

Lot 1 – Primary System

Fine loamy sand, approx 0% slope.

Hydraulic Loading Rate (HLR) – Based on Spm Table 2-8

- Fine sand texture
- Single Grain Structure
- loose Consistence
- HLR from table 2-8 assigns an HLR of 25 litres/m²/day

System Sizing – Based on Appendix 2 – Discharge area Sizing, Interior Health Subdivision Guideline HPK9040 June 2007.

- Base area for primary and reserve fields - 381m² for an HLR of 25 litres/m²/day

Calculations:

Base Area for both fields		381m ²
Base area for 1 field	381m ² /2	190m ²

Configuration of field:

Appendix 2 requires 113 m of .61m wide trenches.

To meet Spm linear loading rates (SPM table 2-11) the system must be a minimum of 25 metres in length. To attain this length, 4 lateral sections of 28.2 metres are required.

System Dimensions:

Length	28.2m +6 for construction	34.2m
Width	190m (area required) divided by 28.2 min system length 6.7m + 6 for construction	12.7m

Dimensions of Lot 1 Primary System: 34.2 metres X 12.7 metres



Lot 1 – Reserve System

Silt Loam, approx 20% slope.

Hydraulic Loading Rate (HLR) – Based on Spm Table 2-8

- Sandy Loam Texture
- Moderate Angular Blocky Structure
- Friable Consistence
- HLR from table 2-8 assigns an HLR of 25 litres/m²/day

System Sizing – Based on Appendix 2 – Discharge area Sizing, Interior Health Subdivision Guideline HPK9040 June 2007.

- Base area for primary and reserve fields over 10% - 419 m² for an HLR of 25 litres/m²/day

Calculations:

Base Area for both fields		419m ²
Base area for 1 field	419m ² /2	209m ²
Addition for slope >10%	(209 X.2)+209	251m ² of area required for primary field

Configuration of field:

Appendix 2 requires 113 m of .61m wide trenches.
4 lateral sections of 28.2 metres in length

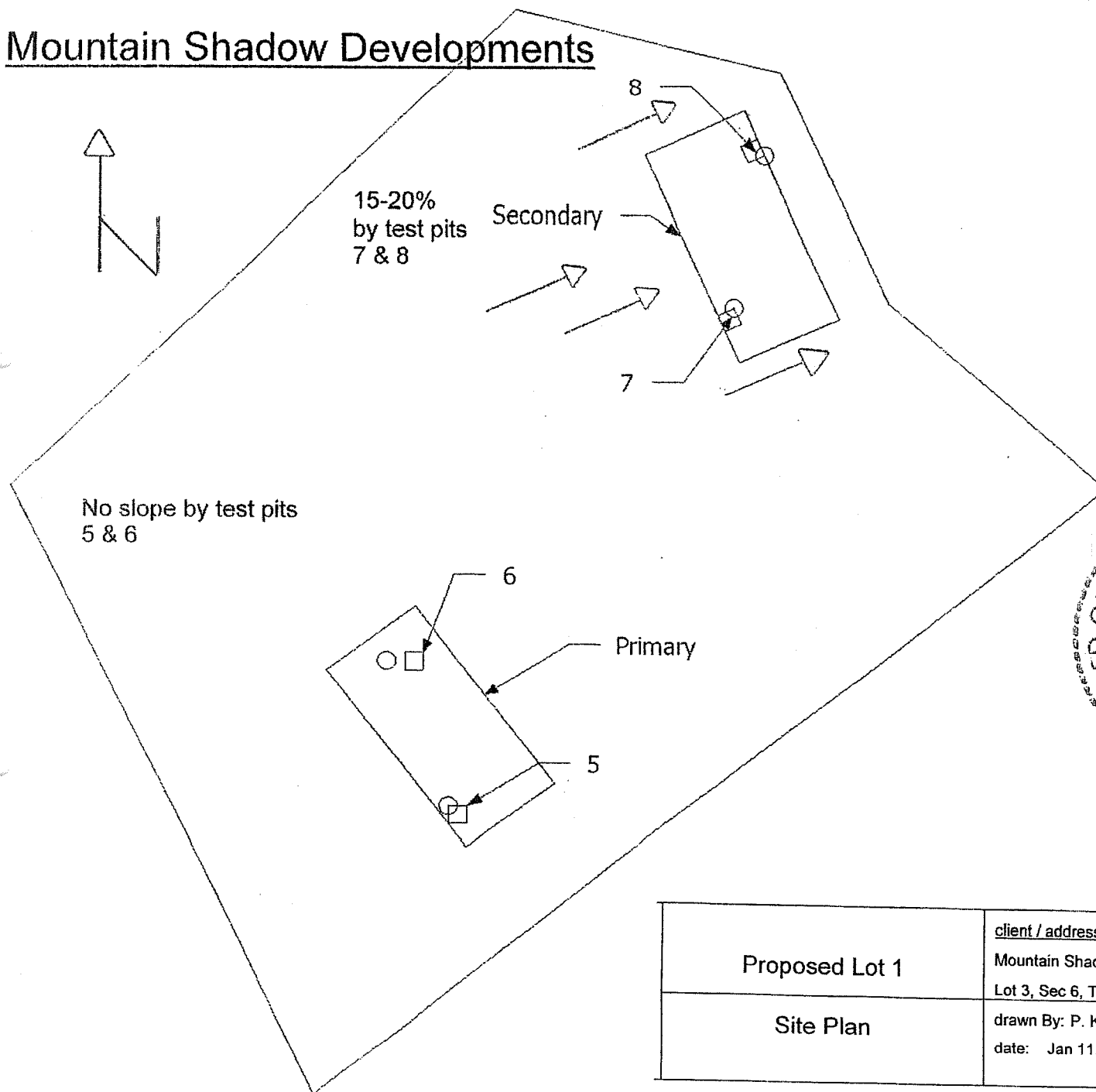
System Dimensions:

Length	28.2m +6 for construction	34.2m
Width	251m (area required) divided by 28.2 min system length 8.9m + 6 for construction	14.9m

Dimensions of Lot 1 Reserve System: 54.2 metres X 14.9 metres

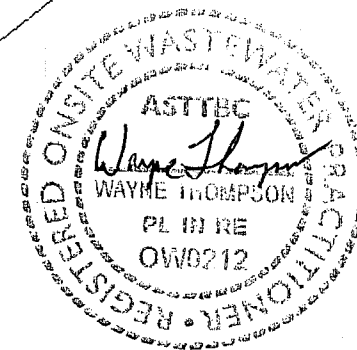


Mountain Shadow Developments



Notes:

- Property is heavily treed with fir and other native forest plants.
- Property has no well. Remainder parcel has a well. See "Over-all Site Plan" drawing for locations and setback distances.
- See attached test pit logs and perc test results.
- Driveway is only temporary...pending final approvals.



Proposed Lot 1	client / address Mountain Shadow Developments Lot 3, Sec 6, Twp 27, plan 16263, rge 21, Kootenay Ld
Site Plan	drawn By: P. Koekkoek date: Jan 11, 2012

Observed Soil Conditions

Test Pit Logs
 Date: 12-Aug-11
 Test Pit #: 5

Proposed Subdivision Lot 1 Primary
 Location: Lot 3 Sec 6 Twp 27 W5M Plan 16263 rge 21 Kootenay LD
 Logged by: Paul Koekkoek
 Slope (%): 0%

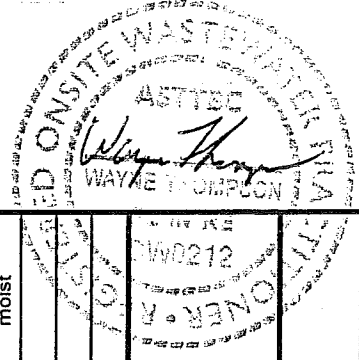
Soil Horizons (depths measured in cm)									
Depth (cm)		Colour	Texture	Structure	Rupture resistance (or density)	Coarse gravel (%)	Roots size & quantity	Mottles size & quantity	Moisture seepage
from	to								
0	7	black	organics	-	loose	0	many m-f	none	moist
7	40	reddish brown	sandy loam	abiky mod	friable	0	many m-f	none	moist
40	122	grey	med sand	s/g	loose	0	few c-f	none	moist

Notes:

Test Pit Logs
 Date: 12-Aug-11
 Test Pit #: 6

Proposed Subdivision Lot 1 Primary
 Location: Lot 3 Sec 6 Twp 27 W5M Plan 16263 rge 21 Kootenay LD
 Logged by: Paul Koekkoek
 Slope (%): 0%

Soil Horizons (depths measured in cm/in)									
Depth (cm)		Colour	Texture	Structure	Rupture resistance (or density)	Coarse gravel (%)	Roots size & quantity	Mottles size & quantity	Moisture seepage
from	to								
0	15	black	organics	-	loose	0	many m-f	none	moist
15	66	brown	sandy loam	abiky mod	friable	0	many f-vf	none	moist
66	122	grey	fine-med sand	s/g	loose	0	few m-f	none	moist



Percolation Tests

Lot 1 - Primary

Date: 12-Aug-11

Customer Name: Mountain Shadows Developments

Civic Address:

Legal Address: Lot 3, Sec 6, Twp 27, W5M, Plan 16263, Rge 21 Kootenay LD

Perc hole # 5

7 min/inch

8 min/inch

8 min/inch

9 min/inch

Total 32

8 Average perc rate

Perc hole #6

6 min/inch

7 min/inch

8 min/inch

8 min/inch

Total 29

7 Average perc rate

Perc hole

min/inch

min/inch

min/inch

min/inch

Total

Average perc rate

Perc hole

min/inch

min/inch

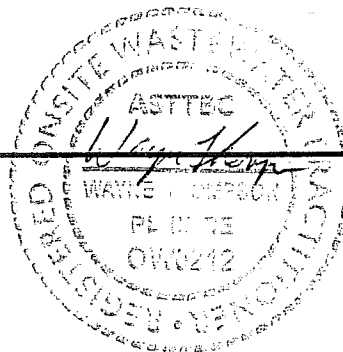
min/inch

min/inch

Total

Average perc rate

8 Average Perc Rate



Observed Soil Conditions

Test Pit Logs

Date: 12-Aug-11 Proposed Subdivision **Lot 1 Reserve** Logged by: Paul Koekkoek
 Test Pit #: 7 Location: Lot 3 Sec 6 Twp 27 W5M Plan 16263 rge 21 Kootenay LD Slope (%): 15-20%

Soil Horizons (depths measured in cm)

Depth (cm)		Colour	Texture	Structure	Rupture resistance (or density)	Coarse gravel (%)	Roots size & quantity	Mottles size & quantity	Moisture seepage
from	to								
0	8	black	organics	-	loose	0	many m-f	none	dry
8	50	redish brown	sandy loam	ablkly mod	slightly hard	5	many m-f	none	dry
50	81	grey	fine sand	s/g	loose	10	many f-vf	none	dry
81	122	grey	fine sand	s/g	loose	5	few f-vf	none	dry

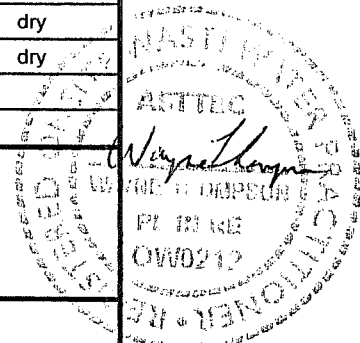
Notes:

Test Pit Logs

Date: 12-Aug-11 Site: Proposed Subdivision **Lot 1 Reserve** Logged by: Paul Koekkoek
 Test Pit # 8 Location: Lot 3 Sec 6 Twp 27 W5M Plan 16263 rge 21 Kootenay LD Slope (%) 15-20%

Soil Horizons (depths measured in cm/in)

Depth (cm)		Colour	Texture	Structure	Rupture resistance (or density)	Coarse gravel (%)	Roots size & quantity	Mottles size & quantity	Moisture seepage
from	to								
0	5	black	organics	-	loose	0	many c-f	none	dry
5	30	black-brown	sandy loam	ablkly mod	soft	0	many c-f	none	dry
30	101	grey	sandy loam	ablkly mod	slightly hard	0	many c-f	none	dry
101	122	light grey	sandy loam	ablkly mod	slightly hard	0	few f	none	dry



Percolation Tests

Lot 1 - Reserve

Date: 12-Aug-11

Customer Name: Mountain Shadows Developments

Civic Address:

Legal Address: Lot 3, Sec 6, Twp 27, W5M, Plan 16263, Rge 21 Kootenay LD

Perc hole # 7

7 min/inch

7 min/inch

7 min/inch

8 min/inch

Total 29

7 Average perc rate

Perc hole #8

7 min/inch

7 min/inch

8 min/inch

8 min/inch

Total 30

8 Average perc rate

Perc hole

min/inch

min/inch

min/inch

min/inch

Total

Average perc rate

Perc hole

min/inch

min/inch

min/inch

min/inch

Total

Average perc rate

8 Average Perc Rate

