

# Memo

10 March 2014

**To:** Vince Connell (Director Planning and Regulation)  
**From:** David Hannah (Design Unit, Engineering & Operations)  
**Subject:** Response to the Compliance Audit for a Development Application for land filling at Depot Road (DA09/0186) and for the Depot Road Sports Fields (DA09/0836).

**Reference:**

---

Please find below a response to the Compliance Audit for a Development Application for land filling at Depot Road (DA09/0186) and for the Depot Road Sports Fields (DA09/0836) prepared by Rob van Iersal, Geolink (the Auditor).

## **Overview of the Compliance Audit**

### ***Background to the Depot Road sports fields development***

In 2009, Council sought development consent to commence filling of land at Lot 1 DP 397082 Depot Road. The site has been identified by Tweed Shire Council's Engineering and Operations Division as fulfilling the requirements for future active open space (sports fields) to satisfy the requirements of existing and emerging communities in the area. Section 94 contributions have been collected for this purpose. A preliminary amount of fill was proposed (50,000m<sup>3</sup>) which aimed to fill undulations in the existing clay cap (the site was a former landfill). At that time, it was decided that the proposed sports fields would be the subject of a separate application once further detailed design of supporting facilities had been completed and funding secured. Infrequent filling commenced over a period of about 2 years from 2009 until 2011 when the subsequent DA for sports fields and associated infrastructure was approved. The sports fields DA included design plans with final levels. A construction certificate was lodged and approved which allowed for earthworks to commence. A second Construction Certificate is yet to be lodged for buildings and other infrastructure. In regards to filling, the site is at or approaching final levels. Vegetation has largely established across the site and will be maintained (slashed) regularly until construction of the finished playing surface is undertaken at which time it will be maintained as a sports field.

### ***Scope of the compliance audit***

During the latter part of 2013, Council received multiple complaints from an adjoining property owner of No. 11 Secret Lane, Kings Forest, claiming that Council had either breached, or not satisfactorily fulfilled the conditions of the two development consents relating to development of sports fields on its property, Lot 1 DP 397082, No. 58 Depot Road, Kings Forest. The Development Consents are listed as follows:

DA09/0186 - filling of land - development consent issued by Council on 26 June 2009.

DA09/0836 - sports fields and associated access road, car parking, lighting, amenities building/clubhouse and sewer rising main - development consent issued by Council on 9 September 2011.

As a consequence, Council sought a quotation of services to:

Memo

**Subject:**



- provide an independent audit and review of the efficacy and degree of compliance with consent conditions achieved by Council in respect to advancing works relating to the two above development consents, and
- further to this, include a specific assessment of the adequacy of the response provided by Council to the complaints received to date from the owners of property No. 11 Secret Lane, Kings Forest.

### ***Audit conclusions***

The Auditors report includes initial general comments, observations relating to specific development consent conditions, and then a tabulated assessment of each consent condition in regards to compliance or non conformance. This approach has been taken for both DA09/0186 and DA09/0836.

In regards to DA09/0186, there were no non-conformances. Although the Audit highlights a lack of clarity relating to the specifics of the two approvals, particularly in relation to the amount of fill approved, the audit clearly states that *“the sportsfield approval (DA09/0836) clearly authorises filling across the site up to the design levels shown on the approved plans. There is therefore no question or issue of non-conformance here”*. The Audit raises a number of observations relating to documentation of fill sources and reporting associated with erosion and sediment control (ESC). As noted, however, no non-conformances were identified.

In regards to DA09/0836, there was one (1) non-conformance against Condition 18 relating to aspects of how an Erosion and Sediment Control Plan (ESCP) is developed and implemented. Specifically, the ESCP did not include procedures for:

- responding to failures in controls,
- reporting procedures,
- procedures for attending to unfinished fill areas left unattended for more than 20 days, and
- documentation of stormwater monitoring.

Despite the non-conformance, the Auditor notes that *“there is no evidence that any significant erosion or sedimentation issues arose during the works”*. Although the ESCP did not specifically explain ESC inspection reporting and remediation of controls, ESC audits were undertaken and documentation provided to the auditor for three of these inspections.

### ***Assessment of responses to issues raised by adjoining landowners***

The audit also provided comments on adjoining land owner issues. In some instances, further clarification has been provided by the Auditor and Council.

### **Actions arising from the Audit**

The construction of the Depot Road sports fields is currently nearing completion of the earthworks stage. As noted, the Audit identified a minor non-compliance in relation to Condition 18 of DA09/0836 relating to aspects of the detailed ESCP and its implementation. To address this, the following actions are identified.

### ***ESCP revision***

The ESCP is being updated to include:

Memo

**Subject:**



1. an event based water quality monitoring program to monitor background and site water discharging to the south west of the site, and
2. reporting procedures and a proposed response to failure of systems and non-compliance with discharge quality standards.

A detailed response to general comments, observations and non-conformances contained within the Audit report is provided in Attachment A. Attachment B contains further responses to landowner issues and a full copy of the Audit report is provided in Attachment C.

For any further questions, please contact either myself or Stewart Brawley,

Regards

Dave Hannah

**Attachment A: Council response to report titled Compliance Audit Report, Geolink 2014**

**Audit Page 1 - General Comments:**

The Audit notes the following: *The audit highlights a lack of clarity relating to the specifics of the two approvals, particularly in relation to the amount of fill approved.*

The Audit further notes that *“the sportsfield approval (DA09/0836) clearly authorises filling across the site up to the design levels shown on the approved plans. There is therefore no question or issue of non-conformance here.*

**TSC Response**

DA09/0186 was for placement of up to 50,000m<sup>3</sup> of clean fill for site levelling purposes at Lot 1 DP 397082, Kings Forest. Refer Paragraph 1 of Section 1.0 of the Statement of Environment Effects (SEE) for DA09/0186.

DA09/0836 was for construction of sports fields and associated works at Lot 1 DP397082 (refer Paragraph 2 of Section 1.0 of the SEE for DA09/0836). Although exact fill volumes were not specified in the SEE, finished design levels were specified within Design Plans included in Appendix 2 of the SEE (refer Paragraph 1 of Section 2 of the SEE which states: *full details of the proposed works are shown on the attached design plans including plan views, and cross sections*). The purpose and intent of DA09/0836 was to fill the site to the preferred 3 field option provided within the DA application. It is noted that fill volumes were not requested as part of the DA assessment process.

During the audit process, a plan was prepared (titled Depot Road Sports Fields, Site Levels-sheet RC10006/A) which compared design levels taken from the Approved plans lodged with DA09/0836 and CC11/0455 with current survey levels to illustrate to the Auditor where we are in terms of filling to approved design levels. Levels were mostly at or just approaching final design levels.

**PART A: Audit Observations on DA09/0186**

**O1 (Condition 2)**

The Audit notes the following: *“Although the Audit recognises that Council’s Standard Operating Procedure - Erosion and Sediment Control (SOP) adequately addresses site risks, not all matters are addressed such as documentation of specific controls, inspections and reporting”.*

The Audit does note, however, that neither Condition 2 or the SOP specifically requires such documentation. The Audit considers that a specific ESC Plan (ESCP) would have been appropriate for the site although notes that *“no evidence that any significant erosion or sedimentation issues arose during the works”.*

**TSC Response:**

The early stages of filling for DA09/0186 involved importing small quantities of fill material, being intermittent truck loads, over a two year period. Prior to receiving fill from the Banora Point Upgrade Alliance (BPUA), only about half of the prescribed amount of fill under DA09/0186 had been taken to site.

Memo

**Subject:**



Given the relatively small amounts of fill placed on the site over a long period of time (prior to the BPUA fill being received), ESC was managed in accordance with Council's SOP for ESC. Also, dense grass filter strips were retained to help manage sheet flow, stockpile heights were less than 2m, and stockpile locations were identified by Council Construction Engineers. ESCs did not concentrate stormwater or channel stormwater off-site. Site management was supervised by Council Works Unit Construction Supervisors in accordance with the SOPs.

Council was offered large volumes of fill from the BPUA which would subsequently satisfy the approved filling volumes under DA09/0186 and achieve design levels approved under DA09/0836.

A detailed ESCP was prepared at this time to manage filling under both the existing DA09/0186 and DA09/0836. This site specific ESCP was considered necessary to manage the increased risk associated with receiving large fill volumes in a relatively short time frame. A detailed Storm Water Management Plan (SWMP) was also prepared as part of DA09/0836.

## **O2 (Condition 3)**

Condition 3 seeks to ensure that *"all imported material shall be from an approved source and details of the source of fill and its nature to be submitted to the satisfaction of the General Manager"*.

The Audit recognises that *"a checklist was developed to satisfy this condition although was not used"*.

The Audit also suggests that filling activities began prior to the checklist approach being developed.

## **TSC Response:**

Fill material from source sites was assessed and approved prior to being taken to the Depot Road sports field site. This was a formal process of development assessments, part V approvals or exempt development checklists.

Of the total volume of fill taken to site under both DA's (as per the spreadsheet of fill volumes previously provided to the Auditor and the EPA), only 6.7% of fill material was not assessed in the manner above and can be divided between the following categories;

- 1.5% was taken to Depot Road under the Exempt Development provisions of the State Environment Planning Policy (Infrastructure) 2007 as a result of Emergency works. Of this, 1.4% of the material came from earth bank slips as a result of natural disaster (major flooding), and 0.1% from water main failures. The earth bank slip material was considered VENM whereas the material associated with water main failures would be ENM. .
- 1.9% was taken to Depot Road from Kingscliff TAFE. Assessment of suitability for this material was carried out independent of TSC (TAFE NSW operates under State Government and not Local Government).
- 2.2% was already stockpiled at the site. Further investigation (including discussion with retired Council staff) has revealed that the source of material was from two large earth bank slips at Carool Road Bilambil and Cudgen Road Duranbah. The material is considered to be VENM. Records have been updated to accurately reflect the source of this material
- This leaves 1.2% of the total fill volume as not being formally assessed.

The checklist was designed to facilitate the filling operation by not requiring every load of material to be pre-approved. However, 99% of the material was assessed in conformity with the condition and use of the checklist was not warranted. Given that the project is still ongoing, records of the material type and source are available for review by the General Manager or his delegate.

Memo

**Subject:**



In regards to receiving fill material prior to the checklist being developed, the dates recorded against the list of quantities and sources of fill relate to the start date and end date of the project that produced the spoil material. These dates are used to identify specific projects and locations from other similarly named and located projects. These dates provide no direct correlation to the actual date(s) when fill was transported to the Depot Road sports fields. Prior to the issue of DA09/0186, other approved fill sites were operating. Spoil material produced by other projects (such as PTV08/004) before 29 June 2009 was either transported to an alternative fill site or stockpiled at the source until DA09/0836 was approved.

### **O3 (Condition's 6 & 7)**

Condition 6 and 7 relate to works not impacting on neighbourhood, adjacent premises or the environment. The Audit discusses the lack of documentation and reporting procedures under the SOP that was used for early stage filling (prior to the detailed ESCP being developed in July 2011).

#### **TSC Response:**

The Audit recognises that *"controls were provided in accordance with Council's adopted SOP which adequately addressed site conditions and risks"*. Further, the Audit notes that *"no evidence that any significant erosion or sedimentation issues arose during the works"*.

The Audit further states that, *Condition 6 does not require records to be kept on site inspections. Formal inspections by Council's environmental scientists were deemed necessary once large volumes of material were being delivered to site associated with the BPUA project.*

Consequently, Council's standard operating procedures for managing erosion and sediment control were considered by the Auditor to have adequately managed site risks. As discussed, once larger volumes of fill were brought to site associated with the BPUA project, a detailed ESCP was deemed to be required. Given that only about half of the designated 50,000m<sup>3</sup> of fill had been delivered to site, the intent was to continue filling to the approved volume stated within DA09/0186 (to allow site levelling), then continue filling to the approved levels provided within design plans under DA09/0836. The ESCP was therefore developed in relation to DA09/0186 (as this consent was still active) and was the guiding document (along with a SWMP) as site filling continued under DA09/0836.

### **O4 (Condition 9):**

Condition 9 states that: *"Appropriate measures are to be put in place to prevent the transport of sediment from the site. Should any material be transported onto the road or any spills occur it is to be cleaned up prior to cessation of same day's work and/or commencement of any rain event"*.

The Audit states that: *"A shake-down grid was installed, but apparently not until Banora Alliance material started to come to site. Prior to that, truck movements to and from the site were minimal and Council considered that a shaker grid was not necessary. An ESCP plan was developed, but not until July 2011. No documentation was prepared to indicate the measures put in place prior to ESCP, with Council's SOP relied on to manage risks"*.

#### **TSC Response:**

As noted, only small volumes of fill material delivered to site at a low frequency occurred over a two year period prior to receiving the BPUA material. A stable site access was installed at the single entrance to the Depot Road site. As the frequency of trucks increased (associated with the delivery

Memo

**Subject:**



of the BPUA material), a shakedown grid was installed additional to crushed rock stable access. As the staging of works proceeded and frequency of truck movements decreased the shake down grid was taken out of service for a period as internal roads were modified and the area under the grid was filled. The shake down grid was reinstated closer to the site entry location where it is currently sited after the area was re-levelled and access roads re-instated.

Regarding management of site controls and risks prior to the detailed ESCP being developed, the Audit recognises that *"controls were provided in accordance with Council's adopted SOP which adequately addressed site conditions and risks"*. Further, the Audit notes that *"no evidence that any significant erosion or sedimentation issues arose during the works"*.

**O5 (Condition 11):**

Observation 5 states that: *"All waters that are to be discharged from the site shall have a pH between 6.5 and 8.5 and suspended solids not greater than 50mg/kg. It does not appear that any water monitoring was undertaken. Compliance with the criteria contained in the condition cannot, therefore, be determined. However, it is noted that the nature of the filling works avoided the channelization of stormwater flows, with 'sheet flow' around edges into grassed perimeter drains. This could be expected to provide sufficient controls to manage water quality in all but extreme storm events"*.

**TSC Response:**

Sediment basins could not be excavated given that the site contains a clay cap over a previous landfill site. Consequently, initial site controls during the early stages of DA09/0186 aimed to not concentrate stormwater or channel stormwater off-site. Instead, dense grassy batters and buffers to stockpiles and disturbed area were retained to manage sheet flow. The ESCP developed in 2011 similarly did not rely on sediment basins to avoid disturbing the existing clay cap.

As noted in the Audit, *"when basins cannot be achieved, the 'Blue Book' indicates that other adequate controls should be provided to prevent / minimise erosion and/ or treat sediment laden water"* and further, *"An assessment of the design parameters outlined within the ESCP were consistent with the 'Blue Book'"*.

Given the lack of basins on site, or other stormwater collection points, no site water quality monitoring was undertaken. In contrast, water quality monitoring was undertaken within two dams to the north of the subject site up until 6 September 2010 until access to the monitoring point was refused. Monitoring was recommenced in November 2013 once access permission was resinated and is currently ongoing on a biannual schedule (pending a review of monitoring data by the EPA in the next 12 months).

The ESCP is being updated to include an event based water quality monitoring program to monitor background and site water discharging to the south west of the site.

**PART B: Non-compliances (DA09/0836)**

**NC1 (Condition 18)**

The Auditor states that: *“Erosion and Sediment Control shall be provided in accordance with the following:*

- a) The Construction Certificate Application must include a detailed erosion and sediment control plan prepared in accordance with Section D7.07 of Development Design Specification D7 – Stormwater Quality*
- b) Construction phase erosion and sediment control shall be designed, constructed and operated in accordance with Tweed Shire Council Development Design Specification D7 – Stormwater Quality and its Annexure A – “Code of Practice for Soil and Water Management on Construction Works”.*

The Audit highlights the that following minor non-compliances are noted for the ESCP:

- *Section 3 of the Design Specification requires that the ESCP should contain reporting procedures and a proposed response to failure of systems and non-compliance with discharge quality standards.*
- *The Code of Practice requires that specific measures be documented to control ‘lands, stockpiles and other exposed materials scheduled to remain unattended for a duration of more than 20 working days’. The ESCP discusses rehabilitation of the final surfaces, but does not provide information addressing unattended areas.*
- *The Code also requires that ‘stormwater monitoring shall take place at all locations where drainage or surface waters leave the site’. Council advise that, other than opportunistic visual monitoring (for turbidity), no monitoring was undertaken.*

**TSC Response:**

The Audit makes the following points in relation to the NC1:

- *“The first two matters are not considered significant, and the absence of this information in the ESCP does not suggest that appropriate controls were not implemented”.*
- *“From on-site observations and discussions with Council officers, it is apparent that the substantial perimeter grassed swale was the primary control relied on to manage ERSED risks, together with internal grading of the fill platform to avoid channelling stormwater flows. This is considered an appropriate response to the nature of the site and the filling works”.*
- *“The lack of water quality monitoring, however, prevents Council from clearly demonstrating the quality of water leaving the site”.*

The ESCP is being updated to include:

1. an event based water quality monitoring program to monitor background and site water discharging to the south west of the site, and
2. reporting procedures and a proposed response to failure of systems and non-compliance with discharge quality standards.



## **Page 9 Audit Observations (DA09/0836)**

### **O1 (Condition 1):**

The Audit states that: *“The Statement of Environmental Effects refers to land forming and the construction of 3 fields and associated facilities. It states: “The importation of all fill material required for land forming would be undertaken in accordance with previously approved Development Consent (DA09/0186)”.*

### **TSC Response:**

The reference in the SEE to importing fill for land forming is a reference to the processes and procedures associated with filling the site. The intent of DA09/0836 was to fill the site to final levels as provided in Design Plans RC08008/01-07 which were stamped and approved as part of DA09/0836. The design plans clearly show final fill levels, and consequently, fill volumes were neither stated nor required.

### **O2 (Condition 5):**

Condition 5 requires that *“The speed limit along Depot Road must be limited to 40km/hr through traffic calming methods. Signage must be placed to clearly indicate the road crosses a wildlife corridor and is a Koala crossing”.*

The Audit states that:

- *40 speed limit signage is in place and a Vehicle Management Plan was prepared (see Attachment A), including a 40km/hr speed limit.*
- *It does not appear, however, that signage was erected advising of wildlife or koalas. I note an internal Council memo (from Nigel Dobson to David Hannah, dated 31 August 2011) indicating that traffic control personnel will be provided to watch for koalas (and control speed) during hauling of material from Banora Upgrade project.*
- *The issue, therefore, was adequately addressed, but not in strict accordance with the terms of the condition.*

### **TSC Response**

A Vehicle Management Plan (VMP) was prepared (and lodged with CC documentation) to manage construction traffic movements along Depot Road.

This VMP was specifically provided to reduce speed limits of construction traffic in order to maintain the local amenity at the site including noise, dust and caring for wildlife. Measures were incorporated into the VMP to satisfy concerns of the Tweed Coast Koala Advisory Committee who raised concerns via Council’s NRM Unit about impacts on Koala’s. This essentially involved regulating vehicle movements to 40km/h along Depot Road and requesting traffic controllers and BPUA truck drivers to watch for koalas. The VMP was discussed with BPUA and Council staff and formed part of site induction procedures.

Regarding Koala signage, the Ecological Assessment report submitted as part of a further information request stated that all traffic calming devices on Depot Road (which includes Koala signage) would be installed prior to operation of the sports fields. In contrast to the Audit comments above, the project is not conditioned to provide Koala signage at this stage of works.

Memo  
**Subject:**

### **O3 (Condition 12):**

Condition 12 states that: *All imported fill material shall be from an approved source. Prior to the issue of construction certificate details of the source of fill, description of material, proposed use of material, documentary evidence that the fill material is free of any contaminants and haul route shall be submitted to Tweed Shire Council for the approval of the General Manager or his delegate.*

The Audit refers to Observation O3 relating to DA09/0186 relating to assessment of fill material for further comments.

The Audit also notes that: *"...some acid sulfate soil material was deposited and treated on site in late 2011. Strictly, the material was not /clean' when brought to the site. Council advise that it was treated promptly at the site, with subsequent testing verifying that the material was adequately neutralised".*

### **TSC Response**

As stated, in Council's response to Observation 3 (DA09/0186), the checklist was designed to facilitate the filling operation by not requiring every load of material to be pre-approved. However, 99% of the material was assessed in conformity with the condition and use of the checklist was not warranted. Given that the project is still ongoing, records of the material type and source are available for review by the General Manager or his delegate.

### **O4 (Condition 18 & Compliance with D7 – see Tables A & B):**

Observation 4 relates to the requirement for a detailed ESCP for the construction phase of the project and a detailed SWMP for occupational or use stage.

The Audit discusses a number of deficiencies associated with the implementation of the ESCP including the lack of a wind-break barrier fence, progressive site stabilisation, and details regarding self auditing.

### **TSC Response**

No wind break barrier fencing was installed given a dedicated water truck was stationed at the Depot Road site to manage dust issues during filling works associated with large volumes delivered from the BPUA.

Periodic inspections of site controls were undertaken by TSC Environmental Scientists. Daily inspections were carried out by TSC site staff during filling operations.

Vegetation has largely established across the site and will be maintained (slashed) regularly until construction of the finished playing surface is undertaken at which time it will be maintained as a sports field.

# Memo



## Attachment B: Response to report titled: Comments on Adjoining Land Owner Issues, Geolink 2014

As part of the Audit by Geolink, comments were provided in relation to issues set out in a land owner's letter to Council dated 3 September 2013. Issues identified in the Geolink report that require further clarification by Council's Engineering Division have been reproduced in the table below. Refer to Attachment C for a full copy of the Geolink Audit reports

Issue	Audit Comment	TSC Comment
<p>"breaches of the DA 09/0186</p> <p>1. Fill should not have been placed within 10 mtrs of boundary of the Council Site. It was not supposed to affect the gently sloped existing grassed batters all around the site, that would act as sediment filters. The fill has been placed right up to the boundary and also at virtually 45 degrees.</p>	<p>It appears that the 10m comes from the checklist that was included as Appendix 3 of the Statement of Environmental Effects submitted for DA09/0186. The consent does not include a condition of approval specifying the 10m distance. It does, however, have a condition requiring that the 'development shall be completed in accordance with the Statement of Environmental Effects and Plan Nos RC08008/01 – RC08008/07'.</p> <p>The approved plans (see RC08008/03) show the lateral extent of fill some distance inside the property boundaries (extent of clay cap is not shown on this plan).</p> <p>I note, however, that the plans approved for the sportsfields DA (DA09/0836) show more detail of the extent of filling, and indicate filling closer to property boundaries, with a batter slope of 1:4.</p>	<p>Adequate buffers were retained between stockpile and top of batters during preliminary stockpiling at the site associated with the pre-BPUA material being brought to site.</p> <p>The site has been subsequently filled in accordance with approved plans for DA09/0836.</p>
<p>6. The stormwater run-off requires a pH between 6.5-8.5 as per the Notice of Determination DA 09/0186. This would not be consistent with the more acid environment of the adjoining wetlands, acid frog habitat and survival of tadpoles of these frogs. In any case stormwater pH has not been tested in any location as far as we know.</p>	<p>The specified pH range is an industry standard, providing 'neutral' conditions.</p> <p>I assume that, in setting this condition, Council was mindful of the receiving environment and satisfied that it was appropriate in the circumstances.</p> <p>It appears that, apart from some testing in the adjoining farm dam, there has been no testing of stormwater leaving the site.</p>	<p>Sediment basins could not be excavated given that the site contains a clay cap over a previous landfill site. Consequently, initial site controls during the early stages of DA09/0186 aimed to not concentrate stormwater or channel stormwater off-site. Instead, dense grassy batters and buffers to stockpiles and disturbed area were retained to manage sheet flow. The ESCP developed in 2011 similarly did not rely on sediment basins to avoid disturbing the existing clay cap.</p> <p>As noted in the Audit, when basins cannot be achieved, the 'Blue Book' indicates that other adequate controls should be provided to prevent / minimise erosion and/ or treat sediment laden water. The Audit notes that an assessment of the design parameters outlined within the</p>

Memo

**Subject:**



		<p>ESCP were consistent with the 'Blue Book'.</p> <p>Given the lack of basins on site, or other stormwater collection points, no site water quality monitoring was undertaken. In contrast, water quality monitoring was undertaken within two dams to the north of the subject site up until 6 September 2010 until access to the monitoring point was refused. Monitoring was recommenced in November 2013 once access permission was resinated and is currently ongoing on a biannual schedule (pending a review of monitoring data by the EPA in the next 12 months).</p> <p>The ESCP is being updated to include an event based water quality monitoring program to monitor background and site water discharging to the south west of the site.</p>
<p>7. Water quality monitoring has not taken place in the farm dams on our property since 6 Sept 2010, despite an email from Peter De Wilde to Adam Faulkner asking him to resume water monitoring from the 8 Sept 2010 onwards, explaining the withdrawal of consent on the 6th Sept 2010 for Council to test the dam water was a mistake. The results of bore water and dam water monitoring over a 5 yr period will have to be submitted to the DECC at the end of 2013. The dam water results would be particularly interesting as the fill was placed exactly in this period of time( Sept 2010 –present)</p>	<p>I understand that testing has resumed.</p>	<p>Refer Council response to Question 6 above.</p>
<p>9. No contact has been made with us about a legal point of discharge of stormwater onto our property, and use of our farm dam, as was suggested in the SEE related to DA 09/0186. No letters of notice of the DA's being on public display have been received by us. Angela actually spoke to Denise Galle about 2 yrs ago who mentioned the approval for the DA09/0836 had not been given yet. She gave the impression the DA had not even been on Public display. Why did she not then inform Angela about the DA?</p>	<p>Council advise that the majority of stormwater from the site is captured in the perimeter drain and discharged in the south-west corner of the property. A small area drains under the site entrance toward the north-east corner, towards the neighbours' property. Council will need to satisfy themselves that appropriate legal arrangements are in place (if required).</p>	<p>A stormwater management plan was prepared and submitted with the Construction Certificate for the bulk earthworks.</p> <p>Site contours from 2007 demonstrate that a portion of the site prior to filling for the sports fields, drained to the north. (ie, towards the farm dams.)</p> <p>The sports field's earthworks are designed so that once completed, all sports fields, car parks and buildings will drain to the south west corner of the site. The only areas that drain to the north are the most northerly batters to the playing fields, and any areas near the farm dams where</p>

Memo

Subject:



		<p>filling is not undertaken.</p> <p>The most easterly farm dam partially lies within the Depot Road sports fields boundary, so that provides a lawful point of discharge for that portion of the site that previously drained in that direction.</p> <p>The Construction Certificate (and DA) drawings show a pipe under Depot Road, at the north eastern corner of the site. This pipe would allow connection of a catchment east of the sports fields, comprising the eastern batter and an existing sparsely treed area (drain) from the south east corner of the fields to the farm dam. This pipe was intended only as a relief pipe for localised low points, as the surveyed levels of the existing drain on the eastern boundary show it to be relatively flat. However, given the flat grades, the permeable sands at the base of the drain would allow infiltration of stormwater from any low points with flows to the dam generally unlikely.</p> <p>Drawing RC1006-07 of the Construction Certificate drawing set shows that the access road adjacent to the site entry has one way crossfall, which would direct runoff to the southern side of Depot Road. The road is designed to shed runoff to grass swales, which would treat water in accordance with Council's D7 specification.</p>
<p>10. No proper stormwater management plan has been shown to us. We can only guess what it will be like. This plan should have been drawn up when the DA was handed in for approval, Jan 2010. The Catchment plan we were eventually sent was not dated, does not make sense and suggests that we would be better off after the Sportsfields were established than before. It suggests that prior to development, water from the far South East corner would drain all the way North to our property, jumping Depot Road which is in the way. There have never been any signs of water entering our property anywhere from the Council Site in the past. We still invite anyone to come and have a look now to assure themselves personally of this fact, or to come and show us now where and how this has happened in the past. It is also true that prior to the</p>	<p>A Stormwater Management Plan was prepared and submitted with the Construction Certificate for the bulk earthworks.</p> <p>It is suggested that a Council engineer explain the design detail of the SWP with the adjoining owners.</p>	<p>Refer response to Q. 9 above.</p>



Memo

**Subject:**



<p>Council's use of the site as a waste site, the permeable nature of the medium grained sand and lack of slope on this sandplain, would not be consistent with any overland flow as can be seen all over the adjoining parts of the Kings Forest Estate. The plan is now to actively channel and pipeline stormwater onto our property which needs our agreement and possible easement if this would mean overland flow (see Council's D5 and D7). The onus is on Council to prove their blunt statement (quote: Patrick Knight in teleconference, and Stewart Brawley's reply emails) that water/run-off has always entered our property.</p>		
<p>13. An SEE should take into account the impact on surrounding land, for which you would need to do an environmental survey, to establish the nature of the surrounding land first. So far no survey has been supplied to us by Council, and the question whether Council knows of anyone ever having done an environmental survey, in particular on our land, remains unanswered.</p>	<p>It is not clear from this what the adjoining owners mean by 'environmental survey' A Statement of Environmental Effects was prepared for both applications, addressing the requirements of the Act. In approving these applications, Council planning staff considered that the Statements were adequate. I note that Condition 20 of DA09/0836 required the submission of an Ecological Monitoring Report, to be approved prior to the issue of the Construction Certificate. The CC for bulk earthworks was issued without such a report having been submitted. Council advise that the intention is for it to be submitted with the application for buildings/ improvements.</p>	<p>In regards to Condition 20 (submission of an ecological monitoring report), the monitoring report relates to operational issues associated with the sports fields (such as lighting and vehicle traffic along Depot Road, and is therefore the subject of the second construction certificate related to construction of infrastructure (buildings, car parks, lights, water and sewer, roads etc).</p>
<p>14. A form was attached to the Notice of Determination DA 09/0186 that was supposed to be used to confirm the safe nature of the fill and signed by site supervisors and then be approved by General Manager or delegate before fill could be moved to the site. We don't believe this form has been used and a recent request for an updated list of fill sources has so far not been honoured. Peter De Wilde was reassured by Andrea Hamann during an onsite meeting that any further fill would be sourced exclusively from Arkinstall Park from that day, 03 July 2013 onwards. The first truck to arrive I believe the next week while asbestos clearing was still in process came from a different site( the location of which is known to us) and we were told no fill from Arkinstall Park was going to be used at all! Hence the request for an updated list of sources. So far no response.</p>	<p>The form referred to was Appendix E to the Statement of Environmental Effects for DA09/0186. It does not appear to have been used. Council advises that the fill material was sourced from various Council infrastructure projects, and that individual environmental assessments were undertaken for each of those projects (including an assessment of contamination risk). I have noted, however, documentation regarding fill sources to be approved by the General manager or his delegate does not appear to have been provided.</p>	<p>Fill material from source sites was assessed and approved prior to being taken to the Depot Road Sports Field Site. This was a formal process of; development assessments, part V approvals or exempt development checklists. The checklist was designed to facilitate the filling operation by not requiring every load of material to be pre-approved. However, 99% of the material was assessed in conformity with the condition and use of the checklist was not warranted. Given that the project is still ongoing, records of the material type and source are available for review by the General Manager or his delegate.</p>

Memo

**Subject:**



<i>"Questions that remain unanswered:"</i>		
<p>1. Notification of neighbours: (see email Stewart Brawley 26 July 2013). Stewart writes: It is "not practical" or "very reasonable" to expect Council to contact all adjoining landholders when a DA is received. In this instance we would argue that this is a major Council Project, (rather than for example an extension of the neighbours garden shed) and there are only two adjoining landholders, Leda and ourselves. Therefore we would deem it very reasonable and very practical to contact those two landowners, in particular where there is a point of storm water discharge onto a neighbouring property concerned.</p>	<p>I understand that Council has acknowledged that the standard DA notification procedure failed in this case.</p>	<p>DA09/0186 was notified on the 21 April 2009. This included the adjacent land owners of Property Number 4720 (Lot 2 DP 597802). The notification letter provided details on how and where to view the planning application documentation. There were no public submissions following the notification period.</p> <p>DA09/0836 was notified on the 7 January 2010. This included a letter to the resident of 11 Secret Land Kings Forest (as well as the land owners – noting that Council records did not have the new land owner details updated in the system). Nonetheless, the letter of notification, as noted, was also sent to the property at 11 Secret Land. The notification letter provided details on how and were to view the planning application documentation.</p> <p>Two public submission (from residences on Depot Road) and internal further information requests (from Council's Development Assessment Unit) were received as part of the notification and assessment period.</p>
<p>2. When are you going to officially ask us about the legal point of discharge of your stormwater?</p>	<p>Council to advise</p>	<p>Site contours from 2007 demonstrate that a portion of the site prior to filling for the sports fields, drained to the north. (ie, towards the farm dams.)</p> <p>The most easterly farm dam partially lies within the Depot Road sports fields boundary, so that provides a lawful point of discharge for that portion of the site that previously drained in that direction.</p>
<p>3. We have contacted Council's Compliance Officer, who would get back to us about several issues mentioned before, but never did. Does Council have a complaints procedure in place? And are we allowed to use it? Apparently not, as we have been allocated one single point of contact.</p>	<p>Council to advise</p>	<p>Please refer to Council's Policy titled: Compliments and Complaints Handling, Version 1.4 (accessed via Council's Web Site) for further information.</p>
<p>4. We have asked in previous emails what information about the DA 09/0186 and DA 09/0836 was available at the time these were on public display for</p>	<p>Council to advise what information was notified with each DA. I note that some documentation referred to was developed</p>	<p>Refer to the response to Q1 above.</p> <p>Regarding the detailed ESCP: A detailed ESCP was</p>

Memo

**Subject:**



<p>comments/objections. No answer has been given. This is a crucial point. If we make an objection to a DA when these are on public display, we are asked to specify what we specifically object to and back this up with evidence if at all possible. How can you object to a DA if no details are available? For instance the Erosion and Sediment Control Plan attached to DA 09/0186 which went on public display in Jan 2010, is dated July 2011! How does this work? The DA form(s) that were sent to us recently (2013) dated Dec 2009 have not even been filled out completely. The vagueness of the info so far sent to us in relation to the DA's would have made objections at the time of public display virtually impossible.</p>	<p>after the DA approvals, in support of the Construction Certificate application for bulk earthworks.</p>	<p>prepared to manage large volumes of fill material from BPUA. The ESCP referred to DA09/0186 because at that time, the site was only part way through filling under this consent. Once the approved volumes were reached under DA09/0186, DA09/0836 became the guiding consent in terms of filling to final levels. The ESCP was lodged as part of CC documentation for DA09/0836 – which Council does not notify.</p>
<p>5. On the plans for the site there is an “unnamed road reserve” running 10 mtrs wide along the Northern boundary of the site. We have asked several times what this means. If it exists, it exists and please tell us what it means, and who it is for. If it does not exist, don't put it on your plans, tell Google it doesn't exist, because even Google Maps have placed it on their maps, and have done so only recently , approximately 1-2 yrs ago. Why? Is it a “proposed” Right of Way on Council's title, that was “not registered”. If that is the case, does it exist yes or no? Can it be blocked by Council as has been done? Please advise in writing.</p>	<p>This is shown as ‘unnamed road reserve’ on plans in the set RC10006. It is shown on Deposited Plan 397082 as “Site of Proposed Right of Way 50 links wide”. There is no road reserve shown on cadastral plans, so it is not clear whether it the right of way was ever formally created.</p>	<p>There is no road reserve or right of way over the land as described within the current plan for the site (DP1192162).</p>
<p>6. Is fertiliser going to be used on the site for establishment of the turf? And will there be ongoing use of fertilisers and where does the runoff go? The wetlands vegetation is already showing the signs of high nutrient levels. Algae blooms can have quite an effect on the wetlands. Could we ask Greg Jones?</p>	<p>Council could advise of the intentions within the Construction Certificate application for finishing works.</p>	<p>Fertiliser use on Council sports fields is minimal, generally limited to an annual application of a general purpose fertiliser unless specific deficiencies are identified. The rate and method of application and the technology used in the fertiliser production is designed to ensure that off target impacts are negligible if any.</p>
<p>7. Are herbicides going to be used at the site, which ones and where does the run-off go?</p>	<p>As above</p>	<p>As above</p>
<p>8. How is road run-off going to be treated before being discharged. “9 mins in a swale” is mentioned as sufficient treatment for road run-off and sportsfield run-off. No calculations provided by Council have made any sense to</p>	<p>This should be addressed in a Construction Certificate application for the buildings/ roads/ finishing works.</p>	<p>The sports field's earthworks are designed so that once completed, all sports fields, car parks and buildings will drain to the south west corner of the site. The only areas that drain to the north are the most northerly batters of the</p>



Memo

Subject:



<p>us yet. If it takes 9 mins for water to run from the far end of a 150 mtr long swale to the discharge point, how long is the water that enters the swale at 50 mtrs from the discharge point in the swale for? ( The correct answer = 3 mins)</p>		<p>playing fields, and any areas near the farm dams where filling is not undertaken.</p> <p>Any runoff generated by the sports fields is considered "clean" and does not require treatment. Likewise runoff from roofed area is considered clean, but roof water will be collected in tanks for reuse on the site.</p> <p>The car park, whose runoff requires treatment, is sloped so that it falls towards a swale at the southern end of the site. The slope and length of the swale, which runs from east to west, provide for a detention time of 14 minutes prior to it discharging at its western extremity.</p> <p>Drawing RC1006-07 of the Construction Certificate drawing set shows that the access road adjacent to the site entry has one way crossfall, which would direct runoff to the southern side of Depot Road. The road is designed to shed runoff to grass swales (table drains), which would treat water in accordance with D7.</p>
<p>10. When is vegetation going to be established, to stop wind erosion?</p>	<p>Council to advise</p>	<p>Vegetation has largely established across the site and will be maintained (slashed) regularly until construction of the finished playing surface is undertaken at which time it will be maintained as a sports field.</p>
<p>11. The Koala Connection program is planning to establish an East-West Koala Corridor on our land, however at the same time a Telstra Monopole has been planned only 50 meters away from this corridor. Does Council know what this means for Koala migration and breeding? Could this area be avoided by Koala's because of the radiation and or noise? And close off a Koala-route rather than establish or improve it?</p>	<p>Council to advise</p>	<p>This questions is considered to be unrelated to the Depot Road sports field DA's.</p>
<p>12. Why does LEDA have to apply an Ecological buffer and an Agricultural buffer, while this does not seem to apply to Council's own project?</p>	<p>I am not aware of LEDA's requirements.</p>	<p>The Depot Road sports fields site was a former landfill and had been capped prior to filling for sports fields. An ecological assessment was undertaken and the project was approved subject to conditions.</p>
<p>14. A Monopole should not be allowed close to a School site or a Playground/ Sportsfield. This is a policy point of</p>	<p>I have examined the compliance with DA approvals for filling and sportsfields. I have no expertise to comment on</p>	<p>Council's report of 23 January 2014 refers to this issue (refer Council Internet site to view minutes of the January</p>

Memo

**Subject:**



for example our neighbouring Gold Coast City Council, which is line with let's say Europe in general where "electrosmog" is the new worry. Animals can apparently sense the radiation and will likely stay away from areas of higher EME, humans can't. Some small animals can die if staying too close to these poles. Did Council ask for further clarification from Telstra about radiation levels, numbers of antennas etc?( see our objection letter)	monopole issues.	Council meeting).
15. When is Greg Jones, Council's Ecologist going to do his environmental survey of the surrounding land as was promised to me on 3rd of July 2013, after the asbestos would have been cleared from the site? We have not had any correspondence regarding this.	Council to advise	There is no further survey planned for surrounding lands.
16. Who decided that the fill would have to be at the planned height, (which seems excessive to us) and has consideration been given to the hydrological effects on the underlying fill and leachate-rates and ground water levels in the surrounding land including ours?	Council's design engineers to advise	The fill works were dictated by the finished levels of the cap and design requirements for sports field levels and drainage. The inability to breach the cap meant that the design for fill was dictated by the highest point at the site. Council's Waste Unit monitor groundwater and results are provided to the NSW EPA.
17. What are Council's plans right now in relation to all of the above? When is the water in the dams going to be tested? Will you discharge water onto our property, yes or no?	Council to advise	Water quality monitoring within the farm dams to the north east recommenced in November 2013 following permission was reinstated to access the site. Testing is bi-annual pending a review by the EPA of the water quality data in the next 12 months.  Refer to responses to Q 9 and 10 of the first part of this table in relation to discharge of water.
18. How do Fire Services and Essential Energy and ourselves access the south west corner of our land? The access point for the fire services pointed out to me by Matt Inwood, is in the middle of proposed wallum froglet compensation habitat to be created in a 50 mtr ecological buffer. Would it be more sensible to go over the Council's site? A simple ramp in the north east corner and one in the north west corner would suffice.	Council to consider and advise	There is only a single point of entry/exit to the Depot Road sports fields site – located at the western end of Depot Road. Since establishment of the clay cap over the landfill, steep batters and existing boundary fencing would have precluded any access to adjacent lands. The current works for sports fields have not changed existing access conditions.
19. Regarding the Telstra Monopole Application. We were encouraged by Council to come up with alternative sites	See above	The option of utilising the alternate sites offered by LEDA was not a Council decision; it was for Telstra to determine

Memo

**Subject:**



from LEDA- we did, but for what? It would appear that Council including the Mayor and Acting General Manager were keen to get LEDA to offer alternative sites on their land, and "preferably in writing", which they did. No response from Council has so far been received. Is it possible that the income from the lease is too important for the Council?

whether the alternative sites offered would be suitable for their purposes.

# Memo



**Attachment C: Compliance Audit Report and Comments on Adjoining Land Owner Issues, Geolink Consulting**



**AUDIT LOCATION:**

Tweed Shire Council & Depot Road fill/ sports fields site, Kings Forest

**AUDIT DATE:** 13/11 & 13/12/2013

Subsequent documentation 24/01/2014

**AUDITOR:**

Rob van Iersel (ER)

**AUDITEES:**

Stewart Brawley, Andrea Hamann, Nigel Dobson, Greg Jones & David Hannah (Tweed Shire Council)

**AUDIT TYPE:**

Compliance

**REFERENCE DOCUMENTS / AUDIT CRITERIA:**

DA09/0186 Filling of Land

DA09/0836 Sports fields

Tweed Shire Council Development Design Specification D7 – Stormwater Quality (Section D7.07)

Code of Practice for Soil and Water Management on Construction Sites

C = Compliance  
 NC = Non Conformance  
 O = Observation

**General Comments**

---

There is some lack of clarity relating to the specifics of the two approvals, particularly in relation to the amount of fill approved.

The Statement of Environmental Effects (SEE) prepared for DA09/0186 indicates that the development would involve the placement of around 50,000m<sup>3</sup> of imported material. The SEE for DA09/0836 does not contain any figure relating to filling, describing the works (in part) as “*land forming*” for sports fields. It further states that “*the importation of all fill material required for land forming would be undertaken in accordance with previously approved Development Consent (DA09/0186)*”.

The approved plans (for DA09/0836) show proposed design levels, and typical cross-section showing design and existing site levels, but do not quantify total fill volumes. There is a note of the cross-section (Plan RC10006-05 E) to the effect “*approval to fill, spread & compact on site previously granted under separate DA*”.

The design levels clearly indicate a need for more than 50,000m<sup>3</sup> of material, but the amount of fill material is not quantified.

The sportsfield approval (DA09/0836) clearly authorises filling across the site up to the design levels shown on the approved plans. There is therefore no question or issue of non-conformance here. The observation is made merely to suggest that greater clarity in describing the detail of development would assist third-parties in interpreting approvals.

Documentation provided by Council, titled “*Attachment B Lot 1 DP 397082 Depot Road Kings Forest Quantities and sources of fill*” (undated) shows that the following fill amounts have been deposited at the site:

Fill DA (i.e. DA09/0186)	24,731m <sup>3</sup>
BPUA Certificates (i.e. material from Banora upgrade)	115,000m <sup>3</sup>
Sports field DA (DA09/0836)	32,970m <sup>3</sup>
<b>TOTAL</b>	<b>172,701m<sup>3</sup></b>

**PART A: DA09/0186**

**Observations:**

---

**O1 (Condition 2):**

Condition No 2 requires that appropriate sediment and erosion controls be implemented, and that these controls “be provided and maintained in accordance with Tweed Shire Council Development Design Specification D7 - Stormwater Quality and its Annexure A - “Code of Practice for Soil and Water Management on Construction Works”.

Controls were provided in accordance with Council’s adopted Standard Operating Procedure (SOP), which adequately addressed site conditions and risks. Compliance with the condition was therefore achieved.

The observations are:

- While the SOP adequately addresses the risks at this site, it does not address all of the matters outlined in *Tweed Shire Council Development Design Specification D7 - Stormwater Quality and its Annexure A - “Code of Practice for Soil and Water Management on Construction Works*; and
- There is no documentation to demonstrate how the SOP was interpreted into specific controls at the site (i.e. no specific ESCP prior to July 2011) and no record of regular inspection, monitoring and maintenance (I note that the neither the condition nor the SOP specifically require such documentation).

Given the scale of the works, I consider that it would have been appropriate for a site-specific Erosion and Sediment Control Plan (ESCP), prepared in accordance with the above documents, to have been prepared prior to the commencement of the works, and for regular inspections to have been carried out and documented.

Notwithstanding that, there is no evidence that any significant erosion or sedimentation issues arose during the works.

**O2 (Condition 3):**

Condition No. 3 seeks to ensure that “*all imported material shall be from an approved source*”. It required details of the source of fill and its nature be submitted “*to the satisfaction of the General Manager or his delegate*” prior to the commencement of filling operations.

The fill material was sourced from Council infrastructure projects and from the Banora Point highway upgrade project, with a very small amount remaining from previous operations of capping the land fill (previously determined to be Virgin Excavated Natural Material –VENM).

Individual environmental assessments were undertaken for the majority of the Council infrastructure projects, including consideration of soil contamination. Certification was provided for the material sourced from the Banora Point highway project, demonstrating it to be ‘uncontaminated soil’.

The Banora Point project and each of these infrastructure projects were therefore considered to be ‘approved sources’ for the purposes of this condition.

Council advise that, of the total volume of fill taken to site (under both DAs), only 1.2% of material was not formally assessed. In the context of the total fill volumes (i.e. over 172,000m<sup>3</sup>), this represents a very small risk.

There does not appear, however, to be any ‘sign-off’ or the like from ‘the General Manager or his delegate’, prior to commencement, to confirm that this approach would satisfy this condition, and I note that, in the circumstances of obtaining material from Council infrastructure projects as they arise, it would not be possible to provide information about all ‘approved sources’ prior to the commencement of the filling operation.

Subsequently, after filling began, a checklist approach was agreed to satisfy this condition, as documented by internal Council emails. However, it appears that the checklist was not used.

I also note that asbestos material was uncovered onsite during the operations. Council advises that the source of this material is not known and it came either from an old shed that was at the site, or it could have been illegally dumped by a third party.

***O3 (Conditions 6 & 7):***

*All work associated with this approval is to be carried out so as not to impact on neighbourhood, adjacent premises or the environment.*

This condition does not specifically require the preparation of any formal management system or reporting in regard to the management of impacts. However, in the absence of any such system, it is difficult to clearly demonstrate that the works were planned and carried out to ensure compliance.

General supervision was undertaken based on Council's Standard Operating Procedures. However, there is little documentation of inspections/ audits and the like.

An ESCP was subsequently developed in July 2011.

Council advise that inspections "would have been carried out by outdoor staff operating at the site under the direction of either the works unit or recreation services". No records were kept of these inspections.

Site inspections by Environmental Scientists (Design Section) were not carried out until July 2011 at the earliest.

***O4 (Condition 9):***

*Appropriate measures are to be put in place to prevent the transport of sediment from the site. Should any material be transported onto the road or any spills occur it is to be cleaned up prior to cessation of same day's work and/or commencement of any rain event.*

A shake-down grid was installed, but apparently not until Banora Alliance material started to come to site. Prior to that, truck movements to and from the site were minimal and Council considered that a shaker grid was not necessary.

An ESCP plan was developed, but not until July 2011. No documentation was prepared to indicate the measures put in place prior to ESCP, with Council's SOP relied on to manage risks.

***O5 (Condition 11):***

*All waters that are to be discharged from the site shall have a pH between 6.5 and 8.5 and suspended solids not greater than 50mg/kg.*

It does not appear that any water monitoring was undertaken. Compliance with the criteria contained in the condition cannot, therefore, be determined.

However, it is noted that the nature of the filling works avoided the channelization of stormwater flows, with 'sheet flow' around edges into grassed perimeter drains. This could be expected to provide sufficient controls to manage water quality in all but extreme storm events.

Detailed response to Audit Criteria

DA09/0186 Filling of Land

Condition Number	Requirement	Compliance	Evidence, Observation
1	<p>The development shall be completed in accordance with the Statement of Environmental Effects and Plan Nos RC08008/01 - RC08008/07 prepared by Tweed Shire Council and dated December 2008, except where varied by the conditions of this consent.</p>	C	<p>Documentation proposes 'placement of about 50,000m<sup>3</sup> of clean fill material to achieve the levels required for future sports fields...'</p> <p>Approved plans show two options – Option 1 shows 3 fields; Option 2 shows only 2 fields</p> <p>Approved plans show filling restricted to field areas generally (i.e. not to all boundaries), with differing fill areas for the two options.</p> <p>Subsequent design plans (RC08008, Nov 2009 – approved under DA09/0836) indicate 3 fields to be constructed in stages, with slightly increased lateral extent of filling.</p> <p>Compliance regarding "clean fill":</p> <p>Fill material came from Council infrastructure works. In majority of cases, assessment undertaken for the particular infrastructure project included assessment for potential of contamination. See further detail below.</p>
2	<p>Appropriate erosion and sediment control shall be provided and maintained in accordance with Tweed Shire Council Development Design Specification D7 - Stormwater Quality and its Annexure A - "Code of Practice for Soil and Water Management on Construction Works".</p>	O1	<p>Council advise that early stages of filling involved small quantities of material, brought in intermittently over a two-year period. During that period, erosion and sediment control was managed in accordance with Council's <i>Standard Operating Procedure, Erosion and Sediment Control 46</i> (SOP).</p> <p>Subsequently, to manage the larger amounts of fill available from the Banora Point highway upgrade, a site-specific ESCP was developed.</p> <p>The SOP outlines general information useful for managing environmental risks, including key principles for appropriate erosion and sediment control measures and descriptions of common ERSED measures (including typical drawings).</p> <p>In this case, adherence to the SOP would have been adequate to manage the anticipated erosion risks at the fill site, and therefore 'appropriate erosion and sediment control' was provided in compliance with this condition.</p> <p>While reference to SOP would assist to adequately manage erosion and sedimentation risk, the SOP does not contain the level of detail that is outlined under <i>Tweed Shire Council Development Design Specification D7 -</i></p>



Condition Number	Requirement	Compliance	Evidence, Observation
			<p><i>Stormwater Quality</i> and its <i>Annexure A - "Code of Practice for Soil and Water Management on Construction Works"</i>.</p> <p>I have been advised that measures were implemented onsite and works were supervised by Works Unit Construction Supervisors in accordance with the SOP. However, I have not seen any documentation of either an interim ESCP or inspection/ audits that could demonstrate that the level of control used.</p>
3	<p><i>All imported fill material shall be from an approved source. Prior to commencement of filling operations details of the source of fill, nature of material, proposed use of material and confirmation further blending, crushing or processing is not to be undertaken shall be submitted to the satisfaction of the General Manager or his delegate.</i></p>	O2	<p>Prior to obtaining material from the Banora Point Highway project, the majority of fill material was sourced from Council infrastructure projects. Individual environmental assessments were undertaken for these infrastructure projects, including consideration of soil contamination.</p> <p>Each of these infrastructure projects were therefore considered to be 'an approved source' for the purposes of this condition.</p> <p>Council advise that, <i>of the total volume of fill taken to site (under both DAs), only 6.7% of material was not assessed in this manner and can be divided between the following categories:</i></p> <ul style="list-style-type: none"> <li>▪ 1.5% was taken to Depot Road under the Exempt Development Emergency provisions of the State Environment Planning Policy (Infrastructure) 2007 as a result of emergency works. Of this, 1.4% of the material came from earth bank slips as a result of natural disaster (major flooding), and 0.1% from water main failures. The earth bank slip material was considered VENM whereas the material associated with water main failures would be ENM.</li> <li>▪ 1.9% was taken to Depot Road from Kingscliff TAFE. Assessment of suitability for this material was carried out independent of TSC (TAFE NSW operates under State Government and not Local Government).</li> <li>▪ 2.2% was already stockpiled at the site. Further investigation (including discussion with retired Council staff) has revealed that the source of material was from two large earth bank slips at Carool Road Bilambil and Cudgen Road Duranbah. The material is considered to be VENM. Records have been updated to accurately reflect the source of this material.</li> </ul> <p>For the material from the Banora Point project,</p>

Condition Number	Requirement	Compliance	Evidence, Observation
			<p>documentation was provided to Council certifying that it was not contaminated.</p> <p>There does not appear to be any 'sign-off' or the like from 'the General Manager or his delegate', prior to commencement, to confirm that this approach would satisfy this condition.</p> <p>Subsequently, a checklist approach was agreed internally to satisfy this condition, as documented by internal Council emails.</p> <p>However, it appears that the checklist was not used.</p>
4	<p><i>Site work including the entering and leaving of vehicles is limited to the following hours, unless otherwise permitted by Council: -</i></p> <p><i>Monday to Saturday from 7.00am to 7.00pm</i></p> <p><i>No work to be carried out on Sundays or Public Holidays</i></p> <p><i>The proponent is responsible to instruct and control subcontractors regarding hours of work.</i></p>	C	<p>General Council work hours were used for project.</p> <p>I am advised that standard hours are included in all sub-contractors contracts.</p>
5	<p><i>No soil, sand, gravel, clay or other material shall be disposed of off the site without the prior written approval of Tweed Shire Council General Manager or his delegate.</i></p>	N/A	<p>N/A – no material associated with this approval disposed of off site</p>
6	<p><i>All work associated with this approval is to be carried out so as not to impact on neighbourhood, adjacent premises or the environment. All necessary precautions, covering and protection shall be taken to minimise impact from: -</i></p> <ul style="list-style-type: none"> <li>▪ <i>Noise, water or air pollution</i></li> <li>▪ <i>Minimise impact from dust during filling operations and also from construction vehicles</i></li> <li>▪ <i>No material is removed from the site by wind</i></li> </ul>	O3	<p>There was no CEMP or other formal control document developed for the works. General supervision was undertaken based on Council's Standard Operating Procedures. However, there is little documentation of inspections/ audits and the like.</p> <p>An ESCP was subsequently developed in July 2011; i.e. associated with sports field DA09/0836.</p> <p>Council advise that inspection "would have been carried out by outdoor staff operating at the site under the direction of either the works unit or recreation services".</p> <p>No records kept of these inspections.</p> <p>Site inspections by Environmental Scientists (Design Section) were not carried out until July 2011 at the earliest (i.e. associated with sports field DA09/0836).</p>
7	<p><i>All practicable measures must be taken to prevent and minimise harm to the environment as a result of the construction, operation and, where relevant, the decommissioning of the development.</i></p>	O3	<p>As above</p>

Condition Number	Requirement	Compliance	Evidence, Observation
8	<p><i>Any damage caused to public infrastructure (roads, footpaths, water and sewer mains, power and telephone services etc.) during construction of the development shall be repaired in accordance with Councils adopted Design and Construction Specifications prior to the issue of a Subdivision Certificate and/or prior to any use or occupation of the buildings</i></p> <p>[Note: this condition 'technically' does not apply, as development does not require Subdivision Certificate, nor does it involve buildings – ideally, condition should have been tailored for specifics of this development]</p>	C	No repairs required
9	<p><i>Appropriate measures are to be put in place to prevent the transport of sediment from the site. Should any material be transported onto the road or any spills occur it is to be cleaned up prior to cessation of same day's work and/or commencement of any rain event.</i></p>	O4	<p>Shake-down grid installed, but apparently not until Banora Alliance material started to come to site (i.e. with sports field DA09/0836). Prior to Banora Alliance material, truck movements to and from the site were minimal and Council considered that a shaker grid was not necessary.</p> <p>ESCP plan developed in July 2011. No documentation to indicate the measures put in place prior to ESCP, other than reliance on vegetated perimeter drain.</p>
10	<p><i>The site shall not be dewatered, unless written approval to carry out dewatering is received from the Tweed shire Council General Manager or his delegate.</i></p>	N/A	N/A – no dewatering
11	<p><i>All waters that are to be discharged from the site shall have a pH between 6.5 and 8.5 and suspended solids not greater than 50mg/kg.</i></p>	O5	<p>It does not appear that any water monitoring was undertaken. Compliance with the criteria contained in the condition cannot, therefore, be determined.</p> <p>However, it is noted that the nature of the filling works avoided the channelization of stormwater flows, with 'sheet flow' around edges into grassed perimeter drains. This could be expected to provide sufficient controls to manage water quality in all but extreme storm events.</p>
12	<p><i>Fill material introduced to the site shall be free from contamination. Records shall be maintained of the source and nature of all fill materials introduced to the site and made available to Council's Environment and Health Unit upon request.</i></p>	O2	See above for general comments on sources of material.
13	<p><i>Acid sulphate soils shall not be exposed or disturbed</i></p>	N/A	The works involved filling, so no sub-surface soils were exposed or disturbed.

Condition Number	Requirement	Compliance	Evidence, Observation
14	<i>Water Quality monitoring results in accordance with DECC regulations for remediated land fill to be provided to the General Manager (or his delegate) as produced to DECC.</i>	C	I am advised that regular monitoring was carried out of remediated landfill site, as part of landfill licencing requirements.
15	<i>The use to be conducted so as not to cause disruption to the amenity of the locality, particularly by way of the emission of noise, dust and odours or the like.</i>	O3	See above (conditions 6 & 7)
16	<i>Except as may be expressly provided in a licence approval under the Protection of the Environment Operations Act 1997 (POEO) Act, the licence holder must comply with section 120 of the POEO Act 1997 prohibiting the pollution of waters.</i>	N/A	No licence required No CEMP, general supervision relied upon.

**PART B: DA09/0836**

***Non-compliances:***

***NC1 (Condition 18):***

*Erosion and Sediment Control shall be provided in accordance with the following:*

- a) The Construction Certificate Application must include a detailed erosion and sediment control plan prepared in accordance with Section D7.07 of Development Design Specification D7 – Stormwater Quality*
- b) Construction phase erosion and sediment control shall be designed, constructed and operated in accordance with Tweed Shire Council Development Design Specification D7 – Stormwater Quality and its Annexure A – “Code of Practice for Soil and Water Management on Construction Works”.*

The following minor non-compliances are noted for the ESCP:

- Section 3 of the Design Specification requires that the ESCP should contain reporting procedures and a proposed response to failure of systems and non-compliance with discharge quality standards.
- The Code of Practice requires that specific measures be documented to control ‘lands, stockpiles and other exposed materials scheduled to remain unattended for a duration of more than 20 working days’. The ESCP discusses rehabilitation of the final surfaces, but does not provide information addressing unattended areas.
- The Code also requires that ‘stormwater monitoring shall take place at all locations where drainage or surface waters leave the site’. Council advise that, other than opportunistic visual monitoring (for turbidity), no monitoring was undertaken.

The first two matters are not considered significant, and the absence of this information in the ESCP does not suggest that appropriate controls were not implemented.

From on-site observations and discussions with Council officers, it is apparent that the substantial perimeter grassed swale was the primary control relied on to manage ERSED risks, together with internal grading of the fill platform to avoid channelling stormwater flows.

This is considered an appropriate response to the nature of the site and the filling works.

The lack of water quality monitoring, however, prevents Council from clearly demonstrating the quality of water leaving the site.

**Observations:**

---

**O1 (Condition 1):**

The Statement of Environmental Effects refers to "land forming" and the construction of 3 fields and associated facilities. It states: "*The importation of all fill material required for land forming would be undertaken in accordance with previously approved Development Consent (DA09/0186)*".

See 'General Comments' (above) for further discussion.

**O2 (Condition 5):**

*The speed limit along Depot Road must be limited to 40km/hr through traffic calming methods. Signage must be placed to clearly indicate the road crosses a wildlife corridor and is a Koala crossing.*

40 speed limit signage is in place and a Vehicle Management Plan was prepared (see Attachment A), including a 40km/hr speed limit.

It does not appear, however, that signage was erected advising of wildlife or koalas. I note an internal Council memo (from Nigel Dobson to David Hannah, dated 31 August 2011) indicating that traffic control personnel will be provided to watch for koalas (and control speed) during hauling of material from Banora Upgrade project.

The issue, therefore, was adequately addressed, but not in strict accordance with the terms of the condition.

**O3 (Condition 12):**

*All imported fill material shall be from an approved source. Prior to the issue of construction certificate details of the source of fill, description of material, proposed use of material, documentary evidence that the fill material is free of any contaminants and haul route shall be submitted to Tweed Shire Council for the approval of the General Manager or his delegate.*

See Observation O3 relating to DA09/0186 relating to assessment of fill material.

I also note that some acid sulfate soil material was deposited and treated on site in late 2011. Strictly, the material was not 'clean' when brought to the site. Council advise that it was treated promptly at the site, with subsequent testing verifying that the material was adequately neutralised.

**O4 (Condition 18 & Compliance with D7 – see Tables A & B):**

*The Construction Certificate Application must include a detailed erosion and sediment control plan (ESCP) for the construction phase of development and a detailed stormwater management plan (SWMP) for the occupational or use stage of the development.*

A detailed ESCP was prepared, dated July 2011, although the cover page indicates it relates to DA09/0186.

For sites where more than 1,000m<sup>2</sup> is disturbed, barrier fencing should be installed and the maximum length of exposed slope needs to be determined in accordance with the table in section 5.6 of *Code of Practice for Soil and Water Management on Construction Sites*.

No barrier fencing was observed during site inspection. ESCP proposes staged filling in smaller pads, and recommends that, once land shaping is completed for each pad, “revegetation or stabilisation will be undertaken as soon as possible and within 15 working days from placement of topsoil in a particular area”. Limited revegetation was observed during site inspection.

‘High efficiency’ dust controls are required, including wind-break barrier fencing for larger sites. I am advised that water carts were used during filling operations on an as-needs basis. It is not clear whether a barrier fence wind break was utilised during the filling.

Where more than 2,500m<sup>2</sup> of land are disturbed, a self-auditing program must be developed for the site. Section 5.5 of the ESCP incorporates requirements for a self-audit program. Three examples of inspection checklists have been provided. It is not clear, however, whether weekly inspections were undertaken and/ or records kept.

### Detailed response to Audit Criteria

#### DA09/0836 Sports fields

Condition Number	Requirement	Compliance	Evidence, Observation
1	<i>The development shall be completed in accordance with the Statement of Environmental Effects and the following Plans (approved plan list)</i>	01	Statement of Environmental Effects refers to “land forming” and the construction of 3 fields and associated facilities. It states: <i>“The importation of all fill material required for land forming would be undertaken in accordance with previously approved Development Consent (DA09/0186)”.</i> This could be interpreted to indicate that no additional material would be imported to the site under this DA. Approved plans, however, show proposed finished levels for fill (not including topsoil etc.), that would indicate the importation of filling in excess of the 50,000m <sup>3</sup> previously approved.
5	<i>The speed limit along Depot Road must be limited to 40km/hr through traffic calming methods. Signage must be placed to clearly indicate the road crosses a wildlife corridor and is a Koala crossing. No street lighting is to be erected along the access road.</i>	02	A Vehicle Management Plan (VMP) was developed for the project, with the specific aim <i>“to reduce speed limits of construction traffic in order to maintain the local amenity at the site including noise, dust and caring for wildlife”.</i> The VPM includes the requirement for the 40km/hr speed limit. 40 speed limit signage in place. I did not see any signs advising of wildlife or koalas, but I note an internal Council memo (from Nigel Dobson to David Hannah, dated 31 August 2011) indicating that traffic control personnel will be provided to watch for koalas (and control speed) during hauling of material from Banora Upgrade project.

Condition Number	Requirement	Compliance	Evidence, Observation
	<i>Prior to issue of a Construction Certificate</i>		CC11/0455 issued 25/10/2011 for bulk earthworks
12	<i>All imported fill material shall be from an approved source. Prior to the issue of construction certificate details of the source of fill, description of material, proposed use of material, documentary evidence that the fill material is free of any contaminants and haul route shall be submitted to Tweed Shire Council for the approval of the General Manager or his delegate</i>	O3	See comments relating to DA09/0186 (above). I note that acid sulfate soils were taken to the site for treatment. Council advises that it was treated promptly and spread following verification sampling results obtained from Tweed Laboratory demonstrating that the material was neutralised in accordance with the requirements of NSW ASS Manual.
14	<i>Site filling and associated drainage is to be designed to address drainage on the site as well as existing stormwater flows onto or through the site, and minimising the impact of filling on local drainage. Detailed engineering plans of fill levels and perimeter drainage shall be submitted for Council approval</i>	C	CC plan RC10006-23 E shows drainage catchments and provides drainage calculations. Stormwater Drainage Works approval SWD11/0279 approved 3 November 2011.
17	<i>Permanent stormwater quality treatment shall be provided in accordance with the following:</i>	N/A	Condition relates to 'occupation stage'. CC11/0455 was issued 25/10/2011 for bulk earthworks stage. A future CC application will be lodged for car park/ building works. Occupation stormwater management will be addressed in that future application. Notwithstanding that, a Stormwater Management Plan was prepared for the bulk earthworks stage. Council issued Stormwater Drainage Works Approval SDW11/0279 on 3 November 2011.
18	<i>Erosion and Sediment Control shall be provided in accordance with the following:</i> a) <i>The Construction Certificate Application must include a detailed erosion and sediment control plan prepared in accordance with Section D7.07 of Development Design Specification D7 – Stormwater Quality</i> b) <i>Construction phase erosion and sediment control shall be designed, constructed and operated in accordance with Tweed Shire Council Development Design Specification D7 – Stormwater Quality and its Annexure A – "Code of Practice for Soil and Water Management on Construction Works".</i>	NC1 O4	See Tables A and B below
20	<i>An Ecological Monitoring report must be submitted and approved by Director Planning and Regulation or his delegate prior to issue of the Construction Certificate</i>	C	Council have assessed that, in the circumstances, the only potential for ecological impact come from the operational stage of the development, associated with traffic movement and lighting. Accordingly, the required

Condition Number	Requirement	Compliance	Evidence, Observation
			report will be prepared as part of the subsequent CC application (for finishing works).
21	<i>A detailed landscape plan containing only local native species must be submitted and approved by Director Planning and Regulation or his delegate. Such plan must include screen planting on mounds between the sports fields and the SEPP 14 wetlands.</i>	C	Landscape Plan RC10006-22 C approved as part of CC11/0455.
	<b>Prior to commencement of work</b>		Work has commenced
34	<i>Fauna survey targeting Bush Stone-curlew must be undertaken prior to commencement of works. Should potential exist for works to impact breeding habitat, works must be delayed until chicks have fledged.</i>	C	Council advise that fauna surveys were undertaken prior to commencement, targeting the Bush Stone-curlew. None were detected, so no reporting was initiated.
	<b>During Construction</b>		
42	<i>All cut or fill on the property is to be battered at an angle not greater than 45° within the property boundary, stabilised and provided with a dish drain or similar at the base in accordance with Tweed Shire Councils Design and Construction Specifications, Development Control Plan Part A1 to the satisfaction of the Principal Certifying Authority.</i>	C	Site looks to have complied
43	<i>All work associated with this approval is to be carried out so as not to impact on the neighbourhood, adjacent premises or the environment. All necessary precautions, covering and protection shall be taken to minimise impact from:</i> <ul style="list-style-type: none"> <li>▪ Noise, water or air pollution</li> <li>▪ dust during filling operations and also from construction vehicles</li> <li>▪ material removed from the site by wind</li> </ul>		See comments above in relation to DA09/0186.



**Table A: Tweed Shire Council Development Design Specification D7 – Stormwater Quality (Section D7.07)**

Condition Number	Requirement	Compliance	Evidence, Observation
1	<i>The Construction Certificate Application must include a detailed erosion and sediment control plan (ESCP) for the construction phase of development and a detailed stormwater management plan (SWMP) for the occupational or use stage of the development.</i>	C	Detailed ESCP prepared, dated July 2011. Although cover pages indicates it relates to DA09/0186, Council advises that intention was for this Plan to manage filling under both DA09/0186 and DA09/0836. SWMP was prepared.
3	<i>The ESCP (for all development except single dwellings and duplexes) shall include</i>		
	<i>a) Adoption of the Code Of Practice For Soil And Water Management On Construction Works contained in Annexure A</i>		See Table B below
	<i>b) Plans of external and internal catchments</i>	C	Internal catchments mapped in ESCP. Given site is raised above surrounding landscape, there are no relevant external catchments.
	<i>c) Site layout to include</i>		
	<i>i. plans showing existing site topography and final contours with cut and fill locations identified. property boundaries and lot lines</i>	C	Plans within ESCP do not show typography. I note, however, survey and bulk earthworks design plans were provided with CC application.
	<i>ii. staging of works, including staging of site clearing and topsoil stripping</i>	C	Staging shown. Note, given site history, clearing and topsoil stripping not involved
	<i>iii. location of all site access points, parking areas, site facilities and on site roadways/tracks</i>	C	Shown
	<i>iv. location of site storage and stockpile areas (sand, gravel, topsoil, building materials, fuel etc)</i>	C	CC for bulk earthworks only – site storage and stockpiling not needed
	<i>v. utility plans</i>	N/A	
	<i>vi. erosion risk mapping - identification of low, medium, high and extreme erosion risk areas</i>	N/A	Not shown – given nature of site, all areas have same erosion risk, which is quantified in report
	<i>vii. topographic site limitations which may include:- excessive slope gradients; unstable or hazardous terrain; flood inundation areas; rock outcrops; active coastal dune systems; land subject to wave attack; existing erosion; water bodies; drainage problem areas; areas of potential mass movement.</i>	N/A	None relevant to this site
	<i>d) Vegetation layout</i>	N/A	Note relevant to this site
	<i>e) Soil properties</i>	C	Properties quantified in report

Condition Number	Requirement	Compliance	Evidence, Observation
	f) Drainage	C	Information provided
	g) Erosion and sediment control proposal including		
	i. Site specific text overview and design philosophy or erosion and sediment control proposal	C	Contained in report
	ii. location (on plans), type, function, and timing (instigation and decommissioning) of all drainage, erosion and sediment control measures (the location plans must include areas external to the site where these areas impact or are impacted upon by the drainage or ESCP of the subject site). Preliminary calculations of sedimentation pond sizing	C	Information contained in SWMP and ESCP
	iii. timetable, integration/sequencing of ESCP with staging of works, detailed RUSLE calculations to evaluate current annual soil loss and likely annual soil losses from the proposed development incorporating the proposed ESCP	C	Information generally provided
	iv. water quality monitoring program with water quality criteria goals, parameters to be monitored, monitoring locations, monitoring frequency	C	Water quality goals included. Inspection program included
	v. proposed response to failure of system and non-compliance with discharge quality standards	NC1	Not included
	vi. reporting procedures	NC1	Not included
	h) Acid soil management	N/A	
	i) Details of receiving waters including quality characteristics	NC	Not included
j) Procedures for amending the ESCP	NC	Not included	

**Table B: Code of Practice for Soil and Water Management on Construction Sites**

Condition Number	Requirement	Compliance	Evidence, Observation
1.5	<p><i>Design Average Recurrence Interval (ARI): Unless advised elsewhere in this code, works to capture sediment laden water will be designed to accommodate a design storm of the ARI 3 month storm (deemed to be 40% of the ARI one year event), however overflow/ bypass arrangements are to be designed to accommodate an ARI 100 year storm without erosion, scouring or structural damage to erosion or sediment control devices, or re-mobilisation of previously captured sediment.</i></p>	O4	<p>This requirement relates to sediment basins (i.e. 'works to capture sediment laden water'). ESCP indicates that basins could not be excavated, given that the site contains a clay cap over a previous landfill site.</p> <p>When basins cannot be achieved, the 'Blue Book' indicates that other adequate controls should be provided to prevent / minimise erosion and/ or treat sediment laden water.</p> <p>Design parameters outlined in ESCP are consistent with the 'Blue Book'.</p> <p>The overflow area requirement also does not strictly apply, as it relates to overflows from a basin. However, I note that the vegetated perimeter drain appears to be sufficient to prevent scour / erosion for the ARI 100 year storm, based on grass cover and a 0.5% grade. However, this is not confirmed in either ESCP or design plans (drain long section – RC08008/06 A).</p> <p>Design plans do not show any detail of outlet of perimeter drain in sites south-west corner, but observations on site indicate that this was constructed as a rock-lined batter chute, which would appear to adequately address scour potential.</p>
2.1	<p><i>ESCP prepared for site, demonstrating consideration of relevant factors (a) to (t)</i></p>	C	ESCP complies
2.2	<p><i>Classification of soil loss for this site</i></p>	C	Section 2 of ESCP contains calculations.
3.2	<p><i>Vegetated buffer zones</i></p>	C	Complies – Sections 4 & 5.
4.3	<p><i>Shakedown device for construction site &gt; 1 hectare</i></p> <ul style="list-style-type: none"> <li>▪ <i>minimum length 7m</i></li> <li>▪ <i>10m long shakedown area constructed with 75mm diameter crushed rock</i></li> </ul>	C	Plans show stabilised access to comply with SD6-14 (from Blue Book), which complies.
4.4	<p><i>Regular maintenance of shakedown devices is required</i></p>	C	ESCP calls for regular maintenance of all controls.
5.5	<p><i>Runoff and erosion controls</i></p> <ul style="list-style-type: none"> <li>▪ <i>diversion of upslope runoff</i></li> <li>- <i>waters diverted to a legal point of</i></li> </ul>	C	ESCP notes that, because previously filled pad is elevated above surrounding land, run-on controls not required.

Condition Number	Requirement	Compliance	Evidence, Observation
	<p><i>discharge</i></p> <ul style="list-style-type: none"> <li>- <i>carry peak flows at non-erosive velocities</i></li> <li>▪ <i>sediment control fencing</i></li> <li>▪ <i>maintenance of all controls</i></li> </ul>		<p>Plans show bulk of site water diverted to perimeter drain (pre-existing), with discharge at south-wester corner; with small area (basically around stabilised site entry) discharging to north-east corner</p>
5.6	<p><i>Sites where more than 1,000 square metres disturbed:</i></p> <ul style="list-style-type: none"> <li>▪ <i>barrier fencing</i></li> <li>▪ <i>maximum length of exposed slope determined in accordance with table</i></li> </ul>	O4	<p>No barrier fencing was observed during site inspection.</p> <p>Plan proposes staged filling in smaller pads, and recommends that, once land shaping is completed for each pad, "revegetation or stabilisation will be undertaken as soon as possible and within 15 working days from placement of topsoil in a particular area".</p> <p>Limited revegetation observed during site inspection.</p>
5.13	<p><i>High efficiency dust control techniques must be employed</i></p> <p><i>Dust control techniques must be employed on site at all times including outside of normal working hours</i></p> <p><i>All permanent roads and trafficable areas must be sealed or hard surfaced to minimise dust generation</i></p> <p><i>Unless an exemption from Council is obtained, all sites where over 1,500m<sup>2</sup> are to be disturbed must be provided with a barrier fence wind break</i></p>	O4	<p>Advised that water carts were used during filling operations on an as-needs basis.</p> <p>It appears that a barrier fence wind break was not utilised during the filling.</p>
7.2	<p><i>Sediment basin(s) must be constructed where the area to be developed exceeds 1 ha.</i></p>	C	<p>ESCP indicates that sediments basins not possible, as filling was on top of clay cap of previous landfill. Basins could not be excavated into through this clay cap.</p>
7.3	<p><i>Design requirements for silt fences, hay bales and other sediment filters</i></p>	C	<p>ESCP refers to standard Blue Book designs.</p> <p>Example site management inspection checklist (dated 17/10/2011) noted need for maintenance of controls and need to fully implement ESCP controls.</p>
7.9	<p><i>All sediment control structures must be operated and maintained in an effective operational condition following good engineering practice.</i></p>		<p>See above</p>
7.13	<p><i>Work adjacent to water bodies – must be carried out in a manner that prevents sediment being transported to the adjacent water body</i></p>	C	<p>Vegetation channels used to capture site water and convey majority away from dams.</p> <p>Smaller area (effectively around access) flows to</p>

Condition Number	Requirement	Compliance	Evidence, Observation
			first small dam (partly on the property), through vegetated swale.
10.2	<i>The C-factor is to be reduced to less than 0.15 (e.g. greater than 50% grass cover) on all lands, stockpiles and other exposed materials scheduled to remain unattended for a duration of more than 20 working days</i>	NC1	ESCP does not appear to contain controls relating to 'unfinished' fill areas which would be left unattended for more than 20 working days.
11.2, 11.3, 11.4	<p><i>Where more than 2,500m<sup>2</sup> of land are disturbed, a self-auditing program must be developed for the site. A site inspection self-audit and monitoring program must be undertaken by the land developer:</i></p> <ul style="list-style-type: none"> <li>▪ <i>at least each week</i></li> <li>▪ <i>immediately following rainfall events that cause runoff</i></li> </ul> <p><i>Audit records in accordance with 11.3</i></p> <p><i>Signed, completed self-audits, original test results, weekly and other result sheets shall be kept on site</i></p>	O4	<p>Section 5.5 incorporates requirements for a self-audit program.</p> <p>Three examples of inspection checklists provided. Not clear whether weekly inspections undertaken and/ or records kept.</p>
12.1	<i>Stormwater monitoring shall take place at all locations where drainage or surface water leaves the site</i>	NC1	No evidence of stormwater monitoring. I am advised that visual monitoring was undertaken on an opportunistic basis, and that some testing of the adjoining dam was undertaken.

**DA09/0186 & DA09/0836**  
**DEPOT ROAD FILLING & SPORTSFIELDS**  
**COMMENTS ON ISSUES RAISED BY ADJOINING LAND OWNERS**

The comments provided below are made in relation to the issues set out in the land owners' letter to Council dated 3 September 2013. The comments are made based on the findings and observations contains in my Compliance Audit Report (attached).

<i>Issue</i>	<i>Comment</i>
<i>"breaches of the DA 09/0186: "</i>	
<p>1. <i>Fill should not have been placed within 10 mtrs of boundary of the Council Site. It was not supposed to affect the gently sloped existing grassed batters all around the site, that would act as sediment filters. The fill has been placed right up to the boundary and also at virtually 45 degrees.</i></p>	<p>It appears that the 10m comes from the checklist that was included as Appendix 3 of the Statement of Environmental Effects submitted for DA09/0186.</p> <p>The consent does not include a condition of approval specifying the 10m distance. It does, however, have a condition requiring that the <i>'development shall be completed in accordance with the Statement of Environmental Effects and Plan Nos RC08008/01 – RC08008/07'</i>.</p> <p>The approved plans (see RC08008/03) show the lateral extent of fill some distance inside the property boundaries (extent of clay cap is not shown on this plan).</p> <p>I note, however, that the plans approved for the sportsfields DA (DA09/0836) show more detail of the extent of filling, and indicate filling closer to property boundaries, with a batter slope of 1:4.</p>
<p>2. <i>Deliberate dumping of Acid Sulphate Soil above ground water level by Council in more than one location. No information has been given on pre-treatment of this soil, and why it needed to be covered with lime/ bicarb on-site, which also spilled in considerable amounts along other fill dumping locations on the site.</i></p>	<p>Council acknowledged that some acid sulfate soil material was brought to the site in late 2011. It was treated promptly and subsequent verification sampling demonstrated that it was appropriately neutralised, in accordance with the requirements of the ASS Manual.</p>
<p>3. <i>The shake-down grid was removed for a significant amount of time and stored in the southern half of the site, until reinstalled when asbestos clearing was in process.</i></p>	<p>Council advised that the shake down grid was installed when the frequency of truck movements increased. It was considered that the grid was not needed for the lower frequency of movements before that.</p> <p>When truck movements were decreased, the grid was taken out of service as internal roads were modified and the area under the grid filled. It was reinstalled after that.</p> <p>There is no condition that requires the grid. The condition requires Council to manage the risk of tracking material out onto Depot Road. Council staff are of the view that this risk was adequately managed, based on the number of truck movements.</p>
<p>4. <i>No rain meter was installed to help with anticipating erosion control measures.</i></p>	<p>Installation of a rain meter is not a requirement of the consent.</p>

Issue	Comment
<p>5. <i>Non-existing or failing erosion control measures, resulting in run-off with high sediment content and possible pollutants entering surrounding wetlands (in our view triggering SEPP 14 regulations) and one of our farm dams. Some of these erosion control measures have now been improved, but most still in same failing condition.</i></p>	<p>Council advises that, during the early stages of filling, erosion control was managed in accordance with Council's <i>Standard Operating Procedure – Erosion &amp; Sediment Control 46</i> (SOP).</p> <p>The SOP adequately addresses the requirements for erosion and sediment control.</p> <p>There are no inspection reports or the like to indicate the ongoing assessment/ management of the controls that were installed.</p> <p>As filling progressed, a specific Erosion and Sediment Control Plan (ESCP) was developed (July 2011) and implemented. While Council staff advise that regular inspections/ maintenance was undertaken, there is little in the way of documentation.</p>
<p>6. <i>The stormwater run-off requires a pH between 6.5-8.5 as per the Notice of Determination DA 09/0186. This would not be consistent with the more acid environment of the adjoining wetlands, acid frog habitat and survival of tadpoles of these frogs. In any case stormwater pH has not been tested in any location as far as we know.</i></p>	<p>The specified pH range is an industry standard, providing 'neutral' conditions.</p> <p>I assume that, in setting this condition, Council was mindful of the receiving environment and satisfied that it was appropriate in the circumstances.</p> <p>It appears that, apart from some testing in the adjoining farm dam, there has been no testing of stormwater leaving the site.</p>
<p>7. <i>Water quality monitoring has not taken place in the farm dams on our property since 6 Sept 2010, despite an email from Peter De Wilde to Adam Faulkner asking him to resume water monitoring from the 8 Sept 2010 onwards, explaining the withdrawal of consent on the 6th Sept 2010 for Council to test the dam water was a mistake. The results of bore water and dam water monitoring over a 5 yr period will have to be submitted to the DECC at the end of 2013. The dam water results would be particularly interesting as the fill was placed exactly in this period of time( Sept 2010 –present)</i></p>	<p>I understand that testing has resumed.</p>
<p>8. <i>Council's weekly Site Inspection, if there was any, has failed to detect a significant area (5 x 60 mtrs) of exposed asbestos on the site, exposing Council staff, neighbouring properties and people visiting the site to asbestos. This would likely have been exposed for a considerable amount of time, as it was detected by Peter De Wilde on a random visit to have a look at the proposed site for the Telstra Monopole. During this time the shake-down grid was not in it's normal position at the entrance. It was stored in the Southern half of the site, out of use. Trucks and bulldozer could have been driving over asbestos-contaminated fill and spread this over Depot Rd etc.</i></p>	<p>Council acknowledge that asbestos was discovered on site. The source of the material is not known, and Council have considered that it may have been from an old shed or the like uncovered in early filling works or that it may have been illegally dumped by a third party.</p> <p>The asbestos was dealt with in accordance with industry requirements, with appropriate testing and certification provided afterward.</p>

Issue	Comment
<p>9. <i>No contact has been made with us about a legal point of discharge of stormwater onto our property, and use of our farm dam, as was suggested in the SEE related to DA 09/0186. No letters of notice of the DA's being on public display have been received by us. Angela actually spoke to Denise Galle about 2 yrs ago who mentioned the approval for the DA09/0836 had not been given yet. She gave the impression the DA had not even been on Public display. Why did she not then inform Angela about the DA?</i></p>	<p>Council advise that the majority of stormwater from the site is captured in the perimeter drain and discharged in the south-west corner of the property.</p> <p>A small area drains under the site entrance toward the north-east corner, towards the neighbours' property.</p> <p>Council will need to satisfy themselves that appropriate legal arrangements are in place (if required).</p>
<p>10. <i>No proper stormwater management plan has been shown to us. We can only guess what it will be like. This plan should have been drawn up when the DA was handed in for approval, Jan 2010. The Catchment plan we were eventually sent was not dated, does not make sense and suggests that we would be better off after the Sportsfields were established than before. It suggests that prior to development, water from the far South East corner would drain all the way North to our property , jumping Depot Road which is in the way. There have never been any signs of water entering our property anywhere from the Council Site in the past. We still invite anyone to come and have a look now to assure themselves personally of this fact, or to come and show us now where and how this has happened in the past. It is also true that prior to the Council's use of the site as a waste site, the permeable nature of the medium grained sand and lack of slope on this sandplain, would not be consistent with any overland flow as can be seen all over the adjoining parts of the Kings Forest Estate. The plan is now to actively channel and pipeline stormwater onto our property which needs our agreement and possible easement if this would mean overland flow (see Council's D5 and D7). The onus is on Council to prove their blunt statement (quote: Patrick Knight in teleconference, and Stewart Brawley's reply emails) that water/run-off has always entered our property.</i></p>	<p>A Stormwater Management Plan was prepared and submitted with the Construction Certificate for the bulk earthworks.</p> <p>It is suggested that a Council engineer explain the design detail of the SWP with the adjoining owners.</p>
<p>11. <i>Dust control has been non-existent from Xmas 2011 until 2 months ago, when a water truck started wetting Depot Rd again. However this was only done in the morning and had little effect after the morning hours.</i></p>	<p>The approvals are conditioned to require that the works be carried out so as not o impact on the neighbourhood, including control of dust.</p> <p>Council advise that water carts have been used to control dust during period of site activity.</p> <p>There is, however, a lack of formal inspection documentation to provide evidence of this.</p>
<p>12. <i>Speed limit of 40 kph has not been adhered to causing more dust and danger.</i></p>	<p>A Vehicle Management Plan was prepared and speed signs installed.</p>



Issue	Comment
<p>13. An SEE should take into account the impact on surrounding land, for which you would need to do an environmental survey, to establish the nature of the surrounding land first. So far no survey has been supplied to us by Council, and the question whether Council knows of anyone ever having done an environmental survey, in particular on our land, remains unanswered.</p>	<p>It is not clear from this what the adjoining owners mean by 'environmental survey'</p> <p>A Statement of Environmental Effects was prepared for both applications, addressing the requirements of the Act. In approving these applications, Council planning staff considered that the Statements were adequate.</p> <p>I note that Condition 20 of DA09/0836 required the submission of an Ecological Monitoring Report, to be approved prior to the issue of the Construction Certificate.</p> <p>The CC for bulk earthworks was issued without such a report having been submitted. Council advise that the intention is for it to be submitted with the application for buildings/ improvements.</p>
<p>14. A form was attached to the Notice of Determination DA 09/0186 that was supposed to be used to confirm the safe nature of the fill and signed by site supervisors and then be approved by General Manager or delegate before fill could be moved to the site. We don't believe this form has been used and a recent request for an updated list of fill sources has so far not been honoured. Peter De Wilde was reassured by Andrea Hamann during an onsite meeting that any further fill would be sourced exclusively from Arkinstall Park from that day, 03 July 2013 onwards. The first truck to arrive I believe the next week while asbestos clearing was still in process came from a different site( the location of which is known to us) and we were told no fill from Arkinstall Park was going to be used at all! Hence the request for an updated list of sources. So far no response.</p>	<p>The form referred to was Appendix E to the Statement of Environmental Effects for DA09/0186.</p> <p>It does not appear to have been used.</p> <p>Council advises that the fill material was sourced from various Council infrastructure projects, and that individual environmental assessments were undertaken for each of those projects (including an assessment of contamination risk).</p> <p>I have noted, however, documentation regarding fill sources to be approved by the General manager or his delegate does not appear to have been provided.</p>
<p>15. Andrea also suggested that a sediment/infiltration basin on the Council site might be a possibility. However she was soon after cut off from any further contact with us.</p>	<p>Council staff advised that sediment basins were not possible, as they would require excavation into the clay cap constructed over the landfill.</p>
<p>16. In the Notice of Determination 09/0186 erosion control is mentioned. The site is bare without vegetation apart from approximately 10-15 %. The bare area would roughly be 7 hectares and has been bare for 2 yrs now. What is the plan for the next 12 months or so in relation to wind erosion control? (See the Erosion and Sediment Control Plan July 2011 for details of what area at any one time can be left bare)</p>	<p>The ESCP developed for the site indicates filling in stages, with progressive rehabilitation. It does not specifically address treatment of areas that would be left unattended for extended periods as the filling progresses.</p> <p>Council's Code of Practice for erosion control calls for wind barrier fencing to be installed on larger construction sites. Council considered that such barrier was not required at this site, managing dust risk by use of water carts.</p>
<p><b>"Questions that remain unanswered:"</b></p>	
<p>1. Notification of neighbours: (see email Stewart Brawley 26 July 2013). Stewart writes: It is "not practical" or "very reasonable" to expect Council to contact all adjoining landholders when a DA is received. In this instance we would argue that this is a major Council Project, (rather</p>	<p>I understand that Council has acknowledged that the standard DA notification procedure failed in this case.</p>

Issue	Comment
<p><i>than for example an extension of the neighbours garden shed) and there are only two adjoining landholders, Leda and ourselves. Therefore we would deem it very reasonable and very practical to contact those two landowners, in particular where there is a point of storm water discharge onto a neighbouring property concerned.</i></p>	
<p>2. <i>When are you going to officially ask us about the legal point of discharge of your stormwater?</i></p>	Council to advise
<p>3. <i>We have contacted Council's Compliance Officer, who would get back to us about several issues mentioned before, but never did. Does Council have a complaints procedure in place? And are we allowed to use it? Apparently not, as we have been allocated one single point of contact.</i></p>	Council to advise
<p>4. <i>We have asked in previous emails what information about the DA 09/0186 and DA 09/0836 was available at the time these were on public display for comments/objections. No answer has been given. This is a crucial point. If we make an objection to a DA when these are on public display, we are asked to specify what we specifically object to and back this up with evidence if at all possible. How can you object to a DA if no details are available? For instance the Erosion and Sediment Control Plan attached to DA 09/0186 which went on public display in Jan 2010, is dated July 2011! How does this work? The DA form(s) that were sent to us recently (2013) dated Dec 2009 have not even been filled out completely. The vagueness of the info so far sent to us in relation to the DA's would have made objections at the time of public display virtually impossible.</i></p>	<p>Council to advise what information was notified with each DA.</p> <p>I note that some documentation referred to was developed after the DA approvals, in support of the Construction Certificate application for bulk earthworks.</p>
<p>5. <i>On the plans for the site there is an "unnamed road reserve" running 10 mtrs wide along the Northern boundary of the site. We have asked several times what this means. If it exists, it exists and please tell us what it means, and who it is for. If it does not exist, don't put it on your plans, tell Google it doesn't exist, because even Google Maps have placed it on their maps, and have done so only recently , approximately 1-2 yrs ago. Why? Is it a "proposed" Right of Way on Council's title, that was "not registered". If that is the case, does it exist yes or no? Can it be blocked by Council as has been done? Please advise in writing.</i></p>	<p>This is shown as 'unnamed road reserve' on plans in the set RC10006.</p> <p>It is shown on Deposited Plan 397082 as "Site of Proposed Right of Way 50 links wide".</p> <p>There is no road reserve shown on cadastral plans, so it is not clear whether it the right of way was ever formally created.</p>
<p>6. <i>Is fertiliser going to be used on the site for establishment of the turf? And will there be ongoing use of fertilisers and where does the runoff go? The wetlands vegetation is already showing the signs of high nutrient levels. Algae blooms can have quite an effect on the wetlands. Could we ask Greg Jones?</i></p>	Council could advise of the intentions within the Construction Certificate application for finishing works.
<p>7. <i>Are herbicides going to be used at the site, which ones and where does the run-off go?</i></p>	As above

Issue	Comment
<p>8. How is road run-off going to be treated before being discharged. "9 mins in a swale" is mentioned as sufficient treatment for road run-off and sportsfield run-off. No calculations provided by Council have made any sense to us yet. If it takes 9 mins for water to run from the far end of a 150 mtr long swale to the discharge point, how long is the water that enters the swale at 50 mtrs from the discharge point in the swale for? ( The correct answer = 3 mins)</p>	<p>This should be addressed in a Construction Certificate application for the buildings/ roads/ finishing works.</p>
<p>9. Why does LEDA have to have sediment basins on their own Non-Environmentally Protected land before stormwater can be discharged into an adjacent section/ neighbour or wetlands, like is the case just South of the Council site, while this does not seem to apply to Council's own project? ( See D7 and LEDA's documentation)</p>	<p>See above – not able to excavate sediment basins into the clay cap. Stormwater treatment was proposed/ achieved by was of the vegetated perimeter drain.</p>
<p>10. When is vegetation going to be established, to stop wind erosion?</p>	<p>Council to advise</p>
<p>11. The Koala Connection program is planning to establish an East-West Koala Corridor on our land, however at the same time a Telstra Monopole has been planned only 50 meters away from this corridor. Does Council know what this means for Koala migration and breeding? Could this area be avoided by Koala's because of the radiation and or noise? And close off a Koala-route rather than establish or improve it?</p>	<p>Council to advise</p>
<p>12. Why does LEDA have to apply an Ecological buffer and an Agricultural buffer, while this does not seem to apply to Council's own project?</p>	<p>I am not aware of LEDA's requirements.</p>
<p>13. How can we be sure there is no further asbestos or other contaminant on the Council's site or Depot Road? Like mentioned before, the asbestos-contaminated fill was bulldozed over at least 50 meters by 6 meters, but likely a larger area. Whether the asbestos was the result of illegal dumping or was dumped by Council by mistake cannot be proven. However, illegal dumping would not cover an area this big. We are talking truckloads. Pictures showing this layer had been bulldozed are available. Our question to Council whether or not Council will do further soil sampling or checks remains unanswered. This is going to be our children's Sportsfields! Also, our family breaths in dust from Depot Rd and Council site every day and drink tank water collected from the roof of our house. One look at Depot Rd will show how much dust lands on the adjoining vegetation. Truck movements have been ongoing for over 2 years now, with minimal (during a few months at end of 2011) to non-existent (rest of the time until 2 months ago) dust control. The question remains whether there is any more asbestos on the site. This would be likely as the asbestos was found in a bulldozed layer on the outer edge of the fill. This layer would likely extend southwards where recently further fill was dumped, and therefore now buried. If a DA for</p>	<p>Council has provided a report from HSC Consulting and Training regarding the asbestos removal and treatment. The report states: "Following an acceptable visual inspection of the removal zone, the primary removal area; the work zone was, as far as reasonably practicable, clear of residual asbestos containing cement debris".</p>

Issue	Comment
<p>construction for a Telstra Monopole would be approved in this location, this layer would likely be disturbed again. We see it as the Council's responsibility to make Telstra aware of this possible impact on it's employees, the environment and cost implications.</p>	
<p>14. A Monopole should not be allowed close to a School site or a Playground/ Sportsfield. This is a policy point of for example our neighbouring Gold Coast City Council, which is line with let's say Europe in general where "electrosmog" is the new worry. Animals can apparently sense the radiation and will likely stay away from areas of higher EME, humans can't. Some small animals can die if staying too close to these poles. Did Council ask for further clarification from Telstra about radiation levels, numbers of antennas etc?( see our objection letter)</p>	<p>I have examined the compliance with DA approvals for filling and sportsfields. I have no expertise to comment on monopole issues.</p>
<p>15. When is Greg Jones, Council's Ecologist going to do his environmental survey of the surrounding land as was promised to me on 3rd of July 2013, after the asbestos would have been cleared from the site? We have not had any correspondence regarding this.</p>	<p>Council to advise</p>
<p>16. Who decided that the fill would have to be at the planned height, (which seems excessive to us) and has consideration been given to the hydrological effects on the underlying fill and leachate-rates and ground water levels in the surrounding land including ours?</p>	<p>Council's design engineers to advise</p>
<p>17. What are Council's plans right now in relation to all of the above? When is the water in the dams going to be tested? Will you discharge water onto our property, yes or no?</p>	<p>Council to advise</p>
<p>18. How do Fire Services and Essential Energy and ourselves access the south west corner of our land? The access point for the fire services pointed out to me by Matt Inwood, is in the middle of proposed wallum froglet compensation habitat to be created in a 50 mtr ecological buffer. Would it be more sensible to go over the Council's site? A simple ramp in the north east corner and one in the north west corner would suffice.</p>	<p>Council to consider and advise</p>
<p>19. Regarding the Telstra Monopole Application. We were encouraged by Council to come up with alternative sites from LEDA- we did, but for what? It would appear that Council including the Mayor and Acting General Manager were keen to get LEDA to offer alternative sites on their land, and "preferably in writing", which they did. No response from Council has so far been received. Is it possible that the income from the lease is too important for the Council?</p>	<p>See above</p>