

Chief Executive Officer  
City of Busselton  
Locked Bag 1  
BUSSELTON WA 6280

Dear Sir or Madam,

**RE: APPLICATION FOR EXTRACTIVE INDUSTRIES LICENCE (FINAL STAGE) ON SUSSEX LOCATION 4079 HAAG ROAD, YELVERTON. CITY REF: DA10/0306.**

We act for AC & RL Credaro and RC & PE Credaro, the owners of Sussex Location 4079, which has frontage to Haag and Chambers Roads, Yelverton. Our clients also own Sussex Locations 2852, 2853 and 2854, which are located on Chambers Road between the subject land and Bussell Highway.

Location 4079 contains an area of 97.1246 hectares, which has been mostly cleared for many years for grazing and pastoral uses. The subject land is located to the south of Haag Road approximately 1100 metres west of Bussell Highway and just 3.5 kilometres south of the Carburnup River townsite. Chambers Road is bitumenised between Bussell Highway and Lot 4079.

Council will be aware that our clients have had a sand extraction running on this property for a number of years, with demand being very slow during the past 3 years. This situation has changed with a number of larger developments now in construction which will require significant amounts of fill. Our clients are keen to take advantage of the upcoming developments and remove the existing approved resources together with seeking a new approval to extract the remainder of this quality resource from the northwestern area of the property, depicted as area "G" on the Site Plan.

It is noteworthy that the sand on this property meets Main Roads WA specifications and can be used on their road construction projects.

In accordance with the adopted *Rural Areas Land Use and Development Policy - Section 5A Extractive Industries*, the following information is attached:

- i) **Development Application Form;**
- ii) **Cheque for  (application and advertising fee);**
- iii) **Social Impact Statement;**
- iv) **Copy DER Clearing Application;**
- v) **Extractive Industries Site Plan; and**
- vi) **Existing Dust Management Plan.**

We will now address each of the details outlined within the Assessment Criteria and Policy Provisions.

## 1.0 **LOCATION AND SITE DETAILS**

### 1.1 **Property Details and Location on Property**

The enclosed location plan and site plan identify the proposed extraction areas quite clearly. Location 4079 is located within *Extractive Industry Policy Area No. 2 – Extractive Industry Constrained*.

Extractive Industry will only be supported within Policy Area 2 where such operations have due regard to the significant constraints of the area, the particular site and surrounding land uses.



## 1.2 Contoured Topography of Site and Surrounds

The site plan incorporates Landgate 2007 digital aerial photography, together with one metre contours which have been derived from various detailed site surveys carried out by BSO Development Consultants during and after Stages One and Two (Area "B").

This application Area "G" was surveyed by our office in late 2014.

## 1.3 Existing and Surrounding Landuses including Extractive Industry.

Landuse abutting the eastern, southern and western boundaries of the subject land is rural based, predominantly grazing and pastoral landuses. The same is true for a few of the properties located on the north side of Haag Road however, in recent years, a number have been subdivided as "Bushland Protection" Lifestyle lots.

An Extractive Industry Licence has recently been granted on the western abutting Lot 75 and it is understood the proponent is making arrangements for this pit to commence.

The location and access sketch contained on the Site Plan shows the position of all residences located within one kilometre of the existing pits and proposed extraction Area "G".

## 1.4 Property Access

Access to the proposed extraction area is also shown on the Location and Access Sketch. Vehicles will utilise the Chambers Road carriageway to reach Bussell Highway, approximately 1100 metres east of the subject land. This pavement has already been upgraded to a suitable standard. Proposed internal access tracks are already in existence from the previous extraction.

Recent Bussell Highway upgrades performed by Main Roads have vastly improved the Chambers Road intersection, which now includes sliplanes for turning vehicles.

## 1.5 Existing Vegetation

The proposed extraction area contains 15 individual Peppermint trees and all are of a significant age. These trees have provided shade to grazing livestock (sheep), but are so isolated within cleared pasturelands that they do not provide suitable habitat to Western Ringtail Possums. There is no evidence (dreys or scats) that these trees have ever sheltered this species, due to their isolation.

Removal of these trees is considered appropriate to access this regionally important sand resource, where existing and proposed revegetation will replace them many times over. While it is intended by our client to retain as many of these 15 individual trees on bunds as possible, this may not be practical. Consequently, an application to remove these trees has been lodged with the Department of Environment Regulation, and we are expecting this application to be successful.



### 1.6 Existing and Surrounding Watercourses, Dams and Wetlands – Drainage Management.

The low-lying, summer-moist areas which exist on the subject land are identified on the site plan. Extraction within Area “G” will be quite shallow and the natural drainage to the northeast will be preserved. This is depicted with blue directional arrows on the plan, it is anticipated that an interceptor drain and detention basin will be built if required, between the extraction area and the drainage line.

Our clients are committed to closely monitoring drainage/run-off within the excavation areas and will address any problems which may arise, as they have done in the past.

## 2.0 SCALE AND NATURE OF OPERATON

### 2.1 Size and Depth of Pits

It can be seen from the site plan that sand extraction Area “G” is limited to a total area of approximately 7.04 hectares. From past extraction, all areas are expected to contain average sand to depths of around 1.2 metres, although deeper deposits may be encountered. Maximum depths of excavation will be 2 metres below the existing surface, dependent on the depth of sand encountered.

In all areas, excavation will grade out to the natural surface on the low sides, thus maintaining natural drainage patterns. Our clients are now well-experienced in this operation and maintaining natural drainage and final re-establishment to pasturelands are paramount.

The overburden topsoil is to be stripped over a maximum area of approximately 5000m<sup>2</sup> at any one time to a depth of 100-150mm, taking the seed and humus matter which is to be stockpiled. Please refer to the cross section details on the site plan, which indicate the proposed excavation floors and side slope batters (where required). It will be noted that the extraction area will be set back at least 20 metres from the property boundaries.

This will be an **extraction only** project, providing a useful and sought after sand supply for the City and **no crushing or blasting** will be required.

### 2.2 Onsite Maintenance of Vehicles

The landowners propose to purchase a front end loader for this final stage, which is likely to be parked on site however, maintenance and re-fuelling of the same will take place at the principal machinery shed located on Lot 2852.

### 2.3 Estimated Amount of Resource for Extraction.

It is estimated that the total maximum volume of sand to be removed from Area “G” will be approximately 74,000 banked cubic metres.

### 2.4 Period Over Which Operation Will Occur

The landowners request that their permit be given the longest lifespan allowable (5 years).

### 2.5 Proposed Operating Times

Operation of the pit will be constrained between the hours of 7am and 6pm Monday to Friday, and it is not proposed to include public holidays. Should



individual contracts require operation outside these times, our clients are committed to notifying Council accordingly, outlining the specific details of the contract.

It should also be noted that trucks may not operate on designated school bus routes between 7.30 – 8.40am and 3.20 – 4.20pm, Monday to Friday, during school periods. Our clients advise that the school bus travels from Bussell Highway along Chambers Road before turning around at the intersection of Haag Road and returning to Bussell Highway.

## 2.7 Types of Equipment to be Used

As the proposal is for the extraction of sand, it is anticipated that equipment will be limited to trucks (rigid body and trailer or semi-trailer) and front end loaders, however our clients do not wish to preclude the use of a small scraper to reshape their property at the end of the project. Final deep ripping is likely to be undertaken by a medium-sized dozer.

## 2.8 Staging of Operation

The site plan shows clearly the proposed area of excavation. Our clients are committed to rehabilitating the area upon completion of the extraction and this rehabilitation will be commissioned at an appropriate time of the season when the respread topsoil will germinate and stabilise quickly ie. during the months of late May to September. No more than 2.0 hectares of extraction area will be exposed at any time prior to rehabilitation commencing.

## 3.0 RESOURCE HAULAGE – TRAFFIC IMPACT ASSESSMENT

### 3.1 Number of Truck Movements Per Day/Week

Assessment of the estimated banked volume of 74,000 cubic metres against the truck movement calculations contained within the Policy, leads to an average removal volume of 64 truck cubic metres per day (five days per week over five years).

**Based on the 19 cubic metre capacity of a semi-trailer, this equates to just four additional truck movements per day.**

Obviously, this is likely to fluctuate however, at this stage, average truck movements are all that can be estimated.

### 3.2 Size of Trucks

The size of trucks will be limited by the designations specific to heavy haulage routes within this locality. While Chambers Road is not a designated heavy haulage route, it is anticipated that haulage will be limited to the use of semi-trailers and rigid truck/trailer combinations whose combined mass and overall length will not exceed 42.5 tonnes and 19 metres respectively.

### 3.3 Access to Operation Site

It is proposed that access to the subject land will be via Chambers Road which intersects Bussell Highway approximately 1100 metres east of the property. Chambers Road is constructed to a bituminised standard. We reiterate that our clients currently own all properties which abut this section of Chambers Road, excluding Location 1276, and this should be taken into consideration when



assessing perceived impacts that the haulage operation will have on adjoining landowners.

### 3.4 Haulage Routes and Destinations

The haulage routes and destinations will be subject to specific contracts. Obviously, trucks will have to utilise the identified heavy haulage routes which may be accessed directly from Bussell Highway. Trucks will not be allowed to use the northern portions of Chambers Road under any circumstance.

Our clients are committed to advising Council of specifics as contracts are prepared.

### 3.5 Location of Road Signage

Our clients are committed to maintaining the existing road signage as required by Council which is specific to their proposal.

### 3.6 Road Maintenance and/or Upgrading

Chambers Road is now sealed to an acceptable standard and has stood up well to the first stages of extraction and associated haulage.

## 4.0 ENVIRONMENTAL CONSIDERATIONS

### 4.1 Noise, Dust, Vibrations

Sand extraction is the easiest extraction form given that there is no ripping or crushing required on site and as such the noise and vibrations are not expected to impact on adjoining landowners. Dust will be controlled by stockpiling the topsoil and only stripping excavation areas of 0.5ha at a time.

Water is available on site, and the landowners have a number of vineyard spray units which can be utilized as water carts with up to a 4,000 litre capacity.

The existing Dust Management Plan (supplied) will be adhered to for Area "G".

### 4.2 Dieback Status

The subject land is dieback indeterminate to the best of our clients' knowledge and it is not expected that dieback will be introduced by haulage vehicles because the sand will generally be used in newer subdivisions and the trucks will be travelling primarily on bitumen roads.

Generally, the landowners will comply with the provisions included in "*Management of Phytophthora Dieback in Extractive Industries*" – A Best Practice Guideline for the control of the spread of dieback, published by the Dieback Working Group in February 2007.

### 4.3 Visual Impact Management

Area "G" is adjacent to Haag Road and the operation will be visible to passing traffic for approximately 200 metres. It will not be visible to adjoining properties due to existing vegetation in the locality which will screen the pit – please refer to item 4.5 below.



#### 4.4 Drainage Implications

The extraction of sand as proposed is not expected to exacerbate drainage problems or interfere with natural drainage patterns in fact, these completion works will result in the property having drainage patterns as similar as possible to those which existed before any extraction took place.

Our clients wish to return the property to grazing pasture, so they will be pedantic in respect to their rehabilitation works.

#### 4.5 Proposed End Use of Site / Rehabilitation

As previously discussed, our clients are proposing to reinstate the topsoil following extraction of the sand deposits and return the area to a pastured paddock to support grazing livestock.

The extraction areas will be returned to productive, grazing pasturelands, and the minor modifications to the grade of the extraction site will have a negligible impact on this or adjoining properties, following reinstatement.

The site plan also shows our clients' existing revegetation and screening buffers along the west and southern boundaries, to a width of approximately 10 metres. These buffers have now been in place and maintained for a number of years and have proved to be successful.

The site plan contains a list of detailed notes relating to the performance and rehabilitation of the proposed extractive industry application area.

We trust that sufficient information has been supplied for your assessment of our Clients' proposal for the additional extraction of sand, and if any further information is required, please do not hesitate to contact the undersigned.

Yours faithfully



**PETER HARDING**  
**MANAGING DIRECTOR**  
**BSO DEVELOPMENT CONSULTANTS**  
7<sup>th</sup> January 2015

Encl: As listed

c.c. Mr R. Credaro

