



APPENDIX B

Proposed Masterplan for Porters

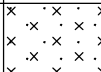



APPENDIX C

Test Pit Logs

TRIAL PIT



Project Porters Stormwater				Crystal River 1 Trial Pit No.
Job No 303872	Date 29-04-10 29-04-10	Ground Level (m)	Co-Ordinates (Degrees.Mins.Secs) Long 171.39.7440 Lat 43.16.5587	
Contractor CPG - Christchurch				
				Sheet 1 of 1

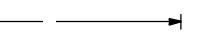
SAMPLES & TESTS			Water	STRATA			
Depth - (Length)	Type No	Test Result		Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION
						(0.50) 0.50	Sandy SILT with trace of clay; orangeish brown Stiff ; moist; (COLLUVIUM)
						(1.50) 2.00	Silty, sandy GRAVEL grey Tightly packed ; moist; (COLLUVIUM)
							End of borehole at 2.00 meters.

Shoring/Support: Stability:	Notes SV=Corrected Shear Vane Reading (kPa) SDS=Small Disturbed Sample B=Bulk Sample C/S=Composite Sample ↓ =Water Strike ↗ =Water Rise Note. All logging carried out to: NZ Geotechnical Society Inc 'Field Description of Soil and Rock, Guideline for the field classification and description of soil and rock for engineering purposes', December 2005.		GENERAL REMARKS Target depth. No groundwater encountered.
All dimensions in metres Scale 1:50	Client Porters Height Development	Method/ Plant Used Hand Auger	Logged By Terry Hughes

Crystal River 2


Sheet
1 of 1

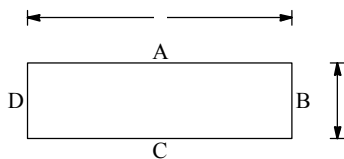
SAMPLES & TESTS			Water	STRATA			
Depth - (Length)	Type No	Test Result		Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION
						(0.50) 0.50	Sandy SILT with trace of clay; orangeish brown Stiff ; moist; (COLLUVIUM)
						(1.20) 1.70	Sandy GRAVEL with some silt & cobbles; grey Tightly packed ; moist; (COLLUVIUM)
							End of borehole at 1.70 meters.

Shoring/Support: Stability: 		Notes SV=Corrected Shear Vane Reading (kPa) SDS=Small Disturbed Sample B=Bulk Sample C/S=Composite Sample ⬇ =Water Strike ⬆ = Water Rise Note. All logging carried out to: NZ Geotechnical Society Inc 'Field Description of Soil and Rock, Guideline for the field classification and description of soil and rock for engineering purposes', December 2005.		GENERAL REMARKS	
All dimensions in metres Scale 1:50	Client Porters Height Development	Method/ Plant Used Hand Auger	Logged By Terry Hughes		

TRIAL PIT


Project Porters Stormwater				Trial Pit No. Ridge Top
Job No 303872	Date 29-04-10 29-04-10	Ground Level (m) 1036.00	Co-Ordinates (Degrees.Mins.Secs) Long 171.39.432 Lat 43.16.779	
Contractor CPG - Christchurch				Sheet 1 of 1

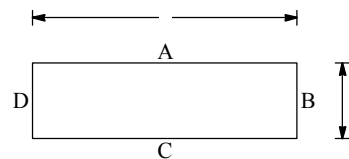
SAMPLES & TESTS			Water	STRATA			
Depth - (Length)	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
				1035.90		0.10	TOPSOIL
						(1.40)	Cobbly BOULDERS with some silt & sand; Tightly packed ; moist; BOULDERS is angular, cobbles are angular; (COLLUVIUM)
				1034.50		1.50	End of borehole at 1.50 meters.

Shoring/Support: Stability: 		Notes		GENERAL REMARKS Too hard to auger below 1.5m. Hole collapsing. No groundwater encountered. Hole sealed and covered.
		SV=Corrected Shear Vane Reading (kPa) SDS=Small Disturbed Sample B=Bulk Sample C/S=Composite Sample ⬇ =Water Strike ⬆ =Water Rise Note. All logging carried out to: NZ Geotechnical Society Inc 'Field Description of Soil and Rock, Guideline for the field classification and description of soil and rock for engineering purposes', December 2005.		
All dimensions in metres Scale 1:50	Client	Porters Height Development	Method/ Plant Used Hand Auger	Logged By Terry Hughes

TRIAL PIT



Project Porters Stormwater				Trial Pit No. Riverside
Job No 303872	Date 29-04-10 29-04-10	Ground Level (m)	Co-Ordinates (Degrees.Mins.Seconds) Long 171.39.568 Lat 43.16.753	
Contractor CPG - Christchurch				Sheet 1 of 1

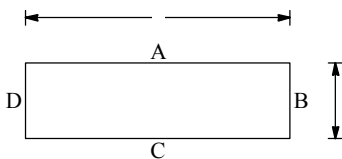
SAMPLES & TESTS			Water	STRATA			
Depth - (Length)	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
						(1.60) 1.60	Sandy GRAVEL with some cobbles; grey Tightly packed ; moist to wet; well graded; (COLLUVIUM). (below 1.0m some boulders)
							End of borehole at 1.60 meters.

Shoring/Support: Stability:		Notes		GENERAL REMARKS
		SV=Corrected Shear Vane Reading (kPa) SDS=Small Disturbed Sample B=Bulk Sample C/S=Composite Sample ⬇ =Water Strike ⬆ =Water Rise Note. All logging carried out to: NZ Geotechnical Society Inc 'Field Description of Soil and Rock, Guideline for the field classification and description of soil and rock for engineering purposes', December 2005.		
		Target depth achieved. No groundwater encountered.		
All dimensions in metres Scale 1:50	Client	Porters Height Development	Method/ Plant Used Hand Auger	Logged By Terry Hughes

TRIAL PIT



Project Porters Stormwater				Trial Pit No. VC1
Job No 303872	Date 29-04-10 29-04-10	Ground Level (m)	Co-Ordinates (Degrees.Mins.Secs) Long 171.39.6614 Lat 43.16.6836	
Contractor CPG - Christchurch				Sheet 1 of 1


SAMPLES & TESTS			Water	STRATA			
Depth - (Length)	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
						(0.60) 0.60	Silty SAND with some gravel; orangeish brown Stiff ; moist; (COLLUVIUM)
						(1.10) 1.70	Silty GRAVEL with some sand; grey Tightly packed ; moist; GRAVEL is angular, (COLLUVIUM)
							End of borehole at 1.70 meters.

Shoring/Support: Stability: 		Notes		GENERAL REMARKS Target depth achieved.
		SV=Corrected Shear Vane Reading (kPa) SDS=Small Disturbed Sample B=Bulk Sample C/S=Composite Sample ⬇ =Water Strike ⬆ =Water Rise Note. All logging carried out to: NZ Geotechnical Society Inc 'Field Description of Soil and Rock, Guideline for the field classification and description of soil and rock for engineering purposes', December 2005.		
All dimensions in metres Scale 1:50	Client	Porters Height Development	Method/ Plant Used Hand Auger	Logged By Terry Hughes

TRIAL PIT

Project Porters Stormwater				Trial Pit No. VC2
Job No 303872	Date 29-04-10 29-04-10	Ground Level (m)	Co-Ordinates (Degrees.Mins.Secs) Long 171.39.7100 Lat 43.16.6528	
Contractor CPG - Christchurch				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA			
Depth - (Length)	Type No	Test Result		Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION
						(0.50) 0.50	Sandy SILT with trace of clay; orangeish brown Stiff ; moist; (COLLUVIUM)
						(1.50) 2.00	Sandy GRAVEL with some silt; grey Tightly packed ; dry to moist; (COLLUVIUM)
							End of borehole at 2.00 meters.

Shoring/Support: Stability:		Notes	GENERAL REMARKS Target depth. No groundwater encountered.
		SV=Corrected Shear Vane Reading (kPa) SDS=Small Disturbed Sample B=Bulk Sample C/S=Composite Sample ↓ =Water Strike ↗ =Water Rise Note. All logging carried out to: NZ Geotechnical Society Inc 'Field Description of Soil and Rock, Guideline for the field classification and description of soil and rock for engineering purposes', December 2005.	
All dimensions in metres Scale 1:50	Client Porters Height Development	Method/ Plant Used Hand Auger	Logged By Terry Hughes



APPENDIX D

Proposed Pressure Conveyance Mains



GENERAL NOTES

- Horizontal Datum:
NZGD 2000
Mount Pleasant Circuit
- Areas and dimensions are approximate only and subject to Council approval and final survey.
- This sheet includes content sourced from:

B	UPDATED LAYOUT	VM	23.06.10
A	INITIAL ISSUE	VM	09.06.10

Revision		App	Date
Surveyed	~		~
Designed	CM		02.06.10
Drawn	NC		23.06.10
Reviewed	VM		23.06.10
Approved	VICTOR MTHAMO		23.06.10

Verify all dimensions on site before commencing work. Prioritise figured dimensions over scaling. Refer all discrepancies to the drawing office.

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Client

Project Title
PORTER HEIGHTS DEVELOPMENT

Sheet Title
**CONCEPTUAL DESIGN
WASTEWATER
RETICULATION PLAN**

Scale (A3 Original) **1: 2500**

Project No	Sheet	Revision
303872	130	B