

SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5390									
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1									
Hitachi 200 LC		Coordinates: Z08N N6799091.8m E467380.3m		ELEVATION: 788m									
SAMPLE TYPE		UNDISTURBED		DCPT		AUGER		BULK		SPT		CORE	
ELEV. (m)	PLASTIC		M.C		LIQUID		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION		Depth (m)
	0 20 40 60 80 100		0 20 40 60 80 100		0 20 40 60 80 100								
											ORGANICS		
											SILT -Brown, damp, loose		
787	●						★	001	ML		-Moist	1	
786	●						★	002	ML		SILT with SAND -Frozen	2	
785	●						★	003	ML		END of HOLE -Refusal - frost	3	
784												4	
783												5	



SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5391									
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1									
Hitachi 200 LC		Coordinates: Z08N N6799044.2m E467494.5m		ELEVATION: 795m									
SAMPLE TYPE		UNDISTURBED		DCPT		AUGER		BULK		SPT		CORE	
ELEV. (m)	PLASTIC		M.C		LIQUID		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION		Depth (m)
	0 20 40 60 80 100		0 20 40 60 80 100		0 20 40 60 80 100								
											Waste Material		
											ORGANICS -Original ground		
794								004	ML		SILT -Brown, damp, soft	1	
											-Firm		
793											GRAVELLY SILT -Brown, damp, compact -10% Cobbles, <=20cm	2	
792								005	ML			3	
791								006	GM		SILTY GRAVEL -Brown, damp, compact -Trace cobbles, <=20cm	4	
790											END OF HOLE -Target depth reached	5	



SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5392									
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1									
Hitachi 200 LC		Coordinates: Z08N N6799084m E467398.1m		ELEVATION: 799m									
SAMPLE TYPE		UNDISTURBED		DCPT		AUGER		BULK		SPT		CORE	
ELEV. (m)	PLASTIC M.C. LIQUID 0 20 40 60 80 100		★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION		Depth (m)		
	0 20 40 60 80 100		0 20 40 60 80 100										
798			★	◆		007	SM		SILTY SAND with GRAVEL -Brown, damp, loose -Bottom of old stockpile -Oil odour, some asphalt		1		
797						008			-Floor of stock pile -POORLY GRADED GRAVEL with SAND -Brown, damp, compact		2		
796									-Rounded -Odd boulder <40cm -20% Cobbles <30cm		3		
795			★	◆		009	GP				4		
794									END of HOLE -Sloughing		5		



SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5393				
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1				
Hitachi 200 LC		Coordinates: Z08N N6799050m E467443.9m		ELEVATION: 796m				
SAMPLE TYPE	UNDISTURBED	DCPT	AUGER	BULK	SPT	CORE		
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	PLASTIC M.C LIQUID 0 20 40 60 80 100							
795				010	GP		POORLY GRADED GRAVEL with SAND -Brown, damp, compact, rounded	1
							-5% Cobbles, <15cm	
794				011	GP		Moist, loose - compact, subrounded - rounded	2
793								3
792				012	GP		-Loose	4
791							END of HOLE -Sloughing	5



SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5394				
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1				
Hitachi 200 LC		Coordinates: Z08N N6799130.1m E467480.6m		ELEVATION: 797m				
SAMPLE TYPE	UNDISTURBED	DCPT	AUGER	BULK	SPT	CORE		
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	PLASTIC M.C LIQUID 0 20 40 60 80 100							
796				013	GP		POORLY GRADED GRAVEL with SAND -Brown, damp, compact -10% Cobbles	1
795				014	SP		-POORLY GRADED SAND with GRAVEL -Brown, damp, compact	2
794							-10% Cobbles	3
793				015	SP			4
792							END of HOLE -Target depth reached	5



SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5395				
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1				
Hitachi 200 LC		Coordinates: Z08N N6798943.8m E467478m		ELEVATION: 803m				
SAMPLE TYPE		UNDISTURBED	DCPT	AUGER	BULK	SPT	CORE	
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	PLASTIC M.C LIQUID 0 20 40 60 80 100							
802	★	◆	■	GW	016	GW	WELL-GRADED GRAVEL with SAND -Brown, damp, compact subangular to subrounded -10% Cobbles, <10cm	1
801	★	◆	■	GW	017	GW	-15% Cobbles <20cm	2
800	★	◆	■	SP	018	SP	POORLY GRADED SAND with GRAVEL -Brown, moist, compact, subrounded	3
799	★	◆	■	SP	019	SP	-Damp	4
798	★	◆	■				END of HOLE -Target depth reached	5



SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5396									
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1									
Hitachi 200 LC		Coordinates: Z08N N6798989.3m E467514.2m		ELEVATION: 798m									
SAMPLE TYPE		UNDISTURBED		DCPT		AUGER		BULK		SPT		CORE	
ELEV. (m)	PLASTIC M.C LIQUID 0 20 40 60 80 100		★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION		Depth (m)		
	0 20 40 60 80 100		0 20 40 60 80 100										
797			★	◆	■	020	GP		POORLY GRADED GRAVEL with SAND -Brown, damp, compact, subangular -10% Cobbles < 30cm, 5% boulders		1		
796			★	◆	■	021	GP		-moist, subrounded		2		
795			★	◆	■	022	SP		POORLY GRADED SAND with GRAVEL -Brown, moist, compact, subrounded		3		
794			★	◆	■						4		
793									END of HOLE -Target depth reached		5		



SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5397				
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1				
Hitachi 200 LC		Coordinates: Z08N N6799027m E467546.8m		ELEVATION: 804m				
SAMPLE TYPE	<input type="checkbox"/> UNDISTURBED	<input type="checkbox"/> DCPT	<input type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> SPT	<input type="checkbox"/> CORE		
ELEV. (m)		★ Percent Fines★	Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
		◆ Percent Sand◆						
803		★ ◆ ■	GP-GM	023			POORLY GRADED GRAVEL with SILT and SAND -Brown, dry, compact, subrounded -Trace organics -15% Cobbles, < 30cm	1
802		★ ◆ ■	SP-SM	024			POORLY GRADED SAND with SILT and GRAVEL -Brown, dry, compact, subrounded -Some organics -10% Cobbles, < 30cm	2
801		★ ◆ ■	SM	025			SILTY SAND with GRAVEL -Damp, compact, subrounded	3
800		★ ◆ ■	SP	026			POORLY GRADED SAND with GRAVEL -damp, compact, subrounded	4
799							END of HOLE -Target depth reached	5
		Highways and Public Works Transportation Engineering Branch		LOGGED BY: RWS/LM		Termination Depth: 5m		
				COMPILED BY: R.Stilwell		Complete: 10/14/2015		
				REVIEWED BY:		Pit #: 105E-04 Page 1 of 1		

SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5398				
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1				
Hitachi 200 LC		Coordinates: Z08N N6799031.7m E467472.6m		ELEVATION: 773m				
SAMPLE TYPE	UNDISTURBED	DCPT	AUGER	BULK	SPT	CORE		
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	PLASTIC M.C LIQUID 0 20 40 60 80 100							
772				027	GP		POORLY GRADED GRAVEL with SAND -Brown, damp, compact, subrounded	1
771				028	GP-GM		POORLY GRADED GRAVEL with SILT and SAND -Damp, compact, subrounded	2
770				029	GP		POORLY GRADED GRAVEL with SAND -Brown, damp, compact, subrounded	3
769				030	SP		POORLY GRADED SAND with GRAVEL -Brown, damp, compact, subrounded	4
768							END of HOLE -Target depth reached	5
				LOGGED BY: RWS/LM		Termination Depth: 5m		
				COMPILED BY: R.Stilwell		Complete: 10/14/2015		
				REVIEWED BY:		Pit #: 105E-04 Page 1 of 1		

SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway #2		SOURCE/TP#: 878-5399				
Graceland		Exploration of pit floor, km 260.1 RHS		PROJECT NO: 552-202021-0204-02-1				
Hitachi 200 LC		Coordinates: Z08N N6799017.8m E467390.8m		ELEVATION: 790m				
SAMPLE TYPE	UNDISTURBED	DCPT	AUGER	BULK	SPT	CORE		
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	PLASTIC M.C LIQUID 0 20 40 60 80 100							
789				031	GP-GM		POORLY GRADED GRAVEL with SILT and SAND -Brown, damp, dense, subangular -5% Boulders	1
788				032	GM		SILTY GRAVEL -Brown, damp, compact, angular	2
787				033	SP		POORLY GRADED SAND with GRAVEL -Brown, damp, dense, subangular	3
786				034	GP		POORLY GRADED GRAVEL with SAND -Brown, damp, dense, subangular	4
785							END of HOLE -Target depth reached	5



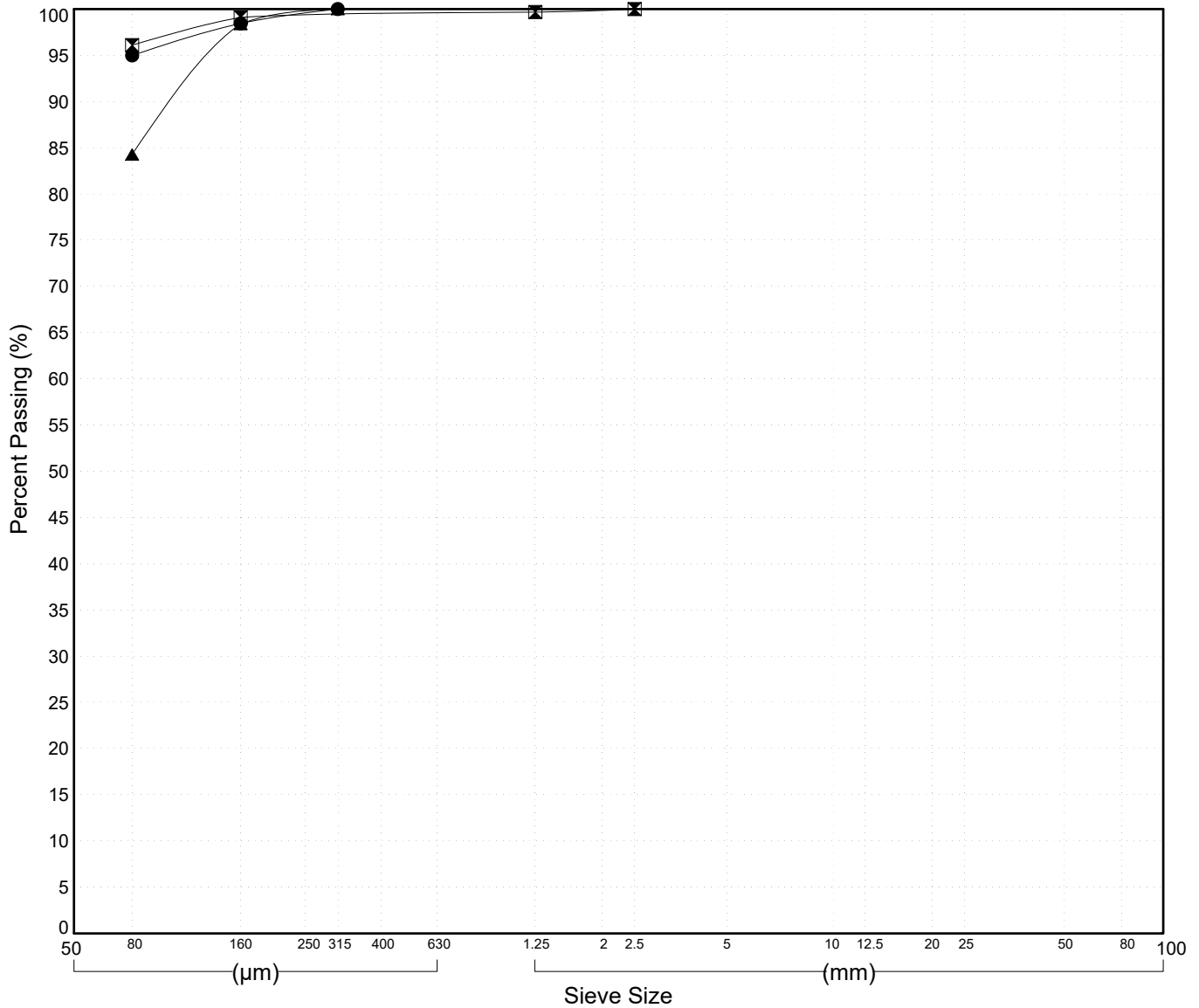
GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5390
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6799091.8m E467380.3m	ELEVATION: 788m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 001	2015-833	0.5 to 1.0	SILT(ML)	19.3	NP	NP	NP		
☒ 002	2015-834	1.5 to 2.0	SILT(ML)	26.2	NP	NP	NP		
▲ 003	2015-835	2.5 to 2.6	SILT with SAND(ML)	22.7	NP	NP	NP		

Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	% Breakdown			
		% P A S S I N G														Gravel	Sand	Silt	Clay
● 001	2015-833	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.4	95.0	0.0	5.0	95.0
☒ 002	2015-834	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.5	99.3	99.1	96.1	0.0	3.9	96.1	
▲ 003	2015-835	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.4	84.3	0.0	15.7	84.3	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works
Transportation Engineering Branch

LOGGED BY: RWS/LM

COMPILED BY: R.Stilwell

REVIEWED BY:

Pit #: 105E-04

Complete: 10/14/2015

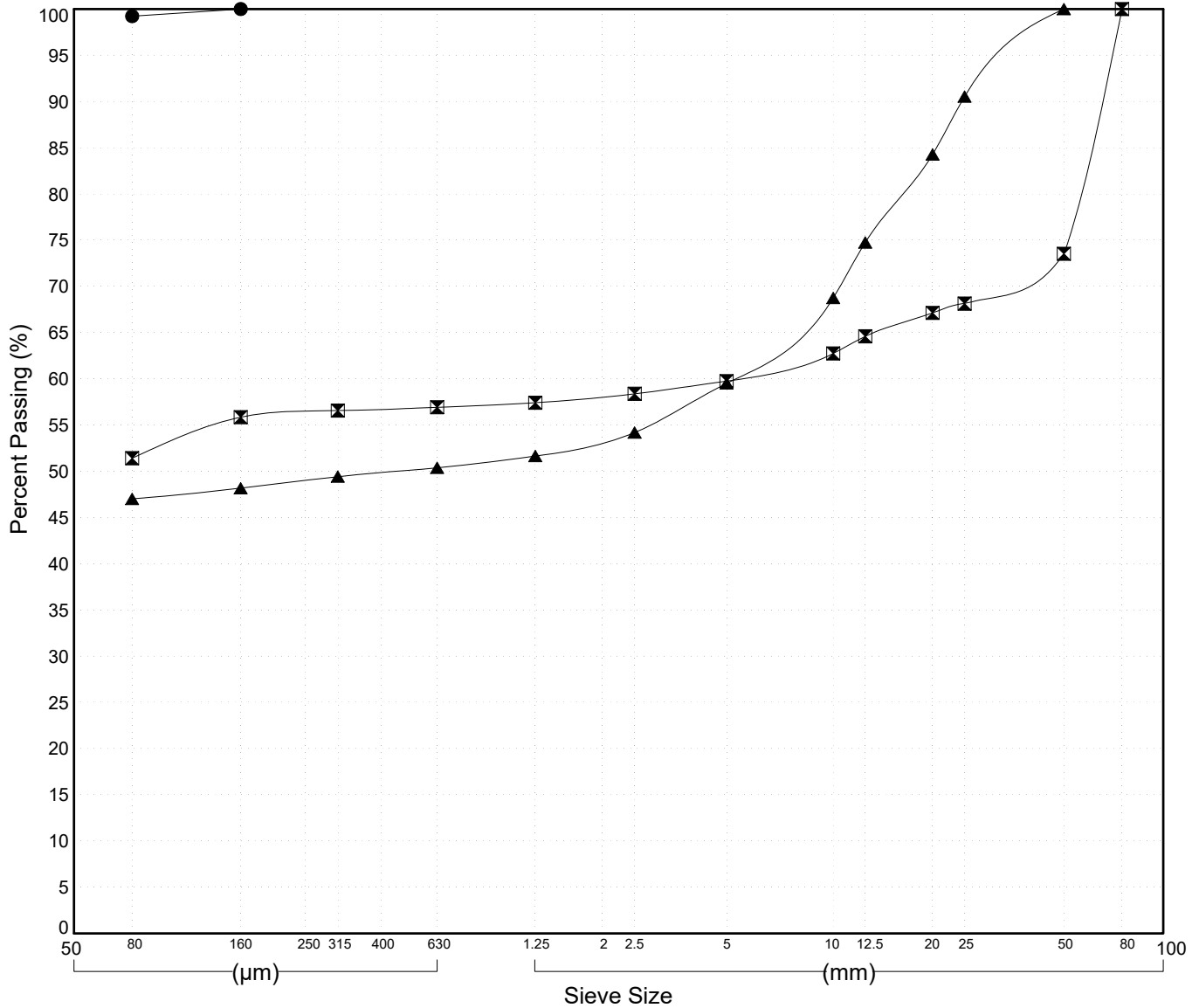
GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5391
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6799044.2m E467494.5m	ELEVATION: 795m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 004	2015-836	1.0 to 1.2	SILT(ML)	18.3	NP	NP	NP		
☒ 005	2015-837	2.6 to 2.8	GRAVELLY SILT(ML)	7.4	NP	NP	NP		
▲ 006	2015-838	4.0 to 4.3	SILTY GRAVEL(GM)	13.0	NP	NP	NP		

Field #	Lab #	% P A S S I N G													% Breakdown				
		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	Gravel	Sand	Silt	Clay
● 004	2015-836	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	0.0	0.8	99.2	
☒ 005	2015-837	100.0	100.0	73.5	68.1	67.1	64.6	62.7	59.7	58.4	57.4	56.9	56.6	55.9	51.4	40.3	8.3	51.4	
▲ 006	2015-838	100.0	100.0	100.0	90.5	84.3	74.7	68.7	59.5	54.2	51.6	50.4	49.4	48.2	47.0	40.5	12.5	47.0	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

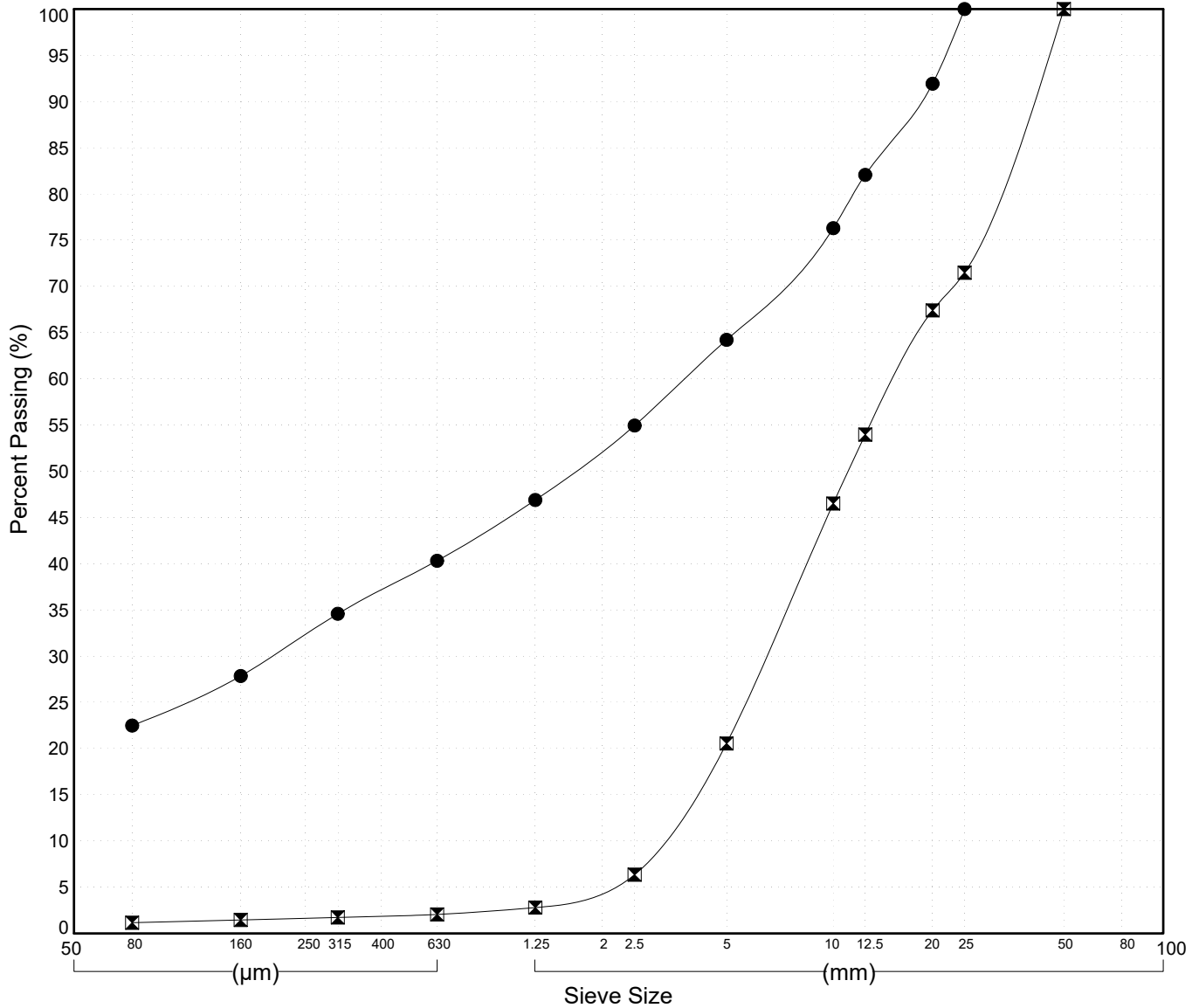


GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5392
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6799084m E467398.1m	ELEVATION: 799m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H ₂ O	LL	PL	PI	C _c	C _u											
● 007	2015-839	0.8 to 1.0	SILTY SAND with GRAVEL(SM)	5.5	NP	NP	NP													
☒ 009	2015-841	3.5 to 4.0	POORLY GRADED GRAVEL with SAND(GP)	1.2	NP	NP	NP	0.9	5.2											
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	% Breakdown				
● 007	2015-839	100.0	100.0	100.0	100.0	91.9	82.1	76.3	64.2	54.9	46.9	40.3	34.6	27.8	22.5	Gravel	Sand	Silt	Clay	
☒ 009	2015-841	100.0	100.0	100.0	71.5	67.4	54.0	46.5	20.5	6.4	2.8	2.1	1.7	1.5	1.2	79.5	19.4	1.2		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works
Transportation Engineering Branch

LOGGED BY: RWS/LM

COMPILED BY: R.Stilwell

REVIEWED BY:

Pit #: 105E-04

Complete: 10/14/2015

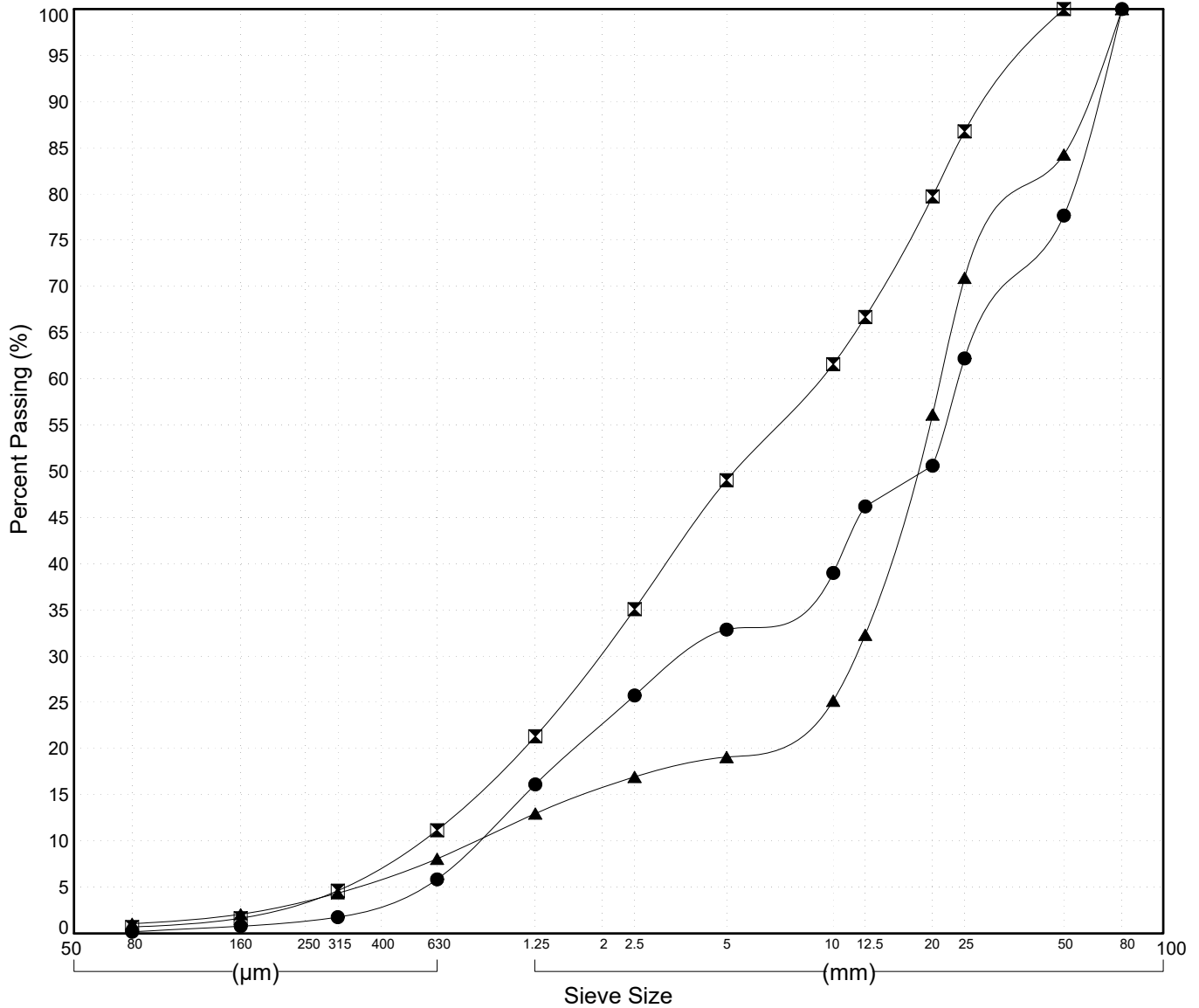
GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5393
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6799050m E467443.9m	ELEVATION: 796m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 010	2015-842	1.0 to 1.2	POORLY GRADED GRAVEL with SAND(GP)	2.2	NP	NP	NP	0.7	28.8
☒ 011	2015-843	2.0 to 2.3	POORLY GRADED GRAVEL with SAND(GP)	1.5	NP	NP	NP	0.7	16.3
▲ 012	2015-844	3.8 to 4.2	POORLY GRADED GRAVEL with SAND(GP)	0.3	NP	NP	NP	7.7	25.7

Field #	Lab #	% PASSING	Sieve Size (mm)													% Breakdown		
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	Gravel	Sand
● 010	2015-842	100.0	100.0	77.7	62.2	50.6	46.2	39.0	32.9	25.7	16.1	5.8	1.8	0.8	0.2	67.1	32.7	0.2
☒ 011	2015-843	100.0	100.0	100.0	86.8	79.7	66.7	61.6	49.0	35.1	21.3	11.2	4.6	1.6	0.7	51.0	48.3	0.7
▲ 012	2015-844	100.0	100.0	84.3	70.9	56.1	32.3	25.2	19.1	16.9	13.0	8.1	4.4	2.1	1.0	80.9	18.0	1.0

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works
Transportation Engineering Branch

LOGGED BY: RWS/LM

COMPILED BY: R.Stilwell

REVIEWED BY:

Pit #: 105E-04

Complete: 10/14/2015

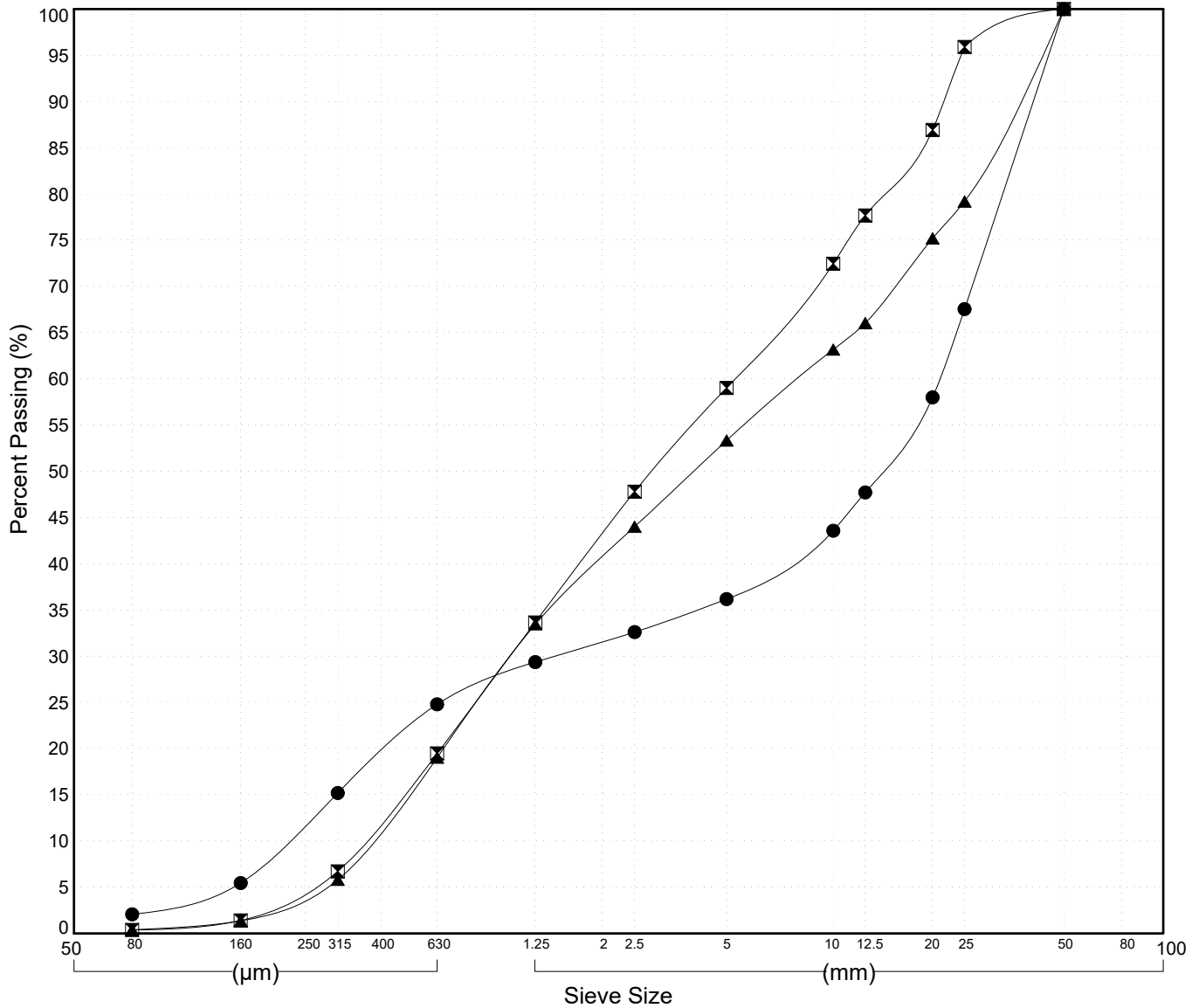
GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5394
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6799130.1m E467480.6m	ELEVATION: 797m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 013	2015-845	0.5 to 0.8	POORLY GRADED GRAVEL with SAND(GP)	1.0	NP	NP	NP	0.4	95.5
☒ 014	2015-846	2.2 to 2.4	POORLY GRADED SAND with GRAVEL(SP)	1.4	NP	NP	NP	0.6	13.3
▲ 015	2015-847	3.8 to 4.0	POORLY GRADED SAND with GRAVEL(SP)	1.4	NP	NP	NP	0.4	20.0

Field #	Lab #	% PASSING	Sieve Size (mm)													% Breakdown			
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	Gravel	Sand	Silt Clay
● 013	2015-845	100.0	100.0	100.0	100.0	67.5	58.0	47.7	43.6	36.2	32.6	29.4	24.8	15.2	5.5	2.1	63.8	34.1	2.1
☒ 014	2015-846	100.0	100.0	100.0	95.9	86.9	77.7	72.4	59.0	47.8	33.6	19.5	6.7	1.4	0.4	41.0	58.6	0.4	
▲ 015	2015-847	100.0	100.0	100.0	79.2	75.2	66.0	63.2	53.3	44.0	33.4	19.0	5.8	1.4	0.4	46.7	52.9	0.4	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works
Transportation Engineering Branch

LOGGED BY: RWS/LM

COMPILED BY: R.Stilwell

REVIEWED BY:

Pit #: 105E-04

Complete: 10/14/2015

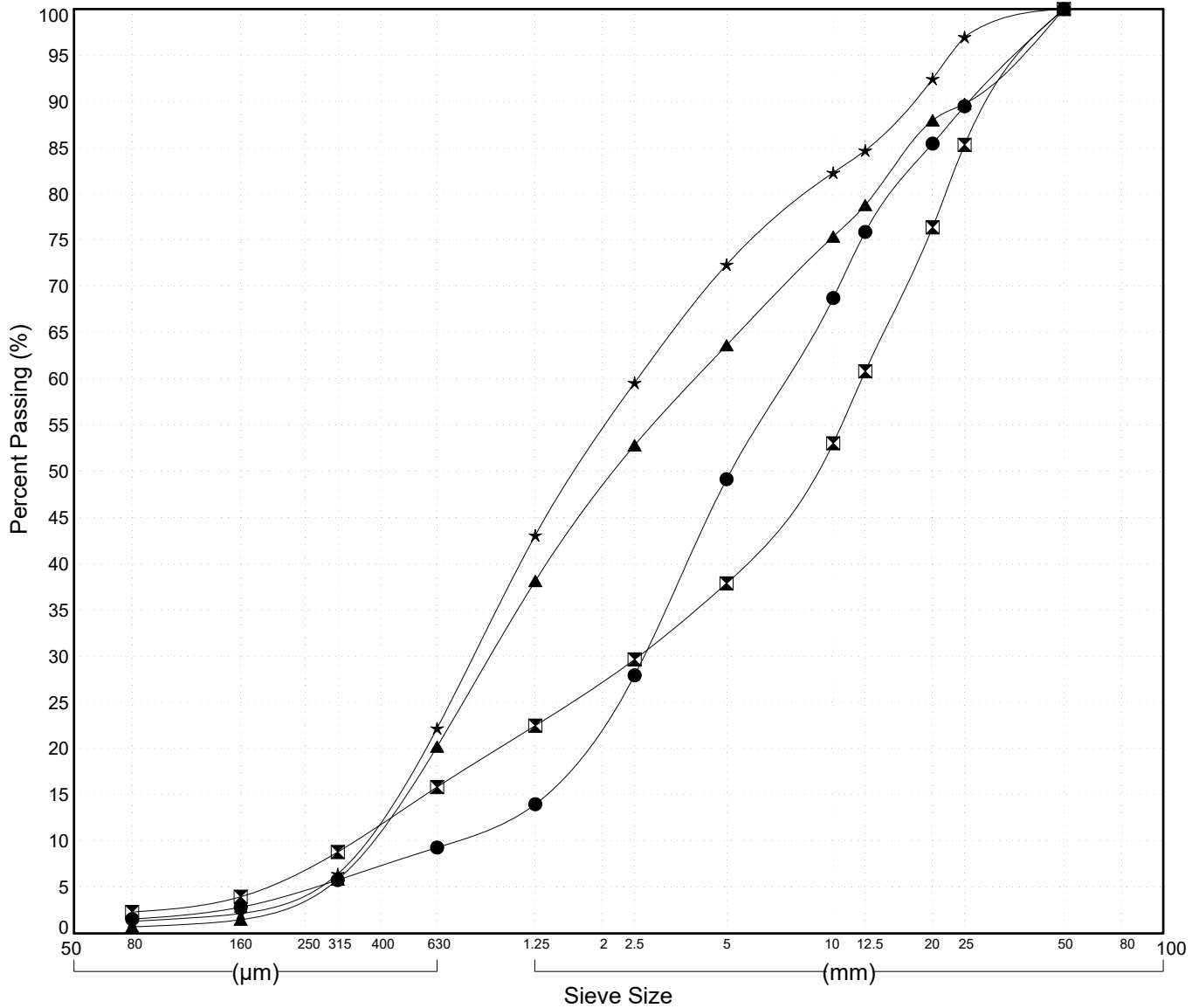
GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5395
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6798943.8m E467478m	ELEVATION: 803m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 016	2015-848	0.8 to 1.0	WELL-GRADED GRAVEL with SAND(GW)	0.8	NP	NP	NP	1.4	10.3
☒ 017	2015-849	1.8 to 2.0	WELL-GRADED GRAVEL with SAND(GW)	1.7	NP	NP	NP	1.5	34.5
▲ 018	2015-850	3.0 to 3.2	POORLY GRADED SAND with GRAVEL(SP)	2.3	NP	NP	NP	0.6	9.9
★ 019	2015-851	4.5 to 4.8	POORLY GRADED SAND with GRAVEL(SP)	2.0	NP	NP	NP	0.7	6.9

Field #	Lab #	%PASSING	Sieve Size (mm)													% Breakdown		
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	Gravel	Sand
● 016	2015-848	100.0	100.0	100.0	89.5	85.4	75.9	68.7	49.1	27.9	14.0	9.3	5.8	2.8	1.5	50.9	47.6	1.5
☒ 017	2015-849	100.0	100.0	100.0	85.3	76.4	60.8	53.0	37.9	29.6	22.5	15.8	8.8	4.0	2.3	62.1	35.6	2.3
▲ 018	2015-850	100.0	100.0	100.0	89.7	88.0	78.8	75.4	63.6	52.8	38.1	20.2	5.8	1.5	0.7	36.4	62.9	0.7
★ 019	2015-851	100.0	100.0	100.0	97.0	92.4	84.7	82.3	72.4	59.6	43.1	22.2	6.4	2.2	1.3	27.6	71.0	1.3

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works
Transportation Engineering Branch

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Pit #: 105E-04

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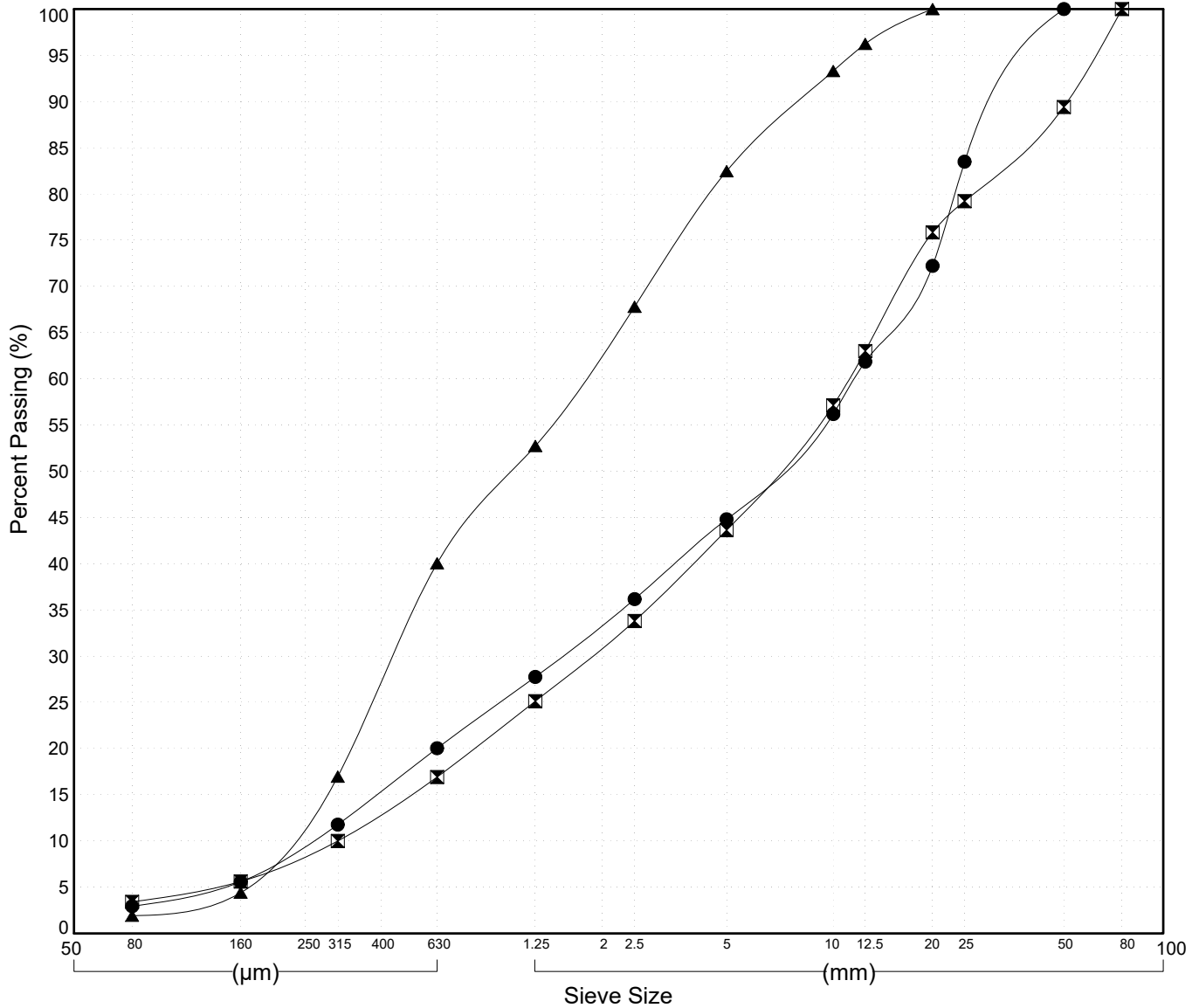
GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5396
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6798989.3m E467514.2m	ELEVATION: 798m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 020	2015-852	1.2 to 1.4	POORLY GRADED GRAVEL with SAND(GP)	2.0	NP	NP	NP	0.8	44.8
☒ 021	2015-853	2.4 to 2.5	POORLY GRADED GRAVEL with SAND(GP)	2.2	NP	NP	NP	1.0	35.4
▲ 022	2015-854	3.8 to 4.0	POORLY GRADED SAND with GRAVEL(SP)	2.2	NP	NP	NP	0.6	8.1

Field #	Lab #	% PASSING	Sieve Size (mm)													% Breakdown		
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	Gravel	Sand
● 020	2015-852	100.0	100.0	100.0	83.5	72.2	61.9	56.2	44.8	36.2	27.7	20.0	11.8	5.6	2.9	55.2	41.9	2.9
☒ 021	2015-853	100.0	100.0	89.4	79.2	75.8	63.0	57.1	43.6	33.8	25.1	16.9	10.0	5.6	3.4	56.4	40.2	3.4
▲ 022	2015-854	100.0	100.0	100.0	100.0	100.0	96.2	93.3	82.5	67.8	52.7	40.0	17.0	4.4	1.9	17.5	80.6	1.9

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works
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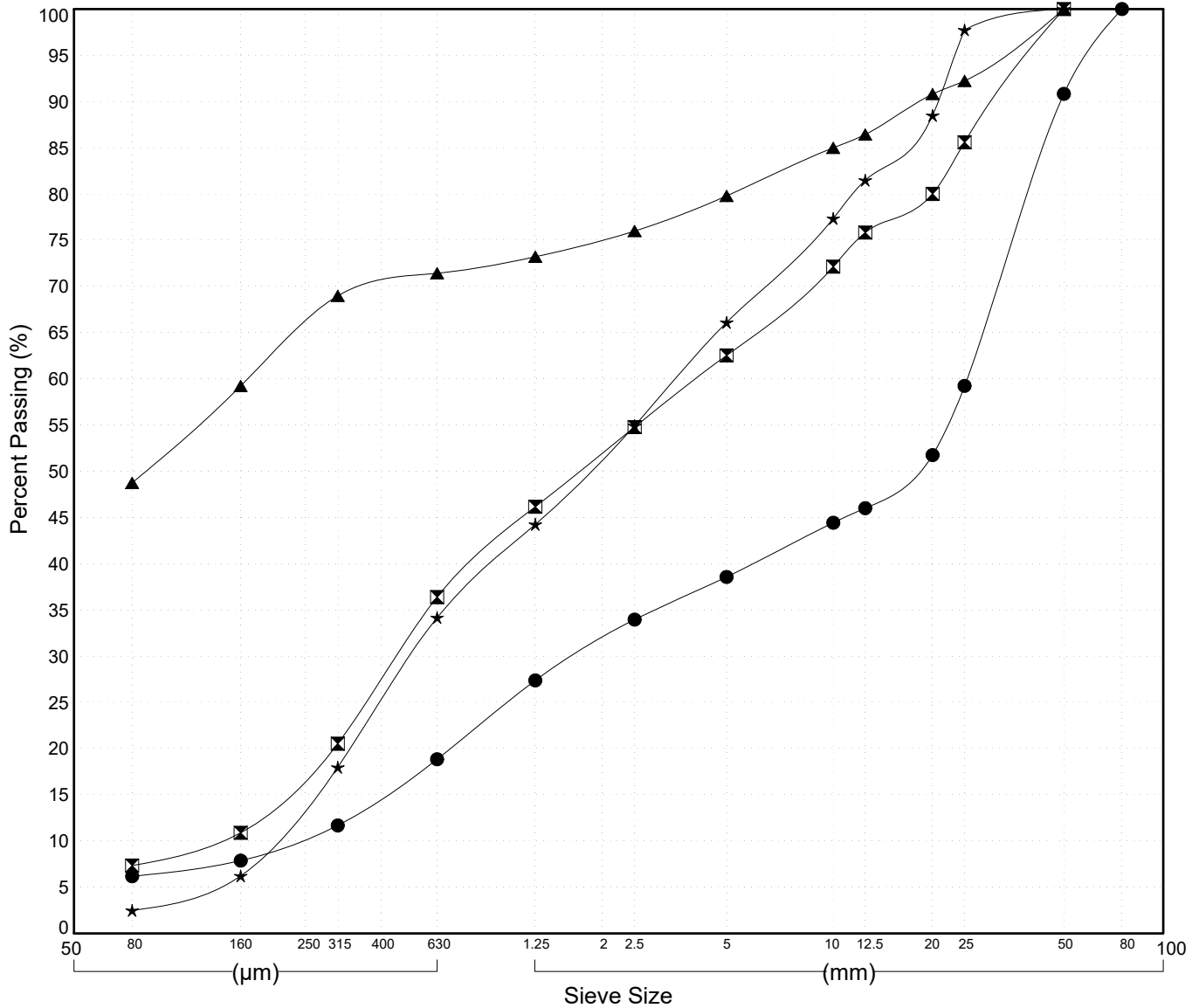
GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5397
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6799027m E467546.8m	ELEVATION: 804m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 023	2015-855	0.8 to 1.0	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)	1.5	NP	NP	NP	0.5	108.9
☒ 024	2015-856	2.0 to 2.2	POORLY GRADED SAND with SILT and GRAVEL(SP-SM)	2.6	NP	NP	NP	0.4	29.1
▲ 025	2015-857	3.2 to 3.4	SILTY SAND with GRAVEL(SM)	7.9	NP	NP	NP		
★ 026	2015-858	4.0 to 4.2	POORLY GRADED SAND with GRAVEL(SP)	2.1	NP	NP	NP	0.4	16.8

Field #	Lab #	% P A S S I N G														% Breakdown			
		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	Gravel	Sand	Silt	Clay
● 023	2015-855	100.0	100.0	90.8	59.2	51.7	46.0	44.4	38.6	33.9	27.4	18.8	11.7	7.9	6.2	61.4	32.4	6.2	
☒ 024	2015-856	100.0	100.0	100.0	85.6	80.0	75.8	72.1	62.5	54.8	46.2	36.4	20.5	10.9	7.3	37.5	55.2	7.3	
▲ 025	2015-857	100.0	100.0	100.0	92.2	90.8	86.4	85.0	79.8	76.0	73.2	71.4	69.0	59.2	48.7	20.2	31.0	48.7	
★ 026	2015-858	100.0	100.0	100.0	97.7	88.5	81.5	77.3	66.1	54.9	44.3	34.2	18.0	6.2	2.5	33.9	63.6	2.5	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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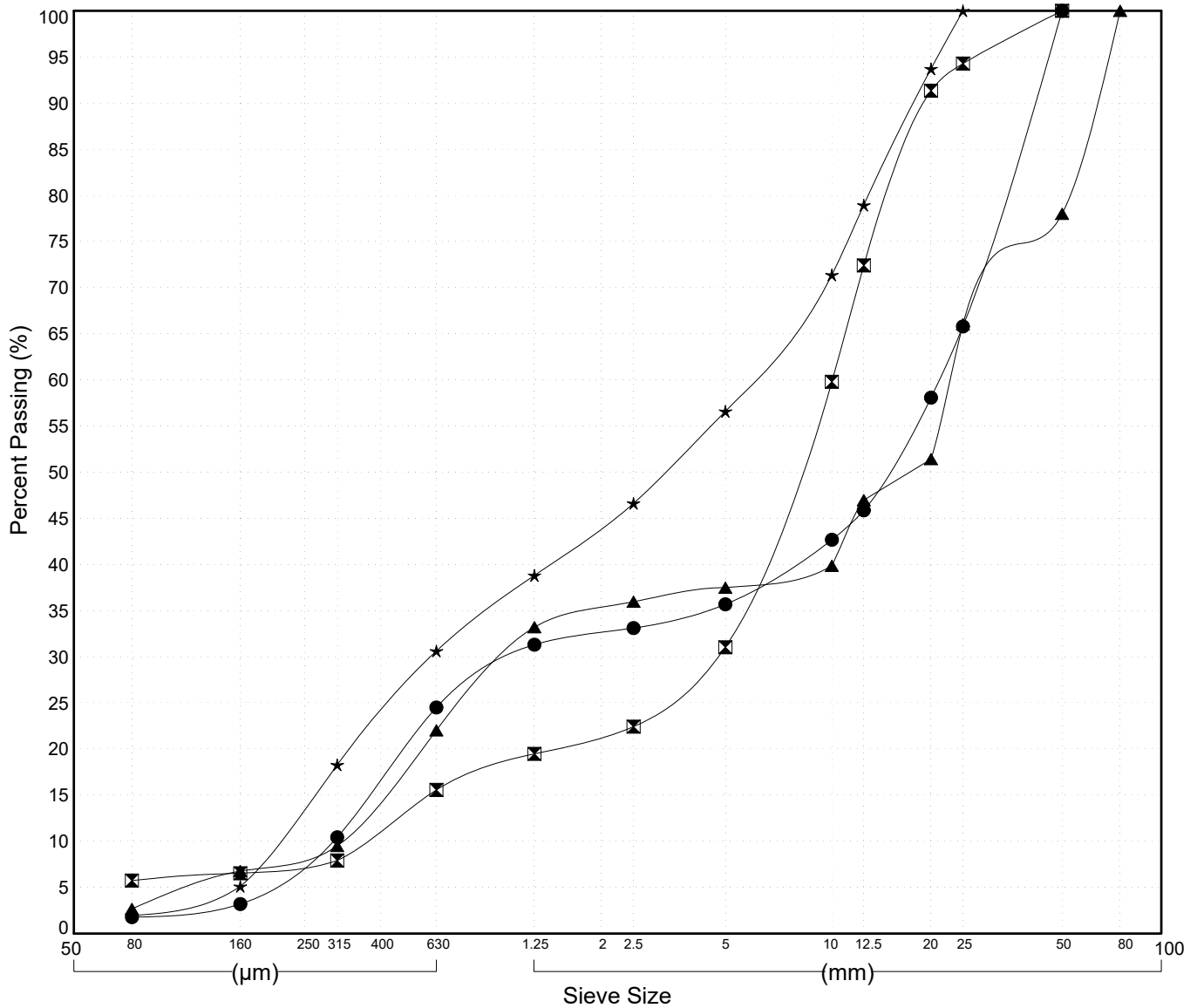
GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5398
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6799031.7m E467472.6m	ELEVATION: 773m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 027	2015-859	0.8 to 1.0	POORLY GRADED GRAVEL with SAND(GP)	1.0	NP	NP	NP	0.2	69.9
☒ 028	2015-860	2.0 to 2.2	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)	1.6	NP	NP	NP	5.1	26.4
▲ 029	2015-861	3.2 to 3.4	POORLY GRADED GRAVEL with SAND(GP)	2.2	NP	NP	NP	0.1	70.4
★ 030	2015-862	4.0 to 4.2	POORLY GRADED SAND with GRAVEL(SP)	1.7	NP	NP	NP	0.3	27.4

Field #	Lab #	% PASSING														% Breakdown			
		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	Gravel	Sand	Silt	Clay
● 027	2015-859	100.0	100.0	100.0	65.8	58.1	45.9	42.7	35.7	33.1	31.3	24.5	10.4	3.2	1.8	64.3	33.9	1.8	
☒ 028	2015-860	100.0	100.0	100.0	94.3	91.3	72.4	59.8	31.0	22.4	19.5	15.6	7.9	6.5	5.7	69.0	25.3	5.7	
▲ 029	2015-861	100.0	100.0	78.0	66.0	51.4	47.0	39.9	37.5	36.0	33.2	22.0	9.5	6.8	2.7	62.5	34.8	2.7	
★ 030	2015-862	100.0	100.0	100.0	100.0	93.7	78.9	71.4	56.6	46.6	38.8	30.6	18.3	5.1	2.0	43.4	54.6	2.0	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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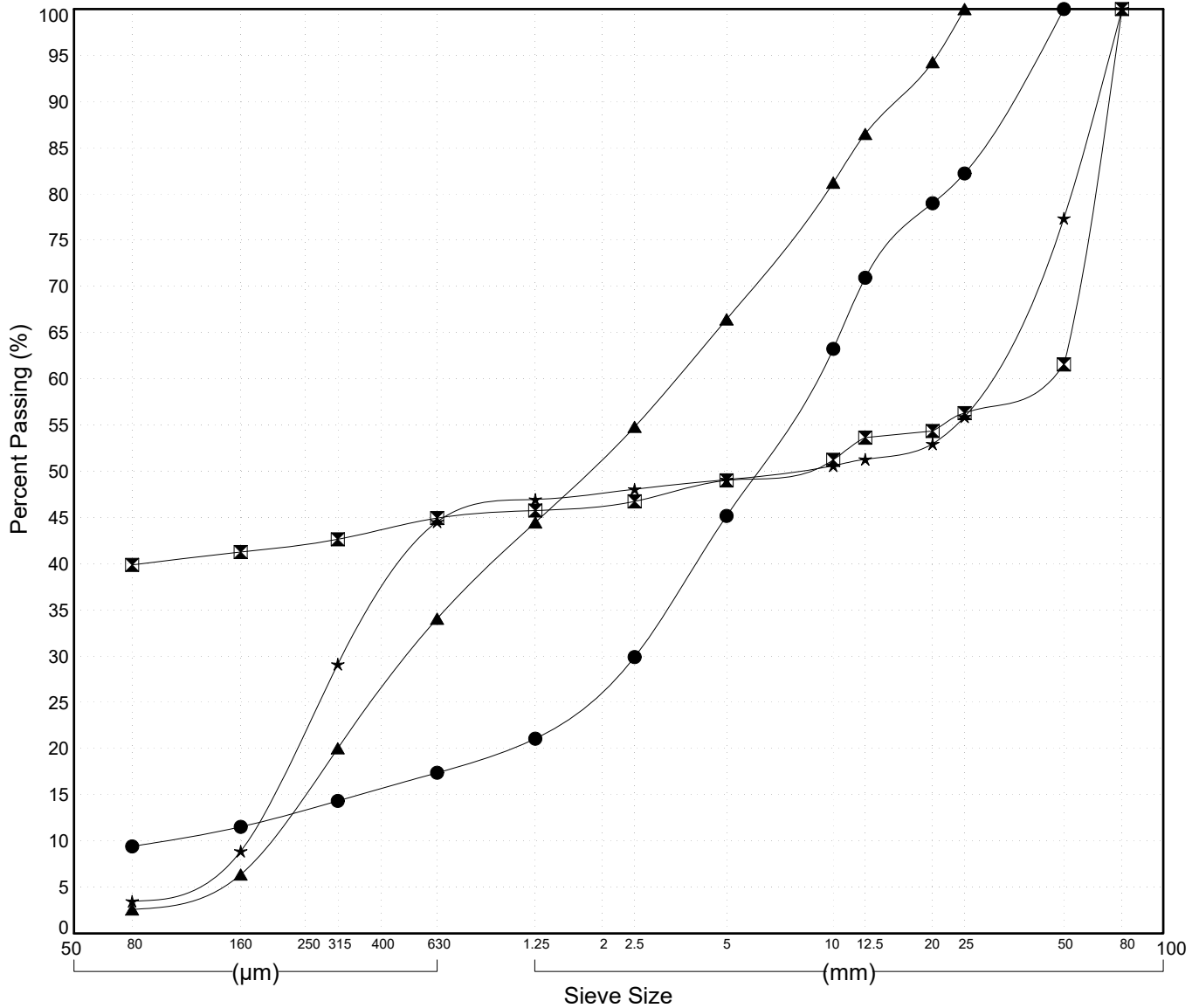
GRAIN SIZE ANALYSIS	Exploration of pit floor	SOURCE/TP#: 878-5399
Graceland	km 260.1 RHS	PROJECT NO: 552-202021-0204-02-1
Hitachi 200 LC	Coordinates:Z08N N6799017.8m E467390.8m	ELEVATION: 790m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 031	2015-863	0.8 to 1.0	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)	1.7	NP	NP	NP	7.8	94.6
☒ 032	2015-864	2.0 to 2.2	SILTY GRAVEL(GM)	7.4	NP	NP	NP		
▲ 033	2015-865	3.2 to 3.4	POORLY GRADED SAND with GRAVEL(SP)	2.6	NP	NP	NP	0.4	17.4
★ 034	2015-866	4.0 to 4.2	POORLY GRADED GRAVEL with SAND(GP)	2.6	NP	NP	NP	0.0	172.0

Field #	Lab #	%PASSING	Sieve Size (mm)													% Breakdown			
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	Gravel	Sand	Silt/Clay
● 031	2015-863	100.0	100.0	100.0	100.0	82.2	79.0	70.9	63.2	45.2	29.9	21.1	17.4	14.3	11.5	9.4	54.8	35.8	9.4
☒ 032	2015-864	100.0	100.0	61.6	56.3	54.4	53.6	51.2	49.0	46.7	45.7	44.9	42.6	41.3	39.9	51.0	9.1	39.9	
▲ 033	2015-865	100.0	100.0	100.0	100.0	94.2	86.5	81.2	66.4	54.8	44.5	34.0	20.0	6.4	2.6	33.6	63.8	2.6	
★ 034	2015-866	100.0	100.0	77.4	55.9	53.0	51.3	50.6	49.1	48.1	47.0	44.5	29.1	8.9	3.5	50.9	45.6	3.5	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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