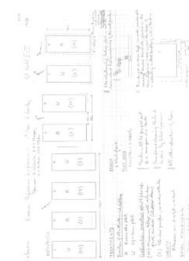


Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Collection of Plans for the Woburn Erosion Reference Experiment



[Full Table of Content](#)

Collection of Plans for the Woburn Erosion Reference Experiment - 1988 - 1998

Rothamsted Research

Rothamsted Research (1988-1998) *Collection of Plans for the Woburn Erosion Reference Experiment - 1988 - 1998* ; Collection Of Plans For The Woburn Erosion Reference Experiment, pp 1 - 11

206

Woburn

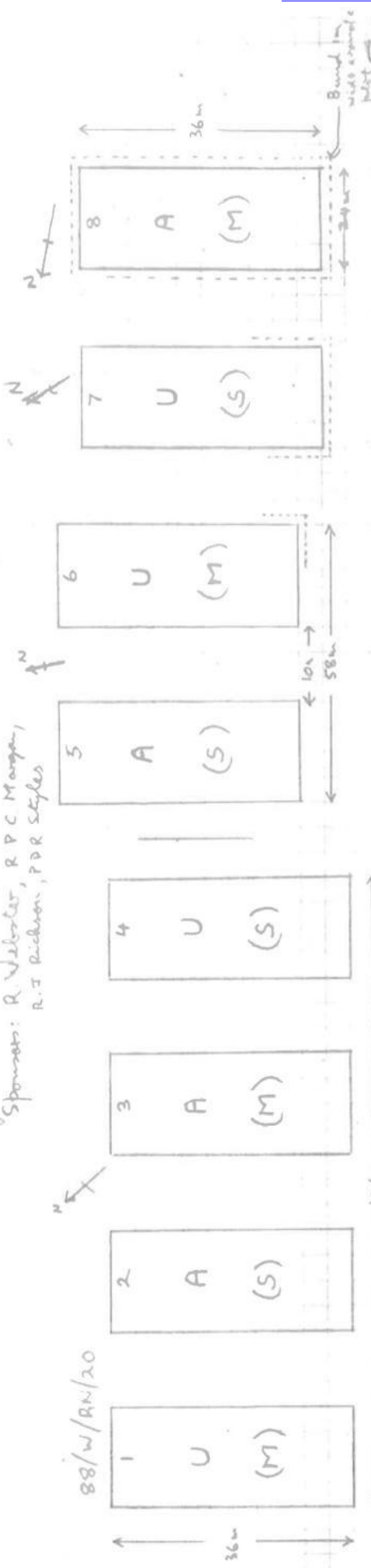
Erona Reference Experiments 1st Year S barley

Sponsors: R. Webster, R.P.C. Morgan, R.F. Rickson, P.R. Styles

88/W/AN/20

Ert Hill II/III

1988



The relationship between plots is not as shown above but as indicated by the north points:-

DESIGN
2 blocks of 2x2
PLOT AREA
 $24m \times 36m = 0.864ha$

TREATMENTS
Direction of all cultivations and drilling
A Across the plots
U Up & down plots

Cultivation practices, applied to first crop
(M) Minimum tillage with retention of crop residues (chopped straw)
(S) Standard practice, no residue retention

VARIETY
Blascon, sown at 150 kg/ha on 30 March
BASAL MANURING 160 kg
'Nitram' at 340 kg on 5 May

Tanks will be pumped out to a main gun or a tanker
Pumping & cleaning tanks to be done by Silcoff & Sonsons
All other operations by Farm

Bunds are 10-30cm high, 1m wide, erected after sowing, tractor-traversable, graded on the down-slope and 1:200 across the slope to a collecting outlet emptying into a tank:-



Tanks to be pumped out in intervals

206

Woburn

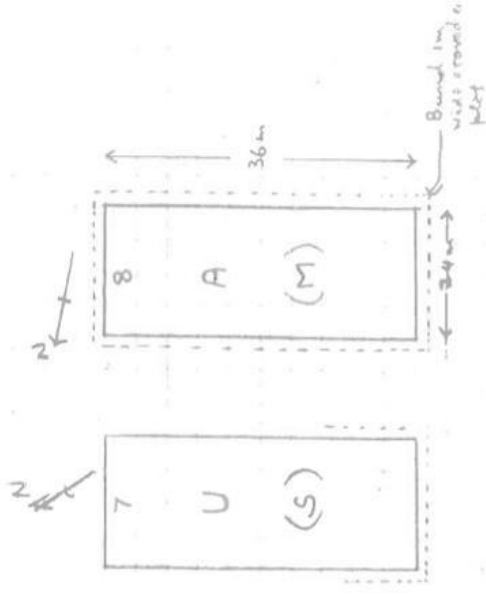
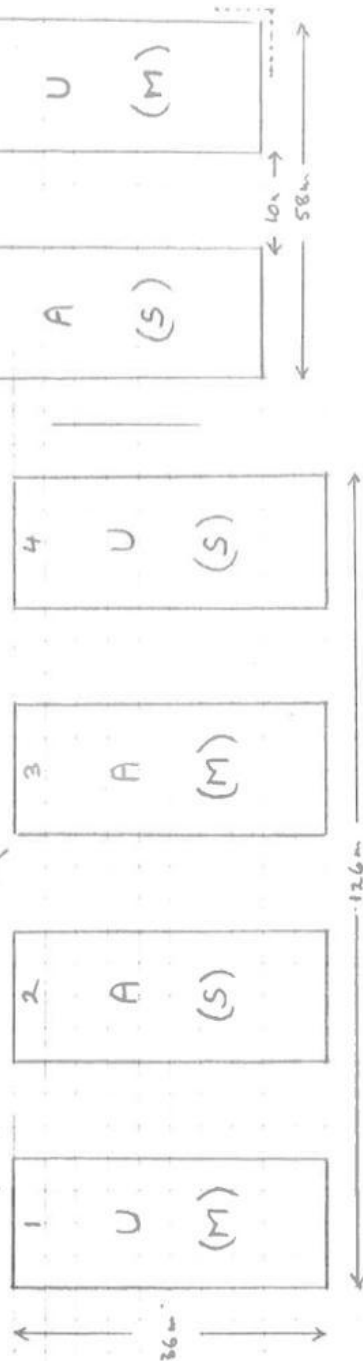
Erosion Reference Experiment 2nd Year Potatoes

St Hill II/III

1989

Sponsors: R. Webster, R.P.C. Morgan,
R.F. Richon, P.R. Styles

89/W/RN/20



The relationships between plots as shown above but as indicated by the North points:-

TREATMENTS

Direction of all cultivations and plantings

- A Across the plots
- U Up & down plots

DESIGN

2 blocks of 2x2

PLOT AREA

$2.4 \times 36 \text{m} = 0.0864 \text{ha}$

Cultivation practice

- (M) Minimum tillage: 1988 barley straw chopped & tined into 10cm, 1989 potato haulm pulverized & retained
- (S) Standard practice: 1988 barley straw baled & removed, 1989 potato haulm removed.

VARIETY

Estima, planted 10 May
BASAL MANURING 160 kg
(15:13:20) at 1800 kg

- Tanks will be pumped out to a main gun or a tanker
- Pumping & cleaning tanks to be done by Silvol & Jenson
- All other operations by Farm
- Bonil or any at 5 kg to seedbed



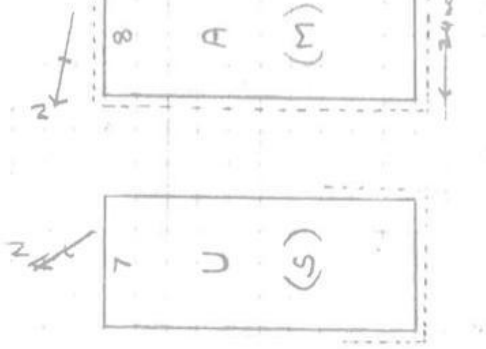
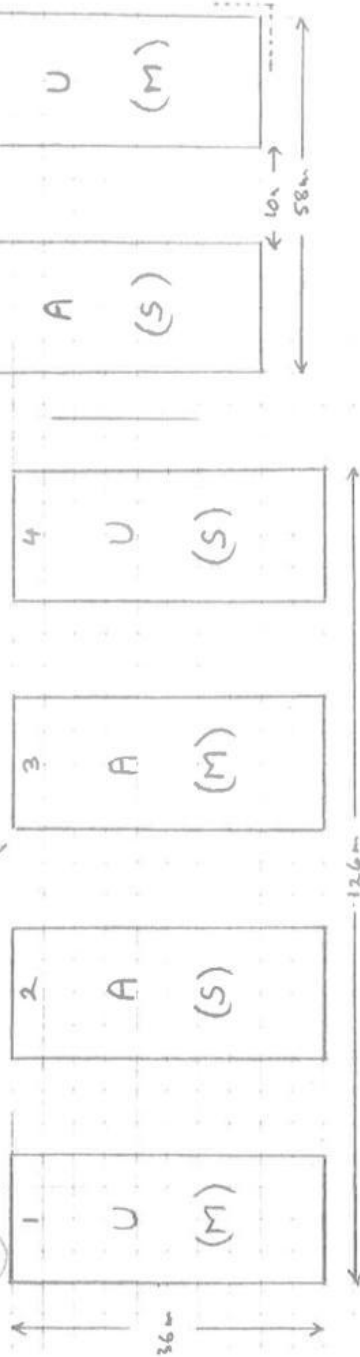
Bunds are 10-30cm high, 1m wide, erected after planting, tractor-traversable, graded on the down-slope end 1:20 across the slope to collecting outlet emptying into a tank:-

206
90
1989

Woburn
Erosion Reference Experiment
3rd Year W. Wheat

Sponsors: R. Webster, R.P.C. Morgan,
R.J. Rickson, P.P.R. Styles

90
89/W/RN/20



The relationships between plots is not as shown above but as indicated by the North points:-

DESIGN

2 blocks of 2x2

PLOT AREA

$24m \times 36m = 0.864 \text{ ha}$

TREATMENTS

Direction of all cultivation and planting

A Across the plots

U Up & down plots

Cultivation practices

(M) Minimum tillage: 1989 potato haulm pulverized & retained
1990 wheat straw chopped & raked in to 10cm

(S) Standard practice: 1989 potato haulm removed
1990 wheat straw baled & removed

VARIETY

Marcia sown @ 15kg/ha, Date:

BASAL MANURING

S.F.P.

Tanks will be pumped out to a main gun or a tanker

Pumping & cleaning tanks to be done by Silver & Sons

All other operations by Farm

Bunds are 10-30cm high, 1m wide, erected after sowing. Tractor-traversable, graded on the down slope end! 1:200 across the slope to a collecting outlet emptying into a tank:-



200

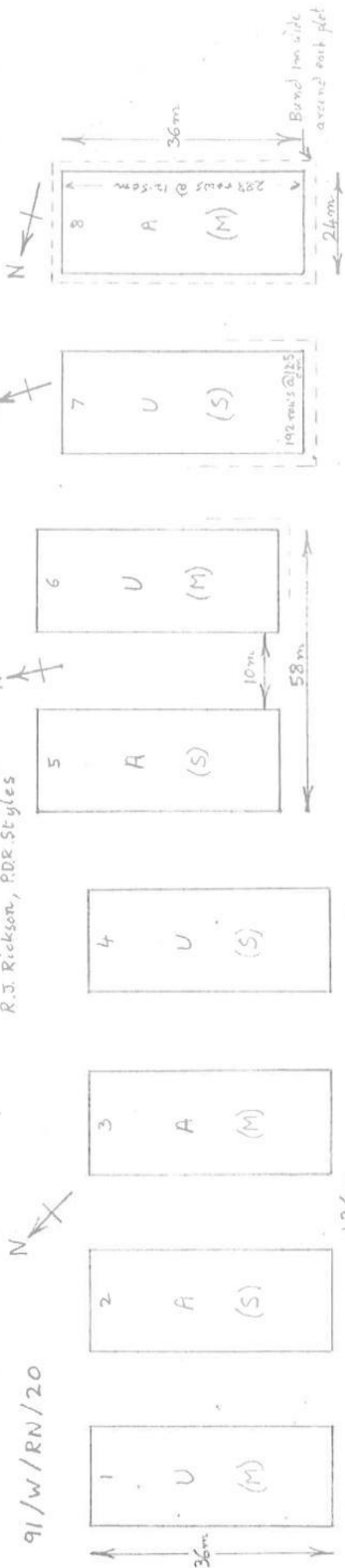
WOUBURN W. barley

EROSION REFERENCE EXPERIMENT
Sponsors J.A. Catt, RPCMorgan,
R.J. Rickson, PDR Styles

4th Year

GREAT HILL II/III 1991

91/W/RN/20



TREATMENTS

Direction of all cultivations and plowing

- A Across the plots
- U Up and down the plots.

Cultivation practices

- M) Minimum tillage: 1989 potato harrow, pulverizer & retained
- : 1990 wheat straw chopper, tined, 10cm
- : 1991 barley straw

Standard practice

- : 1989 plow, haulm removed
- : 1990 wheat straw baled & removed
- : 1991 barley straw

VARIETY

Magis

DESIGN

2 blocks of 2x2

PLOT AREA

$24m \times 36m = 0.864ha$

Tanks will be pumped out to a rain gun or a tank

Pumping & cleaning tanks to be done by Silcoe Sponsons

ALL other operations by farm

22 SEP 1990

The relationship between plots is not as shown above but as indicated by the Northprints



8

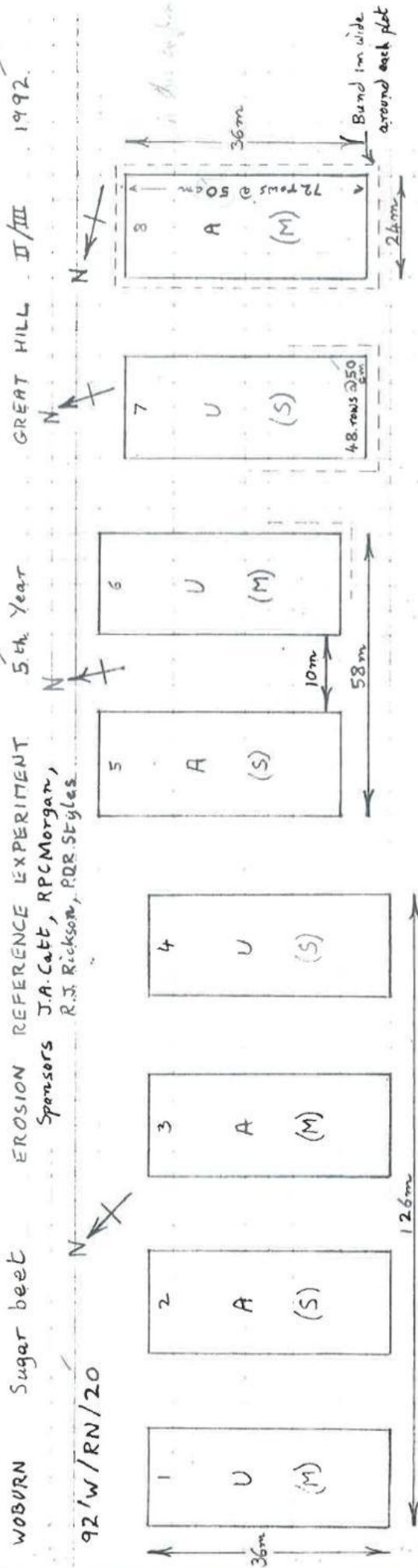
ROAD

COMPLETE & RETURN

TO F.I.E.S.

29 AUG 1990

205



WOBURN Sugar beet
 92'W/RN/20
 EROSION REFERENCE EXPERIMENT
 Sponsors J.A. Catt, R.P.C. Morgan, R.J. Rickson, P.D.R. Styles
 5th Year
 GREAT HILL II/III 1992

TREATMENTS
 Direction of all cultivations and planting
 A Across the plots
 U Up and down the plots.
 Cultivation practice
 M) Minimum tillage: 1989 potato haulm pulverized & retained
 : 1990 wheat straw chopped & retained to 10cm
 : 1991 barley straw
 : 1992 s. beet tops retained
 S) Standard practice: 1989 potato haulm removed
 : 1990 wheat straw baled & removed
 : 1991 barley straw
 : 1992 s. beet tops removed
 sown at 1:10 kg/ha on

DESIGN
 2 blocks of 2x2
PLOT AREA
 $24m \times 36m = 0.0864ha$
 || Tanks will be pumped out to a rain gun or a tanker.
 || Pumping & cleaning tanks to be done by Silise sponsors.
 || ALL other operations by Farm

ORDER OF OPERATIONS 1991/1992
 Mid-November (S) plots ploughed & pressed
 (M) plots uncultivated
 Mid-February (S) plots cultivated to seedbed
 (M) plots ploughed & cultivated to seedbed

VARIETY ...
BASAL MANURING N in spring
 N P K ...
CHECKED 4/10/8
DATE 9.10.96

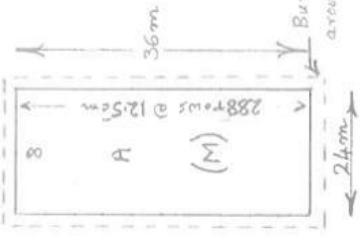
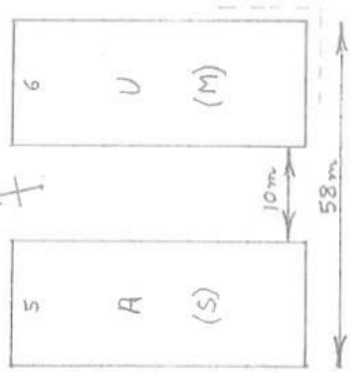
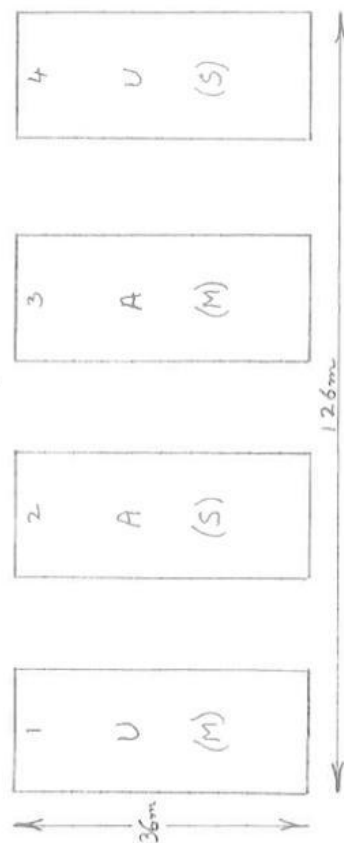
205

WOBURN W. wheat
93/W/RN/20

EROSION REFERENCE EXPERIMENT
Sponsors J.A. Catt, R.P.C. Morgan,
R.J. Rickson, P.D.R. Styles

6th Year

GREAT HILL II/III 1993



TREATMENTS

Direction of all cultivations and planting
A Across the plots
U Up and down the plots.

Cultivation practice

- M) Minimum tillage: 1989 potato haulm pulverized & retained
- : 1990 wheat straw chopped & retained to 10cm
- : 1991 barley straw
- : 1992 subsoil: tops retained
- : 1993 wheat straw chopped & retained to 10cm
- S) Standard practice : 1989 potato haulm removed
- : 1990 wheat straw baled & removed
- : 1991 barley straw
- : 1992 subsoil: tops removed
- : 1993 wheat straw baled & removed

VARIETY: ~~M~~ sown at 1g/ha on
BASAL FERTILISER: NPK Na Mg at 5FP.

SORSSON 2 166 kg/ha

Inilled 26 JAN 1993

DESIGN

2 blocks of 2x2

PLOT AREA
24m x 36m = 0.0864ha

- || Tanks will be pumped out to a rain gun or a tanker
- || Pumping & cleaning tanks to be done by Silcock sponsors
- || ALL other operations by Farm

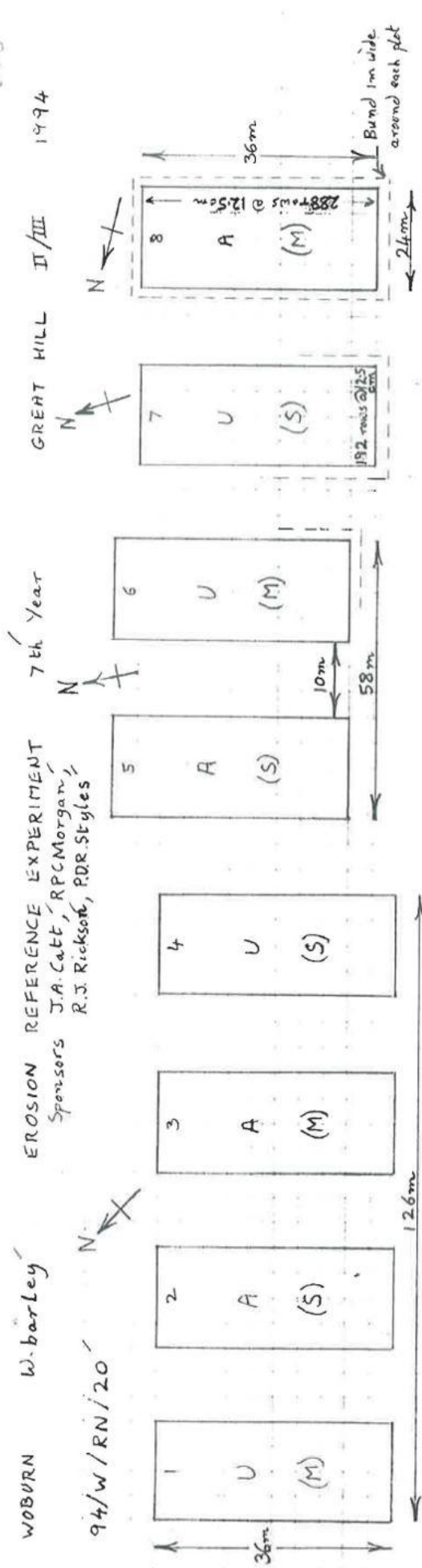
The relationship between plots is not as shown above but as indicated by the North points:-



ROAD

COMPLETE & RETURN

to F. E. S.



WOBURN W. barley
94/W/RN/20

EROSION REFERENCE EXPERIMENT
Sponsors J.A. Catt, RPC Morgan,
R.J. Rickson, PDR. Styles

7th Year

GREAT HILL II/III 1994

TREATMENTS

Direction of all cultivations and planting
A Across the plots
U Up and down the plots.

Cultivation practice

- (M) Minimum tillage: 1989 potato haulm pulverized & retained
- : 1990 wheat straw chopped & tined to 10cm
- : 1991 barley straw
- : 1992 s-beet tops retained
- : 1993 & 4 straw chopped tined to 10cm
- (S) Standard practice: 1989 potato haulm removed
- : 1990 wheat straw baled & removed
- : 1991 barley straw
- : 1992 s-beet tops removed
- : 1993 & 4 straw baled & removed

VARIETY Puffin sown at 1kg/ha on
BASAL MANURE N P K Na Mg at 5FP.

DESIGN

2 blocks of 2x2

PLOT AREA

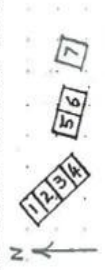
$24m \times 36m = 0.0864ha$

Tanks will be pumped out
to a rain gun or a tanker

Pumping & cleaning tanks to
be done by Silsoe sponsors

All other operations by Farm

The relationship between plots is not as shown above but as indicated by the North points.



CHECKED ATB
DATE 17 8 93

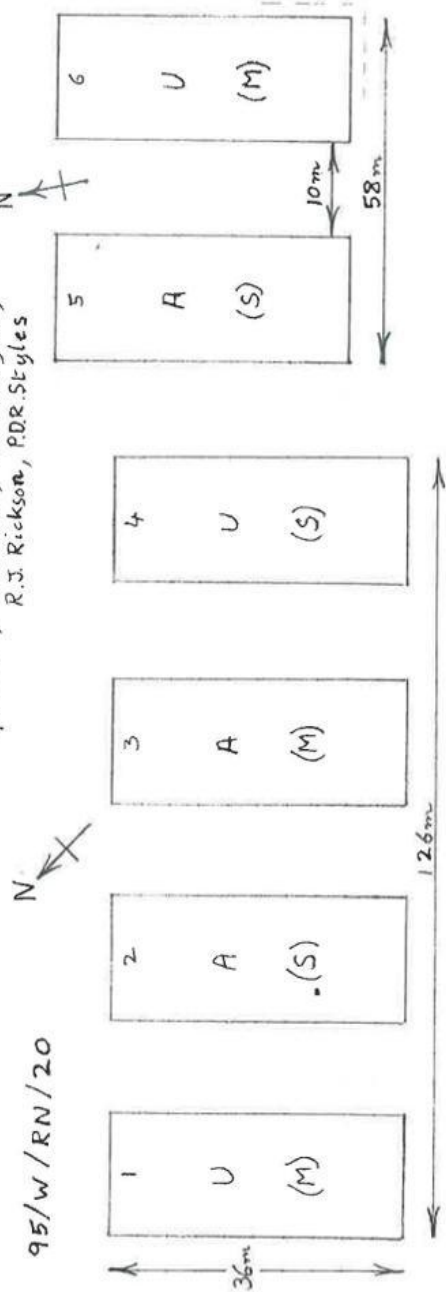
205

WOBURN Potatoes
95/W/RN/20

EROSION REFERENCE EXPERIMENT
Sponsors; J.A. Catt, RPC Morgan,
R.J. Rickson, PDR. Styles

8th Year

GREAT HILL II/III 1995



TREATMENTS

Direction of all cultivations and planting

- A Across the plots
- U Up and down the plots.

Cultivation practice

- (M) Minimum tillage: 1989 potato haulm pulverized & retained
- : 1990 & 1 straw chopped & retained to 10cm
- : 1992 5. beet tops retained
- : 1993 & 4 stray chopped & retained to 10cm
- : 1995 as 1989
- (S) Standard practice: 1989 potato haulm removed
- : 1990 & 1 straw baled & removed
- : 1992 5. beet tops removed
- : 1993 & 4 straw baled & removed
- : 1995 as 1989

VARIETY

Estima, 35-45 mm seed, planted at 22 cm spacing in 75 cm rows on 12th April 1995.

DESIGN

2 blocks of 2 x 2

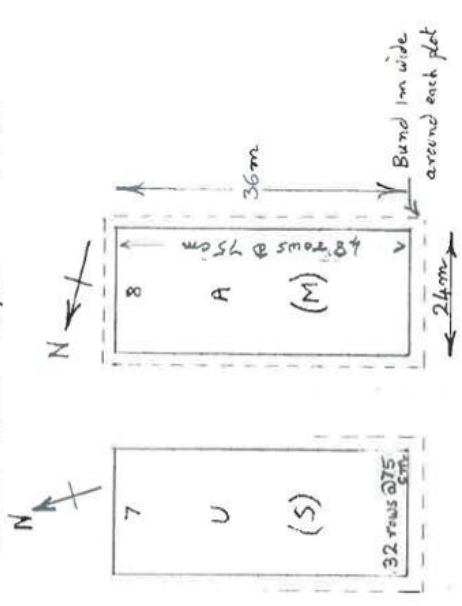
PLOT AREA

$24m \times 36m = 0.0864ha$

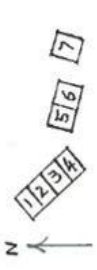
Tanks will be pumped out to a rain gun or a tanker

Pumping & cleaning tanks to be done by Farm

ALL other operations by Farm



The relationship between plots is not as shown above but as indicated by the North points:



ROAD

COMPLETE & RETURN

to F. E. S.

205

WOBURN W. wheat

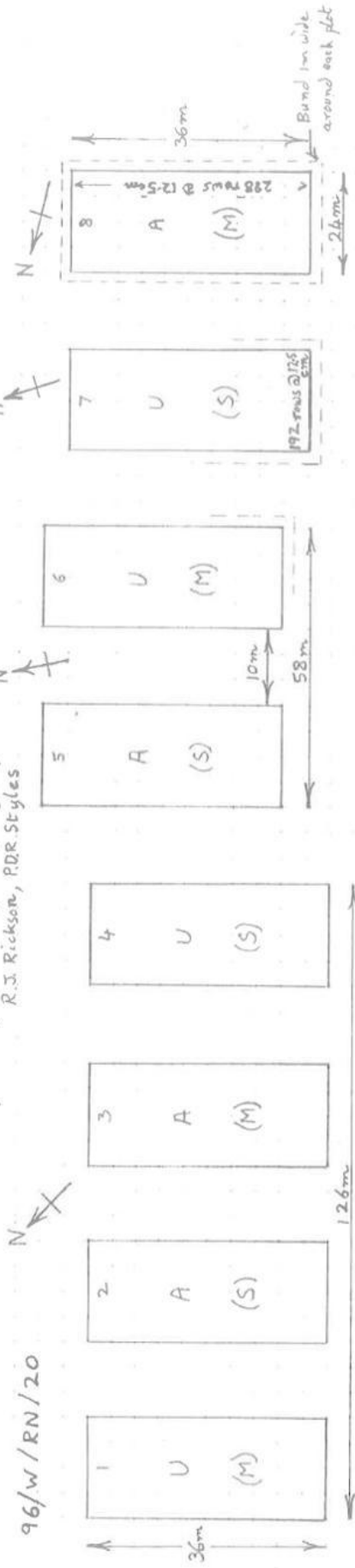
EROSION REFERENCE EXPERIMENT
Sponsors; J.A. Catt, R.P.C. Morgan,
R.J. Rickson, P.D.R. Styles

9th Year

GREAT HILL II/III

1996

96/W/RN/20



TREATMENTS

Direction of all cultivations and planting

- A Across the plots
- U Up and down the plots.

Cultivation practice

- (M) Minimum tillage: 1989 potato haulm pulverized & retained
- : 1990 & 1 straw chopped & retained to 10cm
- : 1992 5: beet tops retained
- : 1993, 4 & 6 straw chopped & retained to 10cm
- : 1995, 00 1989
- (S) Standard practice: 1989 potato haulm removed
- : 1990 & 1 straw baled & removed
- : 1992 5: beet tops removed
- : 1993, 4 & 6 straw baled & removed
- : 1995 00 1989

VARIETY Hereward dressed Panactina @ 375 seeds/m² on 9 Oct 1995
DISAL TREATMENT NPK as SF.P.

DESIGN

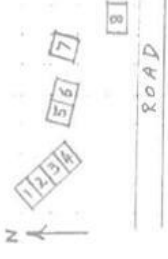
2 blocks of 2x2

PLOT AREA

$24m \times 36m = 0.864ha$

- || Tanks will be pumped out to a rain gun or a tanker
- || Pumping & cleaning tanks to be done by Farm
- || All other operations by Farm

The relationship between plots is not as shown above but as indicated by the North points:-



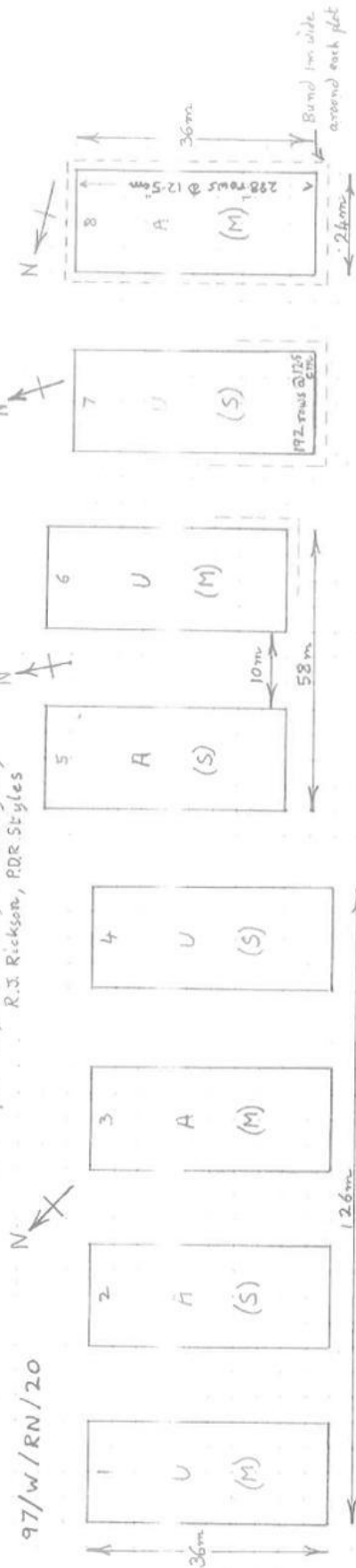
205

WOBURN W. Bartley
97/W/RN/20

EROSION REFERENCE EXPERIMENT
Sponsors: J.A. Catt, RPC Morgan,
R.J. Rickson, PDR Styles

10th Year

GREAT HILL II/III 1997



TREATMENTS

Direction of all cultivations and planting

- A Across the plots
- U Up and down the plots.

Cultivation practice

- (M) Minimum tillage: 1989 potato haulm pulverized & retained
- : 1990 & 1 straw chopped & tined to 10cm
- : 1992 5: beet tops retained
- : 1993, 4, 6, 7 straw chopped & tined to 10cm
- : 1995, as 1989
- (S) Standard practice: 1989 potato haulm removed
- : 1990 & 1 straw baled & removed
- : 1992 5: beet tops removed
- : 1993, 4, 6, 7 straw, baled & removed
- : 1995 as 1989

VARIETY

Basal Raxil S
NPK as SF.P.

DESIGN

2 blocks of 2 x 2

PLOT AREA

24m x 36m = 0.0864ha

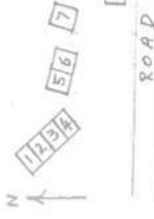
Tanks will be pumped out
to a rain gun or a tanker

Pumping & cleaning tanks to
be done by Farm

All other operations by Farm

Glean dressed Raxil S sown @ 400 seeds/m² on 3 Oct 1996

The relationship between plots is not as shown above but as indicated by the North points:-



98/W/RN/20

Erosion Reference Experiment

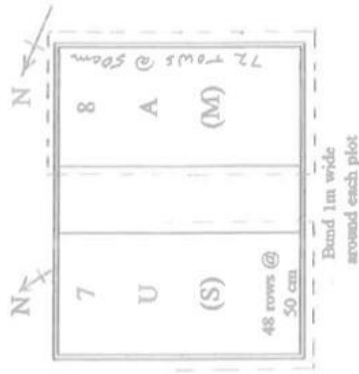
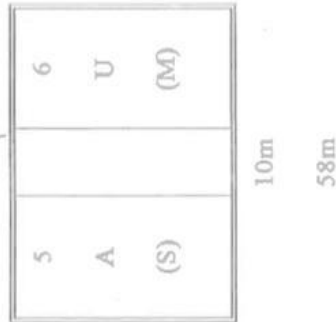
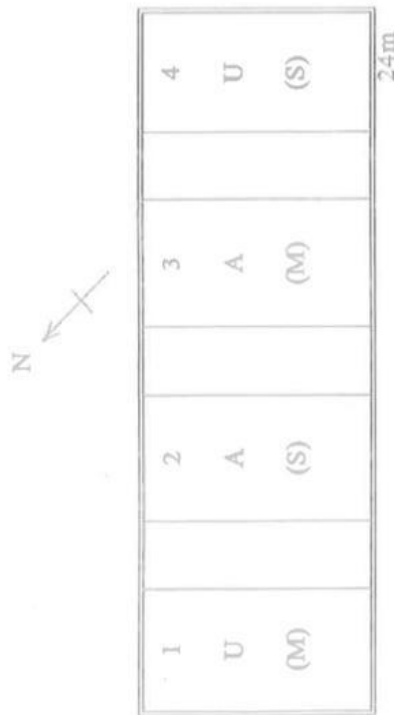
11th year

Great Hill II/III

205

Fodder beet

Sponsors: A.M. Hunt



Treatments

Direction of all cultivations and planting

- A Across the plots
- U Up and down the plots

Cultivation practice

- (M) Minimum tillage : 1989 & 95 potato haulm pulverized and retained
- : 1990,1,3,4,6 & 7 straw chopped and tined to 10 cm
- : 1992 & 8 sugar beet tops retained
- (S) Standard practice : 1989 & 95 potato haulm removed
- : 1990,1,3,4,6 & 7 straw removed
- : 1992 & 8 sugar beet tops removed

Variety

Nestor dressed TMTD and Gaucho sown at 10 seeds/m² on 19 March 1998

Basal manuring
NPK and Na at sfp

Design
2 blocks of 2 x 2

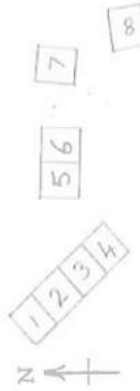
Plot area
24 m x 36 m = 0.0864 ha

// Tanks will be pumped out to a rain gun or a tanker

// Pumping and cleaning tanks to be done by Farm

// All operations by Farm

The relationship between plots is not as shown above but as indicated by the North points



Order of operations 1997/8

Mid-November : (S) plots ploughed and pressed
(M) plots uncultivated

Mid-February:
(S) plots cultivated to seedbed
(M) plots ploughed and cultivated to seedbed