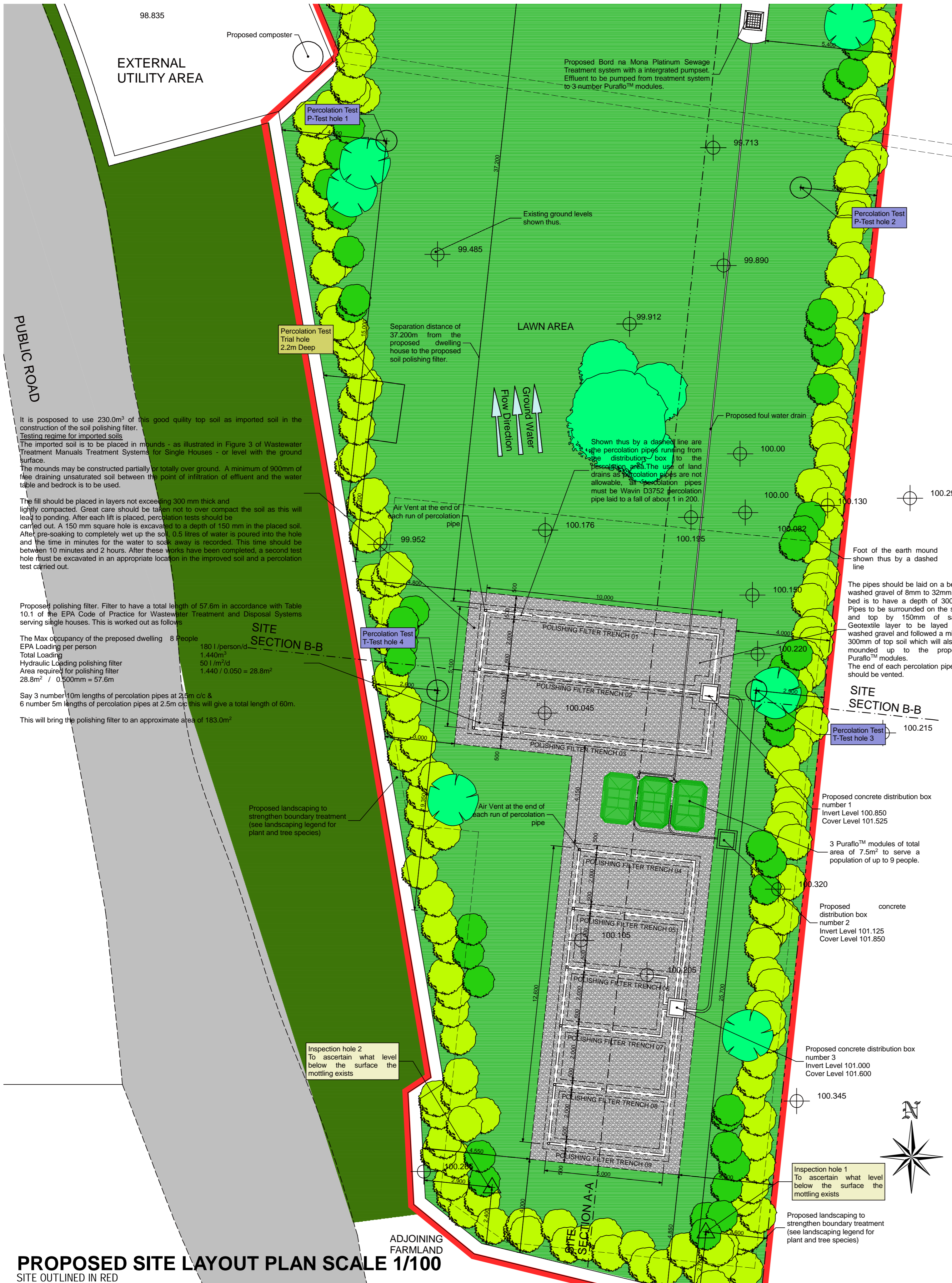


PROPOSED SITE LAYOUT PLAN SCALE 1/200

SITE OUTLINED IN RED
 SITE AREA - 2,259 Sq. M. / 0.22 Hec

THIS DRAWING IS PREPARED SOLELY FOR THE PURPOSES OF MAKING A PLANNING APPLICATION AND DOES NOT PERTAIN TO SHOW CONSTRUCTION INFORMATION FOR THE PURPOSE OF TENDERING OR BUILDING NOR DOES IT PERTAIN TO SHOW ALL INFORMATION REQUIRED FOR COMPLIANCE WITH BUILDING REGULATIONS

| | |
|---|-----------------|
| Declan Noonan & Associates Architecture, Engineering & Project Management Consultants | |
| Upper Main Street, Dingle, Co. Kerry | Client: |
| tel: 087 2837745 tel: 066 9150847 fax: 066 9151503 email: declannoonan@eircom.net | Date: Dmm/DN |
| Scale: 1:200 | Rev: |
| Title: Planning Application Drawing | Dwg No: |
| Please note that the COPYRIGHT of the information contained within this drawing remains with Declan Noonan & Associates | |



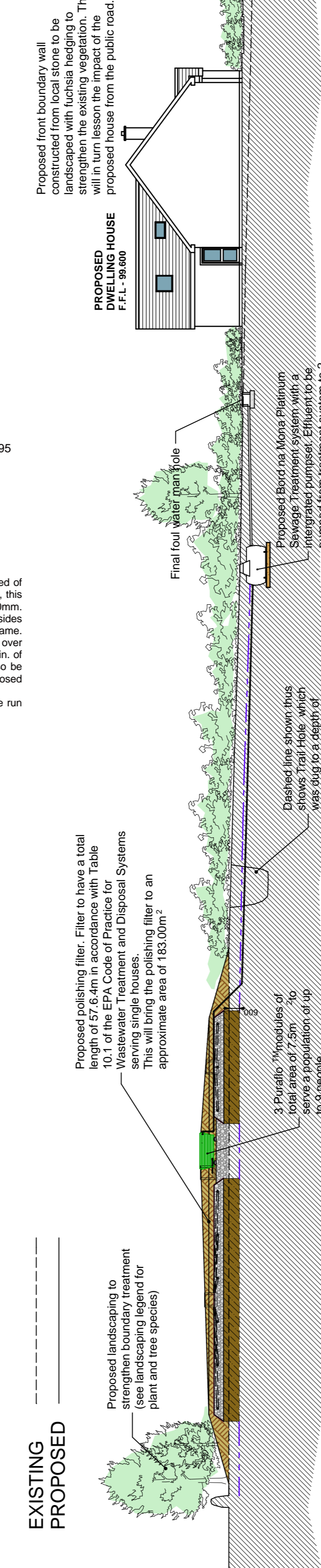
PROPOSED SITE LAYOUT PLAN SCALE 1/100
 SITE OUTLINED IN RED
 SITE AREA - 2,259 Sq. M. / 0.22 Hec

It is proposed to use 230.0m³ of this good quality top soil as imported soil in the construction of the soil polishing filter.
Testing regime for imported soil
 The imported soil is to be placed in mounds - as illustrated in Figure 3 of Wastewater Treatment Manuals Treatment Systems for Single Houses - or level with the ground surface.
 The mounds may be constructed partially or totally over ground. A minimum of 900mm of free draining unsaturated soil between the point of infiltration of effluent and the water table and bedrock is to be used.
 The fill should be placed in layers not exceeding 300 mm thick and lightly compacted. Great care should be taken not to over compact the soil as this will lead to ponding. After each lift is placed, percolation tests should be carried out. A 150 mm square hole is excavated to a depth of 150 mm in the placed soil. After pre-soaking to completely wet up the soil, 0.5 litres of water is poured into the hole and the time in minutes for the water to soak away is recorded. This time should be between 10 minutes and 2 hours. After these works have been completed, a second test hole must be excavated in an appropriate location in the improved soil and a percolation test carried out.

Proposed polishing filter. Filter to have a total length of 57.6m in accordance with Table 10.1 of the EPA Code of Practice for Wastewater Treatment and Disposal Systems serving single houses. This is worked out as follows:
 The Max occupancy of the proposed dwelling 8 People
 EPA Loading per person 1.440m³
 Total Loading 11.52m³
 Hydraulic Loading polishing filter 50 l/m²/d
 Area required for polishing filter 1.440 / 0.050 = 28.8m²
 28.8m² / 0.300mm = 57.6m
 Say 3 number 10m lengths of percolation pipes at 2.0m o/c & 6 number 5m lengths of percolation pipes at 2.5m o/c this will give a total length of 60m.
 This will bring the polishing filter to an approximate area of 183.0m²

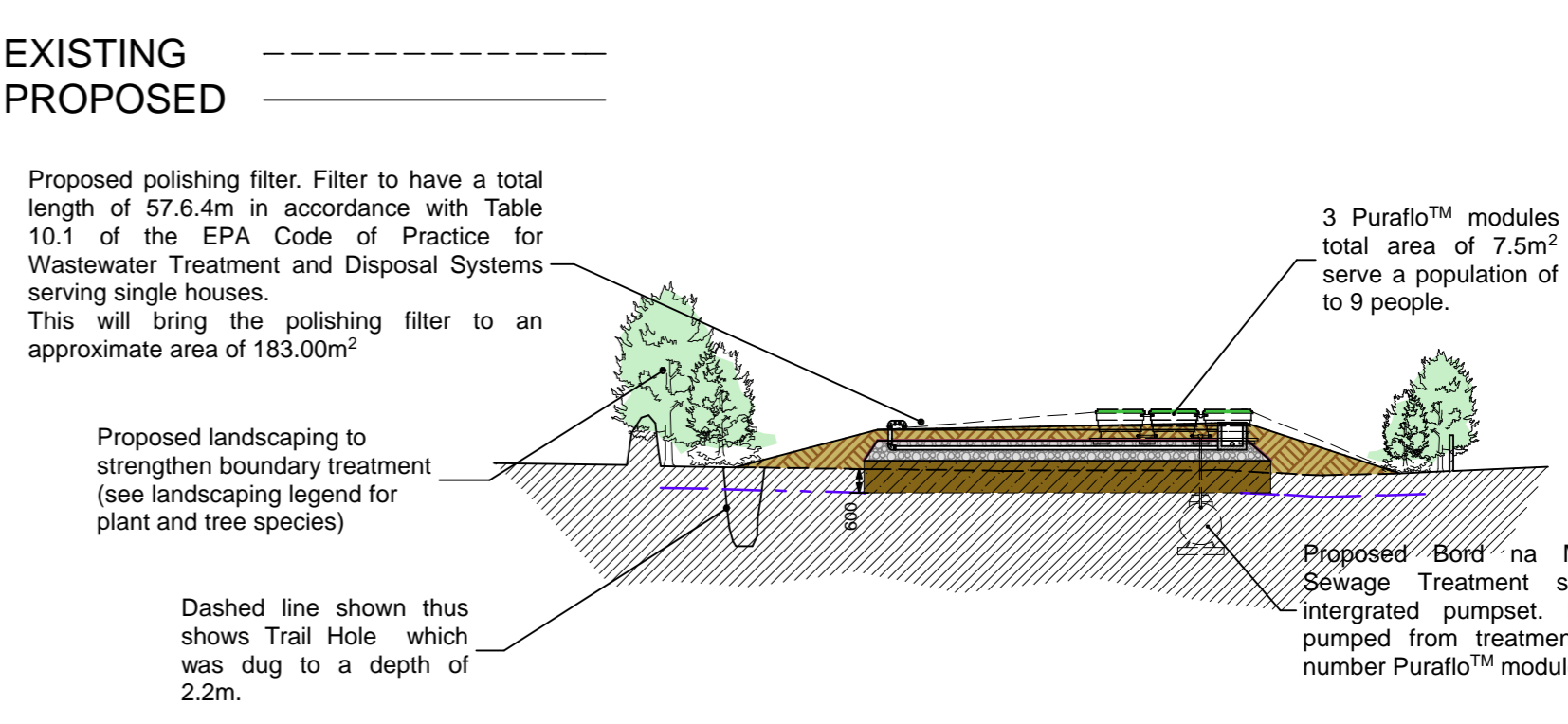
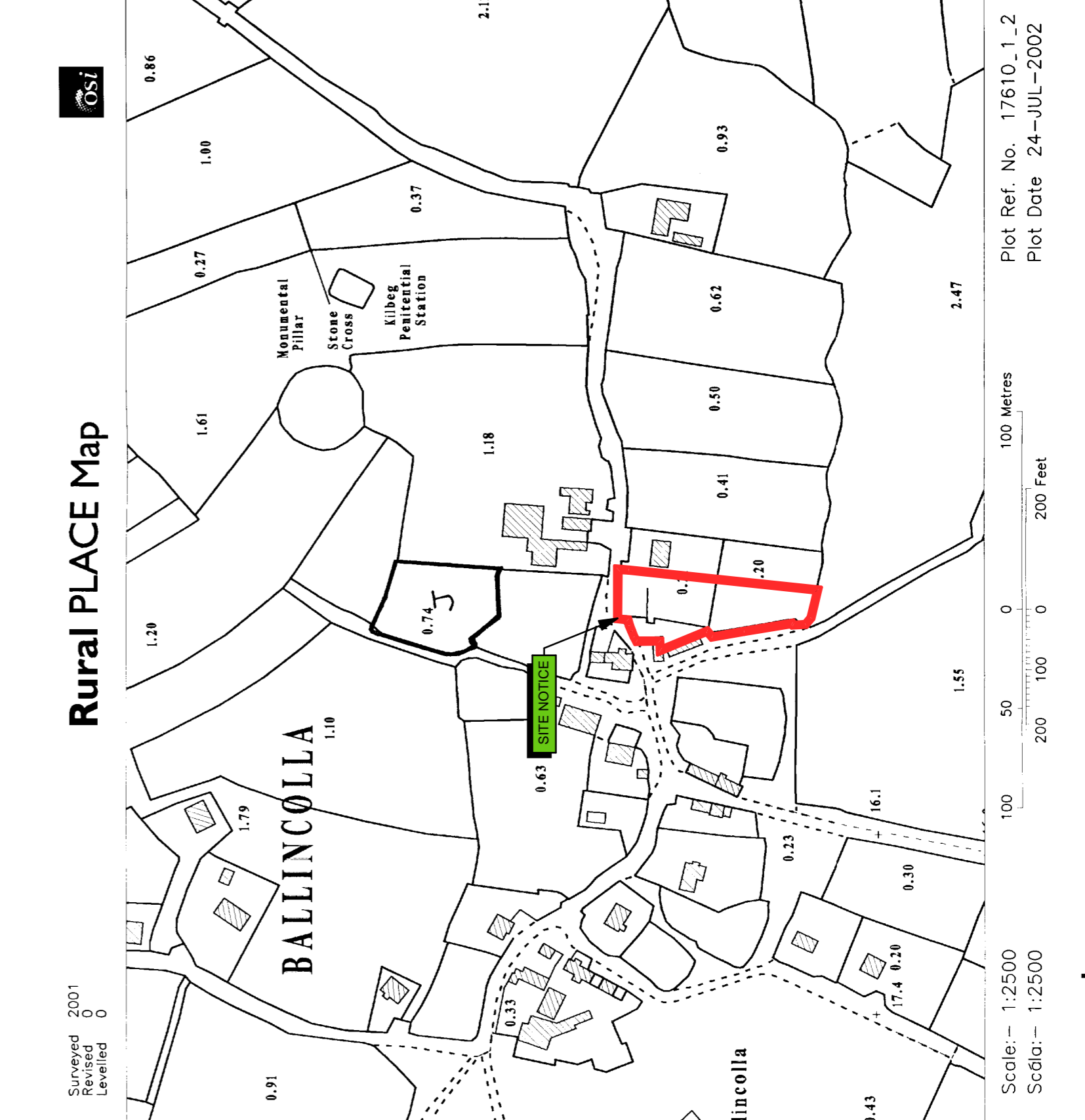
SITE SECTION B-B

| | |
|--|--------------------------------------|
| Max occupancy of the proposed dwelling | 8 People |
| EPA Loading per person | 1.440m ³ |
| Total Loading | 11.52m ³ |
| Hydraulic Loading polishing filter | 50 l/m ² /d |
| Area required for polishing filter | 1.440 / 0.050 = 28.8m ² |
| | 28.8m ² / 0.300mm = 57.6m |



PROPOSED SITE SECTION A-A SCALE 1/200
 DATUM 93.00

PROPOSED SITE SECTION B-B SCALE 1/200
 DATUM 93.00



EXISTING PROPOSED
 Proposed polishing filter. Filter to have a total length of 57.6m in accordance with Table 10.1 of the EPA Code of Practice for Wastewater Treatment and Disposal Systems serving single houses. This will bring the polishing filter to an approximate area of 183.00m²
 3 Puraflo™ modules of total area of 7.5m² to serve a population of up to 9 people.
 Proposed landscaping to strengthen boundary treatment (see landscaping legend for plant and tree species)
 Proposed Bord na Mona Platinum Sewage Treatment system with an integrated pumpset. Effluent to be pumped from treatment system to 3 number Puraflo™ modules.
 Dashed line shown thus shows Trail Hole which was dug to a depth of 2.2m.

PROPOSED SITE SECTION B-B SCALE 1/200
 DATUM 93.00

Declan Noonan & Associates
 Architecture, Engineering & Project Management Consultants

Upper Main Street, Dingle, Co. Kerry
 tel: 087 2837745
 tel: 066 9150847
 fax: 066 9151503
 email: declannoonan@eircom.net

Client: _____
 Title: **Planning Application Drawing**

Scale: 1:100, 1:200, 1:2500
 Date: _____
 Drawn: DN
 Dwg No: _____

Please note that the COPYRIGHT of the information contained within this drawing remains with Declan Noonan & Associates

THIS DRAWING IS PREPARED SOLELY FOR THE PURPOSES OF MAKING A PLANNING APPLICATION AND DOES NOT PERTAIN TO SHOW CONSTRUCTION INFORMATION FOR THE PURPOSE OF TENDERING OR BUILDING NOR DOES IT PERTAIN TO SHOW ALL INFORMATION REQUIRED FOR COMPLIANCE WITH BUILDING REGULATIONS

EXISTING
PROPOSED

Proposed polishing filter. Filter to have a total length of 57.6m in accordance with Table 10.1 of the EPA Code of Practice for Wastewater Treatment and Disposal Systems serving single houses. This is worked out as follows

The Max occupancy of the proposed dwelling 8 People
 EPA Loading per person 180 l/person/d
 Total Loading 1,440m³
 Hydraulic Loading polishing filter 50 l/m²/d
 Area required for polishing filter 1,440 / 0.050 = 28.8m²
 28.8m² / 0.500m = 57.6m

Say 3 number 10m lengths of percolation pipes at 2.5m c/c & 6 number 5m lengths of percolation pipes at 2.5m c/c this will give a total length of 60m.

This will bring the polishing filter to an approximate area of 183.0m²

Shown thus by a dashed line are percolation pipes running from 3 Puraflor™ modules by gravity. The use of land drains as percolation pipes are not allowable, all percolation pipes must be Wavin D3752 percolation pipe laid to a fall of about 1 in 200.

3 Puraflor™ modules of total area of 7.5m² to serve a population of up to 9 people.

It is proposed to use 230.0m³ of this good quality top soil as imported soil in the construction of the soil polishing filter.

The imported soil is to be placed in mounds - as illustrated in Figure 3 of Wastewater Treatment Manuals Treatment Systems for Single Houses - or level with the ground surface. The mounds may be constructed partially or totally over ground. A minimum of 900mm of free draining unsaturated soil between the point of infiltration of effluent and the water table and bedrock is to be used.

The fill should be placed in layers not exceeding 300 mm thick and lightly compacted. Great care should be taken not to over compact the soil as this will lead to ponding. After each lift is placed, percolation tests should be carried out. A 150 mm square hole is excavated to a depth of 150 mm in the placed soil. After pre-soaking to completely wet up the soil, 0.5 litres of water is poured into the hole and the time in minutes for the water to soak away is recorded. This time should be between 10 minutes and 2 hours. After these works have been completed, a second test hole must be excavated in an appropriate location in the improved soil and a percolation test carried out.

Dashed line shown level of mottling recorded in the trial hole 900mm down from the ground level. We have opted for a larger (900mm) separation distance, even though a minimum of 600mm of free draining unsaturated soil between the point of infiltration of the effluent and water table is specified in Wastewater Treatment Manual for Treatment Systems for Single Houses. 900mm is the minimum distance specified in the new Code of Practice.

Imported soil from the dwelling house excavation is to be used in this location to bring up the level of the existing ground surrounding the polishing filter.

Proposed concrete distribution box number 2 Invert Level 101.125 Cover Level 101.950

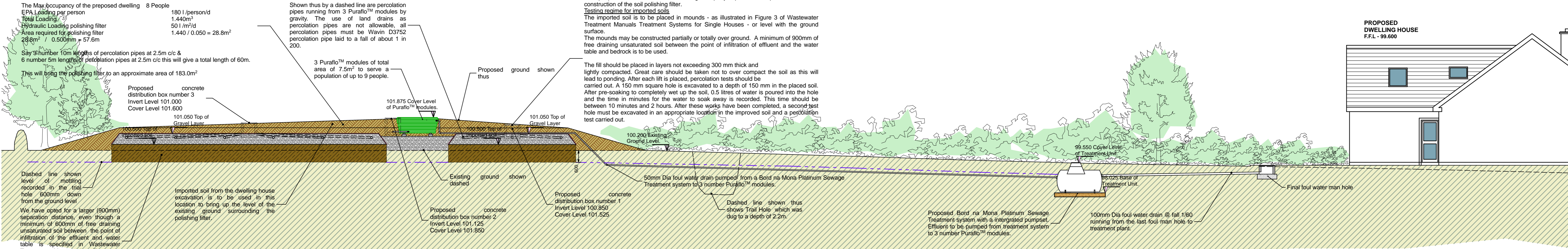
Proposed concrete distribution box number 1 Invert Level 100.850 Cover Level 101.525

Dashed line shown thus shows Trail Hole which was dug to a depth of 2.2m.

Proposed Bord na Mona Platinum Sewage Treatment system with an integrated pumpset. Effluent to be pumped from treatment system to 3 number Puraflor™ modules.

100mm Dia foul water drain @ fall 1/80 running from the last foul man hole to treatment plant.

PROPOSED DWELLING HOUSE
F.F.L. - 99.600



DATUM 93.00
PROPOSED SITE SECTION A-A
SCALE 1/100

EXISTING
PROPOSED

Proposed polishing filter. Filter to have a total length of 57.6m in accordance with Table 10.1 of the EPA Code of Practice for Wastewater Treatment and Disposal Systems serving single houses. This is worked out as follows

The Max occupancy of the proposed dwelling 8 People
 EPA Loading per person 180 l/person/d
 Total Loading 1,440m³
 Hydraulic Loading polishing filter 50 l/m²/d
 Area required for polishing filter 1,440 / 0.050 = 28.8m²
 28.8m² / 0.500m = 57.6m

Say 3 number 10m lengths of percolation pipes at 2.5m c/c & 6 number 5m lengths of percolation pipes at 2.5m c/c this will give a total length of 60m.

This will bring the polishing filter to an approximate area of 183.0m²

Proposed 3 Puraflor™ modules to be used for tertiary treatment or additional treatment. This results in further purification than that obtained by applying primary or secondary treatment. Modules have a total area of 7.5m² to serve a population of up to 9 people.

3 Puraflor™ modules of total area of 7.5m² to serve a population of up to 9 people.

3 Puraflor™ modules of total area of 7.5m² to serve a population of up to 9 people.

Proposed concrete distribution box number 3 Invert Level 100.850 Cover Level 101.525

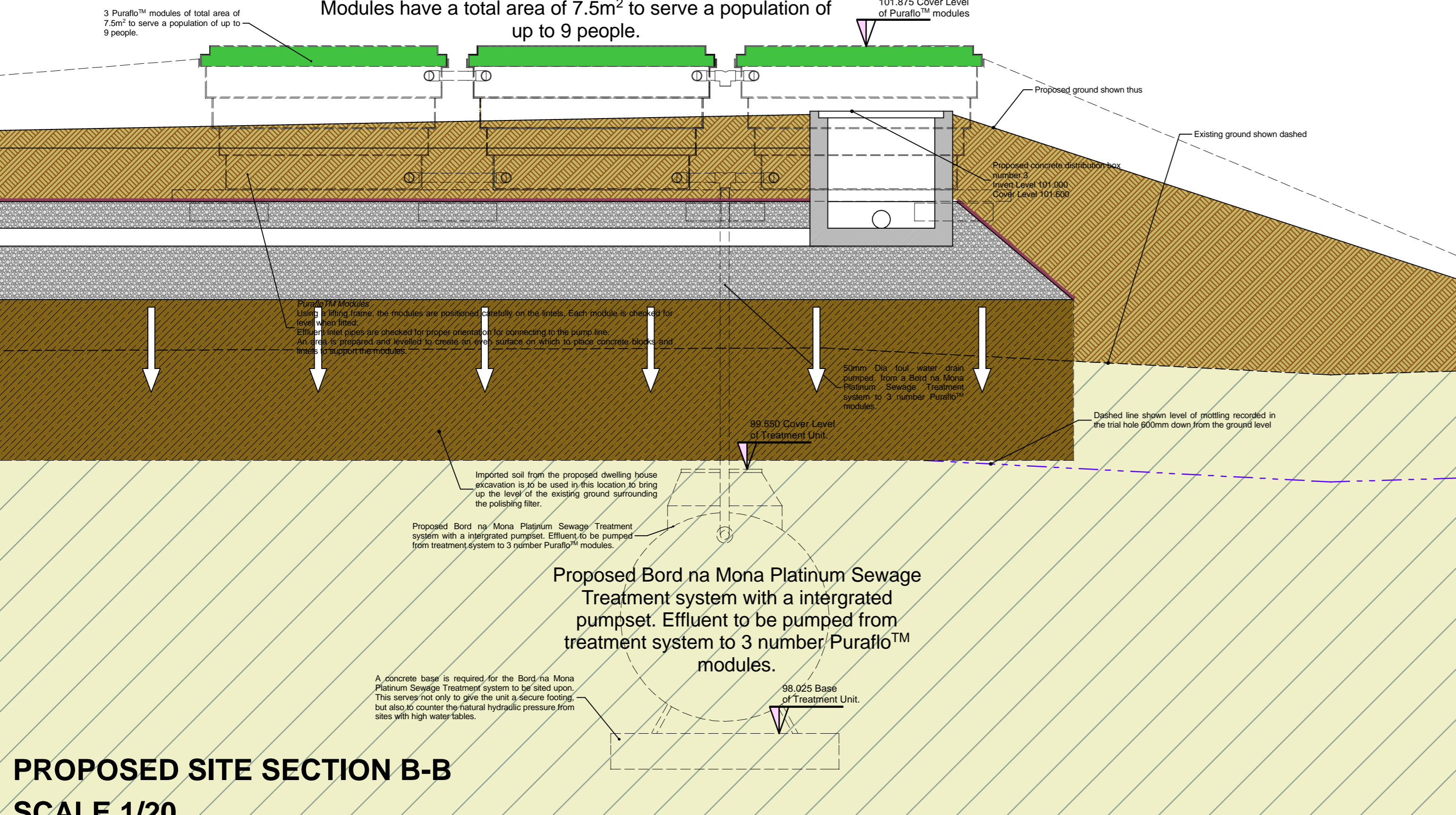
Dashed line shown thus shows Trail Hole which was dug to a depth of 2.2m.

Dashed line shown level of mottling recorded in the trial hole 900mm down from the ground level

Imported soil from the dwelling house excavation is to be used in this location to bring up the level of the existing ground surrounding the polishing filter.

Shown thus by a dashed line are percolation pipes running from 3 Puraflor™ modules by gravity. The use of land drains as percolation pipes are not allowable, all percolation pipes must be Wavin D3752 percolation pipe laid to a fall of about 1 in 200.

Proposed Bord na Mona Platinum Sewage Treatment system with an integrated pumpset. Effluent to be pumped from treatment system to 3 number Puraflor™ modules.



PROPOSED SITE SECTION B-B
SCALE 1/20

DATUM 93.00
PROPOSED SITE SECTION B-B
SCALE 1/100

THIS DRAWING IS PREPARED SOLELY FOR THE PURPOSES OF MAKING A PLANNING APPLICATION AND DOES NOT PERTAIN TO SHOW CONSTRUCTION INFORMATION FOR THE PURPOSE OF TENDERING OR BUILDING NOR DOES IT PERTAIN TO SHOW ALL INFORMATION REQUIRED FOR COMPLIANCE WITH BUILDING REGULATIONS

Declan Noonan & Associates
Architecture, Engineering & Project Management Consultants

Upper Main Street,
Dingle,
Co. Kerry

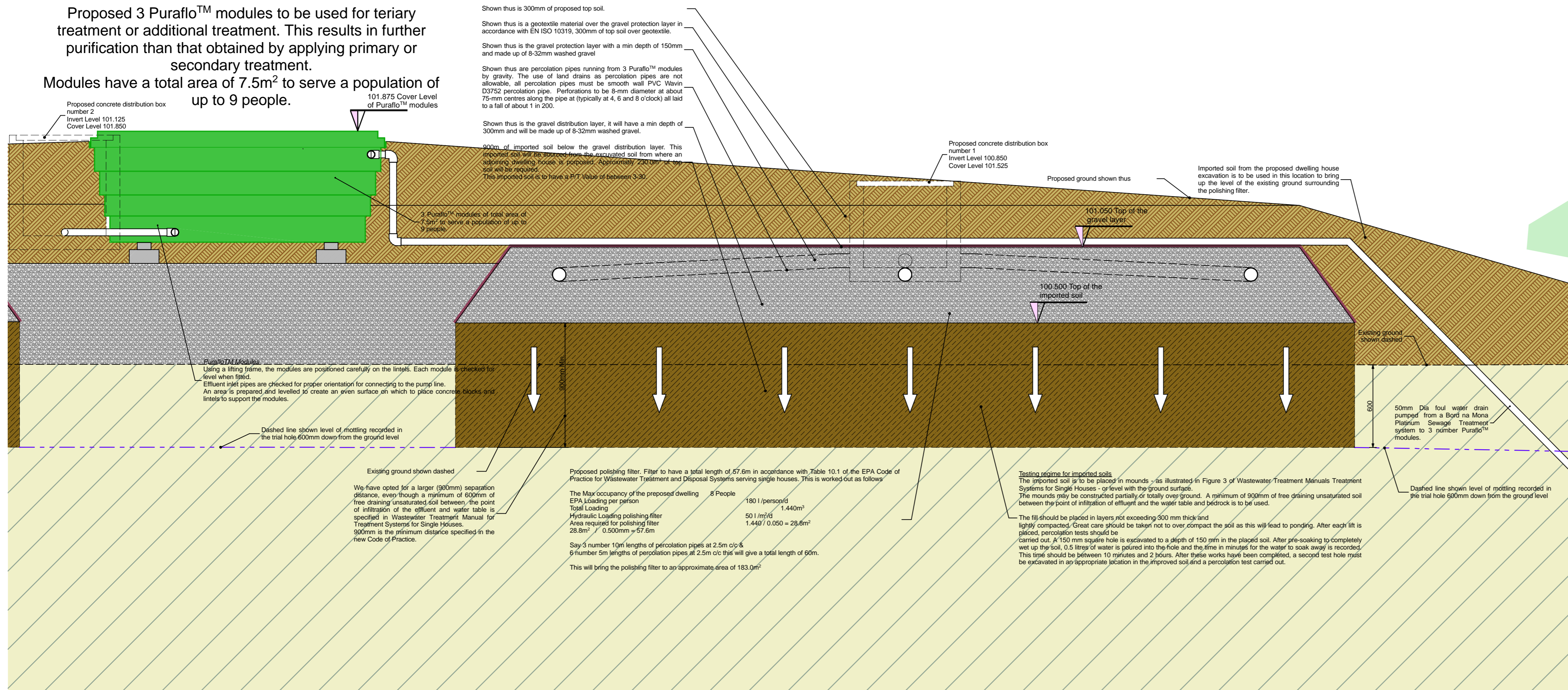
tel: 087 2837745
tel: 066 9150847
fax: 066 9151503
email: declannoonan@eircom.net

Client:
Title:
Planning Application Drawing

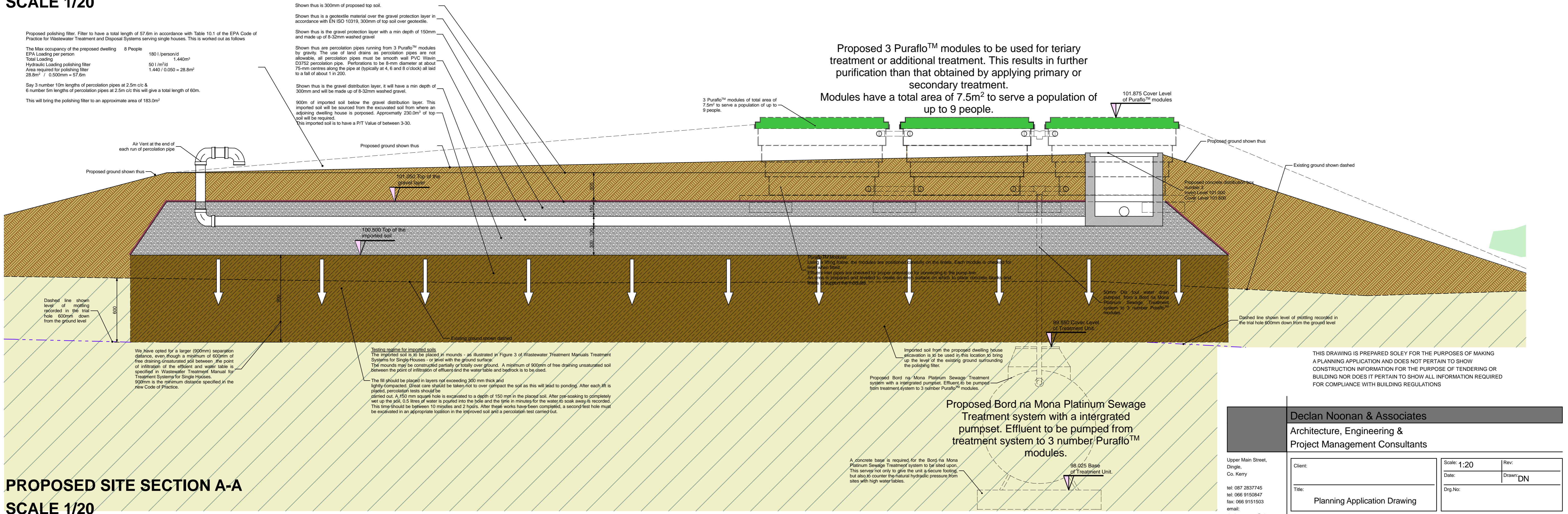
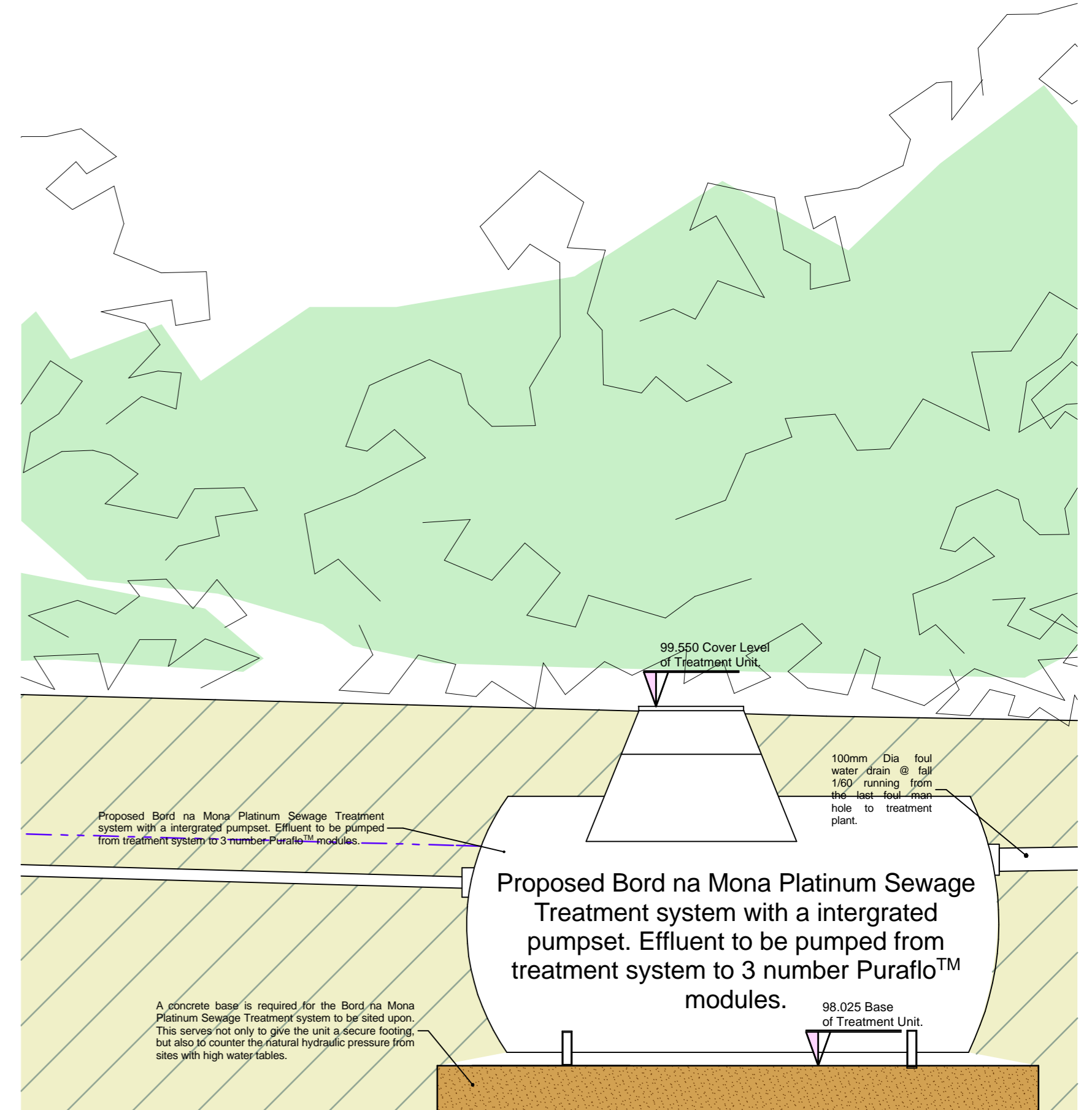
Scale: 1:100
Rev:
Date:
Drawn: DN
Dwg No:

Please note that the COPYRIGHT of the information contained within this drawing remains with Declan Noonan & Associates

Proposed 3 Puraflo™ modules to be used for tertiary treatment or additional treatment. This results in further purification than that obtained by applying primary or secondary treatment. Modules have a total area of 7.5m² to serve a population of up to 9 people.



PROPOSED SITE SECTION A-A
SCALE 1/20



PROPOSED SITE SECTION A-A
SCALE 1/20

Proposed 3 Puraflo™ modules to be used for tertiary treatment or additional treatment. This results in further purification than that obtained by applying primary or secondary treatment. Modules have a total area of 7.5m² to serve a population of up to 9 people.

THIS DRAWING IS PREPARED SOLELY FOR THE PURPOSES OF MAKING A PLANNING APPLICATION AND DOES NOT PERTAIN TO SHOW CONSTRUCTION INFORMATION FOR THE PURPOSE OF TENDERING OR BUILDING NOR DOES IT PERTAIN TO SHOW ALL INFORMATION REQUIRED FOR COMPLIANCE WITH BUILDING REGULATIONS

| | | | |
|--|---|--|-----------|
| Declan Noonan & Associates | | Architecture, Engineering & Project Management Consultants | |
| Upper Main Street, Drogheda, Co. Kerry | Client: | Scale: 1:20 | Rev: |
| tel: 087 2837745 tel: 066 9150847 fax: 066 9151503 email: declannoonan@eircom.net | Title: Planning Application Drawing | Date: | Drawn: DN |
| | | Dwg No: | |

Please note that the COPYRIGHT of the information contained within this drawing remains with Declan Noonan & Associates