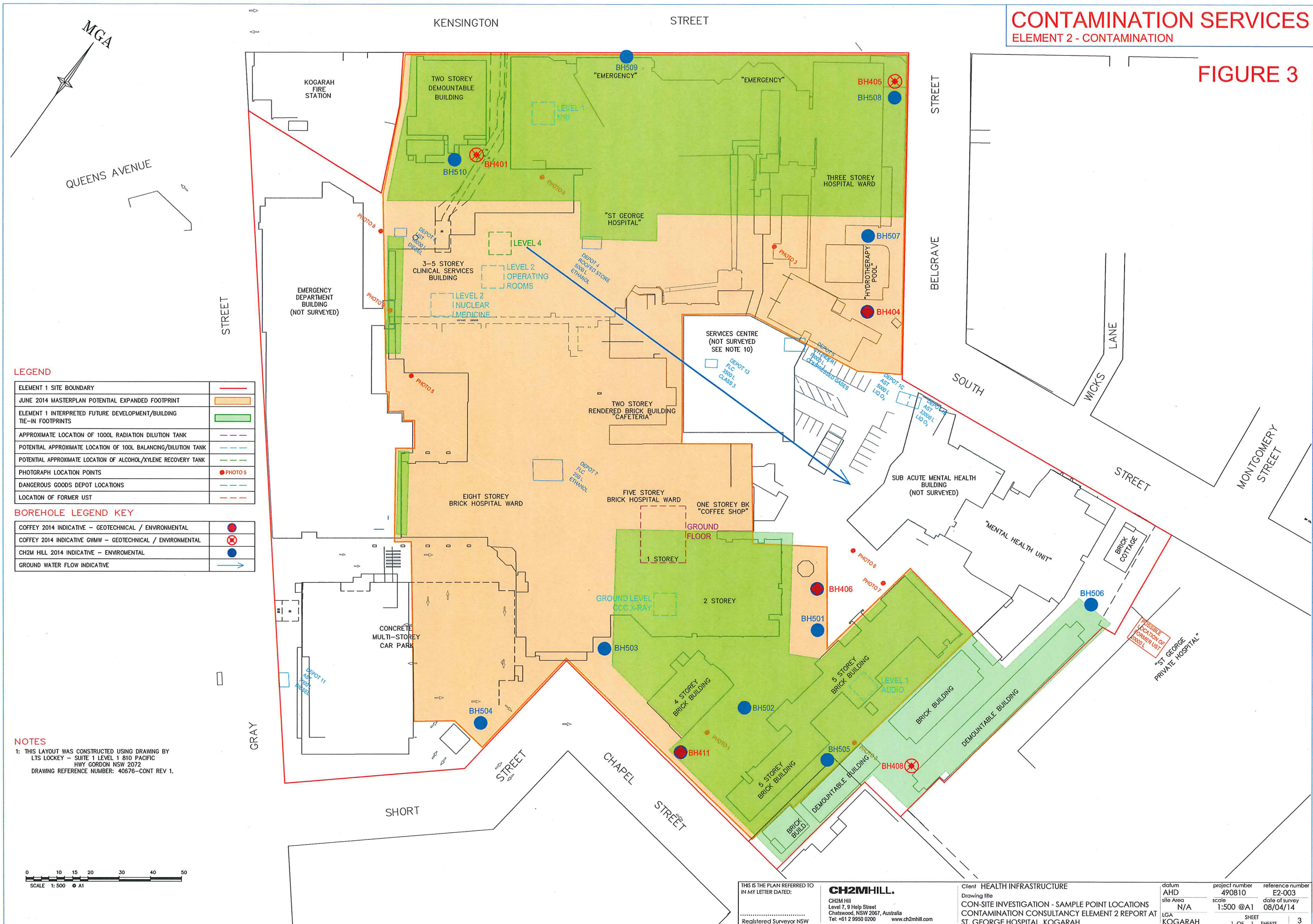


FIGURE 3



## 9 UPDATE OF RISK ASSESSMENT

The following section presents the potential contamination and hazardous materials information in the context of the risk these may pose to the enacting of the masterplan.

### 9.1 UNDERGROUND STORAGE TANKS

Groundwater flow near the 10,000L diesel UST is uncertain and due to investigation constraints no conclusions could be drawn about potential impacts to soil or groundwater immediately adjacent to the tank and beneath buildings to the east.

If the UST were compromised and diesel fuel had entered the soil and groundwater, this may present a risk to human health (through either vapour intrusion or direct contact during site works) within the vicinity of the UST. However, based on the investigations completed to date, and due to the nature of the potential contaminants (diesel fuel has relatively low volatility and therefore a lower vapour risk) and the geology at the Site (which is likely to impede the transport of contaminants), the risk is generally considered to be low.

While possible contamination resulting from the UST leaking is not likely to pose a direct risk to the development masterplan, CH2M HILL considers the currently unknown integrity status of the UST to require further investigation.

A tank integrity test and loss monitoring procedures, such as product reconciliation, should be implemented for the 10,000L diesel UST to assess potential leakage. The results of these works will inform whether the tank is suitable to remain in use or will require repair/replacement. If the UST requires removal based on a lack of integrity, or as part of future development works (Stage 4 based on the current masterplan), it should be decommissioned, and the area validated, in accordance with the requirements of UPSS 2008.

The potential for impacts to soil or groundwater in the immediate vicinity of the UST, or under buildings to the east of the UST, should be considered during future works. If not already completed as part of tank decommissioning, the assessment of ground conditions in these areas should be factored into early works for Stage 4.

### 9.2 HAZARDOUS BUILDING MATERIALS

The presence of hazardous building materials within certain buildings across the Site is well known. These materials present a risk to the development masterplan by potentially:

- Increasing the cost of demolition or renovation, by requiring specific hazardous materials controls, contractors and licences; and
- Increasing the time for demolition or renovation of certain buildings (including partial demolition for tie-ins) due to implementing the abovementioned controls.

Hazardous building materials have the potential to present a risk to all stages of the masterplan, including those involving vertical extensions to the new ED building. However, assessed on the investigations conducted, the risk appears well characterised and manageable via normal safe working protocols for refurbishment and demolition works.

### 9.3 CONTAMINATED FILL

The presence of uncontrolled fill is likely across the Site. Investigations of accessible areas to date have generally indicated that gross contamination is not present. Similarly, the site history does not indicate

substantial potential contamination sources on site. However, due to large areas being inaccessible beneath buildings, there is potential for impacted soil to remain present.

If concentrations within the fill material exceed the relevant assessment criteria the cost of excavation and disposal may be elevated compared to General Solid Waste, which may present a risk to the stages of the masterplan that involve at-ground works or building demolition.

### 9.4 UN-LOCATED INFRASTRUCTURE

The exact location and operational status of a number of pieces of infrastructure; the 100L balancing/dilution waste tanks, silver recovery units and xylene recovery unit is currently unknown.

If the location of any of these pieces of infrastructure is concurrent with a building planned to be demolished or renovated, this may impact the construction. This may include consideration of decommissioning, disposal of potentially hazardous chemicals, assessment of potential contamination of soils beneath demolished building footprints and if necessary remediation of soils or groundwater. This may impact the planned construction by increasing potential costs and time delays.

As previously discussed, intrusive investigations from this and previous investigations did not identify gross xylene, silver or cyanide contamination of the Site. However, there could be localised contamination impacts if the units/tanks leaked in areas where pathways were available for migration of the contaminants into the Site soils through imperfections in building subfloors. The potential presence of the tanks should be considered during future works; however, given their size and probably defunct status and lack of evidence of gross contamination on the Site the tanks/units are considered to be of low risk to the Masterplan development works.

10SURVEY BRIEF TO THE SURVEYOR FOR ELEMENT 2