

EIS 915

AB019664

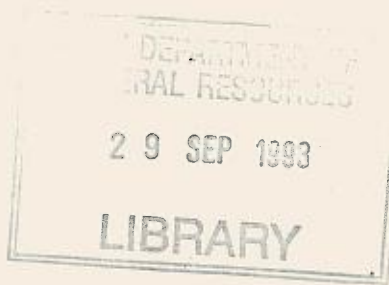
Additional information proposed extension of existing quarry at  
Lots 58, 62, 66 & 69 corner Burfitt & Neville Road, Riverstone.

EIS 915(II)

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**ADDITIONAL INFORMATION**  
**PROPOSED EXTENSION OF EXISTING QUARRY**  
**AT LOTS 58, 62, 66 & 69**  
**CORNER BURFITT & NEVILLE ROAD, RIVERSTONE**



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**8 May 1990**

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## 1. INTRODUCTION

Following the submission of the development application for consent to extend the existing quarry on the corner of Burfitt Road and Neville Street, Riverstone and the recent exhibition of the Environmental Impact Statement in respect of that proposed development, both the Council and the Department of Planning have requested further information. This report seeks to provide that additional information.

It is <sup>understood</sup> ~~understand~~ that the Council has forwarded the submissions received to the Assessments Branch of the Department of Planning and that the Council is awaiting a response from the Department.

Mr. Murray Vincent of the Assessments Branch was contacted with a view to having any outstanding issues clarified.

In relation to the question of the ultimate rehabilitation and long term use of the land, this submission contains a schedule of opportunities. The applicant company is investigating a range of recreational uses and the possibility of the site being used by a public authority.

If the surrounding area were to be zoned for residential purpose then the site could be used as public open space providing for both active and passive recreation opportunities. The site could also be used in whole or in part as a stormwater retention basin.

If the locality is to be zoned for industrial purposes then bulk storage uses such as a timber yard, container storage area or pole depot would be suitable.

A car park would also be a suitable use either in conjunction with a commercial or industrial use if such uses are ultimately to be permitted.

The land when rehabilitated through landfill, using non-putrescible material, would also be suitable for use as a caravan park.

If the site is ultimately used for public reserve then it would be surfaced with not less than 150 mm of topsoil and revegetated with grass cover with planting being by conventional agricultural methods.

If the site is ultimately used for car parking or bulk storage the final layer of impervious material will be compacted and covered with a pavement material. The site would of course also be landscaped in accordance with the requirements of the Council.

## 2. SITE REHABILITATION

Refilling of the quarry will be progressively and orderly and in this sense rehabilitation will be immediate.

Final rehabilitation and revegetation will be possible when refilling has reached natural ground level.

### 2.1 FUTURE LAND USE

Subject to its future zoning the site could be used for:-

Residential Zoning

Public Reserve

- a) active recreation
- b) passive recreation
- c) stormwater retention basin

Industrial Zoning

Bulk Storage

- a) Timber yard
- b) Container storage
- c) County Council pole depot

Commercial Zoning

Car Park

Appropriate Zoning

Caravan Park

If the site is ultimately used for public reserve then it would be surfaced with not less than 150 mm of topsoil which would be available from the stock pile which will form the bund wall.

The area will be revegetated with grass cover with planting being by conventional agricultural methods. The established grass will be top-dressed with a thin layer of approved imported topsoil.

If the site is ultimately used for car parking or bulk storage the final layer of impervious material will be compacted and covered with a geotechnical fabric prior to placing of 300 mm of pavement material and 2 coat hot bitumen seal.

## 2.2 LAND FILL OPERATION PROCEDURE

The material used in the land fill shall be approved solid waste and shall not include any putrescible material.

*Non-putrescible fill only!*

The disposal of the materials listed in Appendix "A" of the Metropolitan Waste Disposal Authorities "Standards Conditions of Approval to the establishment and operation of controlled land fill waste Disposal Depots" will not be permitted.

Any large individual boulders shall be carefully placed to achieve even compaction.

Material shall be placed in layers not exceeding 1.8 metres thick.

*ie. non-putrescible I hope?*

Each layer and each days filling shall be covered with a minimum of 150 mm of soil or other approved material.

The final layer of fill shall be covered with a minimum of 600 mm of compacted impervious material.

*for compaction is suppose*

The site shall be fully fenced and entry shall be controlled at all times.



### 3. SEDIMENT CONTROL STRUCTURE

Water from the floor of the quarry will be piped from the existing low level silt trap to a new silt trap located at the south west corner of the site.

The trap will have a capacity of 1,000 m<sup>3</sup> and will be regularly desilted to maintain operating capacity.

Desilting will be mandatory when capacity is reduced by 50%.

*why only 50%?*

Outlet will be via an in-situ gabion structure formed to allow the basin to dry out when not in use and to facilitate economic and convenient dewatering during dry periods.

Flow from the outlet will be directed to the existing well grassed waterway along the western boundary of the site which will further polish the flow.

Egress from the site will be to an existing pipe culvert under Neville Road which discharges to a defined natural drainage depression to the south of Neville Road.

This drainage depression discharges to Eastern Creek.

*Need reassurance that discharge is clean - USE SPC guidelines to make sure of this.*

#### 3.1 SEDIMENT CONTROL MONITORING

The importance of desilting the traps is acknowledged. However, it is considered that the measures set out previously will give a satisfactory water quality.

If further treatment is required a filter fabric barrier can be installed prior to Neville Road.

*Where does the silt go when it has built up?*

#### 4. BUND WALL

The detail of the bund wall shown on Plan 5 has been chosen to balance acoustic efficiency and affective revegetation.

The surface of the bund wall will be of selected topsoil.

*what do they mean by this?*

The core of the wall will as far as possible also be of topsoil. All on site topsoil will be conserved for use in final rehabilitation.

Topsoil will be tested and improved as may be found necessary.

Revegetation will be of grass applied by conventional agricultural methods.

##### Autumn/Winter Seeding Mix

|                               |          |
|-------------------------------|----------|
| Rye corn/oats (as cover crop) | 30 kg/ha |
| White Clover                  | 5 kg/ha  |
| Red Clover                    | 5 kg/ha  |
| Perennial Rye Grass           | 5 kg/ha  |

##### Spring/Summer Seed Mix

|            |          |
|------------|----------|
| Jap Millet | 30 kg/ha |
| Couch      | 5 kg/ha  |
| Kikuyu     | 2 kg/ha  |
| Red Clover | 5 kg/ha  |
| Rye Grass  | 5 kg/ha  |

*is this appropriate  
may need  
to get more  
detail -  
check with  
Chris*

Fertiliser will be applied with the seed with a further follow up application six (6) months later.

Water pumped from the pit will be used to irrigate the grass to establish a strong growth and to maintain seed growth.

The health of the grass on the bund wall, and particularly in the ground waterway, will be regularly monitored and any defect made good.

\* will there be any further  
vegetation on bund wall e.g.  
Trees, shrubs etc. ?

*Note. Have updated  
Hydrological study*

5. FLOOD LEVELS

It has been calculated by the Council that the site is subject to inundation from flooding events greater than the 5% A.E.P..

The proposed extension to the quarry will not adversely affect the level of any flood with the small local flow passing outside the proposed bund wall as indicated on the plan.

The bund walls will be regrassed to prevent erosion.

The silt trap will satisfy the requirements of the Soil Conservation Service and the State Pollution Control Commission.

*Need confirmation from these  
two authorities before work can occur.*

APPENDIX 'A'

Substances currently excluded from landfill solid waste disposal sites to prevent pollution of waters are:

1. Liquid wastes. *- resident reported they are already dumping some gummy waste.*
2. Radioactive wastes.
3. Any inflammable liquid or material derived from grease, oil, tar petroleum, shale or coal. ?
4. *F* Any sludge or material (unless it can be shown to be innocuous and harmless) being the refuse from any industrial process carried on in:
  - (i) any tanning or leather processing plant
  - (ii) any petroleum or petrochemical plant
  - (iii) any chemical plant
  - (iv) any paint manufacturing plant
  - (v) any metal treatment plant
  - (vi) any vegetable oil or mineral oil plant
  - (vii) any pharmaceutical or drug manufacturing plant
5. Any material containing:

|         |         |          |
|---------|---------|----------|
| Arsenic | Cyanide | Sulphide |
|---------|---------|----------|
6. Any toxic soluble salt of the following:

|          |           |          |
|----------|-----------|----------|
| Barium   | Copper    | Selenium |
| Boron    | Lead      | Silver   |
| Cadmium  | Manganese | Zinc     |
| Chromium | Mercury   |          |

(ii)

7. Any pesticide or weedicide - in particular any:

Chlorinated hydrocarbons

Fluorinated hydrocarbons

Organophosphates

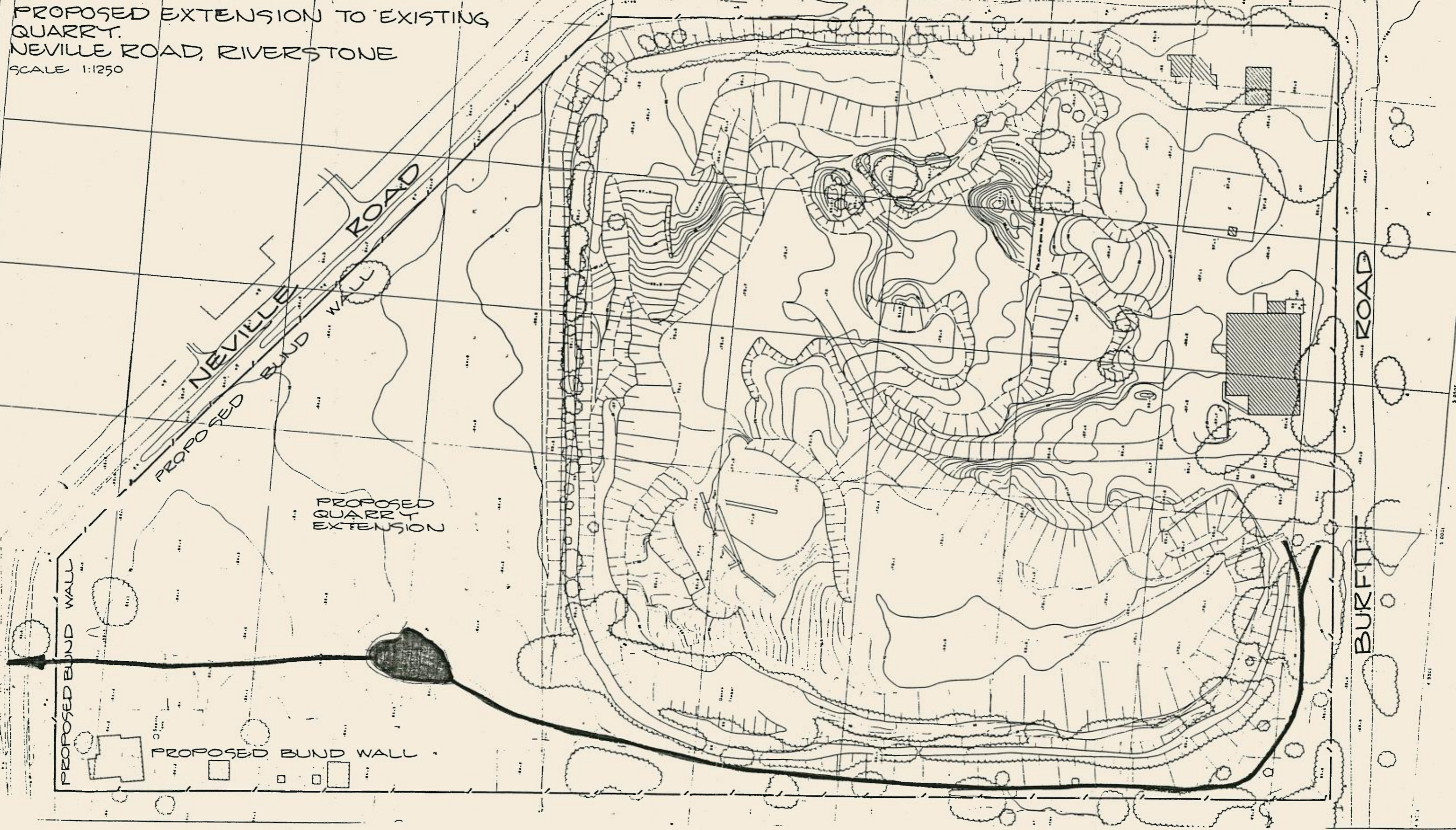
Carbamates

Phenols

8. Any soluble acid or alkali or acidic or basis compounds.

Permission may be given by the Authority, subject to the approval of the State Pollution Control Commission, to dispose of certain liquid wastes and sludges at selected landfill sites, provided it can be shown that geological conditions are such, or adequate leachate treatment facilities have been installed to ensure, that pollution of ground waters will not occur.

PROPOSED EXTENSION TO EXISTING  
QUARRY.  
NEVILLE ROAD, RIVERSTONE  
SCALE 1:1250



PLAN ONE EXISTING DRAINAGE OF SUBJECT LAND

PROPOSED EXTENSION TO EXISTING  
QUARRY.  
NEVILLE ROAD, RIVERSTONE  
SCALE 1:1250

BUND WALL &  
DRAINAGE  
STAGE ONE

STAGE 2  
HAUL ROAD

STAGE 4  
FUTURE  
QUARRY

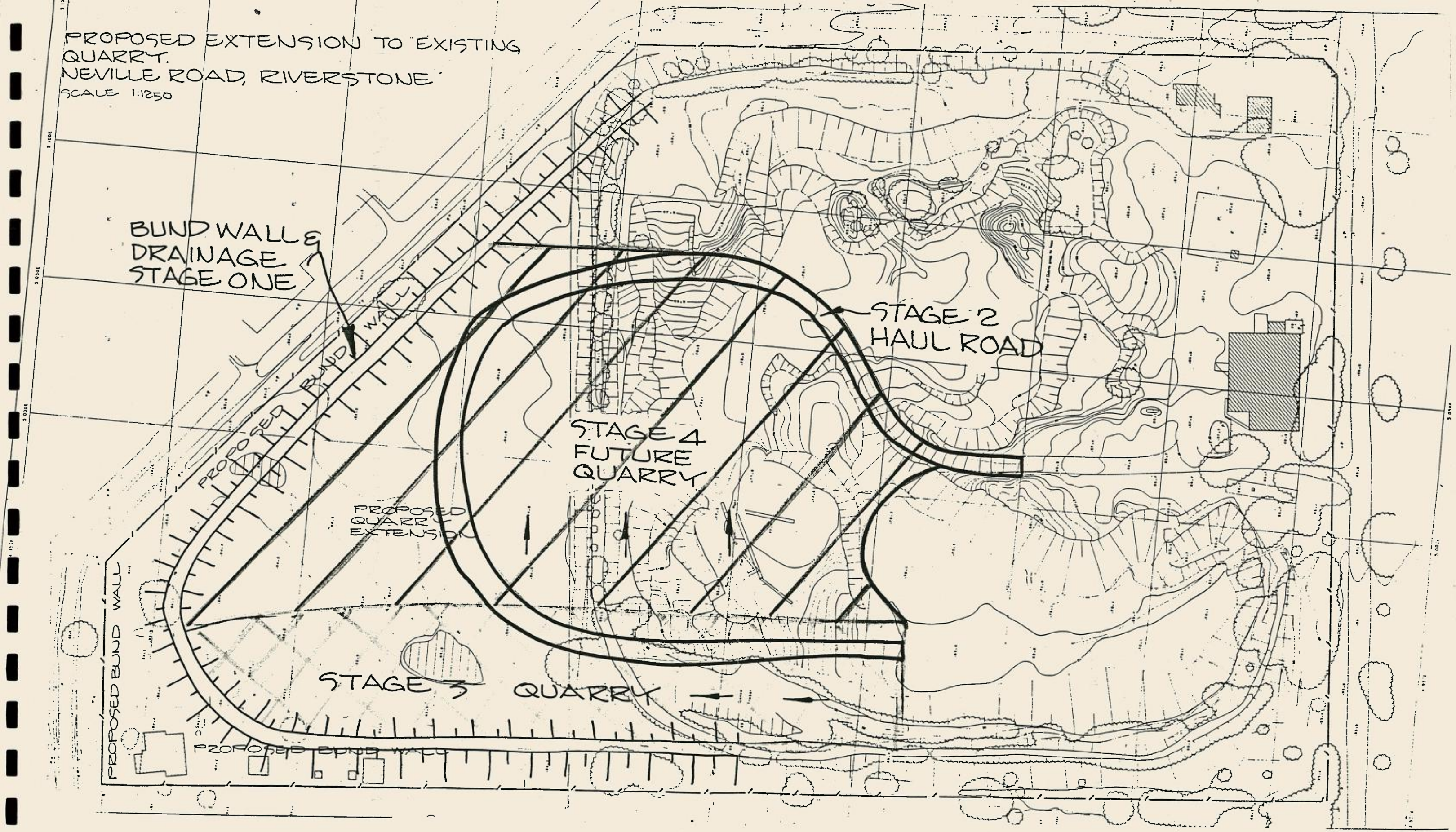
PROPOSED  
QUARRY  
EXTENSION

STAGE 3  
QUARRY

PROPOSED BUND WALL

PROPOSED BUND WALL

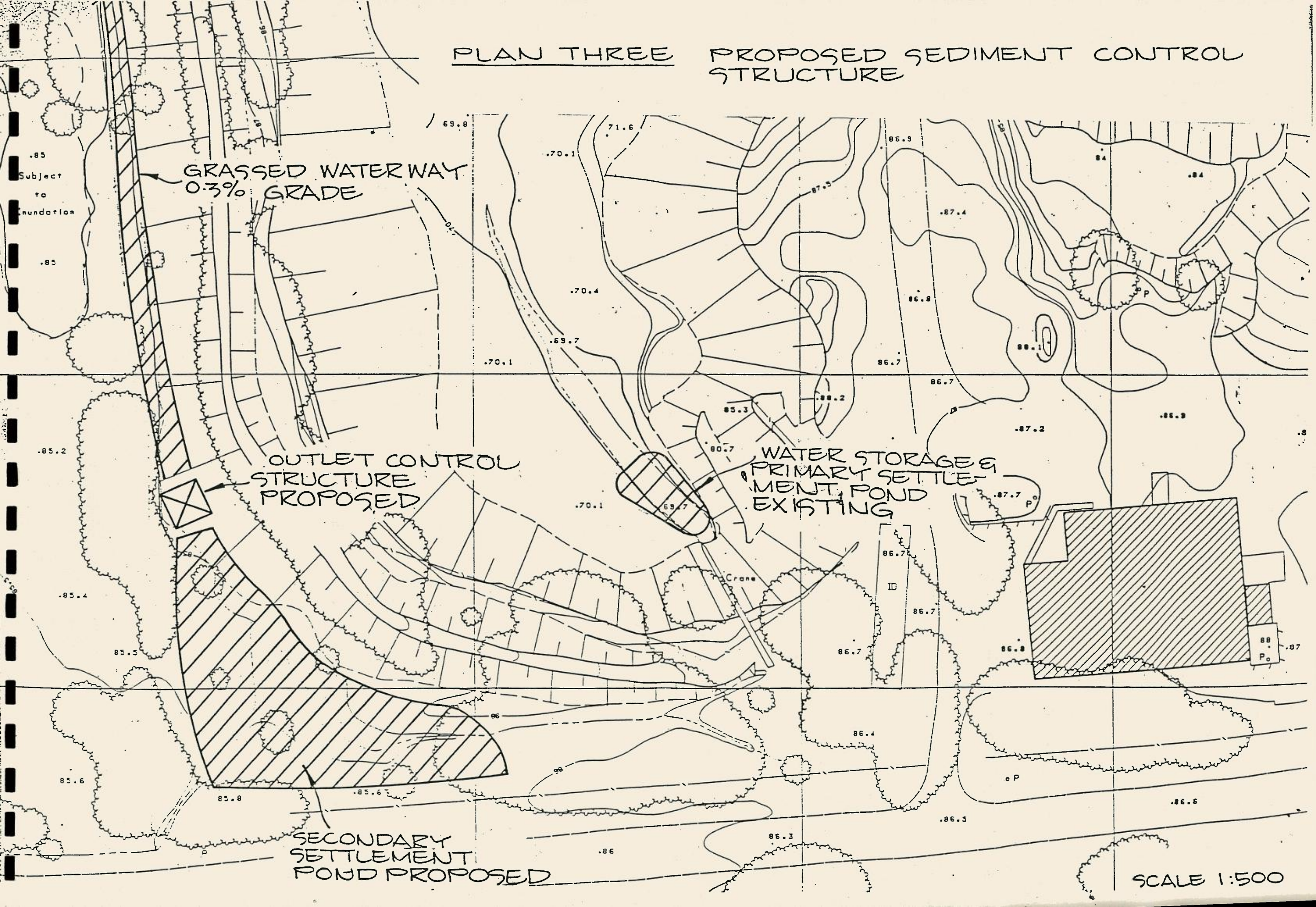
PLAN TWO STAGES OF DEVELOPMENT





PLAN THREE

PROPOSED SEDIMENT CONTROL  
STRUCTURE



.85  
Subject  
to  
Floodation  
.85

GRASSED WATERWAY  
0.3% GRADE

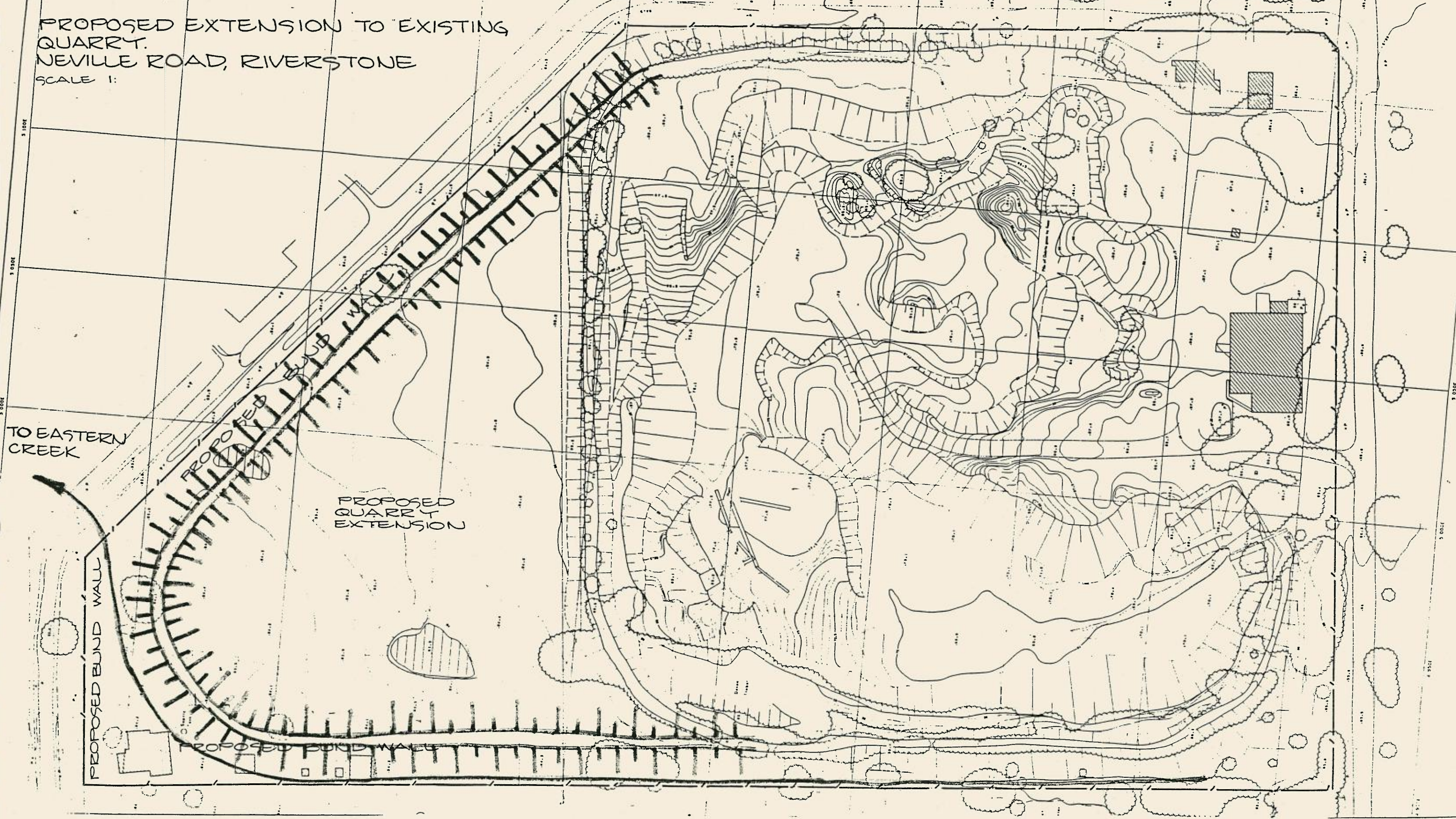
OUTLET CONTROL  
STRUCTURE  
PROPOSED

WATER STORAGE &  
PRIMARY SETTLE-  
MENT POND  
EXISTING

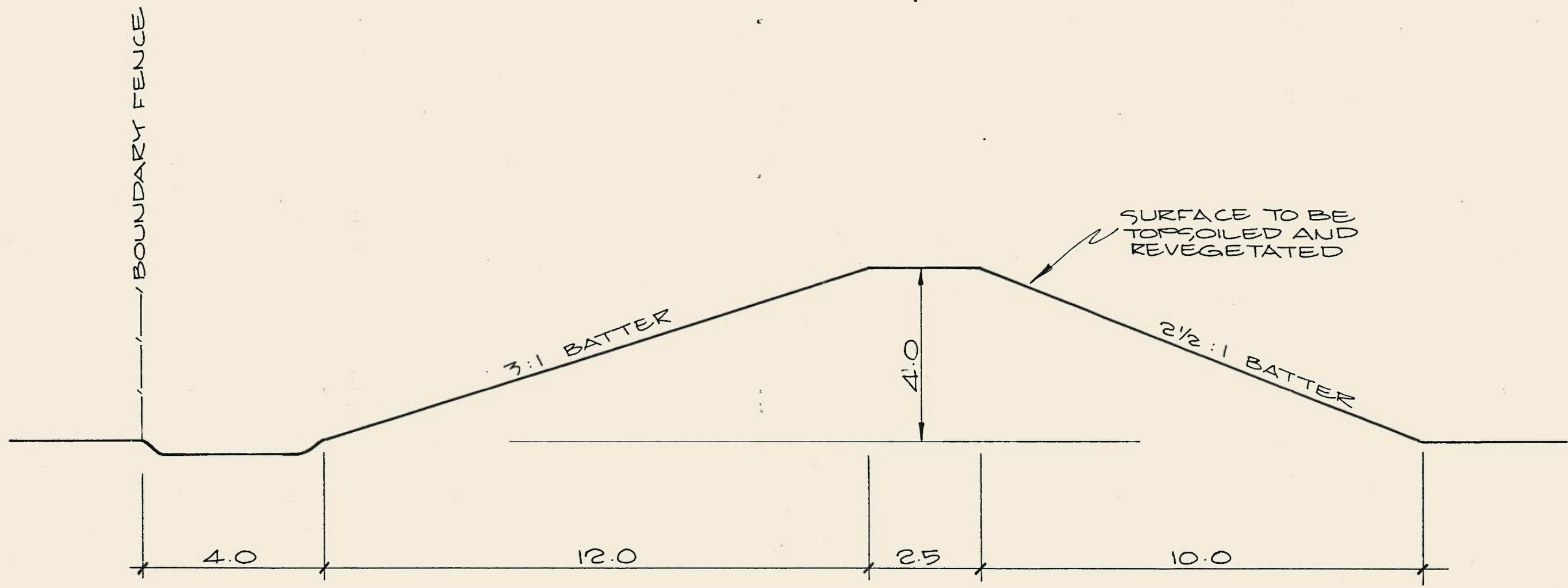
SECONDARY  
SETTLEMENT  
POND PROPOSED

SCALE 1:500

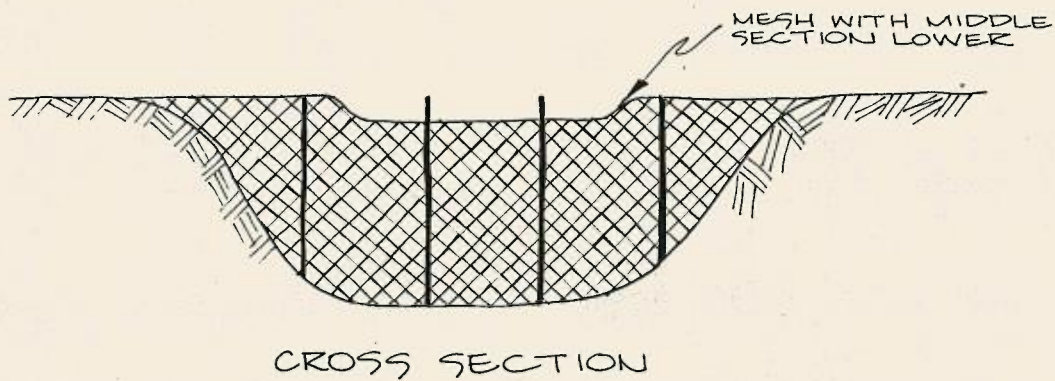
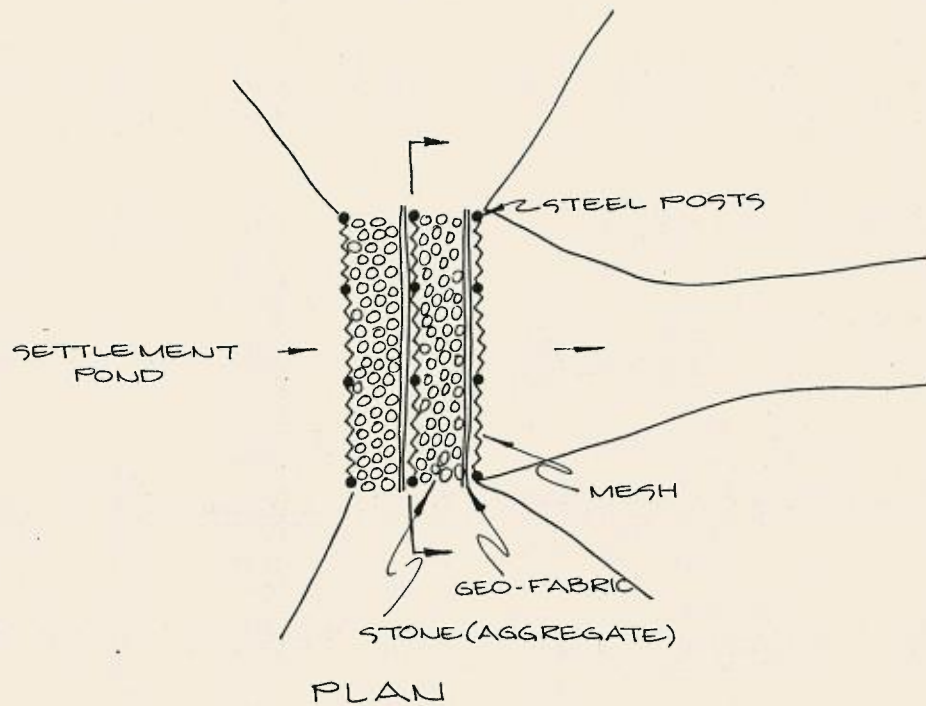
PROPOSED EXTENSION TO EXISTING  
QUARRY.  
NEVILLE ROAD, RIVERSTONE  
SCALE 1:



PLAN FOUR LOCATION OF BUND WALL



PLAN FIVE CROSS-SECTION PROPOSED BUND WALL  
SCALE 1:100



PLAN SIX DETAIL OF BASIN OUTLET STRUCTURE  
N.T.S.