FULTON COUNTY

DEPARTMENT OF PURCHASING & CONTRACT COMPLIANCE

Winner 2000- 2008 Achievement of Excellence in Procurement Award
National Purchasing Institute

Felicia Strong-Whitaker, Interim Director

OUTSTANDING AGENCY ACCREDITATION ACHIEVEMENT AWARD NIGP

June 8, 2009

Re: 09ITB68031K-DB
T123 Will Lee Road Sidewalks

Dear Bidders:

Attached is one (1) copy of Addendum 2, hereby made a part of the above referenced ITB #09ITB68031K-DB; T123 Will Lee Road Sidewalks.

Except as provided herein, all terms and conditions in the ITB #09ITB68031K-DB; T123 Will Lee Road Sidewalks referenced above remain unchanged and in full force and effect.

Sincerely,

Darlene A. Banks,
Assistant Purchasing Agent

This Addendum forms a part of the contract documents and modifies the original RFP documents as noted below:

1. Delete the Price Quote sheets contained in the Bid Document and substitute the revised per the attachment.

2. Retaining Wall Report.

3. Bridge Foundation Investigation Report

Consultants shall be responsible for reviewing the documents posted on the Fulton County's website along with the ITB. Documents posted are to be used as a reference as applicable.

ACKNOWLEDGEMENT OF ADDENDUM NO. 2

The undersigned bidder acknowledges receipt of this addendum by returning one (1) copy of this form with the bid package to the Purchasing & Contract Compliance Department, Fulton County Public Safety Building, 130 Peachtree Street, Suite 1168, Atlanta, Georgia 30303 by the Bid due date and time on Monday, June, 15 2009 at 11:00 A.M.

This is to acknowledge receipt of Addendum No. 2, _____ day of _____, 2009.

_____
Legal Name of Bidder

_____
Signature of Authorized Representative

_____
Title

PRICE QUOTE

Bidder shall utilize the following to submit price quote

PAY ITEM	TOTAL QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
ROADWAY ITEMS					
150-1000	LS	LUMP	TRAFFIC CONTROL – STP-000-00 (189)		
210-0100	LS	LUMP	GRADING COMPLETE – STP-000-00(189)		
310-1101	813	TN	GR AGGR BASE CRS, INCL MATL		
402-3131	52	TN	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL AND H - LIME		
402-3190	12	TN	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL AND H - LIME		
441-0014	2274	SY	DRIVEWAY CONCRETE, 4 IN THK		
441-0104	9930	SY	CONC SIDEWALK, 4 IN		
441-0740	1268	SY	CONCRETE MEDIAN, 4 IN		
441-4020	2298	SY	CONC VALLEY GUTTER, 6 IN		
441-4030	283	SY	CONC VALLEY GUTTER, 8 IN		
441-6012	5260	LF	CONC CURB & GUTTER, 6 IN X 24 IN, TP2		
444-1000	300	LF	SAWED JOINTS IN EXIST PAVEMENTS – ASPHALT		
500-3107	310	CY	CLASS A CONCRETE, RETAINING WALL		
500-9999	5	CY	CLASS B CONC, BASE OR PVMT WIDENING		
511-1000	30175	LB	BAR REINF STEEL		
515-1000	203	LF	FERROUS METAL HANDRAIL, SPCL DESIGN		
515-2020	515	LF	GALV STEEL PIPE HANDRAIL, 2 IN, ROUND		
607-1000	279	CY	MORTAR RUBBLE MASONRY		

PAY ITEM	TOTAL QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
634-1200	205	EA	RIGHT OF WAY MARKER		
DRAINAGE ITEMS					
550-1150	23	LF	STORM DRAIN PIPE, 15 IN, H 1-10		
550-2150	70	LF	SIDE DRAIN PIPE, 15 IN ,H 1-10		
550-4115	6	EA	FLARED END SECTION 15 IN SIDE DRAIN		
611-3000	10	EA	RECONSTR CATCH BASIN, GROUP 1		
611-9000	1	EA	CAPPING MINOR STRUCTURE		
668-1105	2	EA	CATCH BASIN, GP 1, SPCL DES		
668-2100	1	EA	DROP INLET, GP 1		
668-5000	1	EA	JUNCTION BOX		
TRAFFIC SIGNS AND MARKING					
611-5360	30	EA	RESET HIGHWAY SIGNS		
636-1020	38	SF	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 3		
636-1031	60	SF	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6		
636-2070	98	LF	GALV STEEL POSTS, TP 7		
636-2090	102	LF	GALV STEEL POSTS, TP 9		
653-1704	200	LF	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE		
653-1804	2500	LF	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE		
653-6004	66	SY	THERMOPLASTIC TRAF STRIPING, WHITE		
EROSION					
163-0232	3	AC	TEMPORARY GRASSING		
163-0240	80	TN	MULCH		

PAY ITEM	TOTAL QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
165-0010	4715	LF	MAINTENANCE OF TEMPORARY SILT FENCE, TP A		
165-0030	1100	LF	MAINTENANCE OF TEMPORARY SILT FENCE, TP C		
167-1000	2	EA	WATER CONTROL MONITORING AND SAMPLING		
167-1500	18	MO	WATER QUALITY INSPECTIONS		
171-0010	9430	LF	TEMPORARY SILT FENCE, TYPE A		
171-0030	2200	LF	TEMPORARY SILT FENCE, TYPE C		
700-6910	6	AC	PERMANENT GRASSING		
700-7000	17	TN	AGRICULTURAL LIME		
700-7010	14	GL	LIQUID LIME		
700-8000	6	TN	FERTILIZER MIXED GRADE		
700-8100	275	LB	FERTILIZER NITROGEN CONTENT		
700-9300	9700	SY	SOD		
716-2000	23596	SY	EROSION CONTROL MATS, SLOPES		
LANDSCAPE/TREE PROTECTION					
643-8200	6900	LF	BARRIER FENCE (ORANGE), 4 FT		
702-0052	208	EA	ANDROPOGON VIRGINICUS		
702-0257	242	EA	EUONYMUS FORTUNEI		
702-0330	619	EA	HEMEROCALLIS SPECIES		
702-0470	337	EA	ILEX VOMITORIA		
702-0500	402	EA	JUNIPERUS CONFERTA		
702-0570	407	EA	LIRIOPE SPICATA		
702-9005	113	LBS	FERTILIZER		

PAY ITEM	TOTAL QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
702-9020	2939	SY	MULCH		
708-1000	220	CY	PLANT TOPSOIL		
BRIDGE QUANTITIES					
211-0300	97	CY	BRIDGE EXCAVATION, STREAM CROSSING		
310-1101	135	TN	GR AGGR BASE CRS, INCL MATL		
500-3101	35	CY	CLASS A CONCRETE		
511-1000	3084	LB	BAR REINF STEEL		
534-1000	LUMP	LS	PEDESTRIAN OVERPASS BRIDGE, STA 11+63		
603-2024	55	SY	STN DUMPED RIP RAP, TP1, 24 IN		
603-7000	55	SY	PLASTIC FILTER FABRIC		
WATER ITEMS					
611-8120	24	EA	ADJUST WATER METER BOX TO GRADE		
670-9710	3	EA	RELOCATE EXIST FIRE HYDRANT		
670-9730	38	EA	RELOCATE EXIST WATER METER INCL BOX		
	LUMP	Allow	POST DESIGN SERVICES	$25,000	$50,000
	LUMP	Allow	TESTING ALLOWANCE	$15,000	$15,000
			BASE BID AMOUNT		

BIDDERS SHALL ENTER ALL UNIT PRICES, MAKE ALL EXTENSIONS, AND TOTAL THE BID

RETAINING WALL REPORT
Sidewalk Improvements on Will Lee Road
Revised February 15, 2005
Project No. STP-0000-00 (189)
PI No. 0000189
Fulton County Project T123
Fulton County, Georgia

WILLMER ENGINEERING INC.
Willmer Project No. ATL-171-2543

Prepared for

Heath & Lineback
Marietta, Georgia

Prepared by
Willmer Engineering Inc.
3772 Pleasantdale Road
Suite 165
Atlanta, Georgia 30340-4270

770.939.0089

RETAINING WALL FOUNDATION INVESTIGATION
For
STP-0000-00 (189), Fulton County
PI No. 0000189
Sidewalk Improvements on Will Lee Road

Location/Description: The retaining wall construction is planned in conjunction with the construction of a new sidewalk leading to a pedestrian bridge. These facilities will be constructed north of Will Lee Road. This report addresses Wall No. 1, which as per project plans begins at Station 20+00 (Will Lee Road Station 34+46.26, 27.93 feet left) and ends at Station 20+77.19 (Will Lee Road Station 35+20.41, 44.00 feet left). The project is located southeast of East Point, Fulton County, Georgia.

A Cantilever retaining wall varying in height from about 8 to 11.5 feet is planned at the following locations:

Station to Station	Location	Bottom of Footing Elevation
34+46.26 to 35+20.41	27.93 to 44 ft. Lt.	859.00 to 853.08

Geology:

This project is geologically sited in the Mica Schist/ Gneiss Formation of the Georgia Piedmont region.

Design Criteria: We recommend a maximum allowable soil bearing pressure of 3.0 KSF for footings bearing on medium dense, silty sand or sandy silt (residuum) or controlled, compacted fill and the following soil parameters for the design of the planned retaining walls:

Soil Unit Weight, γ = 120 pcf
Angle of internal Friction, ϕ = 28 degrees
Cohesion, c = 0 psf
Coefficient of Sliding Friction, μ = 0.40

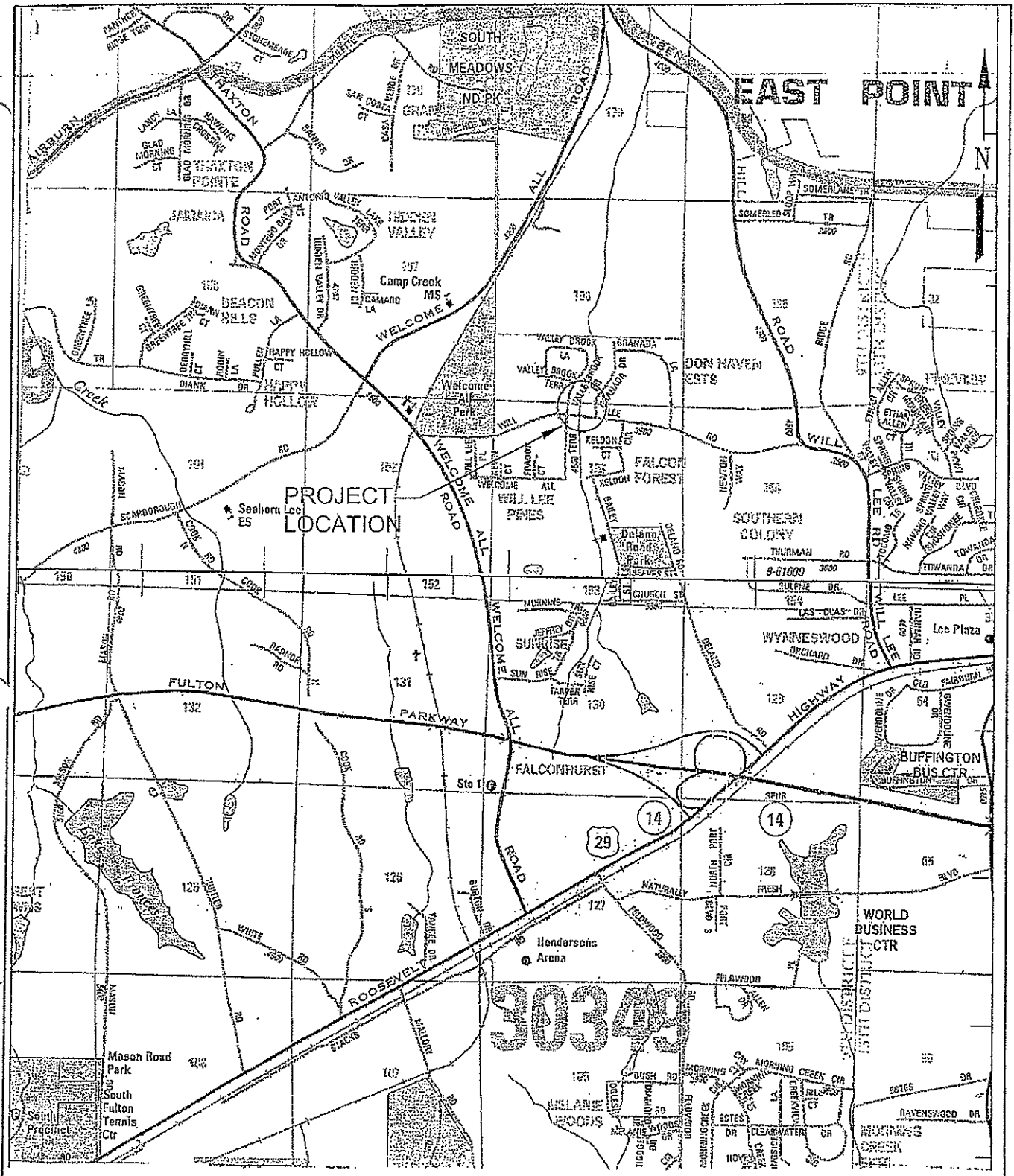
The above design parameters are based on wall backfill consisting of silty sand achieving specified compaction; and retaining wall footing bearing on medium dense residual soils or fill compacted to achieve specified compaction. Footing excavations should be lowered to remove any existing fill and alluvial materials similar to that indicated by borings, RW-1 and B-1. The footing excavation should then be raised to footing bearing level using controlled, compacted fill. In any case, provide a minimum of 2 feet of cover over wall footings.

Subsurface conditions are described on enclosed boring records, RW-1 and B-1. Data from two borings indicate that virgin residual soils are present at about 6 to 7 feet below the existing ground surface, below existing fill and alluvial materials. The residual soils are expected to be medium dense silty sands or sandy silts. Groundwater was encountered at the time of subsurface investigation in boring B-1 below the designed foundation bearing level. It should be noted that groundwater may exhibit seasonal fluctuations.

Reported By: **Harshad V. Modi, PE**

Reviewed By: **James L. Willmer, PE**

APPENDIX

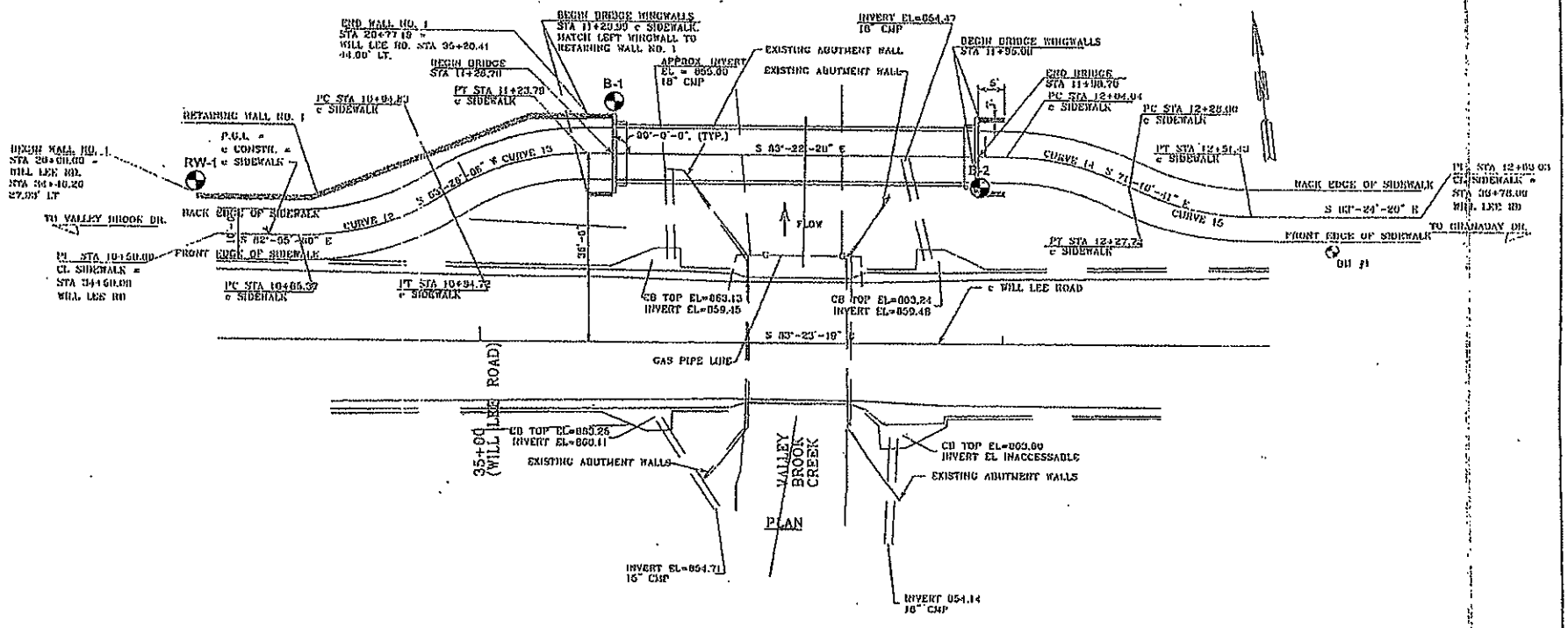


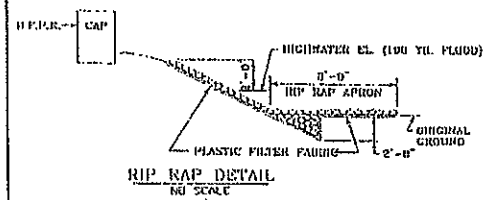
PROJECT NUMBER
STP - 0000-00 (189)
PI No. - 0000189

SCALE: NTS		FIGURE 1 SITE LOCATION MAP SIDEWALK IMPROVEMENTS ON WILL LEE ROAD FULTON COUNTY, GEORGIA WILLMER PROJECT No. ATL-171-2543
DRAWN BY: TRS REVISION: 0		
REVIEWED BY: HM 07/02/2004		

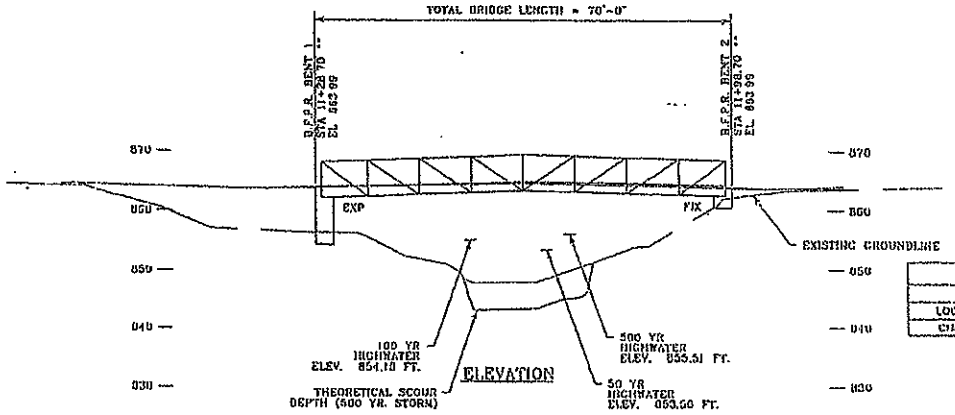
WE

GEOTECHNICAL ENGINEERING
CONSTRUCTION SERVICES
ENVIRONMENTAL SERVICES AND ENGINEERING
3772 PLEASANTDALE ROAD - SUITE 165
ATLANTA, GA 30340-4270





RIP RAP DETAIL
NO SCALE



THEORETICAL SCOUR DEPTHS (FEET)						
	100 YEAR STORM			500 YEAR STORM		
LOCATION	GENERAL	LOCAL	TOTAL	GENERAL	LOCAL	TOTAL
CHANNEL	2.96	0.00	2.96	4.73	0.00	4.73

PROJECT NUMBER
STP - 0000-00 (189)
PI No. - 0000189

SCALE: 1" = 30'	
DRAWN BY: TRS	REVISION: 0
REVIEWED BY: HM	07/02/2004

WILLMER ENGINEERING, INC.

GEOTECHNICAL ENGINEERING ▫ CONSTRUCTION SERVICES
ENVIRONMENTAL SERVICES AND ENGINEERING
3772 PLEASANTDALE ROAD - SUITE 165
ATLANTA, GA 30340-4270

FIGURE 2
BORING LOCATION PLAN
SIDEWALK IMPROVEMENTS ON
WILL LEE ROAD
FULTON COUNTY, GEORGIA
WILLMER PROJECT No. ATL-171-2543

Willmer Engineering Inc.
3772 Pleasantdale Road, Suite 165
Atlanta, Georgia 30340

Boring Record Legend

GS- GROUP SYMBOL based on Unified Soil Classification System (Refer ASTM D-2844 and Table 1 of D-2487)

SPT – BLOWS PER FOOT – Standard Penetration Resistance blow count, N, the sum of the second and third 6-inch increments of the SPT test.

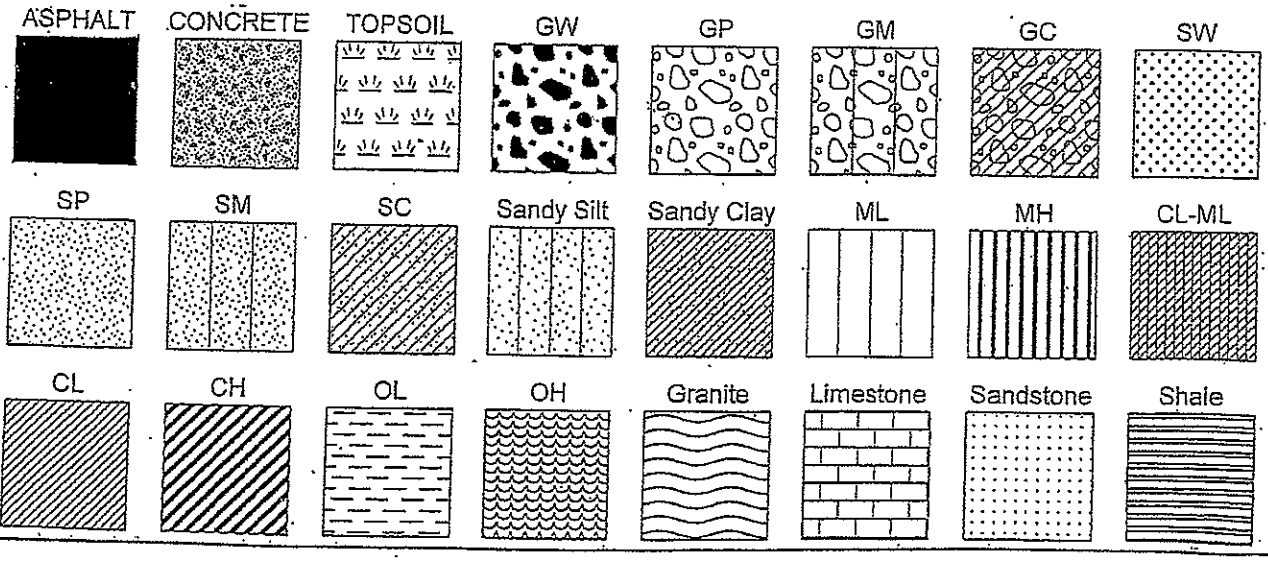
CONSISTENCY/RELATIVE DENSITY correlated with SPT blow count:

SILTS AND CLAYS

N, blows per foot	Consistency
0 – 2	Very Soft
3 – 4	Soft
5 – 8	Firm
9 – 15	Stiff
16 – 30	Very Stiff
31 – 50	Hard
> 50	Very Hard

SANDS

N, blows per foot	Relative Density
0 – 4	Very Loose
5 – 10	Loose
11 – 30	Medium Dense
30 – 50	Dense
> 50	Very Dense



WILLMER ENGINEERING INC. WE

Project: Sidewalk Improvements on Will Lee Rd.

Location: Fulton Co., GA. Proj. No. STP-0000-00 (189)

Project Number: ATL-171-2543 PI No. 0000189

HOLE No. RW-1
Sheet 1 of 1
Location: Wall -1

Azimuth: Angle from Horizontal: 90 Surface Elevation (ft): 855.69 Station: *STA 34+46, 30' Lt. of CL- Will Lee Rd.

Drilling Equipment: CME 550 Drilling Method: HSA

Core Boxes: 0 Samples: 5 Overburden (ft): 16.5 Rock (ft): 0 Total Depth (ft): 16.5

Logged By: MK Date Drilled: 6/9/04

VERTICAL DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE	RCD%	RQD %	MATERIAL DESCRIPTION	ELEVATION (feet)	STANDARD PENETRATION TEST DATA (blows/foot) 5 10 20 40 60 80	N-VALUE
					TOPSOIL: 4 inches / FILL	855.7		
		SS			FILL: Medium dense to loose tan and red silty medium to fine SAND with organics	855		21
5		SS						9
		SS			RESIDUUM: Stiff tan and grey medium to fine sandy SILT (micaceous) / ML SM	850		9
10		SS			Medium dense black, white and grey silty medium to fine SAND with rock fragments (micaceous)	845		17
15		SS				840		15
					Boring terminated @ 16.5 feet below existing ground surface			
					Groundwater was not encountered @ time of boring			
					*Retaining wall station: STA 20+00, 10'L of pedestrian bridge CL.			

SAMPLER TYPE
SS - Split Spoon
ST - Shelby Tube
NQ - Rock Core, 1-7/8"
NX - Rock Core, 2-1/8"
CU - Cuttings
CT - Continuous Tube

DRILLING METHOD
HSA - Hollow Stem Auger
CFA - Continuous Flight Augers
DC - Driving Casing
RW - Rotary Wash
RC - Rock Core

Hole No. RW-1

SPTN 2543.GPJ 7/2/04

WILLMER ENGINEERING INC. WE

Project: Sidewalk Improvements on Will Lee Rd.	**HOLE No. B-1**
Location: Fulton Co., GA. Proj. No. STP-0000-00 (189)	Sheet 1 of 1
Project Number: ATL-171-2543 PI No. 0000189	Location: Bent - 1

Azimuth: Angle from Horizontal: 90 Surface Elevation (ft): 855.45 Station: STA 11+29, 10' Lt. of CL *

Drilling Equipment: CME 550 Drilling Method: HSA

Core Boxes: 0 Samples: 5 Overburden (ft): 20 Rock (ft): 0 Total Depth (ft): 20.0

Logged By: MK Date Drilled: 6/20/04

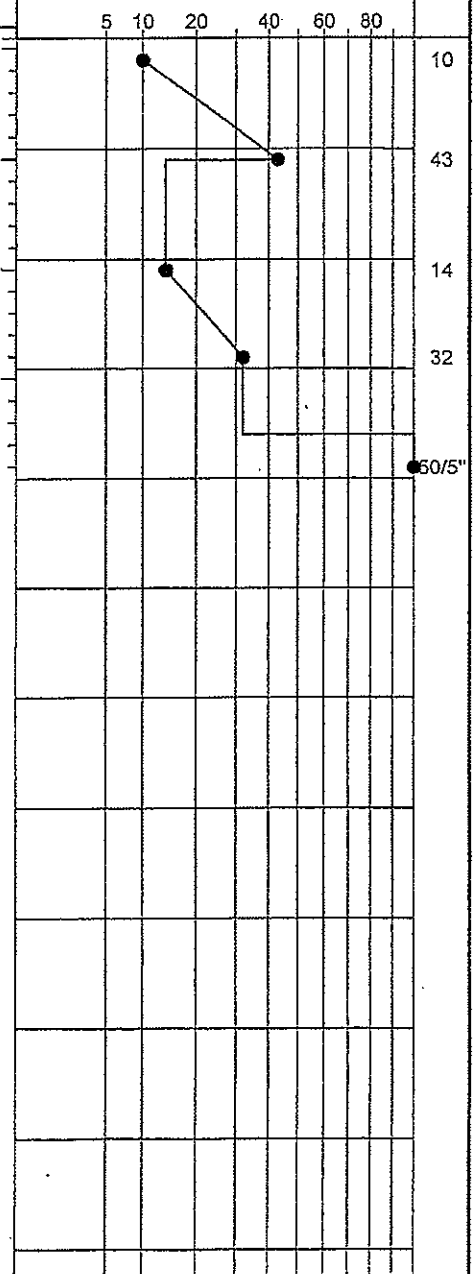
VERTICAL DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE	RCD%	RQD %	MATERIAL DESCRIPTION		ELEVATION (feet)	N-VALUE
		SS			TOPSOIL: 4 inches	FILL	855.5	
					FILL: Loose tan and red silty medium to fine SAND	SM	855	10
5		SS			ALLUVIUM: Medium dense white and tan silty medium to fine SAND with quartz fragments	SM	850	43
10		SS			RESIDUUM: Medium dense red and black silty medium to fine SAND (micaceous)	SM	845	14
15		SS			Dense black, white, and brown silty medium to fine SAND with rock fragments (micaceous)	SM	840	32
20		SS			PARTIALLY WEATHERED ROCK: Very dense black, white and brown silty medium to fine SAND (micaceous)	PWR		50/5"

Boring encountered auger refusal @ 20 feet below existing ground surface

Groundwater was encountered @ 13 feet below existing ground surface @ time of boring

* Pedestrian bridge station

STANDARD PENETRATION TEST DATA (blows/foot)



SAMPLER TYPE		DRILLING METHOD		Hole No.
SS - Split Spoon	NX - Rock Core, 2-1/8"	HSA - Hollow Stem Auger	RW - Rotary Wash	B-1
ST - Shelby Tube	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core	
NQ - Rock Core, 1-7/8"	CT - Continuous Tube	DC - Driving Casing		

SPTN 2543.GPJ 6/29/04

WILLMER ENGINEERING INC. WE
Willmer Engineering Inc.
3772 Pleasantdale Road, Suite 165
Atlanta, Georgia 30340

UNIFIED SOIL CLASSIFICATION SYSTEM REFERENCE SHEET

MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN #200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED #4 SIEVE	CLEAN GRAVELS LITTLE OR NO FINES	(GW)	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			(GP)	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES APPRECIABLE AMOUNT OF FINES	(GM)	SILTY GRAVELS and GRAVEL-SAND-SILT MIXTURES
			(GC)	CLAYEY GRAVELS and GRAVEL-SAND-CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING #4 SIEVE	CLEAN SAND LITTLE OR NO FINES	(SW)	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			(SP)	POORLY GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		FINES APPRECIABLE AMOUNT OF FINES	(SM)	SILTY SANDS and SAND-SILT MIXTURES
			(SC)	CLAYEY SANDS and SAND-CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN #200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		(ML)	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR CLAYEY SILTS WITH SLIGHT PLASTICITY
			(CL)	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICIT SILTY CLAYS, LEAN CLAYS
			(OL)	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		(MH)	INORGANIC ELASTIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS
			(CH)	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			(OH)	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			(PT)	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

REPORT OF SUBSURFACE EXPLORATION
AND
BRIDGE FOUNDATION INVESTIGATION

Sidewalk Improvements on Will Lee Road
Revised February 21, 2005
Pedestrian Bridge over Valley Brook Creek
Project No. STP-0000-00 (189)
P.I. NO. 0000189
Fulton County Project T123
Fulton County, Georgia

WILLMER ENGINEERING INC.
Project No. ATL-171-2543

Prepared for

Heath & Lineback Engineers, Inc.
Marietta, Georgia

Prepared by
Willmer Engineering Inc.
3772 Pleasantdale Road
Suite 165
Atlanta, Georgia 30340-4270

770.939.0089

BRIDGE FOUNDATION INVESTIGATION	
WILLMER PROJECT NUMBER	ATL-171-2543
PROJECT NUMBER	STP-0000-00 (189)
PROJECT P.I. NUMBER	0000189
LOCATION	Pedestrian Bridge over Valley Brook Creek Sidewalk Improvements on Will Lee Road, Fulton County, Georgia
GENERAL INFORMATION	
SITE DESCRIPTION	Construct a single span pedestrian bridge north of Will Lee Road from station 11+28.70 to 11+98.70. The bridge will be 70 feet long and 10 feet wide.
GEOLOGIC FORMATION	The project is geologically sited in the Mica Schist/Gneiss Formation of the Georgia Piedmont region.
GENERAL INFORMATION	
SUBSURFACE FEATURES	The subsoils consist primarily of fill/ alluvial materials of recent origin, underlain by residual soils composed of medium dense to dense silty sands, then partially weathered rock(PWR), sampled as very dense silty sands. Groundwater was encountered between elevations 843 and 854 feet. Rock was found below PWR.

PWR AND ROCK ELEVATIONS

Bents	Top of PWR	Auger Refusal
1	837	835
2	847	843

End Bearing = 100%	10 BP 42 = 55 Tons
Friction = 0%	12 BP 53 = 70 Tons
	14 BP 73 = 96 Tons

FOUNDATION RECOMMENDATIONS

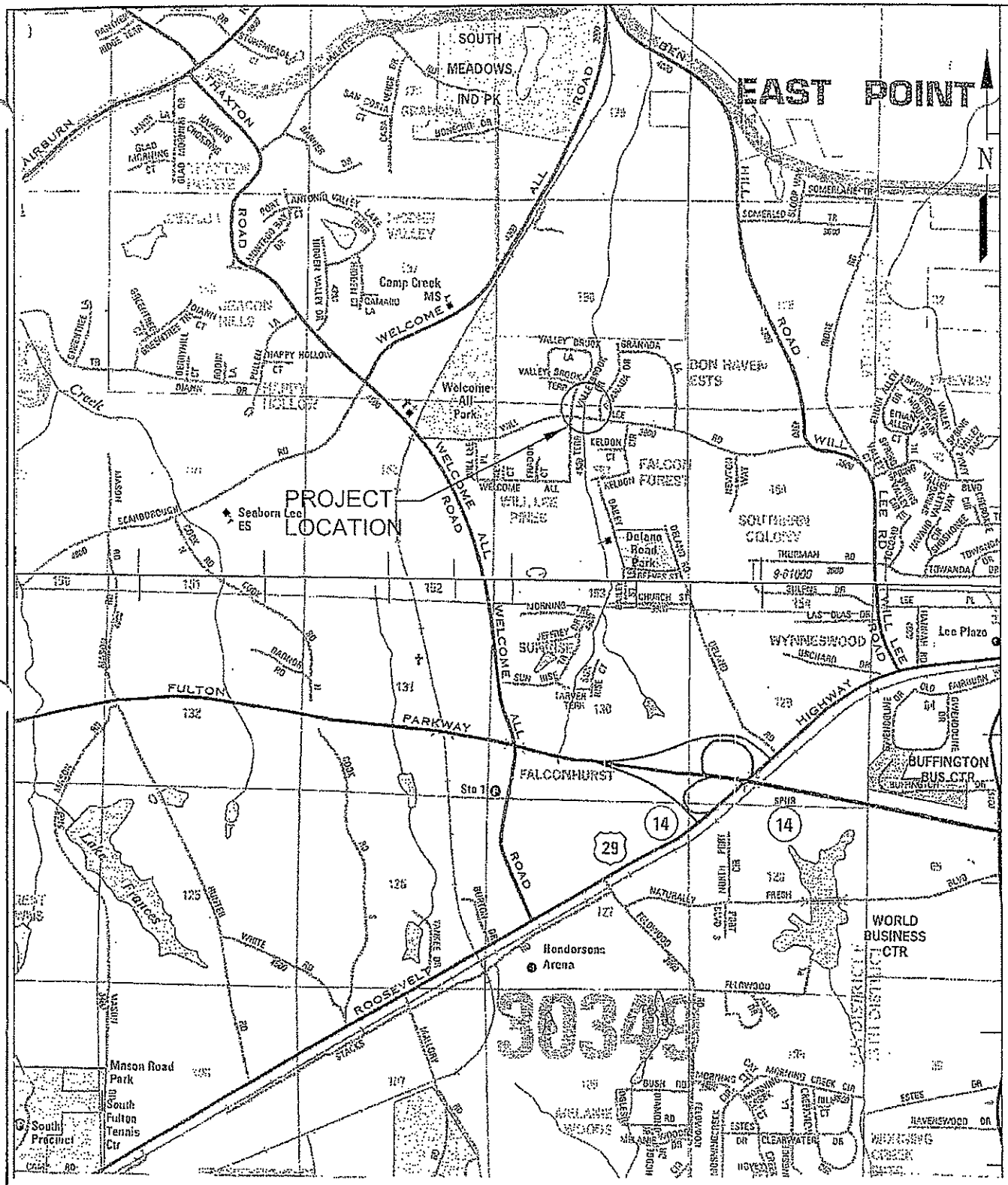
BENTS	SPREAD FOOTING	PILE BENT (TYPE)
1	3.0 ksf*	H**
2	3.0 ksf*	H**

* Footings will be bearing either on medium dense residual soils or dense partially weathered rock.
** Alternate Foundation

ELEVATIONS			
BENTS	**FOOTING BEARING LEVEL**	**MINIMUM TIP/H-PILE**	**ESTIMATED TIP/H-PILE**
1	At or below 849	835	835
2	At or below 847	845	844

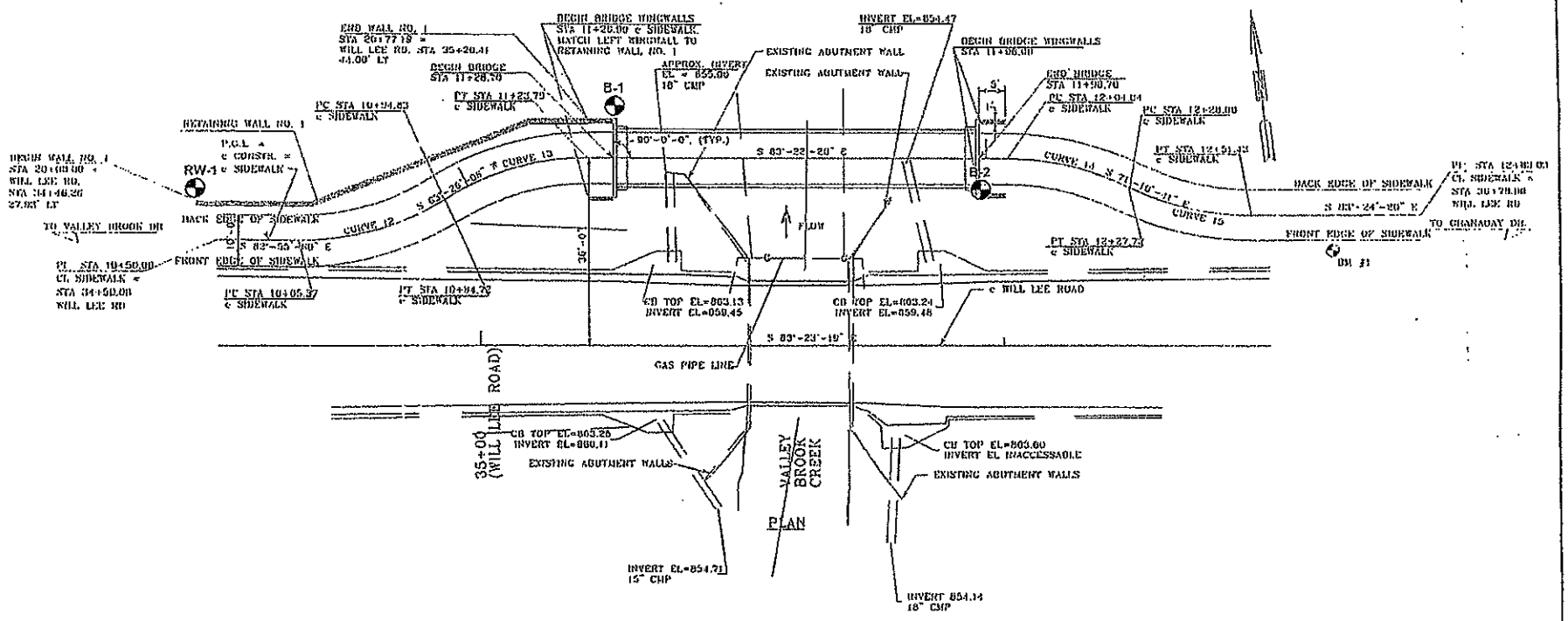
GENERAL NOTES	
Elevations	All elevations referenced in this report are based on El. 865.69 of Bench Mark # 1 at Sta. 36+61.54, 18.15 feet left of the Will Lee Road centerline.
Waiting Period	None required.
Theoretical Scour	Appears feasible for material encountered.
Erosion	We recommend the use of 24 inches of Type I riprap and filter fabric.
As Built Foundation Information:	The as-built foundation information should be forwarded to the Geotechnical Engineering Bureau upon completion of the foundation system.
NOTES: PILE BENTS & SPREAD FOOTINGS	
PDO	Driving resistance after Minimum Tip Elevations are achieved.
Special Problems	None
Shoring	Temporary shoring, seal concrete and dewatering of excavation may be required to construct the spread footing, if footing foundation alternate is selected for bent-2.
Prepared By:	Harshad Modi, PE
Reviewed By:	James L. Willmer, PE

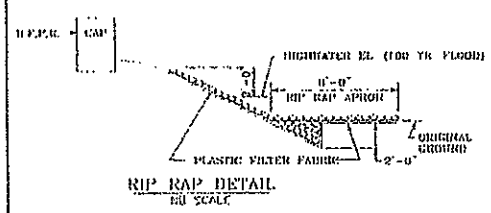
APPENDIX

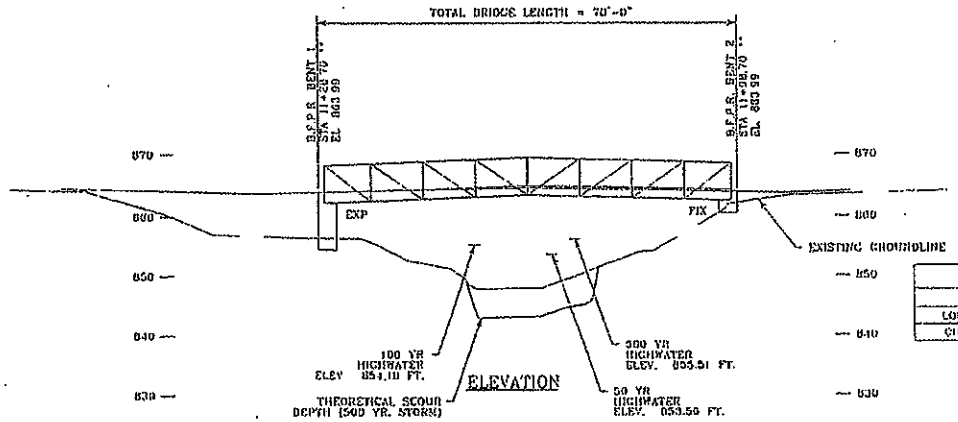


PROJECT NUMBER
STP - 0000-00 (189)
PI No. - 0000189

SCALE: NTS		FIGURE 1 SITE LOCATION MAP SIDEWALK IMPROVEMENTS ON WILL LEE ROAD FULTON COUNTY, GEORGIA WILLMER PROJECT No. ATL-171-2543
DRAWN BY: TRS REVISION: 0	WE	GEOTECHNICAL ENGINEERING CONSTRUCTION SERVICES ENVIRONMENTAL SERVICES AND ENGINEERING 3772 PLEASANTDALE ROAD - SUITE 165 ATLANTA, GA 30340-4270
REVIEWED BY: HM 07/02/2004		







THEORETICAL SCOUR DEPTHS (FEET)

	100 YEAR STORM			500 YEAR STORM		
LOCATION	GENERAL	LOCAL	TOTAL	GENERAL	LOCAL	TOTAL
CHANNEL	2.96	0.00	2.96	4.73	0.00	4.73

PROJECT NUMBER
STP - 0000-00 (189)
PI No. - 0000189

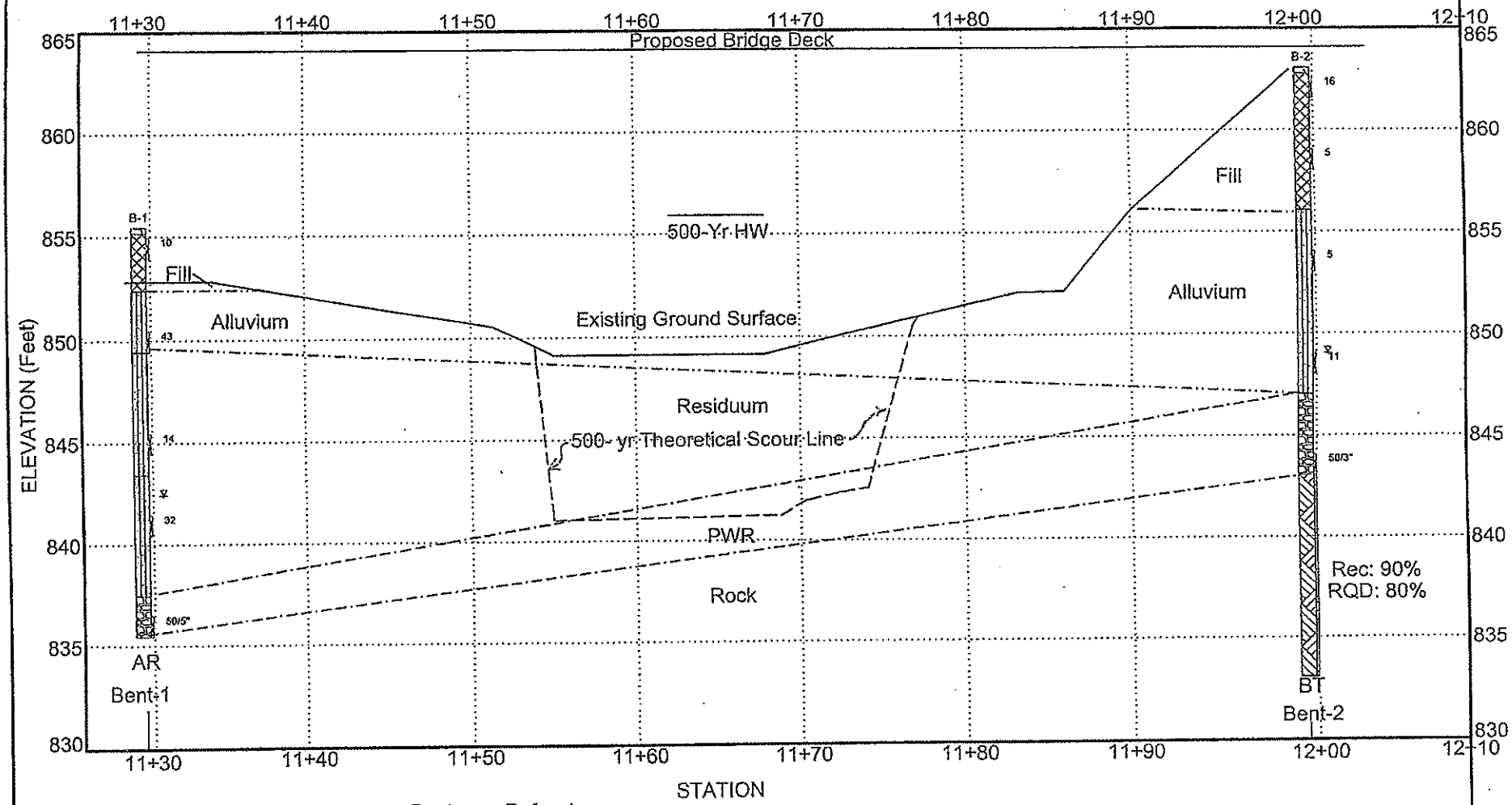
SCALE: 1" = 30'	
DRAWN BY: TRS	REVISION: 0
REVIEWED BY: HM	07/02/2004

WILLMER ENGINEERING, INC.

WE

GEOTECHNICAL ENGINEERING ▫ CONSTRUCTION SERVICES
ENVIRONMENTAL SERVICES AND ENGINEERING
3772 PLEASANTDALE ROAD - SUITE 165
ATLANTA, GA 30340-4270

FIGURE 2
BORING LOCATION PLAN
SIDEWALK IMPROVEMENTS ON
WILL LEE ROAD
FULTON COUNTY, GEORGIA
WILLMER PROJECT No. ATL-171-2543



AR - Auger Refusal
BT- Boring Terminated
PWR-Partially Weathered Rock

GENERALIZED SUBSURFACE PROFILE
Proj. No. STP-0000-00 (189)
PI No. 0000189

Sidewalk Improvements on Will Lee Rd.
Fulton Co., GA.

PROJECT #	DATE	FIGURE
ATL-171-2543	Jun 29, 2004	3

Willmer Engineering Inc.
3772 Pleasantdale Road, Suite 165
Atlanta, Georgia 30340

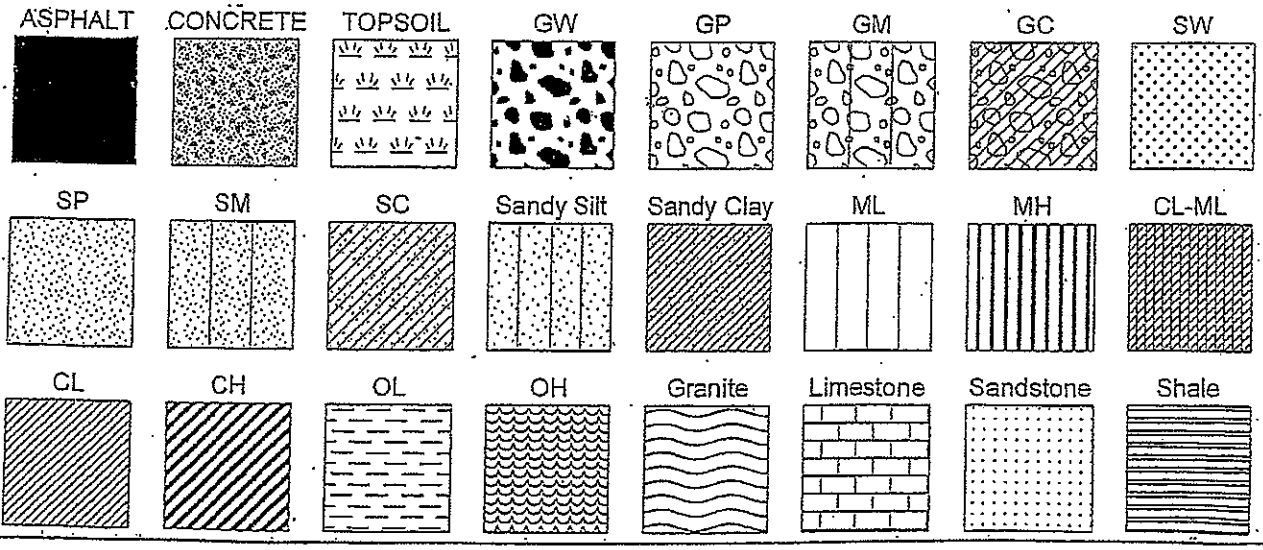
Boring Record Legend

GS- GROUP SYMBOL based on Unified Soil Classification System (Refer ASTM D-2844 and Table 1 of D-2487)

SPT – BLOWS PER FOOT – Standard Penetration Resistance blow count, N, the sum of the second and third 6-inch increments of the SPT test.

CONSISTENCY/RELATIVE DENSITY correlated with SPT blow count:

SILTS AND CLAYS		SANDS	
N, blows per foot	Consistency	N, blows per foot	Relative Density
0 – 2	Very Soft	0 – 4	Very Loose
3 – 4	Soft	5 – 10	Loose
5 – 8	Firm	11 – 30	Medium Dense
9 – 15	Stiff	30 – 50	Dense
16 – 30	Very Stiff	> 50	Very Dense
31 – 50	Hard		
> 50	Very Hard		



WILLIAMS ENGINEERING INC. WE

Project: Sidewalk Improvements on Will Lee Rd.
Location: Fulton Co., GA. Proj. No. STP-0000-00 (189)
Project Number: ATL-171-2543 PI No. 0000189

HOLE No. B-1
Sheet 1 of 1
Location: Bent - 1

Azimuth: Angle from Horizontal: 90 Surface Elevation (ft): 855.45 Station: STA 11+29, 10' Lt. of CL *
Drilling Equipment: CME 550 Drilling Method: HSA
Core Boxes: 0 Samples: 5 Overburden (ft): 20 Rock (ft): 0 Total Depth (ft): 20.0
Logged By: MK Date Drilled: 6/20/04

VERTICAL DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE	RCD%	RQD %	MATERIAL DESCRIPTION	ELEVATION (feet)	N-VALUE
		SS			TOPSOIL: 4 inches / FILL: Loose tan and red silty medium to fine SAND	855.5	10
5		SS			ALLUVIUM: Medium dense white and tan silty medium to fine SAND with quartz fragments (SM) / RESIDUUM: Medium dense red and black silty medium to fine SAND (micaceous) (SM)	850	43
10		SS				845	14
15		SS			Dense black, white, and brown silty medium to fine SAND with rock fragments (micaceous) (SM)	840	32
20		SS			PARTIALLY WEATHERED ROCK: Very dense black, white and brown silty medium to fine SAND (micaceous) (PWR)		50/5"

Boring encountered auger refusal @ 20 feet below existing ground surface

Groundwater was encountered @ 13 feet below existing ground surface @ time of boring

* Pedestrian bridge station

STANDARD PENETRATION TEST DATA (blows/foot): 5 10 20 40 60 80

SAMPLER TYPE
SS - Split Spoon
ST - Shelby Tube
NQ - Rock Core, 1-7/8"
NX - Rock Core, 2-1/8"
CU - Cuttings
CT - Continuous Tube

DRILLING METHOD
HSA - Hollow Stem Auger
CFA - Continuous Flight Augers
DC - Driving Casing
RW - Rotary Wash
RC - Rock Core

Hole No. B-1

SPTN 2543.GPJ 6/29/04

WILLMER ENGINEERING, INC. WE

Project: Sidewalk Improvements on Will Lee Rd.
Location: Fulton Co., GA. Proj. No. STP-0000-00 (189)
Project Number: ATL-171-2543 PI No. 0000189

HOLE No. B-2
Sheet 1 of 1
Location: Bent - 2

Azimuth: Angle from Horizontal: 90 Surface Elevation (ft): 863.05 Station: STA 11+99, 6' Rt. of CL *
Drilling Equipment: CME 550 Drilling Method: HSA
Core Boxes: 1 Samples: 5 Overburden (ft): 20 Rock (ft): 10 Total Depth (ft): 30.0
Logged By: MK Date Drilled: 6/9/04

VERTICAL DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE	RCD%	RQD %	MATERIAL DESCRIPTION	ELEVATION (feet)	STANDARD PENETRATION TEST DATA (blows/foot) 5 10 20 40 60 80	N-VALUE
0					TOPSOIL: 4 inches / FILL	863.1		
		SS			FILL: Medium dense red and brown clayey medium to fine SAND with organics			16
5		SS				860		5
					ALLUVIUM: Very loose to loose gray and tan silty medium to fine SAND (slightly micaceous) SM	855		5
10		SS						
						850		11
15		SS			PARTIALLY WEATHERED ROCK: Sampled as very dense tan and brown silty medium to fine SAND (micaceous) PWR	845		50/3"
20		SS			BEDROCK: Hard black and gray MICA SCHIST / GNEISS with soft layers @ 20'-21' and 26'-27'	840		
25		CORE	90	80		835		
30								

Boring encountered auger refusal @ 20 feet below existing ground surface

Groundwater was encountered @ 14 feet below existing ground surface @ time of boring

* Pedestrian bridge station

SAMPLER TYPE
SS - Split Spoon
ST - Shelby Tube
NQ - Rock Core, 1-7/8"
NX - Rock Core, 2-1/8"
CU - Cuttings
CT - Continuous Tube

DRILLING METHOD
HSA - Hollow Stem Auger
CFA - Continuous Flight Augers
DC - Driving Casing
RW - Rotary Wash
RC - Rock Core

Hole No. B-2

SPTN 2543.GPJ 6/29/04

Willmer Engineering Inc.
3772 Pleasantdale Road, Suite 165
Atlanta, Georgia 30340

UNIFIED SOIL CLASSIFICATION SYSTEM REFERENCE SHEET

MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN #200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED #4 SIEVE	CLEAN GRAVELS LITTLE OR NO FINES	(GW)	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			(GP)	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES APPRECIABLE AMOUNT OF FINES	(GM)	SILTY GRAVELS and GRAVEL-SAND-SILT MIXTURES
			(GC)	CLAYEY GRAVELS and GRAVEL-SAND-CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING #4 SIEVE	CLEAN SAND LITTLE OR NO FINES	(SW)	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			(SP)	POORLY GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		FINES APPRECIABLE AMOUNT OF FINES	(SM)	SILTY SANDS and SAND-SILT MIXTURES
			(SC)	CLAYEY SANDS and SAND-CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN #200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		(ML)	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR CLAYEY SILTS WITH SLIGHT PLASTICITY
			(CL)	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICIT SILTY CLAYS, LEAN CLAYS
			(OL)	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		(MH)	INORGANIC ELASTIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS
			(CH)	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			(OH)	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			(PT)	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS