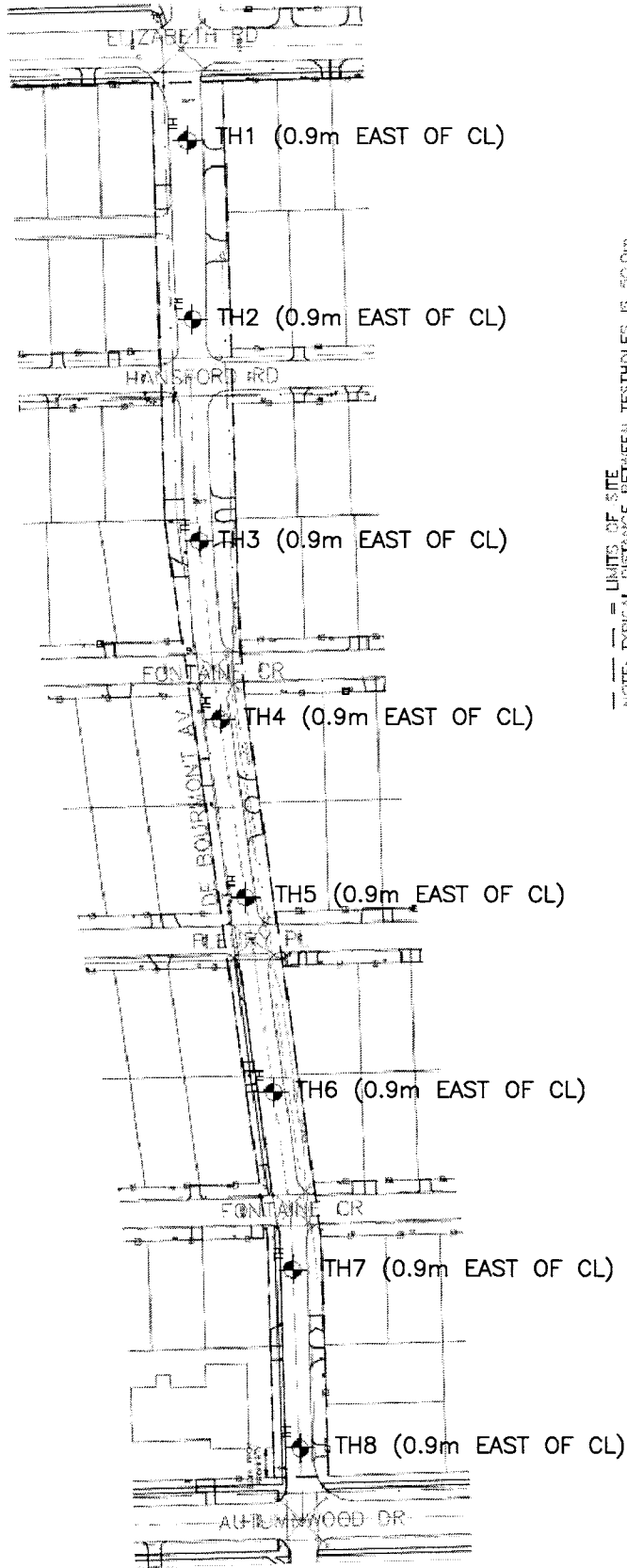


APPENDIX 'A' - GEOTECHNICAL REPORT



— LIMITS OF SITE
 --- TYPICAL DISTANCE BETWEEN TESTHOLES IS 50.0m

DE BOURMONT AVENUE
 (FROM AUTUMNWOOD DR. TO ELIZABETH RD.)



GENIVAR

10 PRAIRIE WAY
 WINNIPEG, MB R2J 3J8
 Tel: (204)477-6650
 Fax: (204)474-2864

CITY OF WINNIPEG
 2010 STREET RENEWAL

TESTHOLE LOCATIONS
 DE BOURMONT AVENUE

DATE: (YYMMDD)	10/04/23
APPROVED:	SSU
DRAWN BY:	AO
PROJ. NO. WE09 151	DWG. NO. GEO-2



GENIVAR

Project No: WE-09-151-00-WE

TH1

Project: 2010 Street Renewal

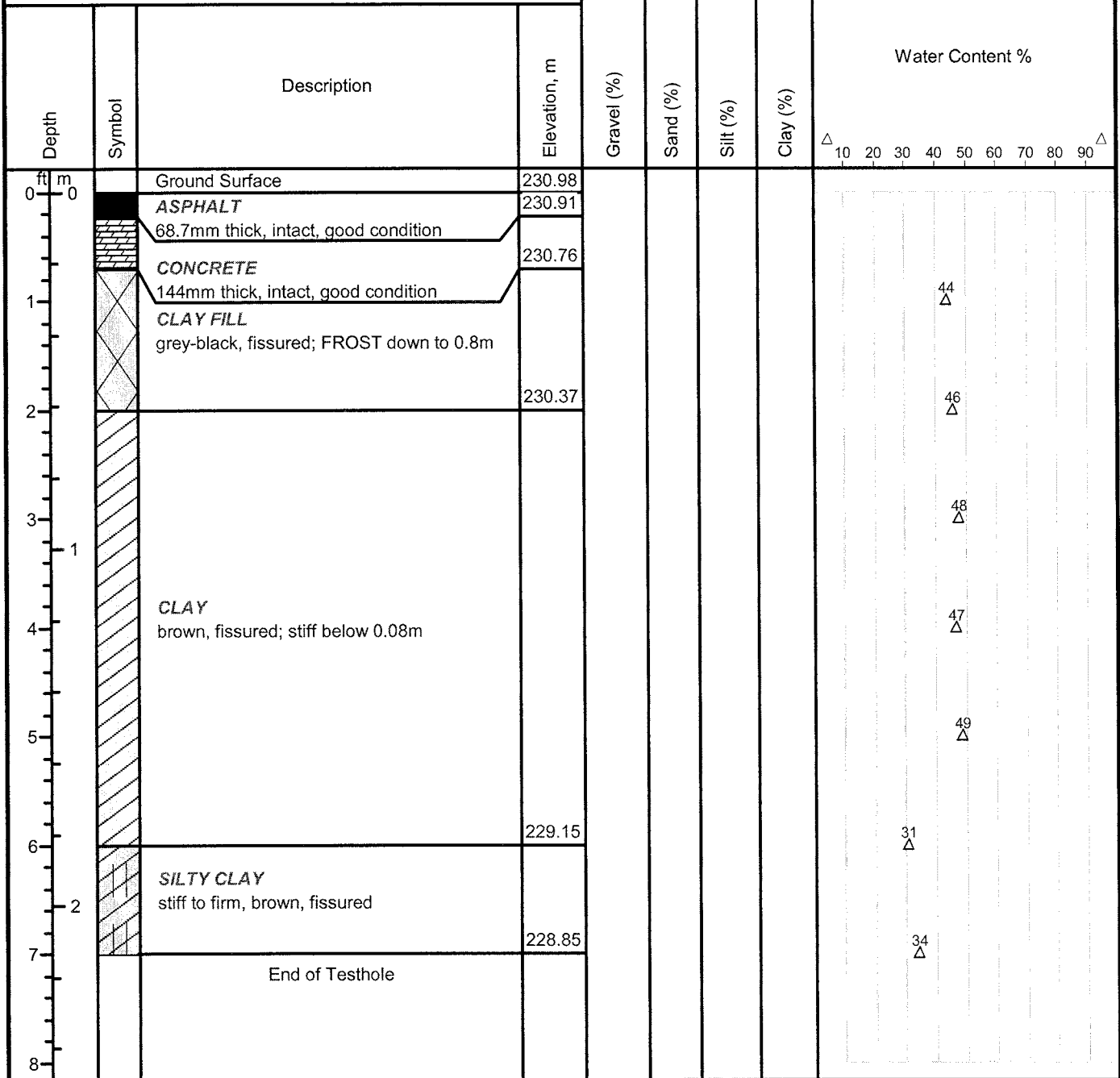
Client: City of Winnipeg

Enclosure:

Location: De Bourmont Ave.(Elizabeth-Autumwood)

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Truck- Mounted

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 230.98m

Drill Date: 01/11/10

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1



GENIVAR

Project No: WE-09-151-00-WE

TH2

Project: 2010 Street Renewal

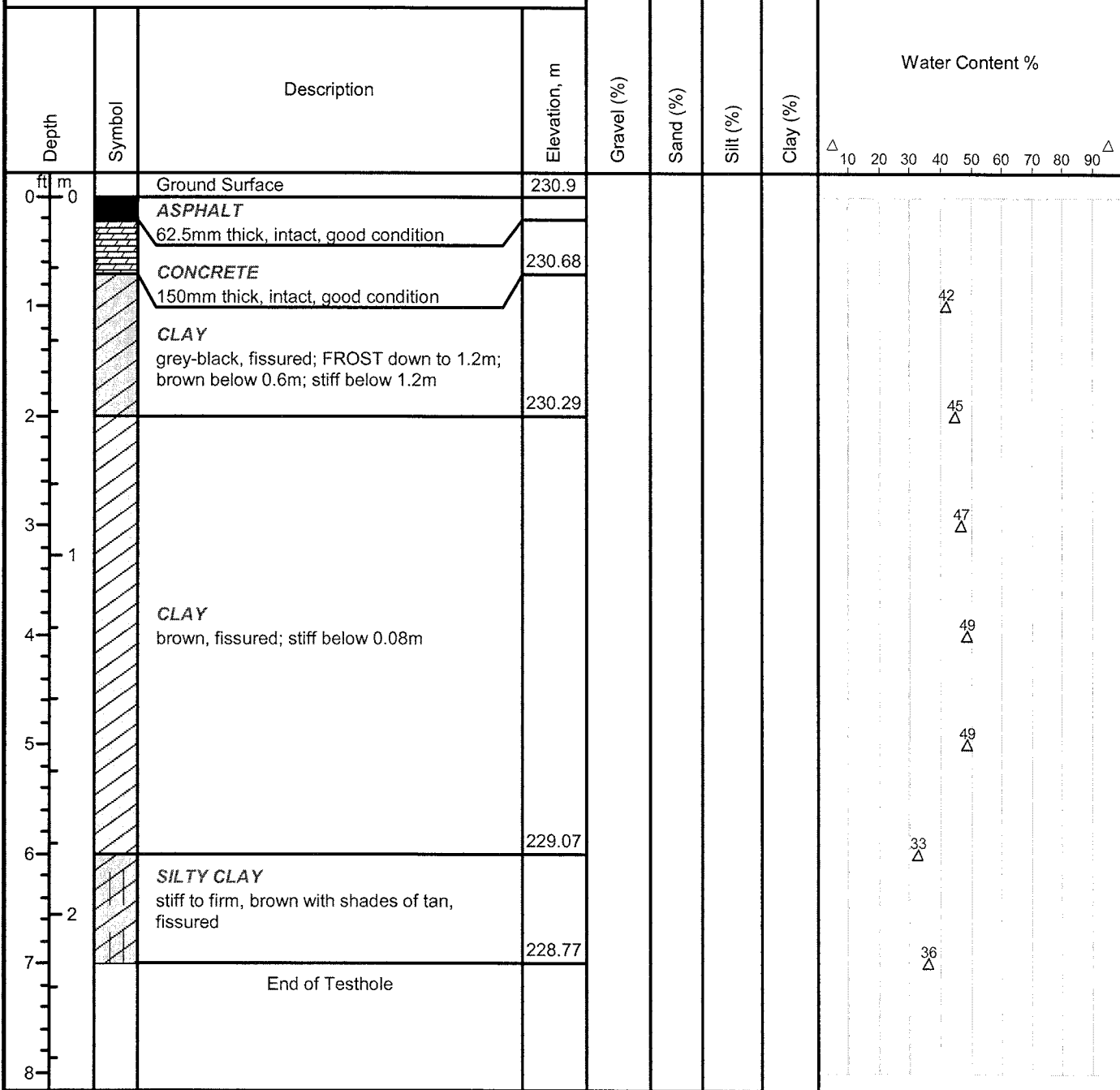
Client: City of Winnipeg

Enclosure:

Location: De Bourmont Ave.(Elizabeth-Autumnwood)

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Truck- Mounted

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 230.90m

Drill Date: 01/11/10

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1



GENIVAR

Project No: WE-09-151-00-WE

TH3

Project: 2010 Street Renewal

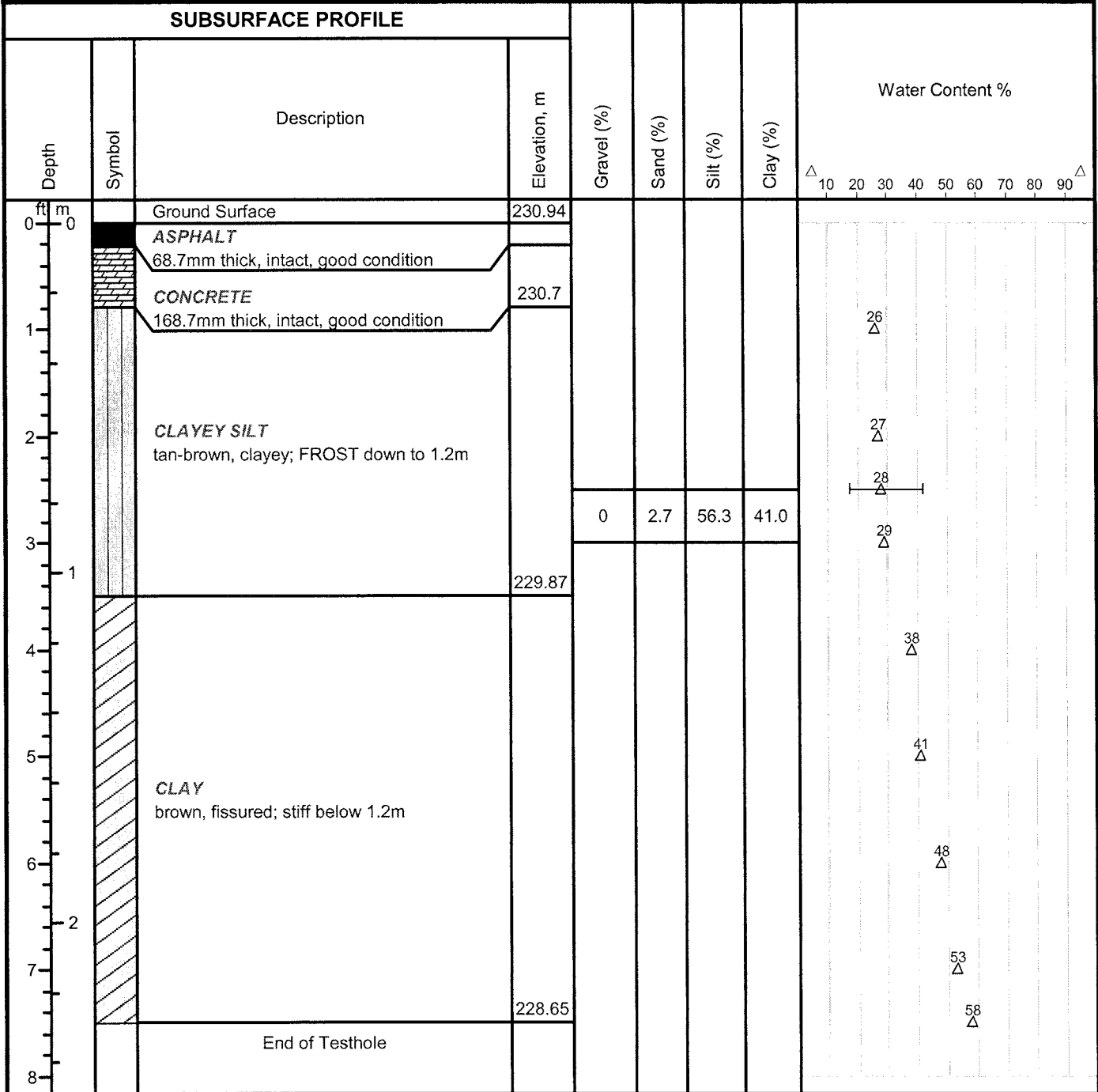
Client: City of Winnipeg

Enclosure:

Location: De Bourmont Ave.(Elizabeth-Autumwood)

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Truck- Mounted

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 230.94m

Drill Date: 01/11/10

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1



GENIVAR

Project No: WE-09-151-00-WE

TH4

Project: 2010 Street Renewal

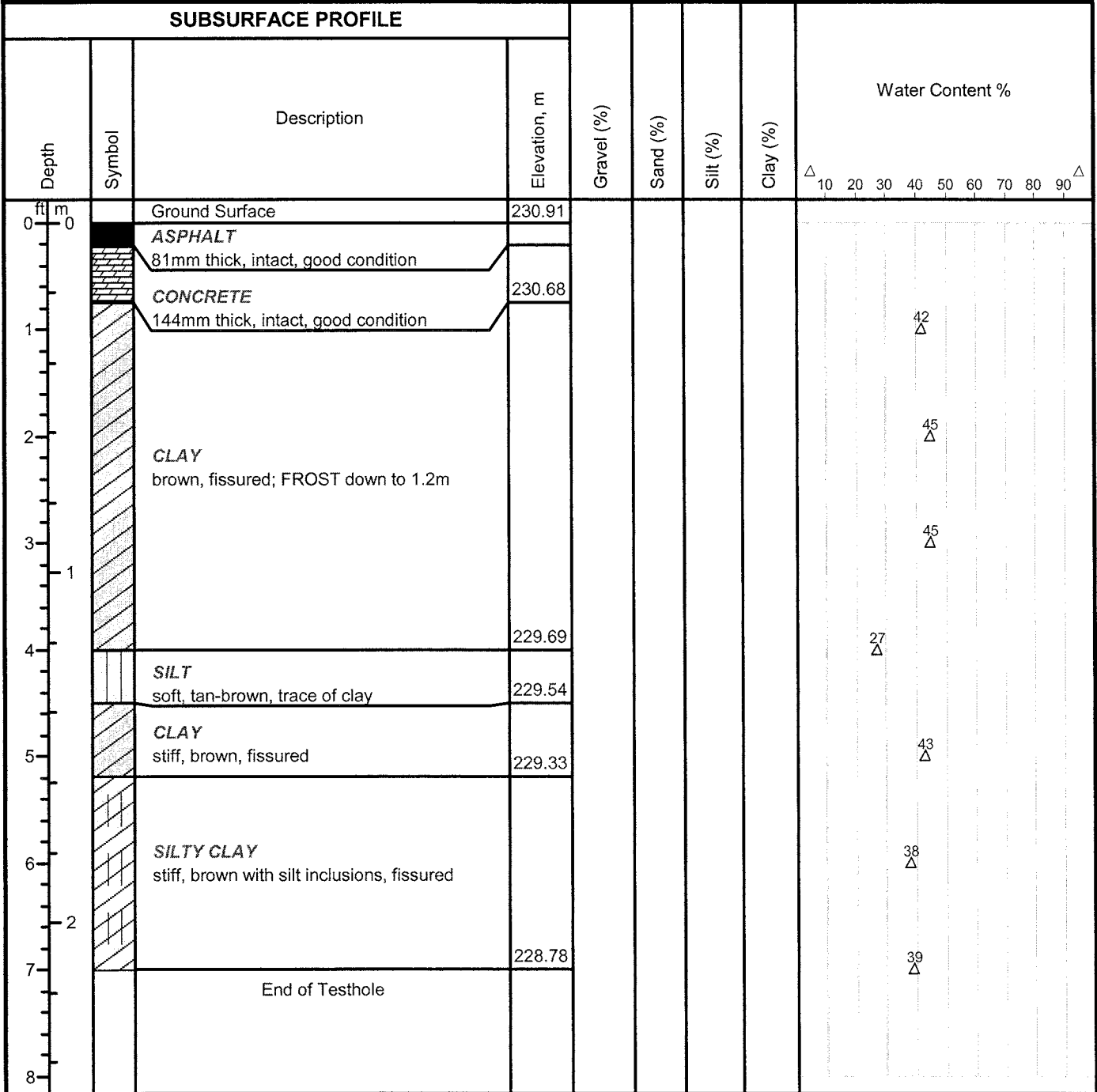
Client: City of Winnipeg

Enclosure:

Location: De Bourmont Ave.(Elizabeth-Autumwood)

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Truck- Mounted

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 230.91m

Drill Date: 01/11/10

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1



Project No: WE-09-151-00-WE

TH5

Project: 2010 Street Renewal

Client: City of Winnipeg

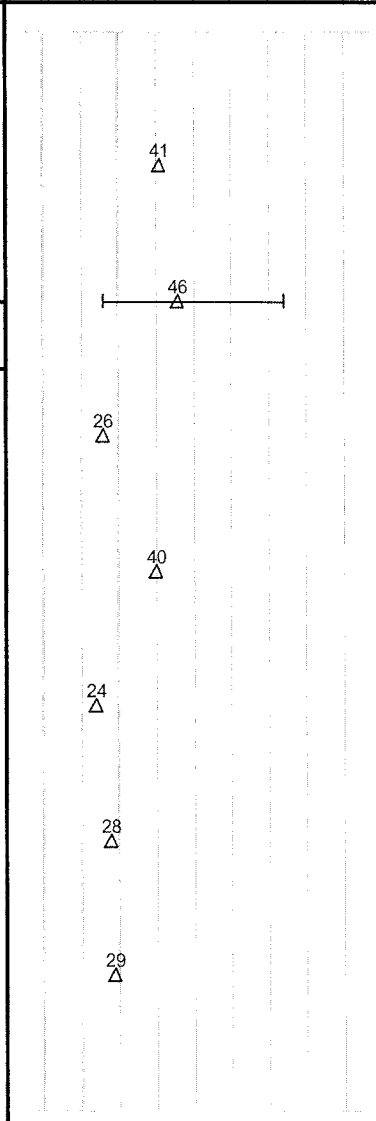
Enclosure:

Location: De Bourmont Ave.(Elizabeth-Autumwood)

Engineer: SSU

SUBSURFACE PROFILE

Depth	Symbol	Description	Elevation, m	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content %	
								Δ	Δ
0		Ground Surface	231.13						
0		ASPHALT 50mm thick, intact, good condition							
0		CONCRETE 150mm thick, intact, good condition	230.93						
1		CLAY grey-black, fissured; brown at 0.6m; FROST down to 0.9m							
2				0.7	6.6	25.7	67.0		
3			230.22						
3		SILT soft, tan-brown, trace of clay							
4			229.91						
4		CLAY stiff, brown, fissured							
5			229.61						
5		SILT soft, tan-brown, moist to wet							
6									
7			229						
7		End of Testhole							
8									



Drill Method: Truck- Mounted

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 231.13m

Drill Date: 01/11/10

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1



GENIVAR

Project No: WE-09-151-00-WE

TH6

Project: 2010 Street Renewal

Client: City of Winnipeg

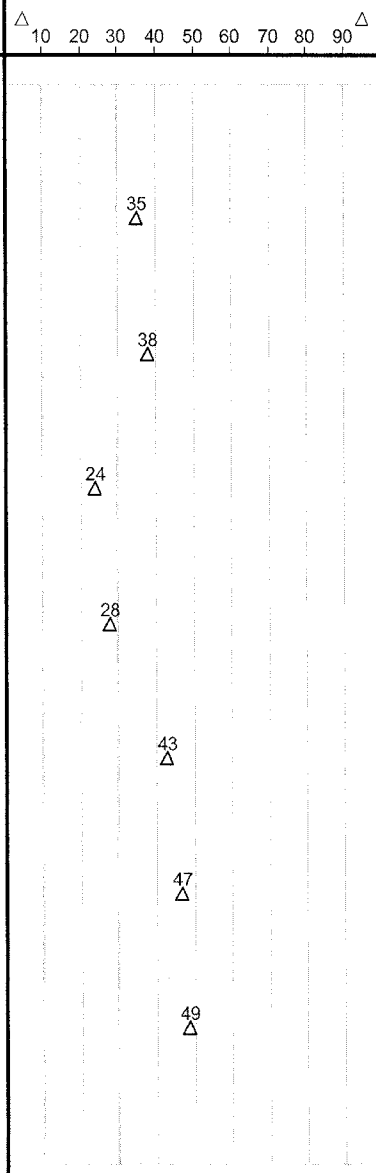
Enclosure:

Location: De Bourmont Ave.(Elizabeth-Autumnwood)

Engineer: SSU

SUBSURFACE PROFILE

Depth	Symbol	Description	Elevation, m	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content %	
								Δ	Δ
0		Ground Surface	231.31						
0		ASPHALT 81mm thick, intact, good condition							
0		CONCRETE 144mm thick, intact, good condition	231.08						
1		SILTY CLAY brown with shades of tan, fissured; FROST down to 1.2m							
2			230.55						
3		SILT tan-brown, moist							
4			230.09						
5		CLAY stiff, brown, fissured							
6									
7			229.18						
7		End of Testhole							
8									



Drill Method: Truck- Mounted

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 231.31m

Drill Date: 01/11/10

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1



GENIVAR

Project No: WE-09-151-00-WE

TH7

Project: 2010 Street Renewal

Client: City of Winnipeg

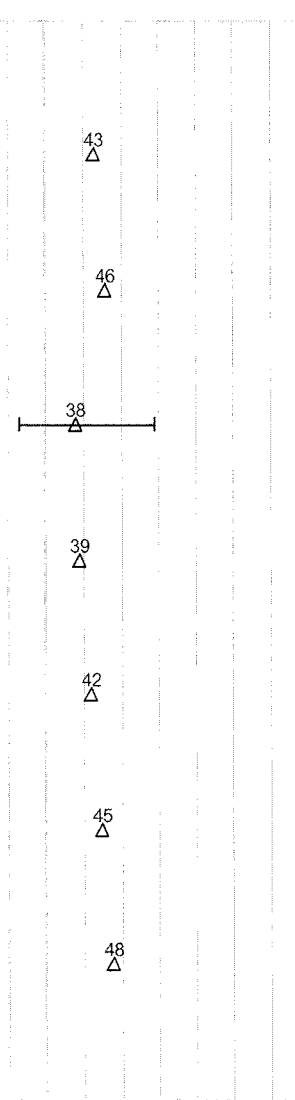
Enclosure:

Location: De Bourmont Ave.(Elizabeth-Autumwood)

Engineer: SSU

SUBSURFACE PROFILE

Depth	Symbol	Description	Elevation, m	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content %	
								△	△
0		Ground Surface	231.13						
		ASPHALT 87mm thick, intact, good condition							
		CONCRETE 188mm thick, intact, good condition	230.85						
1		CLAY brown, fissured; FROST down to 1m							
2			230.37						
3		SILTY CLAY stiff to firm below 1m, brown with traces of tan colour, STRATIFIED		0	4.8	44.2	51.0		
4									
5			229.61						
6		CLAY stiff, brown, fissured							
7			229						
8		End of Testhole							



Drill Method: Truck- Mounted

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 231.13m

Drill Date: 01/11/10

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1



GENIVAR

Project No: WE-09-151-00-WE

TH8

Project: 2010 Street Renewal

Client: City of Winnipeg

Enclosure:

Location: De Bourmont Ave.(Elizabeth-Autumnwood)

Engineer: SSU

SUBSURFACE PROFILE

Depth	Symbol	Description	Elevation, m	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content %														
								△	10	20	30	40	50	60	70	80	90	△				
0		Ground Surface	231.28																			
0		ASPHALT 87mm thick, poor condition, some cracks are observed	231.09																			
1		CONCRETE 100mm thick, broken, deteriorated, poor condition																				
2		CLAY brown, fissured; FROST down to 1.5m																				
3																						
4																						
5		SILTY CLAY firm to soft, brown with traces of tan colour, moist to wet	229.76																			
5			229.6																			
6		CLAY stiff, brown, fissured																				
7			229.15																			
7		End of Testhole																				
8																						

42
△

45
△

45
△

47
△

38
△

43
△

49
△

Drill Method: Truck- Mounted

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 231.28m

Drill Date: 01/11/10

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1

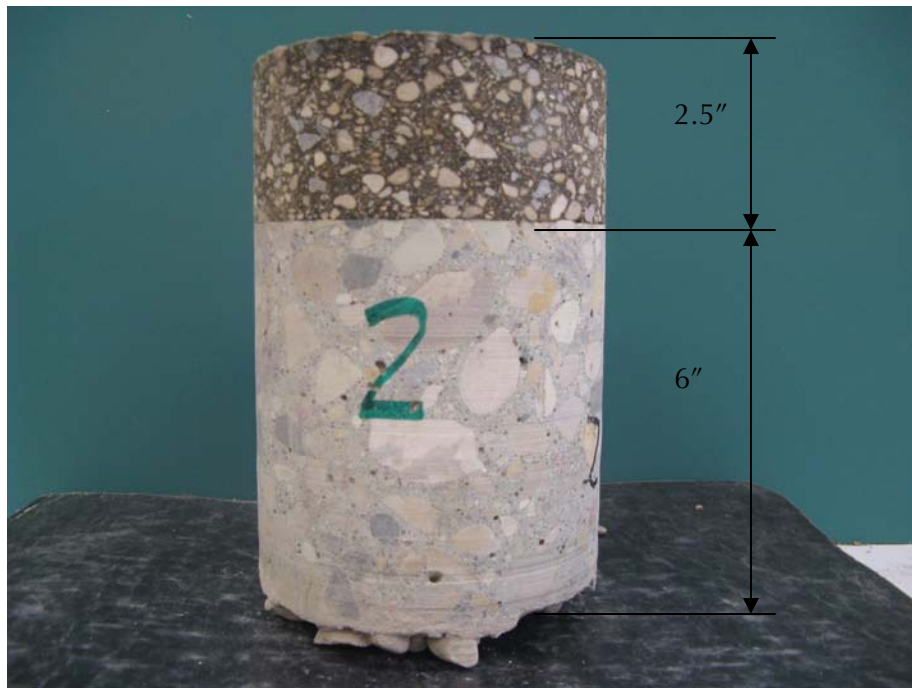
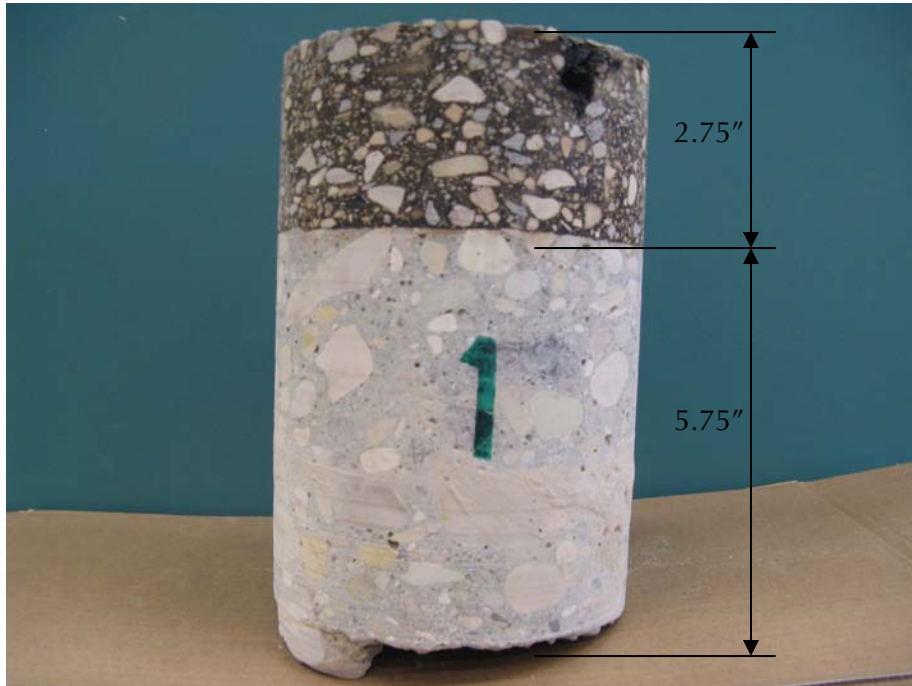
PROJECT:

2010 STREET RENEWAL

STREET:

DEBOURMONT

CORE SAMPLES FROM ELIZABETH ROAD TO AUTUMNWOOD DR.



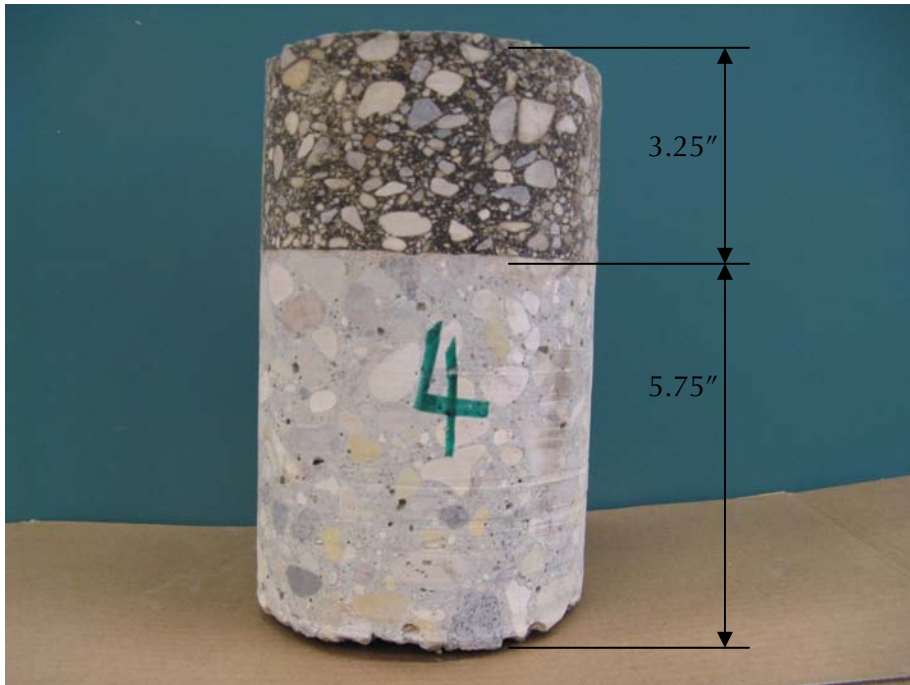
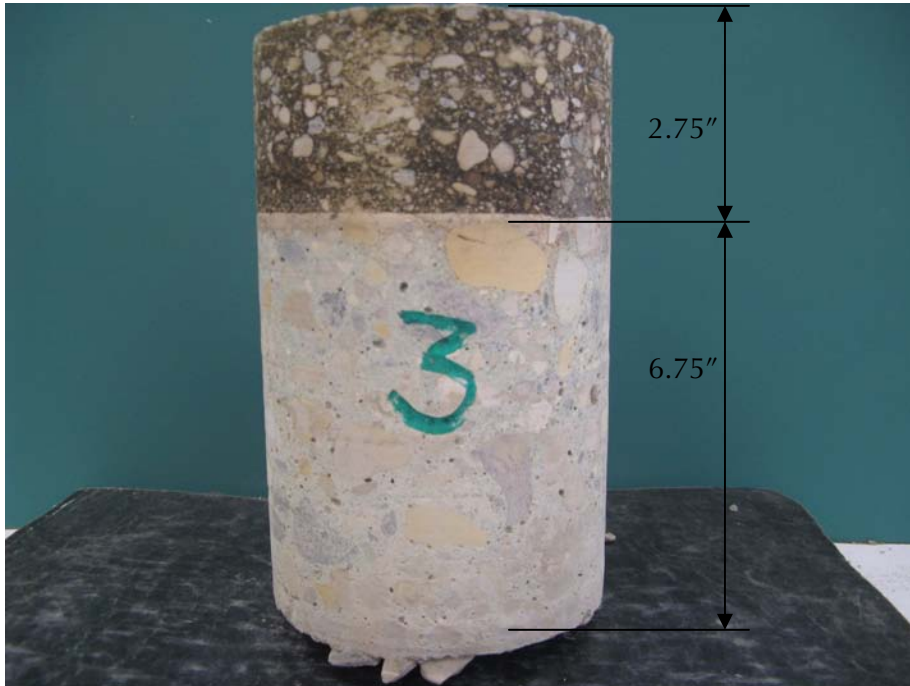
PROJECT:

2010 STREET RENEWAL

STREET:

DEBOURMONT

CORE SAMPLES FROM ELIZABETH ROAD TO AUTUMNWOOD DR.



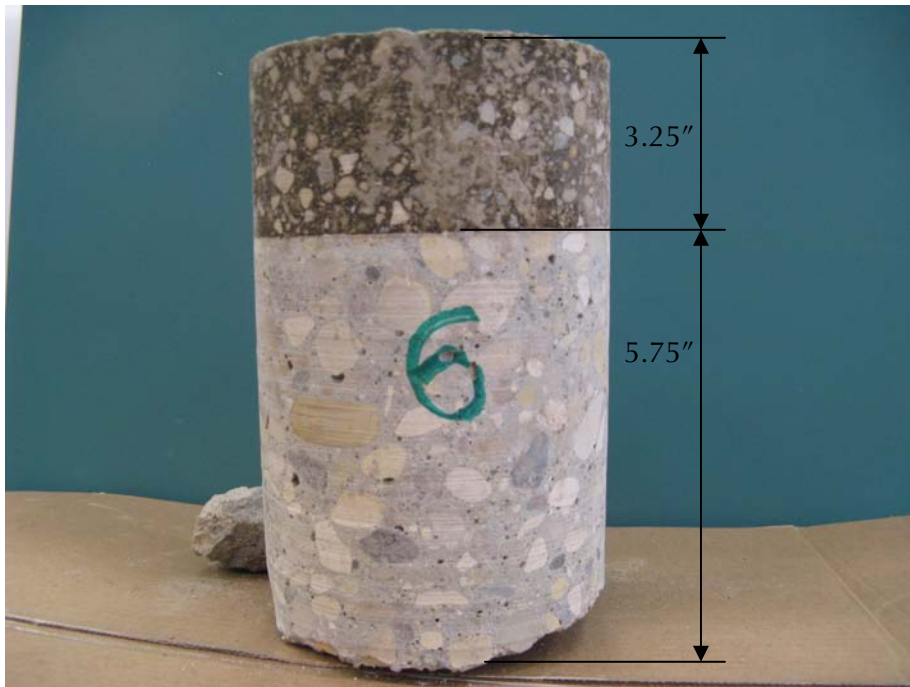
PROJECT:

2010 STREET RENEWAL

STREET:

DEBOURMONT

CORE SAMPLES FROM ELIZABETH ROAD TO AUTUMNWOOD DR.



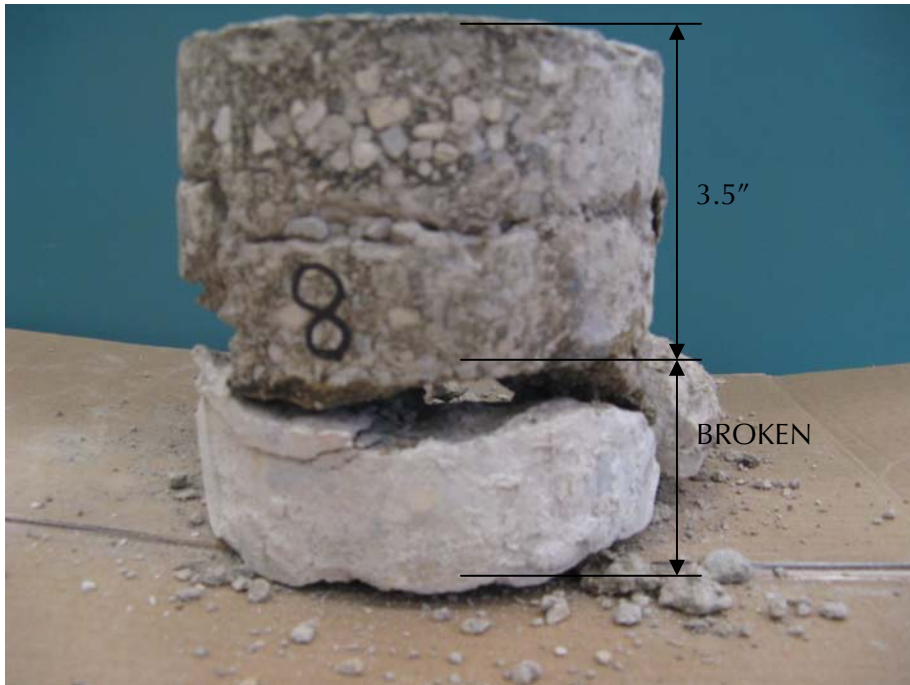
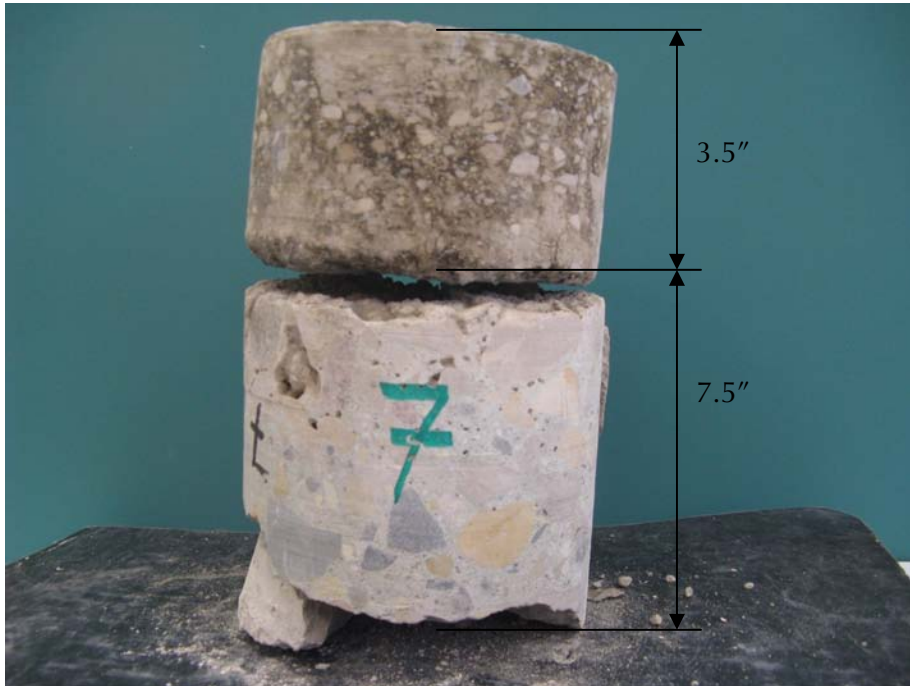
PROJECT:

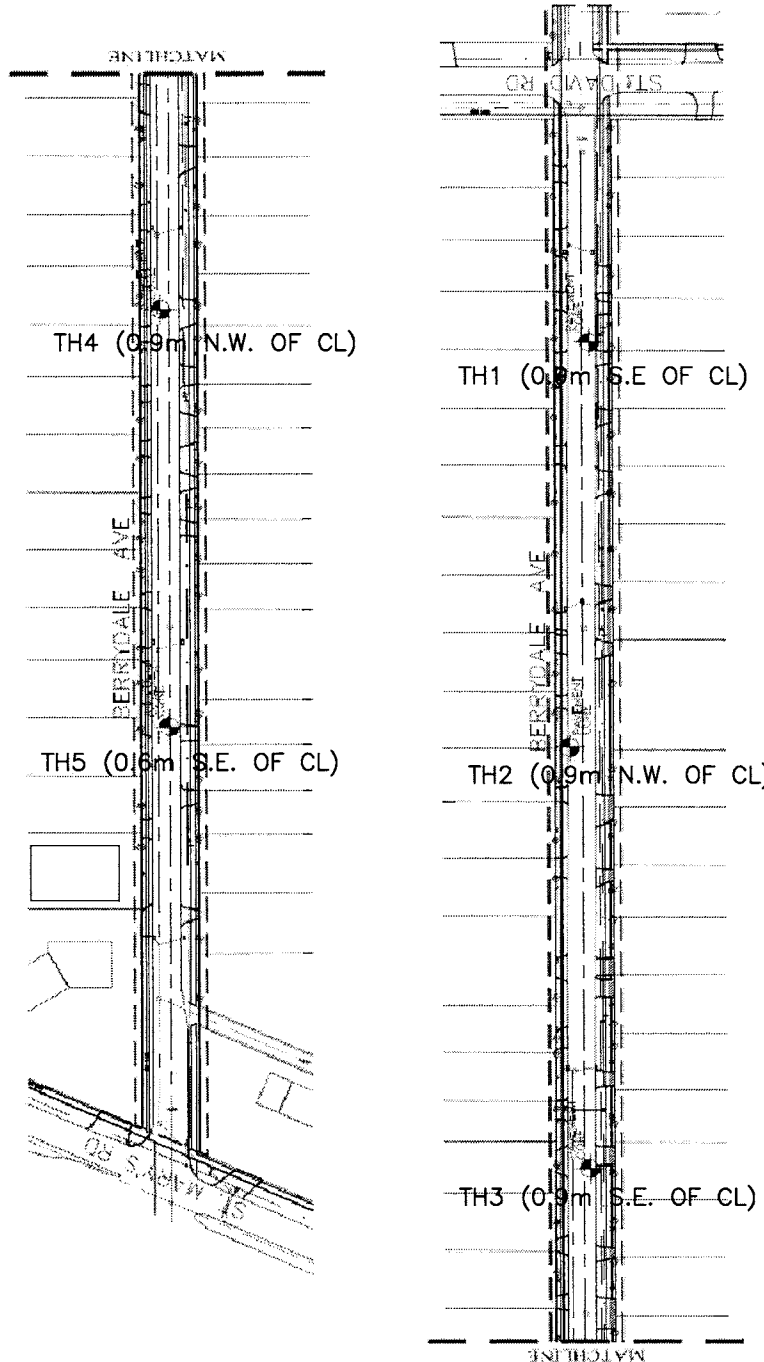
2010 STREET RENEWAL

STREET:

DEBOURMONT

CORE SAMPLES FROM ELIZABETH ROAD TO AUTUMNWOOD DR.





BERRYDALE AVE
 (FROM ST. MARY'S RD. TO ST. DAVID RD.)

--- LIMITS OF SITE
 --- TYPICAL DISTANCE BETWEEN PAVEMENT CORES IS 75.0m TO 100.0m



GENIVAR

10 PRAIRIE WAY
 WINNIPEG, MB R2J 3J8
 Tel: (204)477-6650
 Fax: (204)474-2864

CITY OF WINNIPEG
 2010 STREET RENEWAL

TESTHOLE LOCATIONS
 BERRYDALE AVENUE

DATE: (YYMMDD)	10/04/23
APPROVED:	SSU
DRAWN BY:	AO
PROJ. NO. WE09 151	DWG. NO. GEO-4



Project No: WE-09-151-00-WE

TH1

Project: 2010 Street Renewal

Client: City of Winnipeg

Logged: AO

Location: Berrydale Ave.(St. Mary's - St. David)

Engineer: S.S.U

Depth	Symbol	Description	Elevation(m)	SPT(blow/0.3m)	Pocket Penetrometer/ Field Vane (kPa)
0		Ground Surface	231.58		
		CONCRETE 140mm thick, intact, good condition	231.45		
		End of Testhole			

Drill Method: Truck Mounted Core Drill

GENIVAR
10 Prairie Street
Winnipeg, Manitoba
R2J 3J8

Elevation: 231.58m

Drill Date: 12/23/09

Checked by: S.S.U.

Hole Size: 150 mm



GENIVAR

Project No: WE-09-151-00-WE

TH2

Project: 2010 Street Renewal


Client: City of Winnipeg

Enclosure:

Location: Berrydale Ave.(St. Mary's-St. David)

Engineer: SSU

SUBSURFACE PROFILE

Depth	Symbol	Description	Elevation, m	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content %
								Δ 10 20 30 40 50 60 70 80 90 Δ
0		Ground Surface	232.01					
		CONCRETE 140mm thick, intact, good condition	231.86					
		End of Testhole						

Drill Method: Truck- Mounted Core Drill

Drill Date: 12/23/09

Hole Size: 150mm

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 232.01m

Checked by: SSU

Sheet: 1 of 1



GENIVAR

Project No: WE-09-151-00-WE

TH3

Project: 2010 Street Renewal


Client: City of Winnipeg

Enclosure:

Location: Berrydale Ave.(St. Mary's-St. David)

Engineer: SSU

SUBSURFACE PROFILE

Depth	Symbol	Description	Elevation, m	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content %
								Δ 10 20 30 40 50 60 70 80 90 Δ
0		Ground Surface	231.8					
		CONCRETE 150mm thick, broken, deteriorated	231.65					
		End of Testhole						
1								
2								

Drill Method: Truck- Mounted Core Drill

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 231.80m

Drill Date: 12/23/09

Checked by: SSU

Hole Size: 150mm

Sheet: 1 of 1



Project No: WE-09-151-00-WE

TH4


Project: 2010 Street Renewal

Client: City of Winnipeg

Logged: AO

Location: Berrydale Ave.(St. Mary's - St. David)

Engineer: S.S.U

Depth	Symbol	Description	Elevation(m)	SPT(blow/0.3m)	Pocket Penetrometer/ Field Vane (kPa)
0		Ground Surface	231.74		
		CONCRETE 125mm thick, intact, good condition	231.61		
1		End of Testhole			
2					

Drill Method: Truck Mounted Core Drill

GENIVAR

Elevation: 231.74m

Drill Date: 12/23/09

10 Prairie Street
Winnipeg, Manitoba
R2J 3J8

Checked by: S.S.U.

Hole Size: 150 mm



GENIVAR

Project No: WE-09-151-00-WE

TH5

Project: 2010 Street Renewal

Client: City of Winnipeg

Enclosure:

Location: Berrydale Ave.(St. Mary's-St. David)

Engineer: SSU

SUBSURFACE PROFILE

Depth	Symbol	Description	Elevation, m	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content %
								Δ 10 20 30 40 50 60 70 80 90 Δ
0		Ground Surface	231.86					
		CONCRETE 125mm thick, intact, good condition	231.73					
		End of Testhole						

Drill Method: Truck- Mounted Core Drill

Genivar
10 Prairie Way
Winnipeg, Mb.
R2J 3J8

Datum: 231.86m

Drill Date: 12/23/09

Checked by: SSU

Hole Size: 150mm

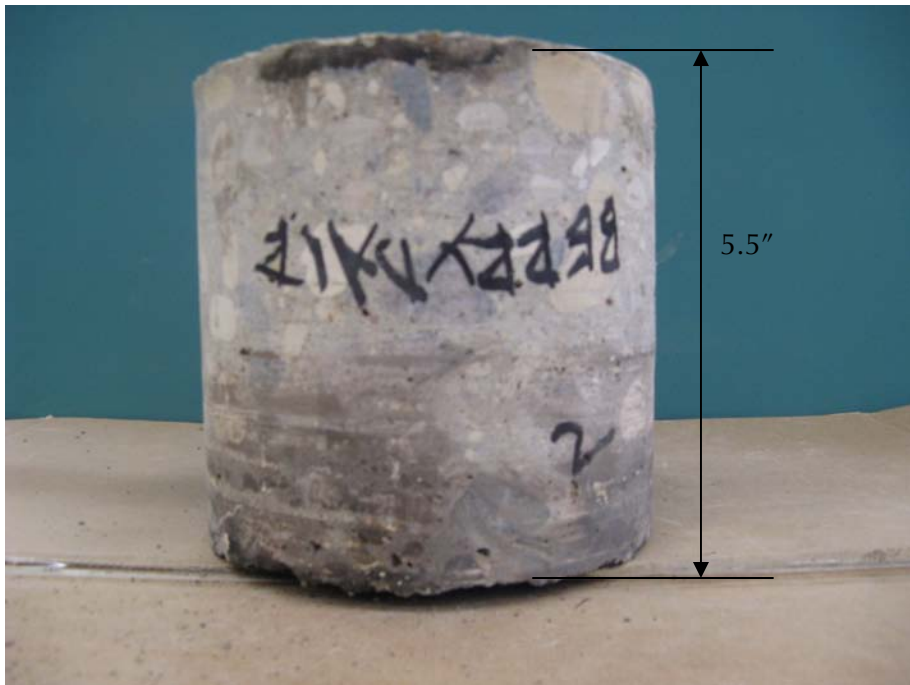
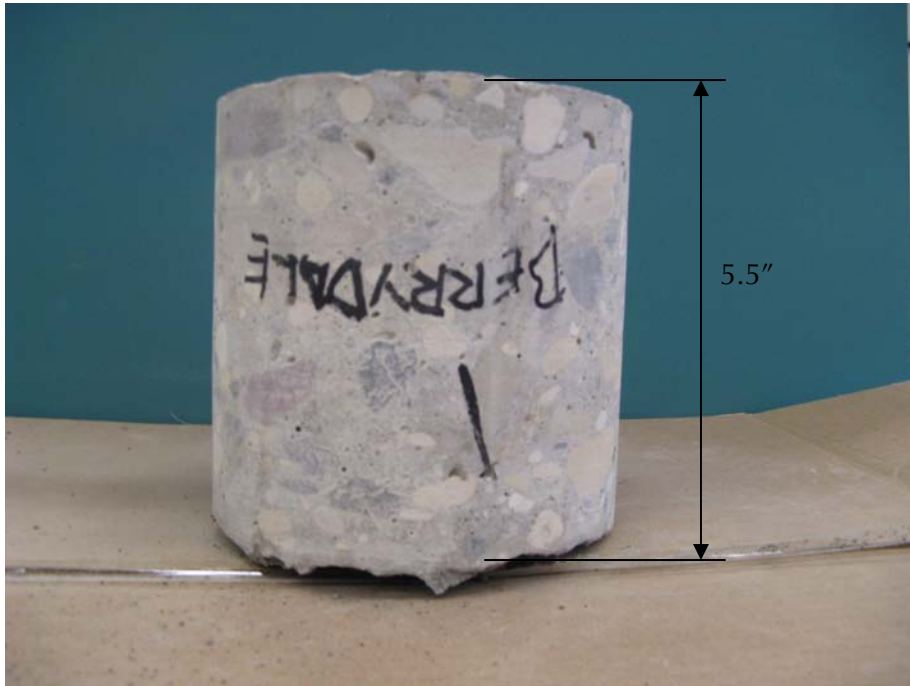
Sheet: 1 of 1

PROJECT:

2010 STREET RENEWAL

STREET:

BERRYDALE AVENUE BET. ST. MARY'S RD. AND ST. DAVID RD.
CORE SAMPLES FROM ST. DAVID RD. TO ST. MARY'S RD.

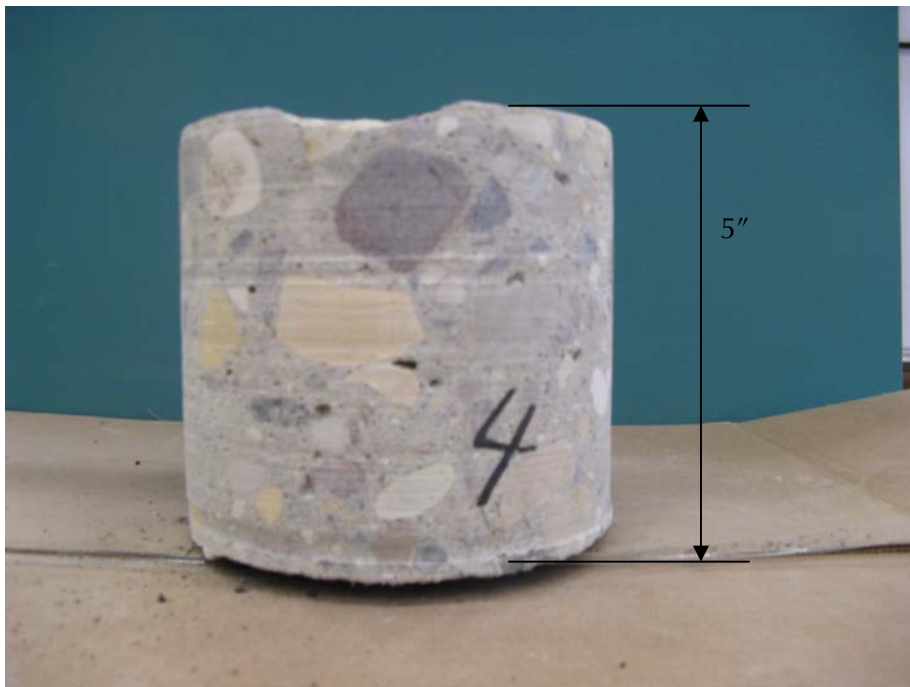


PROJECT:

2010 STREET RENEWAL

STREET:

BERRYDALE AVENUE BET. ST. MARY'S RD. AND ST. DAVID RD.
CORE SAMPLES FROM ST. DAVID RD. TO ST. MARY'S RD.



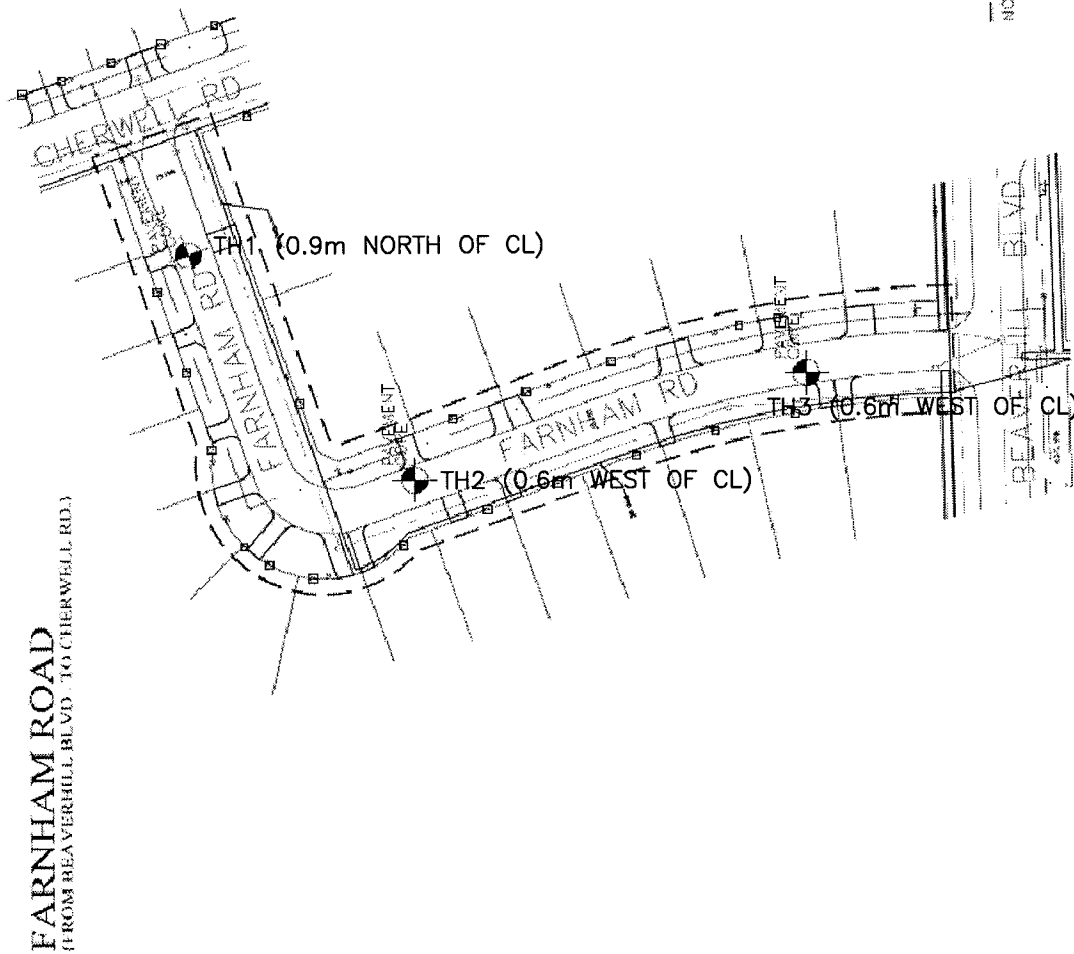
PROJECT:

2010 STREET RENEWAL

STREET:

BERRYDALE AVENUE BET. ST. MARY'S RD. AND ST. DAVID RD.
CORE SAMPLES FROM ST. DAVID RD. TO ST. MARY'S RD.





— = LIMITS OF SITE
 — = TYPICAL DISTANCE BETWEEN PAVEMENT CORES 75.0m TO 100.0m
 NOTE: TYPICAL DISTANCE BETWEEN PAVEMENT CORES 75.0m TO 100.0m



GENIVAR

10 PRAIRIE WAY
 WINNIPEG, MB R2J 3J8
 Tel: (204)477-6650
 Fax: (204)474-2864

CITY OF WINNIPEG
 2010 STREET RENEWAL

TESTHOLE LOCATIONS
 FARNHAM ROAD

DATE: (YY/MM/DD)	10/04/23
APPROVED:	SSU
DRAWN BY:	AO
PROJ. NO. WE09 151	DWG. NO. GEO-3



GENIVAR

Project No: WE-09-151-00-WE

TH1

Project: 2010 Street Renewal

Client: City of Winnipeg

Logged: AO

Location: Farnham Rd. (Cherwell - Beaverhill)

Engineer: S.S.U

Depth	Symbol	Description	Elevation(m)	SPT (blows/0.3m)	Pocket Penetrometer/ Field Vane (kPa)
0		Ground Surface	232.09		
		CONCRETE 125mm thick, intact, good condition	231.96		
		End of Testhole			

Drill Method: Truck Mounted Core Drill

GENIVAR
10 Prairie Street
Winnipeg, Manitoba
R2J 3J8

Elevation: 232.09m

Drill Date: 12/23/09

Checked by: S.S.U.

Hole Size: 150 mm



Project No: WE-09-151-00-WE

TH2

Project: 2010 Street Renewal

Client: City of Winnipeg

Logged: AO

Location: Farnham Rd. (Cherwell - Beaverhill)

Engineer: S.S.U

Depth	Symbol	Description	Elevation(m)	SPT(blow/0.3m)	Pocket Penetrometer/ Field Vane (kPa)
0		Ground Surface	232.15		
		CONCRETE 125mm thick, intact, good condition	232.02		
		End of Testhole			

Drill Method: Truck Mounted Core Drill

Drill Date: 12/23/09

Hole Size: 150 mm

GENIVAR
10 Prairie Street
Winnipeg, Manitoba
R2J 3J8

Elevation: 232.15m

Checked by: S.S.U.



Project No: WE-09-151-00-WE

TH3


Project: 2010 Street Renewal

Client: City of Winnipeg

Logged: AO

Location: Farnham Rd. (Cherwell - Beaverhill)

Engineer: S.S.U

Depth	Symbol	Description	Elevation (m)	SPT (blows/0.3m)	Pocket Penetrometer/ Field Vane (kPa)
0		Ground Surface	232.02		
		CONCRETE 150mm thick, intact, good condition	231.87		
		End of Testhole			

Drill Method: Truck Mounted Core Drill

Drill Date: 12/23/09

Hole Size: 150 mm

GENIVAR
 10 Prairie Street
 Winnipeg, Manitoba
 R2J 3J8

Elevation: 232.02m

Checked by: S.S.U.

PROJECT:

2010 STREET RENEWAL

STREET:

FARNHAM ROAD

CORE SAMPLES FROM CHERWELL ROAD TO BEAVERHILL BLVD.

