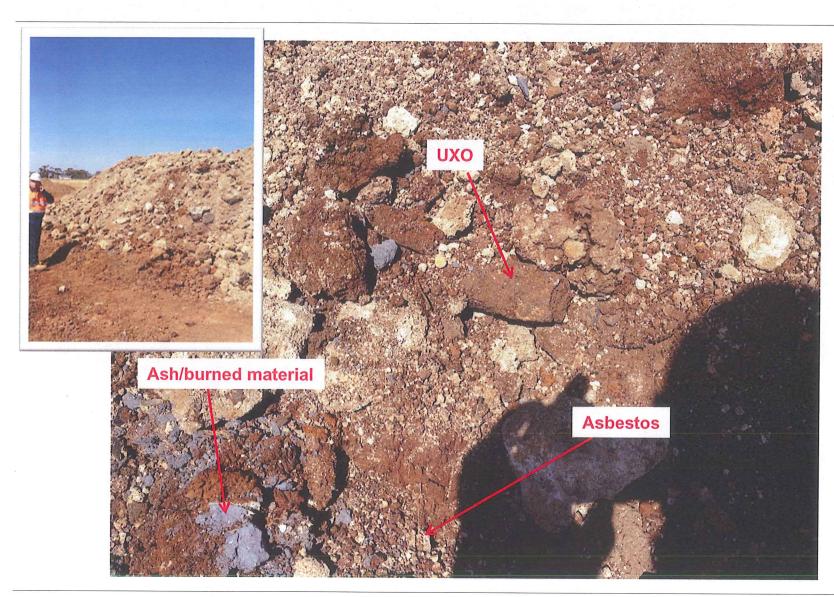
The near surface anomaly





Impacted soil from burn pit area – asbestos, EOW, ash and UXO





Burn Pit Ash – requiring hand removal from surface soils.





Chance Finds - Co-operative approach essential to all assessment work



 This asbestos abatement was conducted with a team of safe-guarding UXO technicians, Class-A Asbestos removalists, Hygienists and Class A excavator operator.



Chance UXO finds. Another consideration for ESA completion.



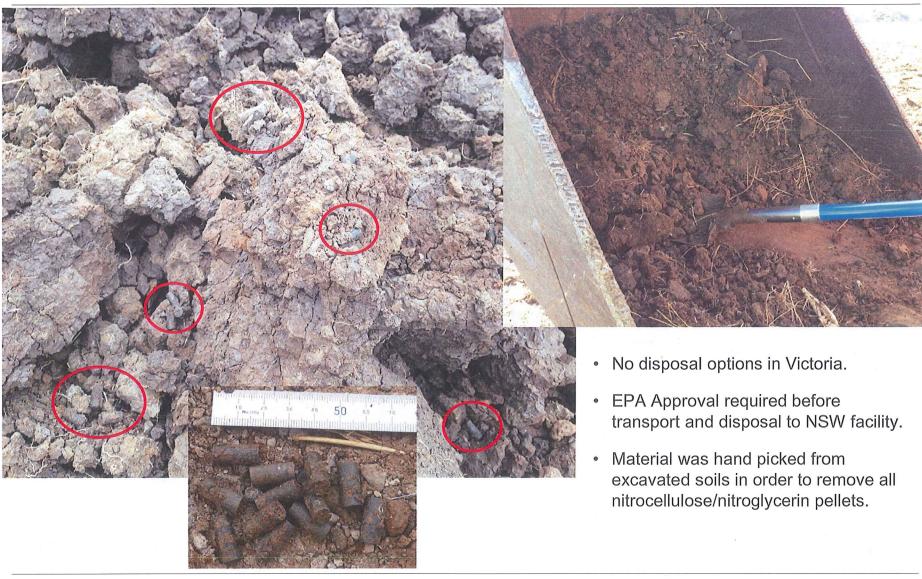




Additional UXO chance finds included marine flares and hand grenades.

Nitrocellulose in soil





UXO and Flora Fauna Assessment and Salvage allow detailed visual contamination of assessment areas





Assessment Outcomes



- Completion of ESAs, Geotech, demolition and other assessment works built into final site report.
- Certificate of Environmental Audit Issued for Site 1 addressed the requirements of Schedule 8 of the Special Use Zone Section 5.





•