

## Silt and sediment control plan



### Main works silt control

- A. Lot 1 Stabilised construction entrance with minor silt trap.
- B. Main stabilised construction entrance and silt trap dam. Detention basin drains to Exploration Way kerb after silt settlement and filtering.
- C. Flow diversion ditch at northern side of lot 2
- D. Silt fence below gully crossing
- E. Silt fence below right of way earthworks
- F. Silt fence below water reservoir earthworks
- G. Silt fence below southern excess-fill site

### Optional works silt control

Not shown: Silt fences may also be appropriate for the optional extra building site earthworks. All of this extra earthworks is able to proceed in theory with run off being caught by the silt control features listed above. However it may at times be more appropriate given the phase of construction to use silt fences more local to the works as well.

Works will progress in small increments ensuring only low levels of disturbed soil at any one time.

All exposed areas will either be sealed or hydroseeded and planted as soon as practicable after completion of works and before removal of silt protection measures.

The following pages gives more detail on items A and B listed above.

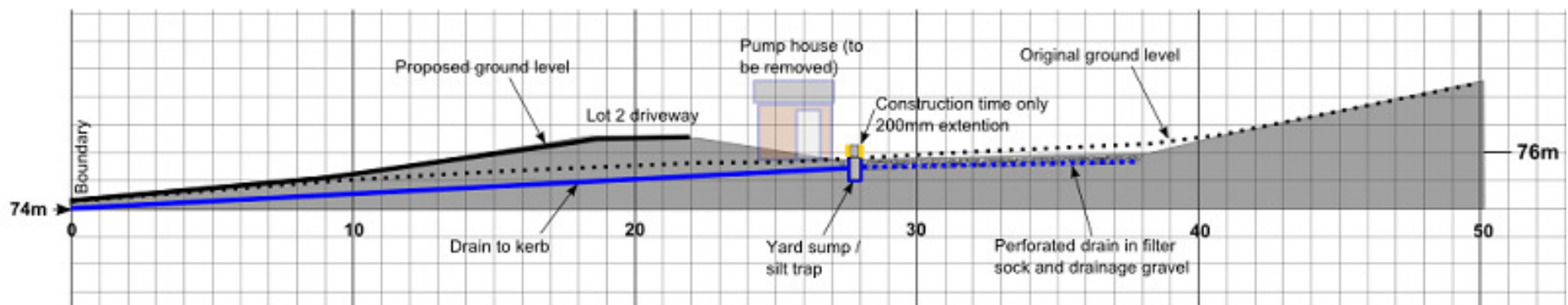
## Exploration way silt protection:

Stabilised construction entrance / Silt trap / Eventually becomes storm water detention area



It is proposed that at the earliest possible time in stage 2, construction of the detention basin subsoil drainage should be completed followed by the first part of the new right of way ramp as far as the lot 2 driveway. The initial version of this fill (road hump shown to left) will only be about 500mm deep and topped with compacted base course. This will allow for access to and from the site but also retain run off until it is filtered through the drainage gavel and filter sock subsoil drainage that feeds the storm water / yard sump as shown. It is proposed that this sump will eventually be used for controlling storm water outfall to the Exploration Way kerb and that the flow will normally be straight through and only result in ponding in extreme inundation events. However during construction it is proposed to fit an extension riser 200 – 300 mm above the normal sump level. This will

mean the detention basin will act as a silt trap and drainage will occur more slowly through the subsoil drainage and filtering that will be installed. After construction the detention basin will be cleaned up and the sump extension riser will be removed. Where sensible a clean water bypass will be used to capture clean driveway water from uphill of the works and pipe it along the existing gutter to avoid unnecessarily putting it through the silt pond.



***Lot 1 silt control: A bit more base course required to form a decent stabilised entrance.***



The current flows across Lot 1 will be greatly reduced as soon as the diversion ditch (C shown in the location diagram) is put in place.

Lot 1 has an existing sump (shown above) with two 100mm pipes to the kerb. Water will pass through a small primary silt settlement ditch before entering the sump where more silt will be removed before any water reaches the road.

A bit more gravel is intended for the entrance

apron both in height and extent and this will direct run off to the silt settlement ditch. Earthworks on this site are by nature mostly landscaping and lawn and plantings preparation. Top soil will be scraped back, some clay removed and top soil reinstated all in fairly short time frames.

### ***Silt fences as required***

In addition to the main potential areas for silt run off already covered, there may be other times and places where silt should be controlled. It is intended that silt fences will always be used where it is identified that silt laden run off could potentially leave the development property without interception.

For this development one hugely mitigating factor is the distance and substantial stretches of biofilter before any silt could reach flowing water especially for most of the south end of the proposed works. Never-the-less it is proposed to place silt fences to intercept any potential silt laden flows downhill of all exposed earthworks.