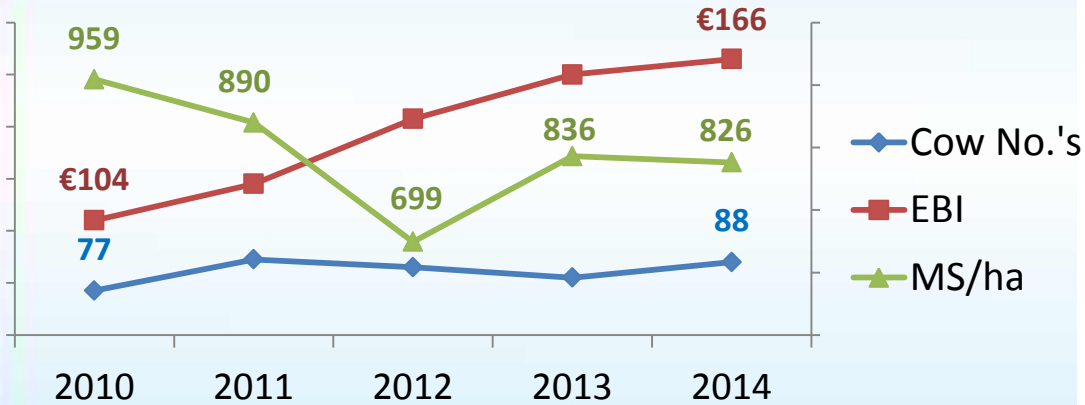
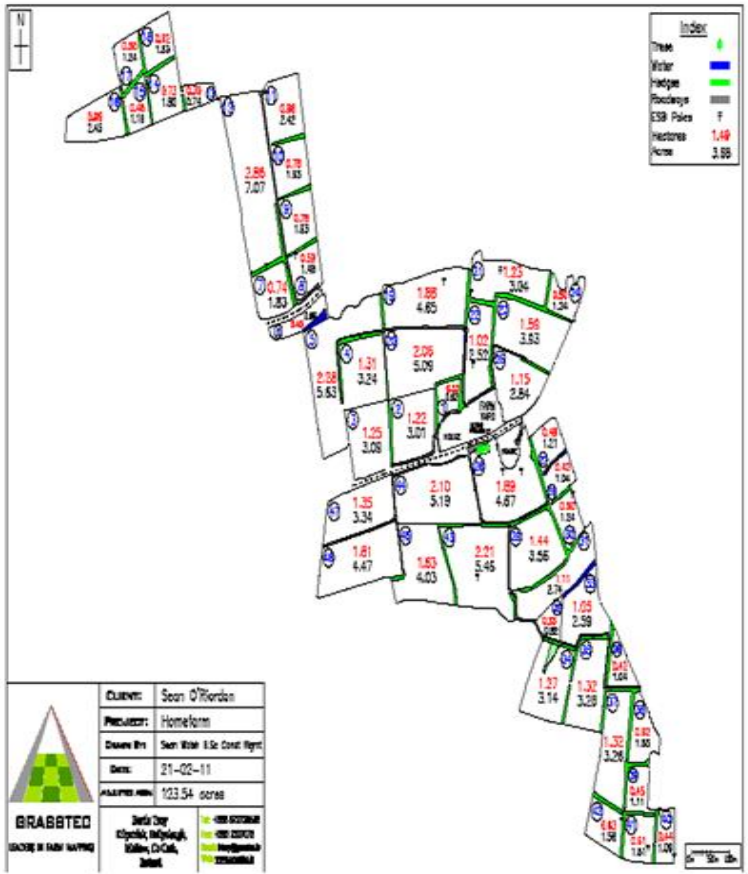
Sean O' Riordan's Farm Performance



Key Farm Drivers

- € Low Cost Grass-Based Dairy Production
- € Cow type – Fertility & Milk Solids
- € Increase profit & Manage Cash Flow
- € Silage reserves - Weather
- € Average Annual Rainfall (Kishkeam - 1622mm)



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KERRY

Sean O' Riordan – Farm Infrastructure

INFRASTRUCTURE	ADEQUACY		
	Good	Adequate	Needs Attention
Grazing			
Paddock Size	X		
Farm Roadways		X	
Water troughs	X		
Milking parlour			
No. of rows		X	
Collecting Yard		X	
Drafting			X
Farmyard			
Slurry Storage	X		
Silage Slab		X	
Cubicle Spaces		X	
Head Feed Space	X		
Calf Facilities		X	
Calving Facilities			X

5 Steps to Improving Soil Fertility

Information

1) Soil Test

2) Soil pH & Lime

Index	Description
1	Very Low
2	Low
3	Target
4	High

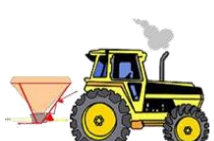
Interpretation

3) P & K Index 3

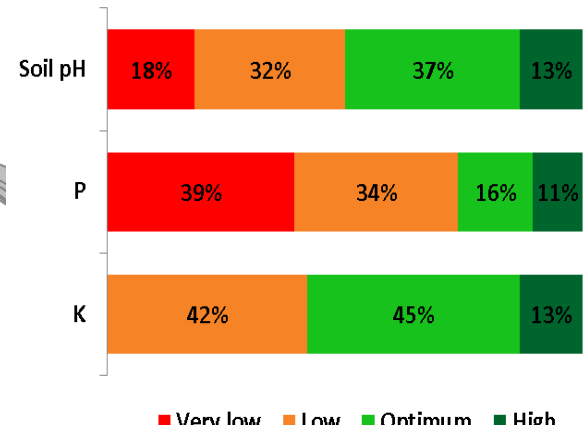
4) Slurry

Action

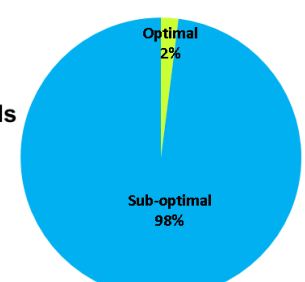
5) NPKS Balance

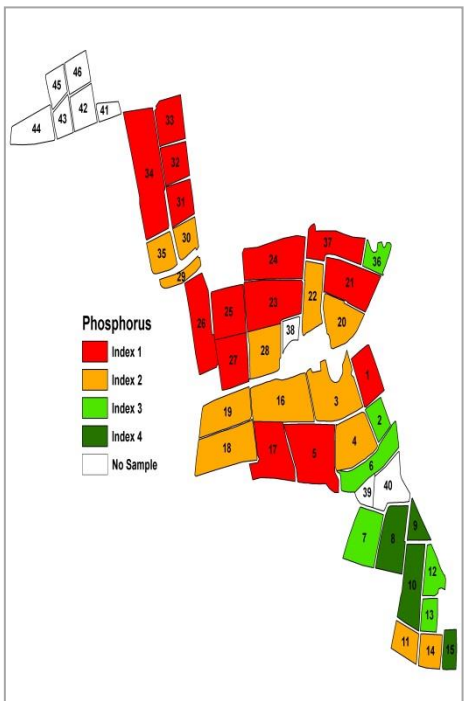


Soil Fertility Summary: O' Riordan's Farm



Percentage of soils with optimum soil pH, P & K status





Land Drainage Principles

Heavy Soils

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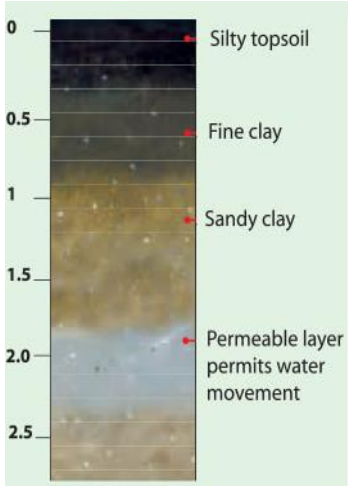
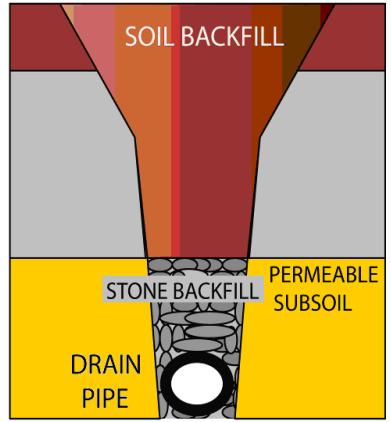
Problem Diagnosis

Soil Test pits (at least 2.5m deep)

- Design varies with soil type
- Is it a groundwater or shallow drainage problem?
- Water enters in permeable layers
- Other layers need help

Groundwater Drainage System





Tapping into the permeable layer

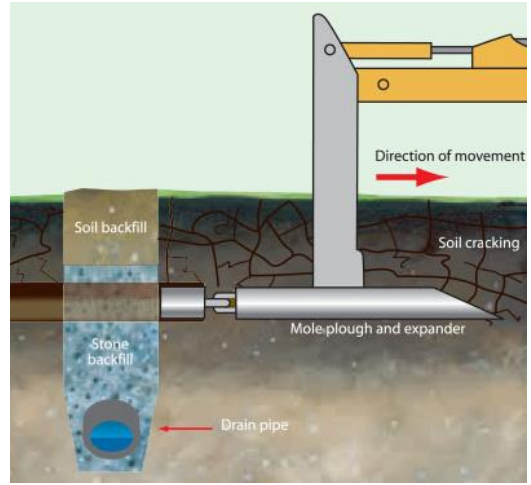
Conventional or deep pipe drains:

- Where a permeable layer will transmit water
- Where water can percolate to watertable
- Most effective way to discharge water

Shallow Drainage System

Mole/Gravel Mole drain/Subsoiling:

- Aim to fracture and crack the soil
- Effectiveness dependent on:
  - Soil clay/stone content
  - Implement used
  - Weather conditions
- Used In tandem with collector drains



Sean O' Riordan-Land Drainage Design

Heavy Soils

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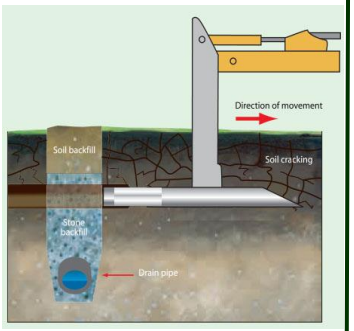
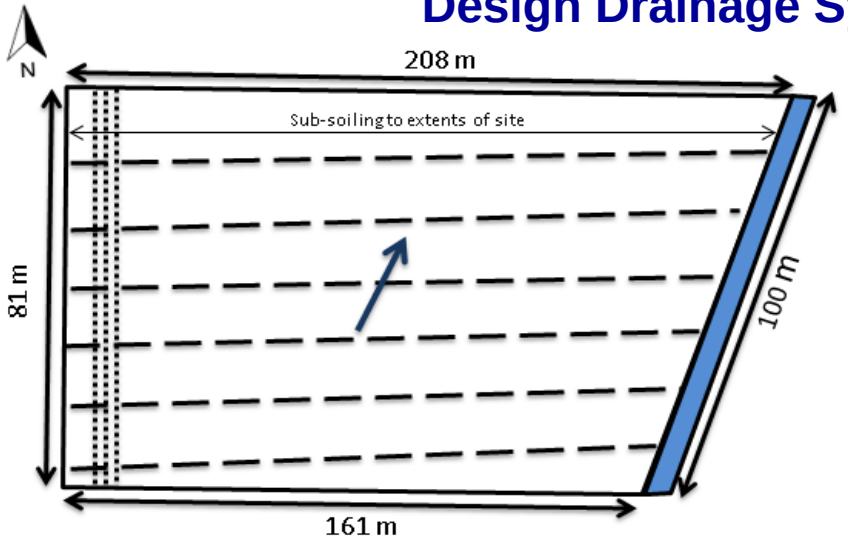
Shallow Drainage System

Sub-soiling:

- Aim to fracture and crack the soil
- Effectiveness Dependent on:
  - Soil clay/stone content
  - Implement used
  - Weather conditions
- Used In tandem with collector drains



Design Drainage System



Field drains: 1.1 m depth, 15 m spacing
Sub-soiling: 0.6 m depth, 1.5 m spacing
Field slope
Open drain

Sean O' Riordan – Drainage Costs

Heavy Soils

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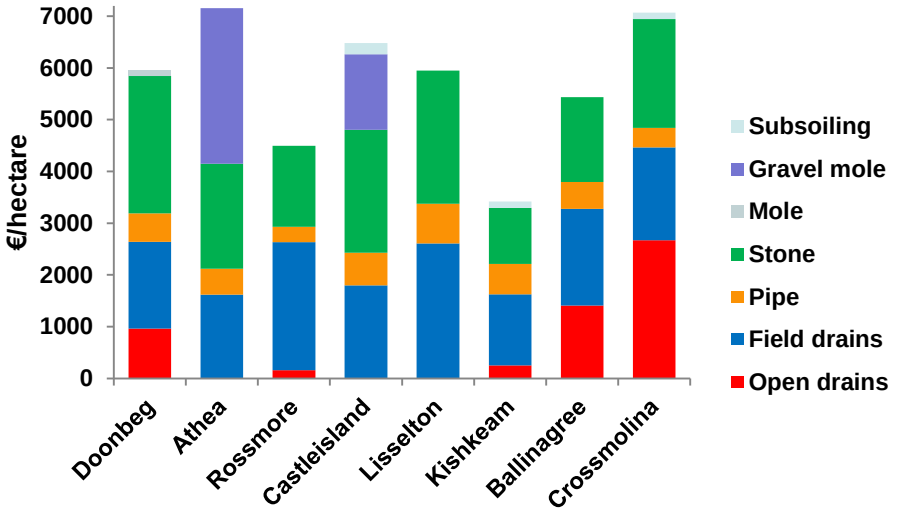
Key points:

- Soil investigation
- Site appraisal
- Drainage system design

Costs	Total/ha
Drain installation @ €45/hr (36 hrs)	€1,625
Drainage pipe @ €1.03/m (566 m)	€585
Drainage stone @ €10.78/t (101 t)	€1,085
Subsoiling	€125
Drainage cost	€3,420



Decision process:

- Soil fertility
- Farm roadway and water Infrastructure
- Ryegrass pasture
- Drainage