CLIENT: JFW, INC.

JOB #: 9807 | BORING #: PS-4 | SHEET: 1 OF 1

PROJECT NAME: SIDWELL FRIENDS SCHOOL WISCONSIN AVE.

ARCHITECT-ENGINEER:

SITE LOCATION: WASHINGTON, DC, NW

ENGLISH UNITS

SURFACE ELEVATION: 399

CALIBRATED PENETROMETER TONS/FT.² (1, 2, 3, 4, 5+)

PLASTIC LIMIT % (X) — WATER CONTENT % (●) — LIQUID LIMIT % (△)

ROCK QUALITY DESIGNATION & RECOVERY: RQD% — — — REC.% ——— (20%, 40%, 60%, 80%, 100%)

STANDARD PENETRATION BLOWS/FT. (10, 20, 30, 40, 50+)

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0	1	SS	18	12	Topsoil Depth 4"		20
					Clayey SAND, With Quartz Fragments, Trace Rock and Brick Fragments, Grayish Brown, Moist, Loose to Very Dense, (SC-FILL)	395	8
5	3	SS	5	5			50/5
	4	SS	18	10		390	9
10							
	5	SS	18	12	Silty SAND, With Quartz Fragments, Reddish Brown, Moist, Loose, (SM)	385	7
15							15.2
	6	SS	18	12		380	9
20							
	7	SS	18	14	Silty GRAVEL, With Sand, Trace Clay, Yellowish Brown, Moist, Medium Dense, (GM)	375	12
25							
	8	SS	18	14	Silty SAND, With Quartz Fragments, Reddish Brown, Moist, Medium Dense, (SM)	370	16
30							

END OF BORING @ 30.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

WL DRY WS OR (WD)	BORING STARTED 03-25-04	
WL(AB) DRY WL(AC)	BORING COMPLETED 03-25-04	CAVE IN DEPTH @ 12.0'
WL	RIG 750 FOREMAN D&S	DRILLING METHOD HOLLOW STEM AUGER

RE (04-12-04) RE (04-13-04) RE (04-19-04) RE (04-29-04)

LE (05/24/04)

Board of Zoning Adjustment
District of Columbia
CASE NO. 17149
EXHIBIT NO. 29A3

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	PS-5	1 OF 1
PROJECT NAME: SIDWELL FRIENDS SCHOOL WISCONSIN AVE.	ARCHITECT-ENGINEER		
SITE LOCATION: WASHINGTON, DC, NW			

ECS LTD

ENGLISH UNITS

SURFACE ELEVATION 399

CALIBRATED PENETROMETER TONS/FT.² (1, 2, 3, 4, 5+)

PLASTIC LIMIT % (X) — WATER CONTENT % (●) — LIQUID LIMIT % (△)

ROCK QUALITY DESIGNATION & RECOVERY RQD% — — — REC.% — 20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT. (⊗) 10 20 30 40 50+

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0	1	SS	18	16	Topsoil Depth 4"		6
					Clayey SAND, With Quartz and Asphalt Fragments, Grayish Brown, Moist, Loose to Medium Dense, (SC-FILL)		
	2	SS	18	14			15
5	3	SS	18	14		395	18
	4	SS	18	12		390	14
10							
	5	SS	18	12	Silty SAND, With Brick and Asphalt Fragments, Reddish Black, Moist, Medium Dense, (SM-FILL)	385	15
15					Silty SAND, With Quartz Fragments, Yellowish Brown, Moist, Medium Dense, (SM)		
	6	SS	18	8		380	28
20							
	7	SS	18	10		375	18
25							
	8	SS	18	4		370	20
30							

END OF BORING @ 30.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY WS OR (WD)	BORING STARTED 03-25-04	
▽WL(AB) DRY ▽WL(AC)	BORING COMPLETED 03-25-04	CAVE IN DEPTH ● 15.5'
▽WL	RIG 750 FOREMAN D&S	DRILLING METHOD HOLLOW STEM AUGER

RE (04-12-04) RE (04-13-04) RE (04-19-04) RE (04-28-04)

Tree(03/29/2004)

CLIENT: JFW, INC.

JOB #: 9807 | BORING #: PS-6 | SHEET: 1 OF 1

PROJECT NAME: SIDWELL FRIENDS SCHOOL WISCONSIN AVE.

ARCHITECT-ENGINEER:

SITE LOCATION: WASHINGTON, DC, NW

ENGLISH UNITS

SURFACE ELEVATION: 401

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	CALIBRATED PENETROMETER TONS/FT.²	STANDARD PENETRATION BLOWS/FT.
0	1	SS	18	18	Topsoil Depth 1"		400		8
	2	SS	18	18	Silty SAND, Trace Quartz Fragments, Brownish Red, Moist, Loose to Medium Dense, (SM-FILL)				22
5	3	SS	18	18	Silty SAND, With Quartz Fragments, Red, Moist, Medium Dense, (SM)		395		18
	4	SS	18	18					25
10							390		
	5	SS	18	18	Silty SAND, With Quartz Fragments, Trace Clay, Yellowish Brown, Moist, Medium Dense to Dense, (SM)				34
15							385		11.1
	6	SS	18	18					32
20							380		
	7	SS	18	18					32
25							375		
	8	SS	18	18					26
30									

ROCK QUALITY DESIGNATION & RECOVERY: RQD% — — — REC.% — 20% — 40% — 60% — 80% — 100%

PLASTIC LIMIT X — WATER CONTENT ● — LIQUID LIMIT △

END OF BORING @ 30.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY WS OR WD	BORING STARTED 03-25-04	
▽WL(AB) DRY ▽WL(AC)	BORING COMPLETED 03-25-04	CAVE IN DEPTH @ 3.7'
▽WL	RIG CME450 FOREMAN RECON	DRILLING METHOD HOLLOW STEM AUGER

RC (04-12-04) RC (04-13-04) RC (04-19-04) RC (04-29-04)

Time(03/29/2004)

CLIENT: JFW, INC.

JOB #: 9807 | BORING #: PS-7 | SHEET: 1 OF 1

PROJECT NAME: SIDWELL FRIENDS SCHOOL WISCONSIN AVE.

ARCHITECT-ENGINEER:

SITE LOCATION: WASHINGTON, DC, NW

ENGLISH UNITS

SURFACE ELEVATION: 400

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS ELEVATION (FT)
0	1	SS	18	18	Topsoil Depth 2"	
					Silty SAND, With Quartz and Rock Fragments, Brownish Red, Moist, Medium Dense, (SM-FILL)	
	2	SS	18	18		
5	3	SS	18	18	Silty SAND, With Quartz Fragments, Red, Moist, Medium Dense, (SM-POSSIBLE FILL)	395
	4	SS	18	2	Silty SAND, With Quartz Fragments, Red to Yellowish Brown, Moist, Medium Dense to Dense, (SM)	390
10						
	5	SS	18	10		385
15						
	6	SS	18	18		380
20						
	7	SS	18	18		375
25						
	8	SS	18	18		
30						

CALIBRATED PENETROMETER TONS/FT.^{2}: 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % △

ROCK QUALITY DESIGNATION & RECOVERY: RQD% — — — REC.% —— 20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT.: 10 20 30 40 50+

10, 15, 19, 23, 25, 24, 28, 28

4.7

END OF BORING @ 30.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY WS OR WD	BORING STARTED 03-26-04	
▽WL(AB) DRY ▽WL(AC)	BORING COMPLETED 03-26-04	CAVE IN DEPTH @ 1.0'
▽WL	RIG CME450 FOREMAN RECON	DRILLING METHOD HOLLOW STEM AUGER

RC (04-12-04) RC (04-13-04) RC (04-19-04) RC (04-29-04)

Rev(03/29/2004)

CLIENT: JFW, INC.

JOB #: 9807 | BORING #: PS-8 | SHEET: 1 OF 1

PROJECT NAME: SIDWELL FRIENDS SCHOOL WISCONSIN AVE.

ARCHITECT-ENGINEER:

SITE LOCATION: WASHINGTON, DC, NW

ECS LTD

DESCRIPTION OF MATERIAL

ENGLISH UNITS

SURFACE ELEVATION 401

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL
0	1	SS	18	18	Topsoil Depth 2"
					Clayey SAND, With Quartz Fragments, Trace Roots, Gray, Moist, Medium Dense, (SC-FILL)
	2	SS	18	18	
5	3	SS	18	18	Silty SAND, With Clay, Yellowish Brown, Moist, Loose, (SM-POSSIBLE FILL)
					Silty SAND, With Quartz Fragments, Yellowish Brown, Moist, Medium Dense to Dense, (SM)
10	4	SS	18	18	
	5	SS	18	18	
15					
	6	SS	18	18	
20					
	7	SS	18	18	Silty SAND, With Quartz Fragments, Trace Clay, Yellowish Brown, Moist, Dense, (SM)
25					
	8	SS	18	18	
30					

END OF BORING @ 30.00'

WATER LEVELS ELEVATION (FT): 400, 395, 390, 385, 380, 375

CALIBRATED PENETROMETER TONS/FT.² 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % △

ROCK QUALITY DESIGNATION & RECOVERY ROD% — — — REC.% — 20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT. 10 20 30 40 50+

14, 10, 25, 26, 32, 29, 43, 38

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY WS OR CD	BORING STARTED 03-25-04	
▽WL(AB) DRY ▽WL(AC)	BORING COMPLETED 03-25-04	CAVE IN DEPTH @ 10.4'
▽WL	RIG CME450 FOREMAN RECON	DRILLING METHOD HOLLOW STEM AUGER

RC (04-12-04) RC (04-13-04) RC (04-19-04) RC (04-29-04)

Tfrm(03/29/2004)

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	PS-9	1 OF 1
PROJECT NAME	ARCHITECT-ENGINEER		
SIDWELL FRIENDS SCHOOL WISCONSIN AVE.			

SITE LOCATION: WASHINGTON, DC, NW

ECS LTD

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)
					ENGLISH UNITS		
					SURFACE ELEVATION 402		
0	1	SS	18	18	Topsoil Depth 1"		
					Silty SAND, With Quartz Fragments, Red, Moist, Loose to Medium Dense, (SM-FILL)		400
5	2	SS	18	18			
	3	SS	18	18	Silty SAND, With Quartz Fragments, Red, Moist, Medium Dense to Dense, (SM)		395
	4	SS	18	18			
10							390
	5	SS	18	18			
15							385
	6	SS	18	18	Silty SAND, With Quartz Fragments, Trace Clay, Yellowish Brown, Moist, Medium Dense to Dense, (SM)		
20							380
	7	SS	18	18			
25							375
	8	SS	18	18			
30							

CALIBRATED PENETROMETER TONS/FT.²: 1, 2, 3, 4, 5+

PLASTIC LIMIT % (X) — WATER CONTENT % (●) — LIQUID LIMIT % (Δ)

ROCK QUALITY DESIGNATION & RECOVERY: RQD% — — — REC.% — 20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT.: 10, 20, 30, 40, 50+

7, 17, 19, 20, 30, 22, 31, 27

8.2

END OF BORING @ 30.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY WS OR WD	BORING STARTED 03-25-04	
▽WL(AB) DRY ▽WL(AC)	BORING COMPLETED 03-25-04	CAVE IN DEPTH ● 2.7'
▽WL	RIG CME450 FOREMAN RECON	DRILLING METHOD HOLLOW STEM AUGER

RE (04-12-04) RE (04-13-04) RE (04-19-04) RE (04-26-04)

Time(03/29/2004)

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	PS–10	1 OF 1
PROJECT NAME	ARCHITECT–ENGINEER		
SIDWELL FRIENDS SCHOOL WISCONSIN AVE.			

SITE LOCATION: WASHINGTON, DC, NW

ENGLISH UNITS

SURFACE ELEVATION: 402

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	CALIBRATED PENETROMETER TONS/FT.²	STANDARD PENETRATION BLOWS/FT.
0	1	SS	18	18	Topsoil Depth 3"		400		8
					Silty SAND, With Quartz Fragments, Red, Moist, Loose to Medium Dense, (SM–FILL)				6
5	2	SS	18	18					14
	3	SS	18	10			395		
	4	SS	18	10	Silty GRAVEL, With Sand, Trace Clay, Brown, Moist, Medium Dense, (GM)				19
10							390		
	5	SS	18	18					12
15							385		
	6	SS	18	18					14
20							380		
	7	SS	18	18					13
25							375		
	8	SS	18	16		▽			10
30					END OF BORING @ 30.00'				

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % △

ROCK QUALITY DESIGNATION & RECOVERY: RQD% — — — REC.% ——— (20% 40% 60% 80% 100%)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 28.5' WS OR WD	BORING STARTED 04–10–04	
▽WL(AB) DRY ▽WL(AC) DRY	BORING COMPLETED 04–10–04	CAVE IN DEPTH @ 17.0'
▽WL	RIG CME550 FOREMAN CONNELLY	DRILLING METHOD HOLLOW STEM AUGER

RE (04-12-04) RE (04-13-04) RE (04-19-04) RE (04-26-04)

Time(04/13/2004)

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	PSP–1	1 OF 1
PROJECT NAME	ARCHITECT–ENGINEER		
SIDWELL FRIENDS SCHOOL WISCONSIN AVE.			

SITE LOCATION: WASHINGTON, DC, NW

ECS LTD

CALIBRATED PENETROMETER TONS/FT.² (1, 2, 3, 4, 5+)

PLASTIC LIMIT % (X) — WATER CONTENT % (●) — LIQUID LIMIT % (Δ)

ROCK QUALITY DESIGNATION & RECOVERY RQD% — — — REC.% — 20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT. (⊗) (10, 20, 30, 40, 50+)

DESCRIPTION OF MATERIAL

ENGLISH UNITS

SURFACE ELEVATION 392

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	WATER LEVELS ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.	DESCRIPTION OF MATERIAL
0					390		Asphalt Depth 7"
	1	SS	18	18		23	Gravel Depth 3"
5	2	SS	18	18	385	19	Silty SAND, With Quartz Fragments, trace Clay, Reddish Brown, Moist, Medium Dense, (SM–FILL)
	3	SS	18	18		22	Silty SAND, With Quartz Fragments, Reddish Brown, Moist, Medium Dense, (SM)
10	4	SS	18	18	380	32	Silty GRAVEL, With Sand, Trace Clay, Yellowish Brown, Moist, Dense to Loose, (GM)
15	5	SS	18	18	375	45	
	6	SS	18	18		36	
20	7	SS	18	9	370 ▽	13	
	8	SS	18	4		4	
25					365		
	9	SS	18	18		4	
30							

END OF BORING @ 30.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 22.0' WS OR WD	BORING STARTED 03–27–04	
▽WL(AB) DRY ▽WL(AC) DRY	BORING COMPLETED 04–09–04	CAVE IN DEPTH @ 3.0'
▽WL	RIG CME550 FOREMAN RECON/CONNELLEY	DRILLING METHOD HOLLOW STEM AUGER

BC (04-12-04) RC (04-13-04) RC (04-19-04) RC (04-28-04)

Time(03/29/2004)

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	QM-1	1 OF 1
PROJECT NAME	**ARCHITECT-ENGINEER**		
SIDWELL FRIENDS SCHOOL WISCONSIN AVE.			
SITE LOCATION			
WASHINGTON, DC, NW			

ECS LTD

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL
					ENGLISH UNITS
					SURFACE ELEVATION 402
0	1	SS	18	18	Topsoil Depth 2"
					Silty SAND, Trace Quartz Fragments and Roots, Brownish Red, Moist, Medium Dense, (SM-FILL)
5	2	SS	18	18	
	3	SS	18	18	Silty SAND, Trace Quartz Fragments, Red, Moist, Medium Dense, (SM)
10	4	SS	18	18	
	5	SS	18	18	Silty SAND, With Quartz Fragments, Yellowish Brown, Moist, Medium Dense, (SM)
15					
20	6	SS	18	18	
25	7	SS	18	18	
30	8	SS	18	18	

END OF BORING @ 30.00'

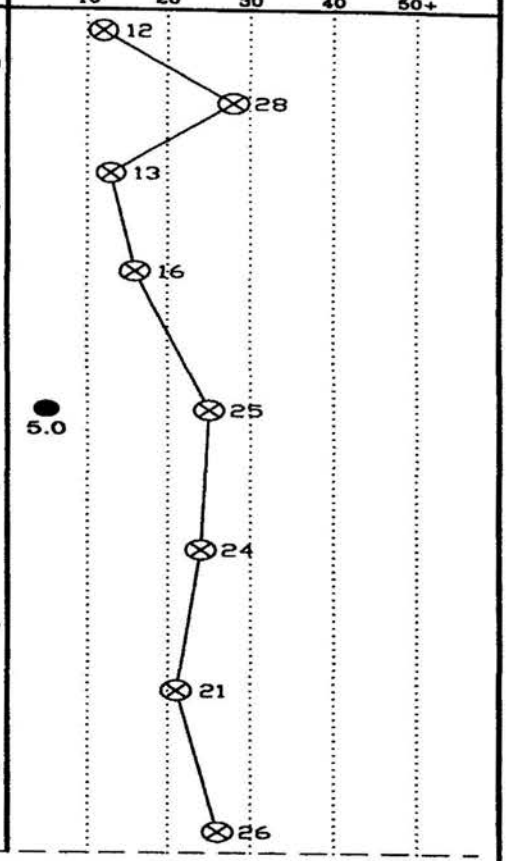
WATER LEVELS — ELEVATION (FT): 400, 395, 390, 385, 380, 375

CALIBRATED PENETROMETER TONS/FT.² 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % △

ROCK QUALITY DESIGNATION & RECOVERY RQD% — — — REC.% —— 20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT. 10 20 30 40 50+



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY WS OR WD	BORING STARTED 03-26-04	
▽WL(AB) DRY ▽WL(AC)	BORING COMPLETED 03-26-04	CAVE IN DEPTH @ 4.0'
▽WL	RIG CME450 FOREMAN RECON	DRILLING METHOD HOLLOW STEM AUGER

WC (04-12-04) WC (04-13-04) WC (04-19-04) WC (04-28-04)
Thm(03/29/2004)

CLIENT: JFW, INC.

JOB #: 9807 | BORING #: QM-2 | SHEET: 1 OF 1

PROJECT NAME: SIDWELL FRIENDS SCHOOL WISCONSIN AVE.

ARCHITECT-ENGINEER:

SITE LOCATION: WASHINGTON, DC, NW

ECS LTD

DESCRIPTION OF MATERIAL

ENGLISH UNITS

SURFACE ELEVATION: 398

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL
0	1	SS	18	18	Topsoil Depth 2"
					Clayey SAND, Trace Roots, Gray, Moist, Medium Dense, (SC-FILL)
	2	SS	18	2	
5	3	SS	18	18	Silty SAND, With Quartz Fragments, Trace Clay, Red to Reddish Brown, Moist, Medium Dense to Dense, (SM)
	4	SS	18	18	
10					
	5	SS	18	18	
15					
	6	SS	18	18	
20					
	7	SS	18	18	
25					
	8	SS	18	18	
30					

END OF BORING @ 30.00'

WATER LEVELS ELEVATION (FT): 395, 390, 385, 380, 375, 370

CALIBRATED PENETROMETER TONS/FT.² (1, 2, 3, 4, 5+)

PLASTIC LIMIT % (X) — WATER CONTENT % (●) — LIQUID LIMIT % (Δ)

ROCK QUALITY DESIGNATION & RECOVERY: RQD% — — — REC.% — 20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT. (⊗) (10, 20, 30, 40, 50+)

16, 31, 26, 28, 29, 30, 30, 28

7.6

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY WS OR WD	BORING STARTED 03-26-04	
▽WL(AB) DRY ▽WL(AC)	BORING COMPLETED 03-26-04	CAVE IN DEPTH @ 3.0'
▽WL	RIG CME450 FOREMAN RECON	DRILLING METHOD HOLLOW STEM AUGER

RC (04-12-04) RC (04-13-04) RC (04-19-04) RC (04-29-04)

Tlog(03/29/2004)

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	QMP-3	1 OF 1

PROJECT NAME: SIDWELL FRIENDS SCHOOL WISCONSIN AVE.

ARCHITECT-ENGINEER:

SITE LOCATION: WASHINGTON, DC, NW

ENGLISH UNITS

SURFACE ELEVATION: 384

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	CALIBRATED PENETROMETER TONS/FT.² (1 2 3 4 5+)	STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50+)
0	1	SS	18	10	Topsoil Depth 8"			6
					Silty SAND, With Gravel, Trace Roots, Yellowish Brown, Moist, Loose, (SM-FILL)			
	2	SS	18	8		380		7
5					Silty GRAVEL, With Sand, Trace Clay, Yellowish Brown, Moist, Loose to Medium Dense, (GM)			11
	3	SS	18	18				
	4	SS	18	16		375		16
10								
	5	SS	18	18		370		15
15								
	6	SS	18	16		365		24
20								
	7	SS	18	10	Fine Sandy SILT, Yellowish Brown, Wet, Medium Dense, (ML)	360		12 32.4
25								
	8	SS	18	18	SILT, Trace Sand, Light Yellow, Moist, Loose, (MH)	355		8
30								

END OF BORING @ 30.00'

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % △

ROCK QUALITY DESIGNATION & RECOVERY ROD% — — — REC.% ——— (20% 40% 60% 80% 100%)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 20.0' WS OR WD	BORING STARTED 04-10-04	
▽WL(AB) 24.0' ▽WL(AC)	BORING COMPLETED 04-10-04	CAVE IN DEPTH ●
▽WL	RIG CME550 FOREMAN CONNELLY	DRILLING METHOD HOLLOW STEM AUGER

RC (04-12-04) RC (04-13-04) RC (04-18-04) RC (04-29-04)

Tmpl(04/13/2004)

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	W-1	1 OF 1
PROJECT NAME	**ARCHITECT-ENGINEER**		
SIDWELL FRIENDS SCHOOL WISCONSIN AVE.			
SITE LOCATION			
WASHINGTON, DC, NW			

ECS LTD

CALIBRATED PENETROMETER TONS/FT.² (1, 2, 3, 4, 5+)

PLASTIC LIMIT % (X) — WATER CONTENT % (●) — LIQUID LIMIT % (△)

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT. (⊗) (10, 20, 30, 40, 50+)

ENGLISH UNITS

SURFACE ELEVATION 390

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0	1	SS	18	10	Topsoil Depth 4"			6
					Silty SAND, Trace Roots and Clay, Gray, Moist, Loose, (SM-FILL)			
	2	SS	18	12				24
5					Silty SAND, With Quartz Fragments, Trace Concrete, Brownish Red, Moist, Medium Dense, (SM-FILL)		385	
	3	SS	18	12				22
					Silty GRAVEL, With Sand and Rock Fragments, Yellowish Brown, Moist, Dense, (GM)			
10	4	SS	18	14			380	37
					END OF BORING @ 10.00'			
15							375	
20							370	
25							365	
30								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY	WS OR WD	BORING STARTED 03-26-04	
▽WL(AB) DRY ▽WL(AC)		BORING COMPLETED 03-26-04	CAVE IN DEPTH @ 5.0'
▽WL		RIG 750 FOREMAN D&S	DRILLING METHOD HOLLOW STEM AUGER

BC (04-12-04) BC (04-13-04) BC (04-19-04) BC (04-26-04)

Time(03/29/2004)

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	W-2	1 OF 1

PROJECT NAME: SIDWELL FRIENDS SCHOOL WISCONSIN AVE.

ARCHITECT-ENGINEER:

SITE LOCATION: WASHINGTON, DC, NW

ENGLISH UNITS

SURFACE ELEVATION: 390

CALIBRATED PENETROMETER TONS/FT.² (1, 2, 3, 4, 5+)

PLASTIC LIMIT % (X) — WATER CONTENT % (●) — LIQUID LIMIT % (Δ)

ROCK QUALITY DESIGNATION & RECOVERY: RQD% — — — REC.% ——— (20%, 40%, 60%, 80%, 100%)

STANDARD PENETRATION BLOWS/FT. (10, 20, 30, 40, 50+)

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0	1	SS	18	18	Topsoil Depth 2"		
					Silty SAND, With Quartz Fragments, Trace Roots, Reddish Brown, Moist, Loose to Medium Dense, (SM-FILL)		
5	2	SS	18	18		385	27, 8
	3	SS	18	18	Silty SAND, With Quartz and Coal Fragments, Trace Clay, Brownish Gray, Moist, Loose, (SM)		9, 17.1
	4	SS	18	18	Silty SAND, Trace Quartz Fragments, Red, Moist, Medium Dense, (SM)	380	24
10					END OF BORING @ 10.00'		
15						375	
20						370	
25						365	
30							

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY	WS OR 7D	BORING STARTED 03-27-04	
▽WL(AB) DRY ▽WL(AC)		BORING COMPLETED 03-27-04	CAVE IN DEPTH @ 1.0'
▽WL		RIG CME450 FOREMAN RECON	DRILLING METHOD HOLLOW STEM AUGER

RC (04-12-04) RC (04-13-04) RC (04-19-04) RC (04-29-04)

Trm(03/29/2004)

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	W-3	1 OF 1
PROJECT NAME	ARCHITECT-ENGINEER		
SIDWELL FRIENDS SCHOOL WISCONSIN AVE.			
SITE LOCATION			
WASHINGTON, DC, NW			

ECS LTD

CALIBRATED PENETROMETER TONS/FT.² (1, 2, 3, 4, 5+)

PLASTIC LIMIT % (X) — WATER CONTENT % — LIQUID LIMIT % (Δ)

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% — 40% — 60% — 80% — 100%

STANDARD PENETRATION BLOWS/FT. (10, 20, 30, 40, 50+)

ENGLISH UNITS

SURFACE ELEVATION 370

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0	1	SS	18	12	Topsoil Depth 4"			12
					Clayey SAND, With Quartz Fragments, Brown, Moist, Medium Dense, (SC-FILL)			
	2	SS	18	12				15
5	3	SS	18	16	SILT, With Sand, Yellowish Brown, Moist, Loose to Medium Dense, (ML)		365	8
								23.0
	4	SS	18	16				10
10					END OF BORING @ 10.00'		360	
15							355	
20							350	
25							345	
30								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY WS OR WD	BORING STARTED 03-26-04	
▽WL(AB) DRY ▽WL(AC)	BORING COMPLETED 03-26-04	CAVE IN DEPTH @ 5.5'
▽WL	RIG 750 FOREMAN D&S	DRILLING METHOD HOLLOW STEM AUGER

RIC (04-12-04) RIC (04-13-04) RIC (04-19-04) RIC (04-28-04)

Tmpl(03/29/2004)

CLIENT	JOB #	BORING #	SHEET
JFW, INC.	9807	W-4	1 OF 1
PROJECT NAME	ARCHITECT-ENGINEER		
SIDWELL FRIENDS SCHOOL WISCONSIN AVE.			

SITE LOCATION: WASHINGTON, DC, NW

ENGLISH UNITS

SURFACE ELEVATION: 364

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)
0	1	SS	18	10	Topsoil Depth 4"		
					Silty SAND, Trace Quartz Fragments and Mica, Reddish Brown, Moist, Loose, (SM-FILL)		
	2	SS	18	10			
5					Sandy SILT, Brown, Moist, Loose, (ML)		360
	3	SS	18	14			
					Silty SAND, With Quartz Fragments, Red, Moist, Medium Dense, (SM)		
10	4	SS	18	14	Silty SAND, With Quartz Fragments, Trace Clay, Reddish Brown, Moist, Medium Dense, (SM)		355
					END OF BORING @ 10.00'		350
15							
20							345
25							340
30							335

CALIBRATED PENETROMETER TONS/FT.²: 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % △

ROCK QUALITY DESIGNATION & RECOVERY: RQD% — — — REC.% ——— 20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT.: ⊗ 10 20 30 40 50+

8, 8, 19, 25

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL DRY WS OR WD	BORING STARTED 03-24-04	
▽WL(AB) DRY ▽WL(AC)	BORING COMPLETED 03-24-04	CAVE IN DEPTH ● 6.0'
▽WL	RIG 750 FOREMAN D&S	DRILLING METHOD HOLLOW STEM AUGER

RC (04-12-04) RC (04-13-04) RC (04-19-04) RC (04-28-04)

Tmw(04/29/2004)

Engineering Consulting Services, Ltd.

Chantilly, Virginia

Laboratory Testing Summary

Date: 4/16/04

Project Number: 9807 **Project Name: Sidwell Friends School Wisconsin Ave.**

Project Engineer: TKM **Principal Engineer: BCL** **Summary By: HNT**

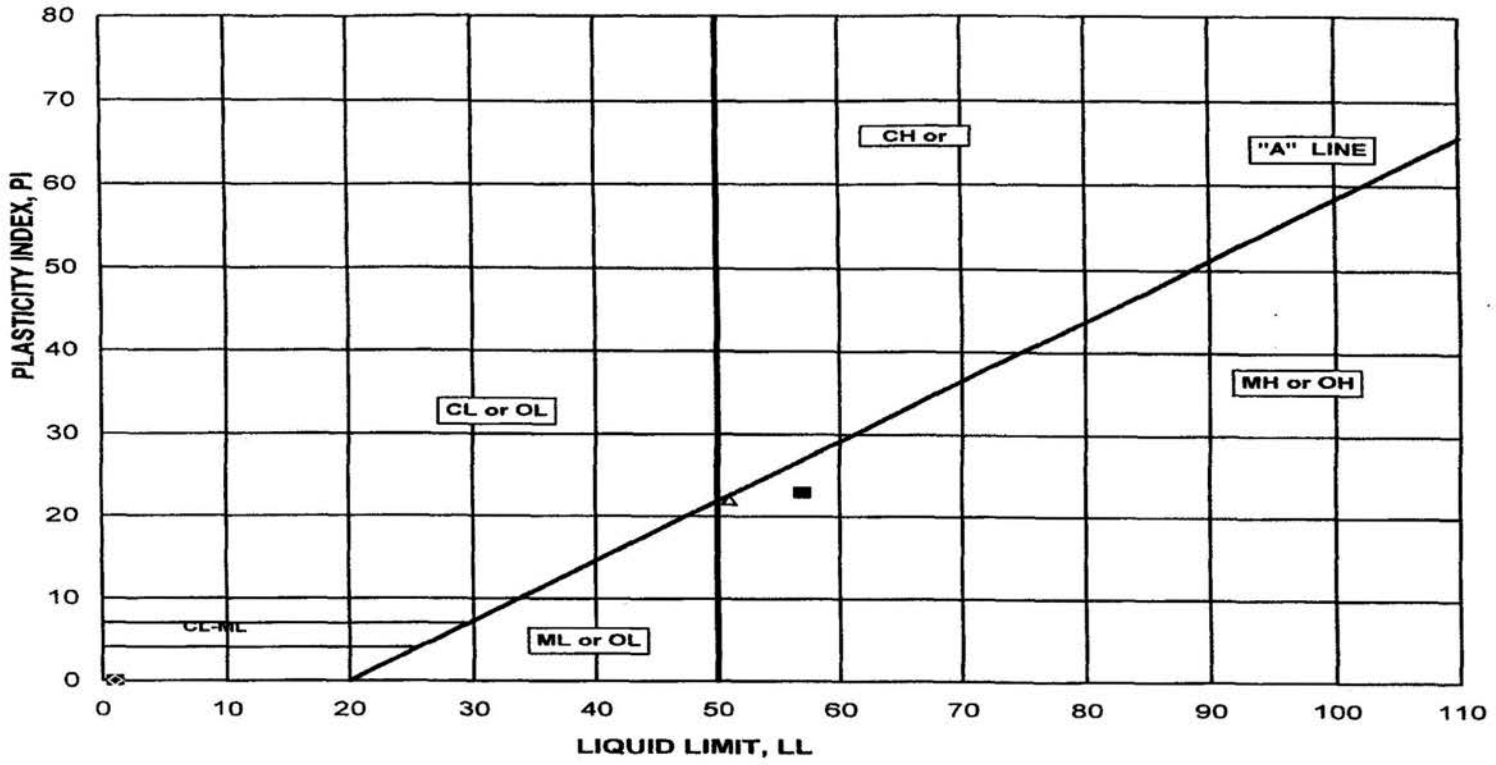
Boring Number	Sample Number	Depth (feet)	Moisture Content (%)	USCS	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Compaction		CBR Value	Other
									Maximum Density (pcf)	Optimum Moisture (%)		
B-1	S-3	5.0 - 6.5	24.2									
B-3	S-3	5.0 - 6.5	20.8									
B-4	S-3	5.0 - 6.5	12.9									
KKP-1	S-6	18.5 - 20.0	4.8									
MS-2	S-6	18.5 - 20.0	89.5	SM	NP	NP	NP	41.5				
MSP-3	S-5	13.5 - 15.0	61.1	MH	51	29	22	75.9				
NW-1	S-4	8.5 - 10.0	15.4									
NW-2	S-7	23.5 - 25.0	50.5	MH	57	34	23	75.5				
NW-4	S-5	13.5 - 15.0	6.1									
PSP-1	S-8	28.5 - 30.0										No Sample
PS-2	S-7	23.5 - 25.0	33.2									
PS-4	S-5	13.5 - 15.0	15.2									
PS-6	S-5	13.5 - 15.0	11.1									
PS-7	S-4	8.5 - 10.0	4.7									
PS-9	S-6	18.5 - 20.0	8.2									
QM-1	S-5	13.5 - 15.0	5.0									
QM-2	S-5	13.5 - 15.0	7.6									
QMP-3	S-7	23.5 - 25.0	32.4									
W-2	S-3	5.0 - 6.5	17.1									
W-3	S-3	5.0 - 6.5	23.0									

Summary Key:

SA = See Attached
S = Standard Proctor
M= Modified Proctor
V = Virginia Test Method
OC = Organic Content

Hyd = Hydrometer
Con = Consolidation
DS = Direct Shear
GS = Specific Gravity

UCS = Unconfined Compression Soil
UCR = Unconfined Compression Rock
LS = Lime Stabilization
CS = Cement Staibilization



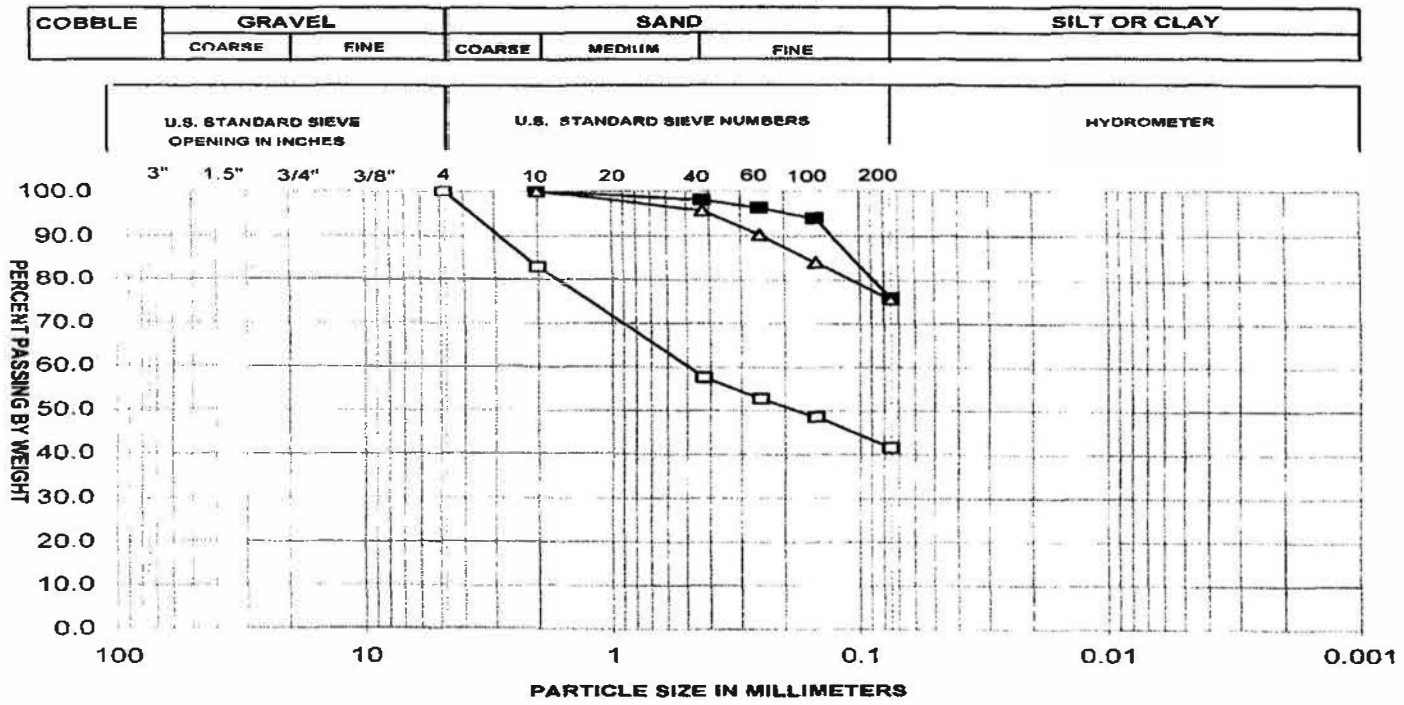
BORING/ SAMPLE No.	DEPTH (feet)	TEST SYMBOL	DESCRIPTION	WATER CONTENT (%)	LL	PL	PI
MS-2 / S-6	18.5-20.0	□	Silty Sand(SM)Grayish Brown	89.5	NP	NP	NP
NW-2 / S-7	23.5-25.0	■	Elastic Silt w/Sand(MH)Yellow L/Brown	61.1	57	34	23
MSP-3 / S-5	23.5-25.0	△	Elastic Silt w/Sand(MH)L/Yellowish Brown	50.5	51	29	22
/		▲			-	-	-
/		×			-	-	-
/		○			-	-	-
/		●			-	-	-
/		◇			-	-	-
/		◆			-	-	-
/		+			-	-	-
		X					

Project:	**Sidwell Friends School Wisconsin Ave.**
Project No.:	**9807**
Date:	**4/15/04**

Engineering Consulting Services Ltd.

Chantilly, Virginia

Plasticity Chart



Boring/ Sample No.	Depth (feet)	Symbol	LL	PI	Description
MS-2 S-6	18.5-20.0	□	NP	NP	Silty Sand(SM)Grayish Brown
MSP-3 S-5	13.5-15.0	■	57	23	Elastic Silt w/Sand(MH)Yellow L/Brown
NW-2 S-5	18.5-20.0	△	51	22	Elastic Silt w/Sand(MH)L/Yellowish Brown
		▲			

Applicable ASTM: D-422

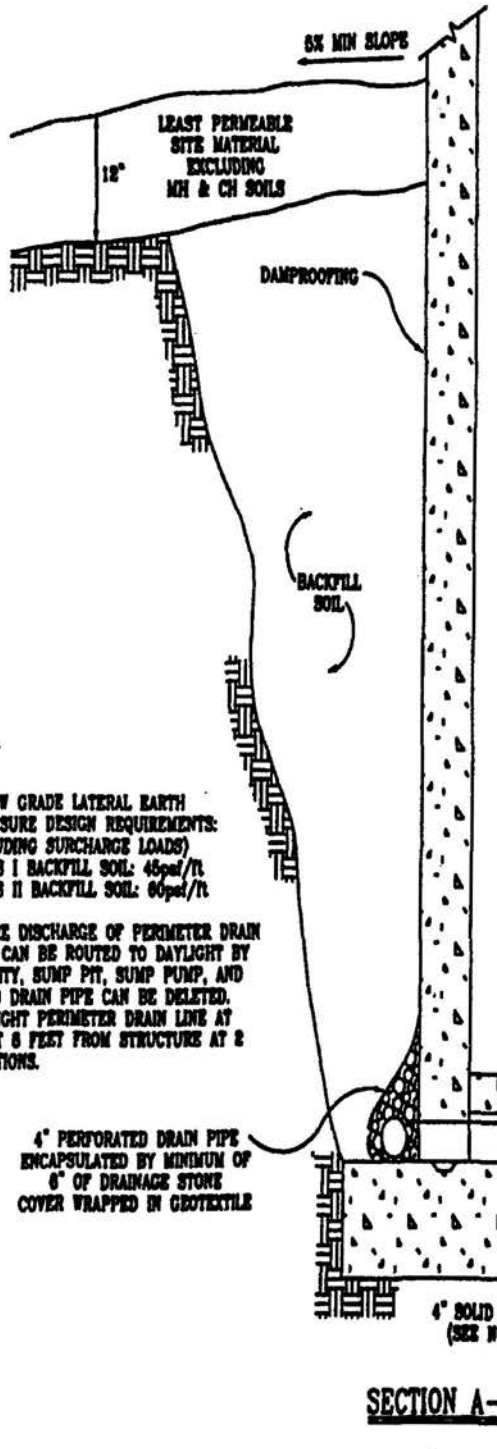
Project: Sidwell Friends School Wisconsin Ave.

Project No: 9807

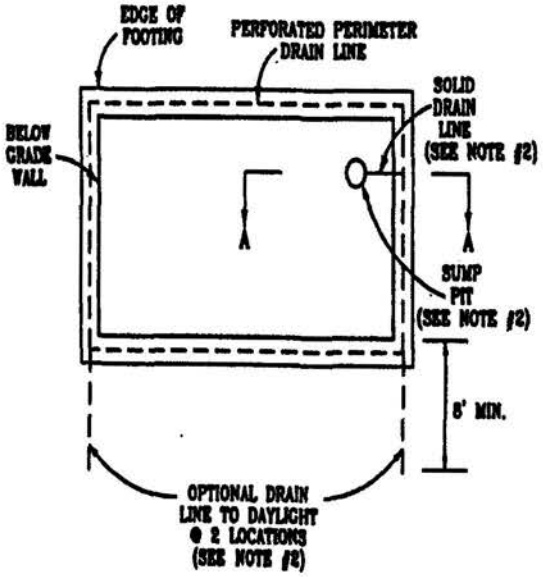
Date: 04/16/04

Engineering Consulting Services. Ltd
Chantilly, Virginia

Grain Size Analysis



SECTION A-A



FOUNDATION PLAN SCHEMATIC

NOTES:

1) BELOW GRADE LATERAL EARTH PRESSURE DESIGN REQUIREMENTS: (EXLUDING SURCHARGE LOADS)
CLASS I BACKFILL SOIL: 45psf/ft
CLASS II BACKFILL SOIL: 60psf/ft

2) WHERE DISCHARGE OF PERIMETER DRAIN LINE CAN BE ROUTED TO DAYLIGHT BY GRAVITY, SUMP PIT, SUMP PUMP, AND SOLID DRAIN PIPE CAN BE DELETED. DAYLIGHT PERIMETER DRAIN LINE AT LEAST 6 FEET FROM STRUCTURE AT 2 LOCATIONS.

DEFINITIONS:

DAMPROOFING: SEALING HOLES, RECESSES, JOINTS & PENETRATIONS WITH APPROVED BITUMINOUS MATERIAL, PARGING WITH PORTLAND CEMENT (3/8 INCH MINIMUM) (ON MASONRY WALLS ONLY), FOLLOWED BY AT LEAST ONE COAT OF APPROVED BITUMINOUS MATERIAL AT THE RECOMMENDED APPLICATION RATE.

DRAINAGE STONE: NO. 57 STONE, OR EQUIVALENT

GEOTEXTILE: EOS OF 40 TO 70 (MIRAFI 140N, AMOCO 2016, OR EQUIVALENT)
BACKFILL SOIL:
CLASS I - SM, SP, SW, GM, GP, GW
CLASS II - ML W/LL≤40, PI≤15

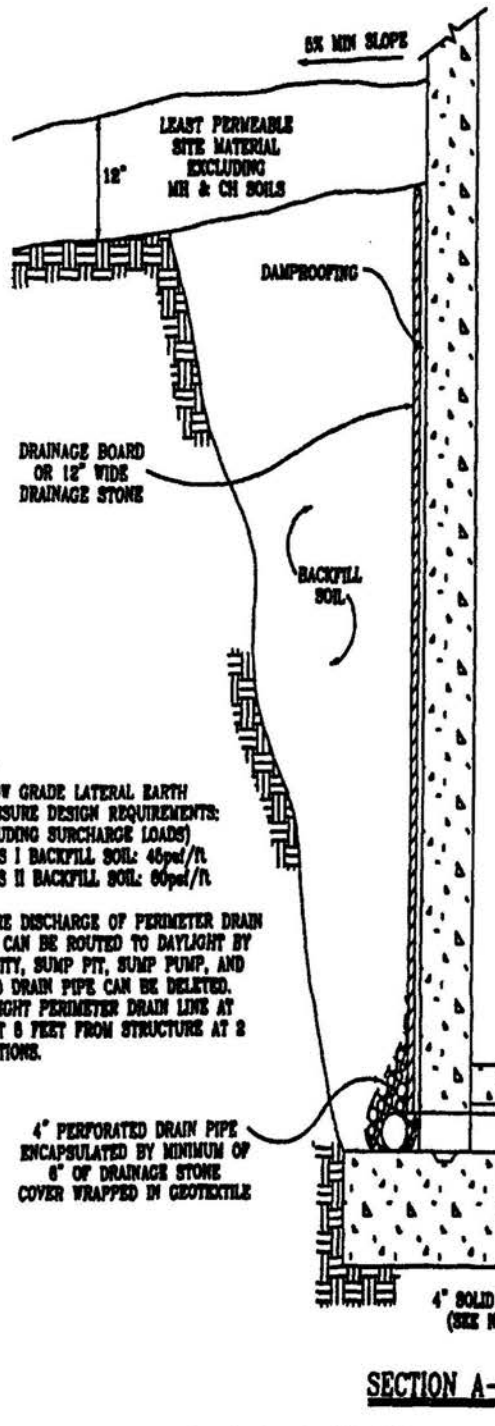
RESIDENTIAL BELOW GRADE DRAINAGE DETAIL

(NON-SEVERE GROUNDWATER CONDITIONS)

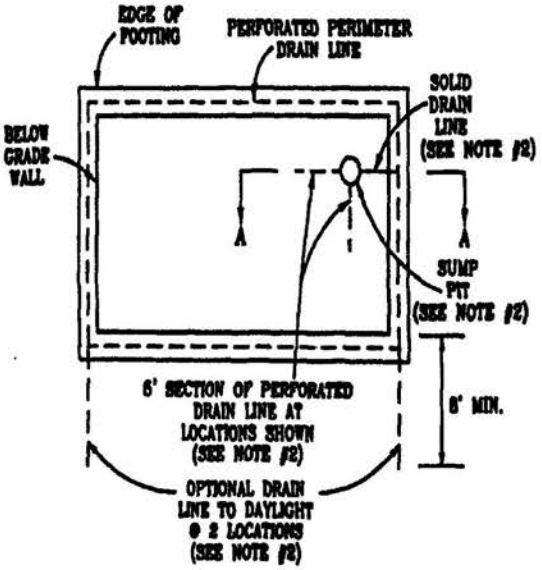
(NTS)

RESSUMPD.DWG REV 7-3-96

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SECTION A-A



FOUNDATION PLAN SCHEMATIC

NOTES:

1) BELOW GRADE LATERAL EARTH PRESSURE DESIGN REQUIREMENTS: (EXCLUDING SURCHARGE LOADS)
CLASS I BACKFILL SOIL: 45psf/ft.
CLASS II BACKFILL SOIL: 60psf/ft.

2) WHERE DISCHARGE OF PERIMETER DRAIN LINE CAN BE ROUTED TO DAYLIGHT BY GRAVITY, SUMP PIT, SUMP PUMP, AND SOLID DRAIN PIPE CAN BE DELETED. DAYLIGHT PERIMETER DRAIN LINE AT LEAST 6 FEET FROM STRUCTURE AT 2 LOCATIONS.

DEFINITIONS:

DAMPROOFING: SEALING HOLES, RECESSES, JOINTS & PENETRATIONS WITH APPROVED BITUMINOUS MATERIAL, PARGING WITH PORTLAND CEMENT (3/8 INCH MINIMUM) (ON MASONRY WALLS ONLY), FOLLOWED BY AT LEAST ONE COAT OF APPROVED BITUMINOUS MATERIAL AT THE RECOMMENDED APPLICATION RATE.

DRAINAGE STONE: NO. 67 STONE, OR EQUIVALENT
DRAINAGE BOARD: MIRADRAIN 6000, 2" THICK GEOTECH BOARD, OR EQUIVALENT
GEOTEXTILE: EOS OF 40 TO 70 (MIRAFI 140N, AMOCO 2016, OR EQUIVALENT)
BACKFILL SOIL:
CLASS I - SM, SP, SW, GM, GP, GW
CLASS II - ML W/LL≤40, PI≤18

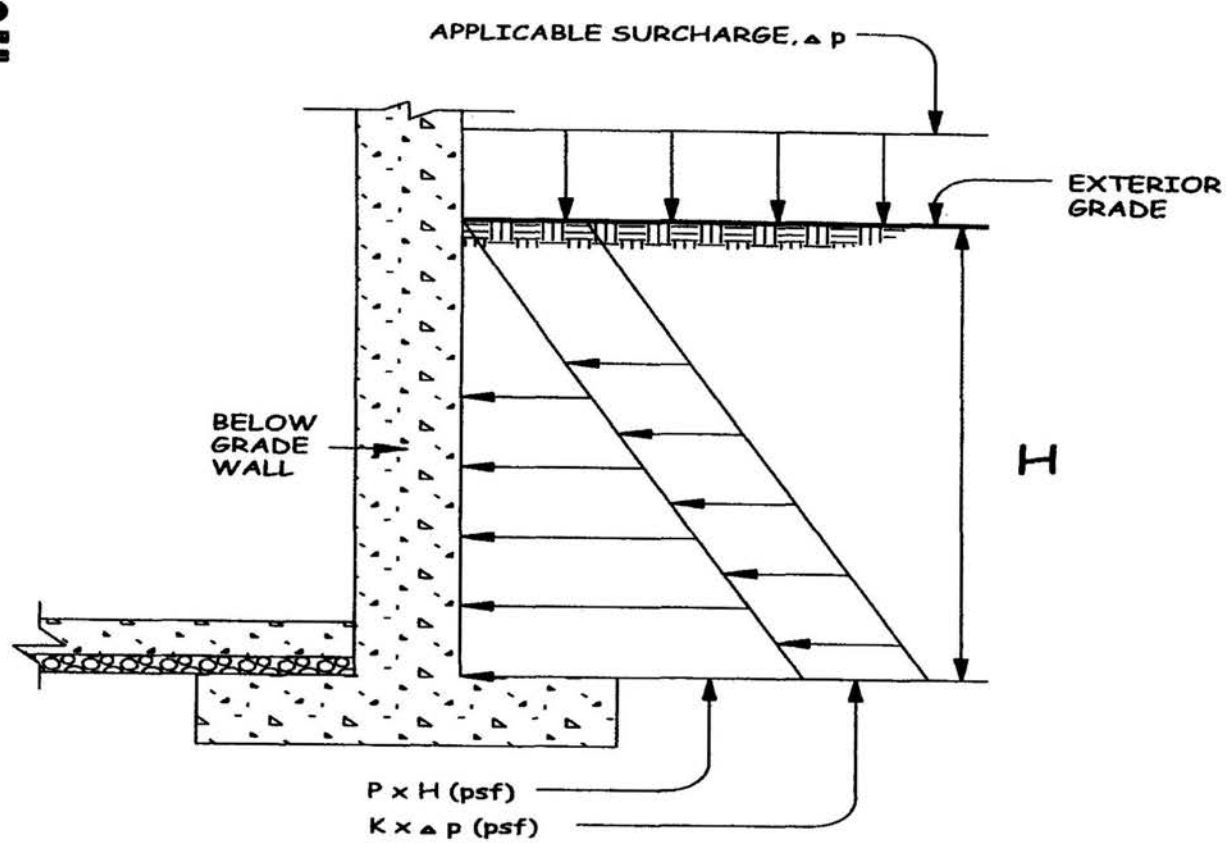
RESIDENTIAL BELOW GRADE DRAINAGE DETAIL

(HIGH SEASONAL GROUNDWATER TABLE)

(NTS)

RESSUMPW.DWG REV 7-3-96

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SOIL TYPE	TYPICAL K VALUE ACTIVE	AT-REST
SILT (ML)	0.4	0.5
GRANULAR (SP)	0.3	0.4

LEGEND:

P = LATERAL EARTH PRESSURE

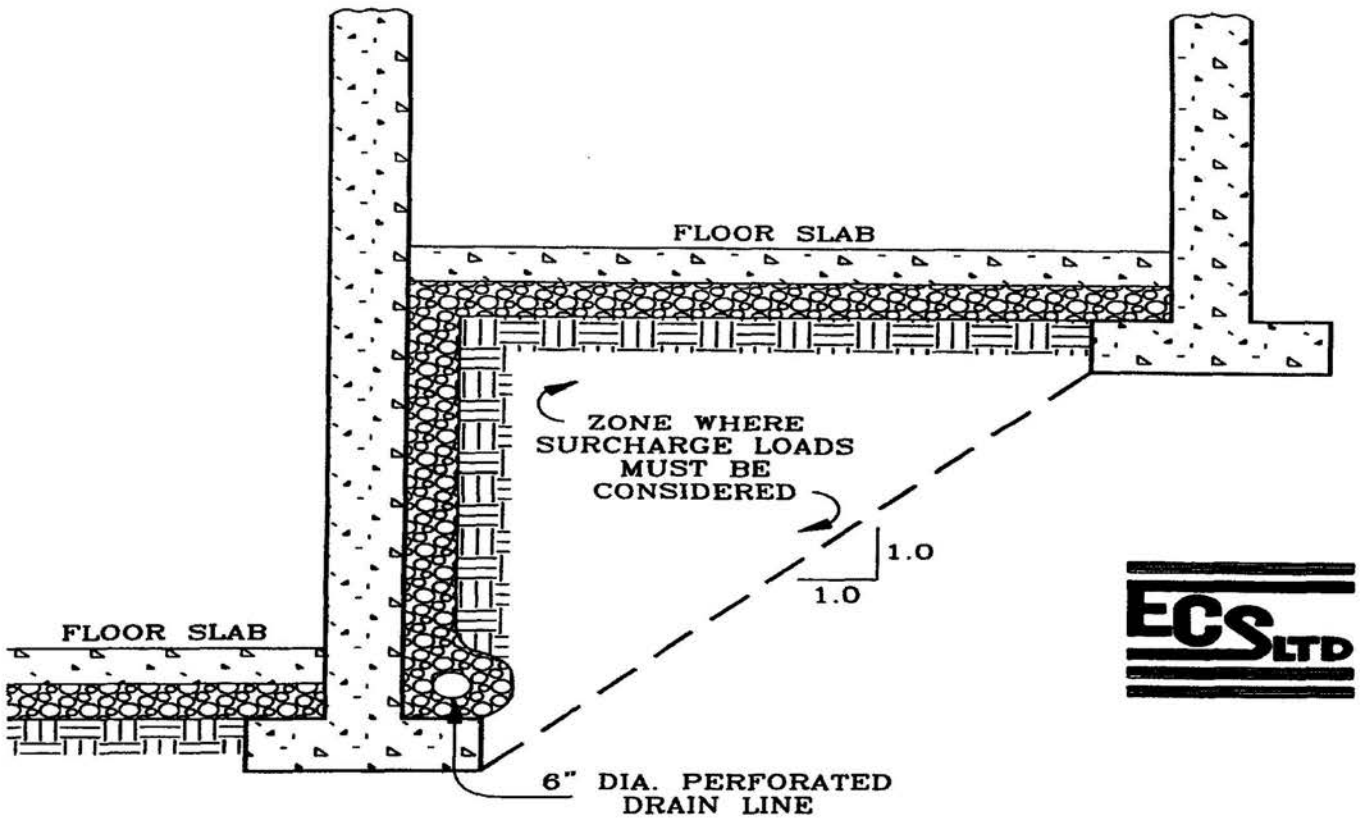
H = HEIGHT OF BACKFILL

▵ p = SURCHARGE

K = HORIZONTAL EARTH PRESSURE COEFFICIENT

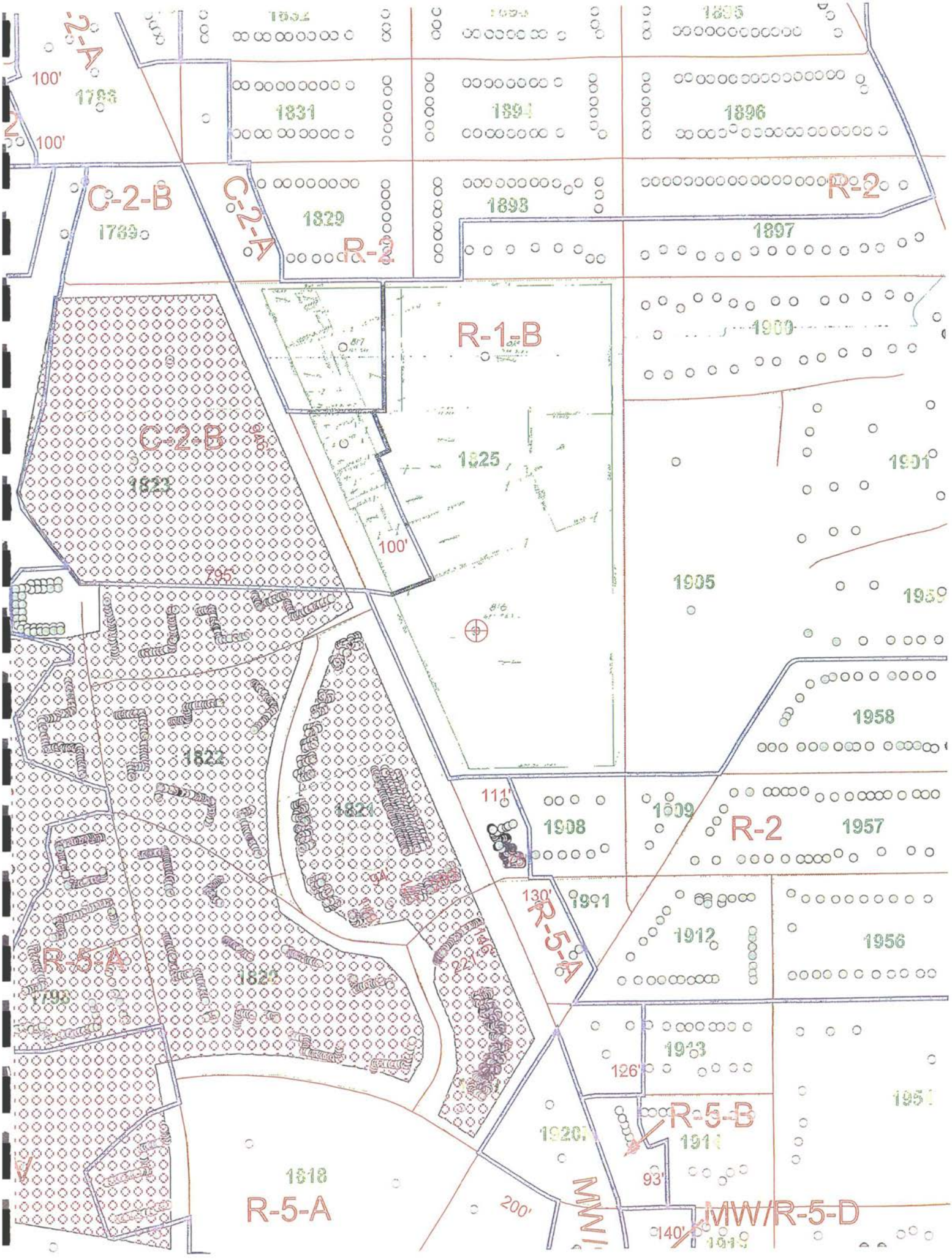
LATERAL EARTH PRESSURE DIAGRAM ©

ZONE OF INFLUENCE DIAGRAM ©



NOTE: HYDRAULICALLY CONNECT UPPER WALL DRAIN AND UNDERSLAB GRAVEL TO LOWER FLOOR SLAB GRAVEL AND DRAIN AS SHOWN.

D


C-2-A
100'
1793
1831
1894
1896
C-2-B
1769
C-2-A
1829
R-2
1898
1897
R-2
R-1-B
1900
C-2-B
1823
1825
1901
100'
795'
1905
1959
1822
1958
1821
111'
1908
1909
R-2
1957
130'
R-5-A
1798
1820
1912
1956
1943
126'
1951
R-5-B
1920
1911
93'
1818
R-5-A
200'
MW
MW/R-5-D
140'

E

HISTORIC PRESERVATION REVIEW BOARD
STAFF REPORT AND RECOMMENDATION

Property Address:	**3825 Wisconsin Avenue, NW**	X	Agenda
Landmark/District:	**The Highlands (Zartman House)**		Consent Calendar
		X	Concept Review
Meeting Date:	**April 22, 2004**	X	Alteration
H.P.A. Number:	**04-236**	X	New Construction
Staff Reviewer:	**Emily Paulus**		Demolition
			Subdivision

The applicant, Sidwell Friends School, seeks conceptual review of a Master Plan for their campus. The Master Plan calls for a number of improvements, including construction of an underground parking facility, a meeting house, a gym, and an addition to the existing middle school. The meeting house would be located adjacent to The Highlands, a DC and National Register listed landmark. The applicants are seeking comments and direction on the locations of the proposed new construction prior to developing more detailed architectural plans. The estate was designated a DC Landmark in 1964 and in 1972 was placed on the National Register of Historic Places.

Historical Background

The Highlands, also known as the Zartman House, was constructed between 1817 and 1827 by Joseph Nourse, the first Register of the Treasury. The estate, situated on the area's highest point, originally comprised approximately 130 acres, which Nourse purchased in 1817 for his son, Charles J. Nourse, as a wedding gift.[1] The house was reportedly constructed from gray and yellow stone discovered in a quarry at the east end of the property when Joseph and Charles set to clear a portion of the land. Charles J. Nourse occupied the house until his death in 1851, at which point the property was passed to his children. During this period, around 1840, the former front porch was replaced with the existing portico and the third floor made habitable by raising the roof and adding attic dormers. By 1850, the property consisted of the house, a large stable and barn, and servants' quarters.[2] Little is known of how the property functioned during this period, other than a 1903 newspaper account describing the estate as a "self-sufficient farm in the midst of the fashionable suburbs."

In 1913, 2 acres of the estate were sold to Thomas Sidwell, principal of the Sidwell Friends School, and 20 acres remained with the Nourse family. In 1920, with the property reduced to 19 acres, it was purchased by Admiral Cary T. Grayson, President Wilson's personal physician. It was during Admiral Grayson's tenure that the estate underwent extensive alterations. In 1926, architects Peabody, Wilson, and Brown erected

[1] Nourse apparently named the estate "The Highlands" after his daughter-in-law's family home of the same name, located in Buck's County, Pennsylvania.

[2] The servants' house still stands across from the Middle School on 37th Street.

the flagstone terrace at the rear, raised the roof (again), and remodeled the interior. Subsequently, in 1935, the low wing to the northwest was constructed. During this period, the surrounding estate was a mix of elaborate gardens and wooded hillside. The garden, known as the Grayson Garden, was located in the rear yard, off the rear terrace, and consisted of a seven-tier garden that dropped from the house to what is now 37th Street. After Admiral Grayson's death in 1938, the estate was held by his widow, who leased the house to Count Andre de Limur, Attache to the French Embassy, John Hay Whitney, and later to Allen Dulles, Director of the CIA.

In 1955, the property was sold to Sidwell Friends School, by which time the estate had been reduced to the house and surrounding eight acres and renamed Zartman House. That same year, the Grayson Garden was destroyed to make way for athletic fields and the surrounding woods and hillside were largely cleared. The demolition of the stable and barn followed shortly thereafter. Since that time, the house has served as the school's administration building. The school has made few physical changes to the house, with the exception of the third floor conversion into an apartment for the Assistant Headmaster. The surrounding land, however, has been intensely developed by the school, largely eradicating the agrarian context in which the estate originally stood. Today, the house stands amidst the larger expansive campus, with tennis courts and a baseball field located to the south, a track and field to the east, and the main campus buildings to the north. The semi-circular drive that fronts the property remains, as does the open lawn located immediately to the east. While the grading and topography of the surrounding landscape changed drastically during the mid-20th century, the house continues to sit on a rise, surrounded by a small ring of open space.

Historical Significance

Documentary evidence indicates that the Highlands was a country estate that once presided over more than one hundred acres of farmland, cultivated fields, and woods. There are few such extant resources in Washington, as most of the city's early country estates have been demolished and the land redeveloped; and Washington never flourished with country estates and mansions, compared to early colonial river port towns such as Georgetown and Alexandria. The Highlands stands today as one of Washington's only surviving 19th-century country estates.

The estate has also both housed and hosted a number of Washington's elite. In *Social Life in the Early Republic* (1904), Anne Hollingsworth Wharton observed that,

> "No house in the vicinity of Washington is more replete with associations of the past than The Highlands, where the Madisons, Thomas Jefferson,...and other distinguished people of the day were wont to congregate" and whose garden featured "shrubbery planted on the grounds by Thomas Jefferson."

According to Matt Jennings' 1997 article, "*This Old House*," other notable guests over the years include Colonel William Seward, Abraham Lincoln, Theodore

Roosevelt (who was said to hike and ride horses in the surrounding woods and fields), Franklin Delano Roosevelt, and William Howard Taft.[3]

Architecturally, the house is an interesting amalgam of the original late Georgian construction, 1840s portico addition, and later 1926 and 1935 Grayson renovations. While it has been substantially altered since its original 1820s construction, each of the major renovations is an important component of the building's historicity, reflecting the trends and desires of its tenants. The Highlands is also significant in that it is of stone construction, whereas the majority of Washington's 19th-century estates and mansions were constructed of red brick. Indeed, the house is identified in Christopher Weeks' "*AIA Guide to the Architecture of Washington, DC*," as "one of the few remaining 19th-century stone houses in the area."[4] A comparable example, which may indeed be the only other remaining 19th-century stone house in Washington, is the 1823 Klingle Mansion.

The Master Plan

The goals of the planned changes, as stated by the school, are to upgrade existing facilities, accommodate increasing needs, and facilitate changing curricula. The major components of the Master Plan include:

- Renovation and expansion of the existing Middle School
- New traffic control strategies
- Underground parking facilities
- Expansion of the athletics facilities
- Renovation of the Arts Center
- New perimeter fencing/landscaping
- Green design implementation
- Construction of a new Quaker Meeting house

With the exception of the meeting house, the proposed changes will have little, if any, physical or visual impact on the landmark. The other buildings undergoing renovation and expansion are located at the north end of the campus, within the already densely built-up portion of the campus, which do not contribute visually or historically to the landmark. Much-needed cohesive perimeter fencing and landscaping have the potential to positively impact the perception of the landmark; these plans are currently at a very conceptual stage and will be coordinated with the staff as they progresses. Staff comments and recommendations will focus entirely on the meeting house construction, proposed immediately adjacent to the Highlands.

The Meeting House

The proposed meeting house would be a stone, flat-roofed building, measuring approximately 48 feet by 32 feet with approximately 9,580 square feet on two floors. The building would be situated at an approximately 45° angle from the house, at its southwest corner. At its closest point, the meeting house would sit

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[3] Matt Jennings, "This Old House," Sidwell Friends Alumni Magazine, Summer 1997.

[4] Christopher Weeks, "AIA Guide to the Architecture of Washington, DC," 1994, p. 210.

about 12 feet from the landmark's one-story south wing. The relationship of the meeting house to the slope on which it would be located is critical to understanding the building's relationship to the landmark: the meeting house would be set into the slope of the rise on which landmark is located, allowing it to appear sunken into the landscape, particularly as seen from Wisconsin Avenue.

The suggested architecture, while only preliminary at this stage, also helps to mitigate the visibility of the building. The low-pitched flat roof would feature long overhanging eaves, while the walls would be composed of large expanses of horizontally raked stone joints. Windows would be composed of several large sheets of glass in addition to some small panes of glazing just below the eaves. Overall, the architects have suggested a building constructed of natural, high quality materials with simple details.

Evaluation and Recommendation

In preliminary meetings with the applicant, the HPO expressed concern about the overall proximity of the meeting house to the landmark. In response, the applicant slightly shifted the location of the building, and made a number of changes to increase the apparent breathing space between the two buildings. A small glass lobby was added to the west elevation of the meetinghouse, providing a more open, translucent appearance from Wisconsin Avenue. The building was pulled an additional 6 feet away from the landmark and stepped down 3-4 feet in height. Finally, the ground floor of the glass lobby was submerged entirely below ground. While certainly an improvement, the staff has not had the benefit of viewing these revisions in the model, which would give a better sense of the spatial relationship between the landmark and the meeting house; the model is being revised and will be brought to the HPRB meeting.

The proposal represents a serious attempt to mitigate the adverse physical and visual impact of the proposed building on the landmark, both through its design and its relationship to the site's terrain. Despite these efforts, however, the proximity of the meeting house to the landmark remains a serious concern. While the Board has approved compatible new construction on the site of landmark buildings in the past, they have typically required a sufficient amount of breathing space around the landmark – this is particularly important for a rural farmstead house. Today, the house has very little open space surrounding it, particularly to the north. The property has been more aggressively encroached upon to the north, while the land to the south and east remains relatively open. One could argue, then, that this places greater importance on the preservation and maintenance of that open space, as it is all that remains to provide a sense of the building's former rural, open context. Also troublesome is the idea of placing a structure into the slope of the hill, or platform, on which the landmark sits. Its isolated, prominent, and elevated location is part of the very notion of the country estate, and the encroachment of even a beautifully designed structure into the hill is quite unnatural. The hill, particularly when seen from the athletic fields to the south

and east, serves almost as a stage for the landmark. The ability to understand the landmark is most pronounced from this vantage point; the proposed building has the potential for being a major intrusion on that element.

A more compatible location for the meeting house would be farther away from the landmark, ideally completely outside the hill, including the slope. The staff would encourage the applicant to more fully explore alternative locations at the south end of the campus. If there are compelling reasons as to why alternative locations are unsuccessful, the staff would encourage the applicant to return to the Board for further review.

The staff recommends that the Review Board support the overall Master Plane, but encourage the applicant to explore alternative, more compatible locations for the proposed meeting house, and return to the Board for further review.

F

Sidwell Friends School Construction Management Plan ("CMP")

May 14, 2004

This CMP reflects input from a number of neighbors, institutions and organizations, including a May 3 meeting with ANC 3C commissioners and a May 13, 2004 meeting with neighbors and ANC 3C and 3F commissioners.

In conjunction with the interior and exterior construction work to be undertaken by Sidwell Friends School as described in BZA Application No. 17149 ("Project"), Sidwell Friends School ("School") and its officers, trustees, employees, agents, contractors, subcontractors and employees of contractors and subcontractors, shall:

1. Conduct no construction activities before 7:00 AM or after 5:00 PM, Mondays-Fridays. In addition, no noisy activities that might disturb neighbors, including the playing of radios by construction workers, idling trucks or yelling, shall be allowed before 7:00 AM. Weekend and holiday work will only be conducted in emergencies and, when possible, with prior notice to the neighborhood through the Construction Liaison Committee to the neighborhood. No noisy activities will be conducted on weekends before 9:00 AM. The School will make its best efforts to avoid working on weekends. Excessive noise will be decided by the Construction Liaison Committee. The School will make its best efforts to minimize truck noise generally. The School will pay special attention to the needs of Hearst School, particularly during pick-up and drop-off time, and during standardized testing week, and to the Washington Home, both of which have special need constituents.

2. Agree to construction contracts that require that all those involved in the Project strictly follow the applicable D.C. ordinances for construction noise and hours of operations (unless the standards set forth herein are more restrictive, in which event the School shall comply with and enforce the more restrictive standards). The School will compile all relevant ordinances at the School, furnish them to the Construction Liaison and provide them on-line, to the extent practicable. A project supervisor will be on premises at all times when work is occurring.

3. Require all vehicles (including, but not limited to, personal or company vehicles of construction workers) to utilize only major traffic arteries for access to the site within a one (1) mile radius of the campus, except as required for limited construction activities and access along 37th Street and Quebec Avenue. It is agreed that every effort will be made to keep traffic and construction activity off of these side streets. The School agrees to develop a construction routing plan with the Construction Liaison Committee and will submit such a plan to the District of Columbia Department of Transportation.

4. Use sealed or covered vehicles both to transport building materials to the construction site and to remove or dispose of waste or garbage at or from the School property, and ensure that any and all spills and dispersal of such materials, waste or garbage at and near the School property are removed immediately, including spillage of excavated soil from dump trucks, or soil carried off the site onto city streets by the

wheels of the trucks. A truck washing area will be provided on campus to remove caked soil from truck wheels.

5. Make every attempt not impede street access or pedestrian or motor vehicle traffic flow on any public streets or sidewalks, except for temporary needs as they may arise.

6. Provide traffic and pedestrian control measures as required by D. C. law and regulations, including employing flagmen.

7. Erect a temporary construction chain link fence around the construction area, all construction materials and construction equipment on the School property.

8. Keep all tools, equipment, building and construction materials, construction storage and trailers, and vehicles (including, but not limited to, personal or company vehicles of construction workers) on School property (except for adjacent public space for which appropriate permits have been issued). The School will locate portable toilets away from the neighborhood and service them frequently. The School will provide adequate on-site parking for each contractor, subcontractor and supplier and their workers, management and any other personnel associated with the Project. Contractors will be prohibited from staging waiting vehicles or equipment on neighborhood streets and subcontractor and contractor personnel will be prohibited from parking on neighborhood streets.

9. Secure all construction materials and equipment every day in a manner that poses no potential danger to the community. The School shall inter alia lock all motorized equipment and vehicles, stack any building materials (i.e., brick, lumber, etc.) in accordance with industry standards for safety. Should any preexisting hazardous or toxic substances be discovered, remove them from the site and provide a report to ANCs 3C and 3F.

10. Fully disclose to ANC 3C and ANC 3F with no less than 3 business days advance notice, all presence or use at the School property of hazardous or toxic substances used in conjunction with the construction work or any lead or asbestos abatement as required by D.C. law.

11. The School is committed to speedy resolution of disputes with neighbors. In cases where the School and its neighbors are unable to resolve disputes in a timely manner, the School agrees to seek mediation assistance from the Construction Liaison Committee and, if necessary, a neutral third party. The School will arrange a twenty four hour emergency phone line and will address emergency matters immediately. The School will also set up another phone line for non-emergency matters and respond to issues within one business day.

12. In order to ensure that neighboring properties are protected, the School will use a contracted engineer to determine the zone of influence for each building in the project and offer preconstruction surveys to neighbors within those zones in order to provide a baseline against which to measure impacts upon nearby buildings. The School

will reimburse any reasonable cost to repair any and all damage to public and private property caused in whole or in part by the construction work involving the Project.

13. Conduct public meetings to address neighbors' concerns about construction activities no less often than twice per month during the time the construction of the Project is actively being pursued if requested by at least three households living within the Notification Zone (as shown on the map attached hereto), ANC 3C or 3F Commissioners or Construction Liaison Committee Members. Such meetings, if so requested, shall commence no later than one week after the construction work begins and will be open to any interested community members.

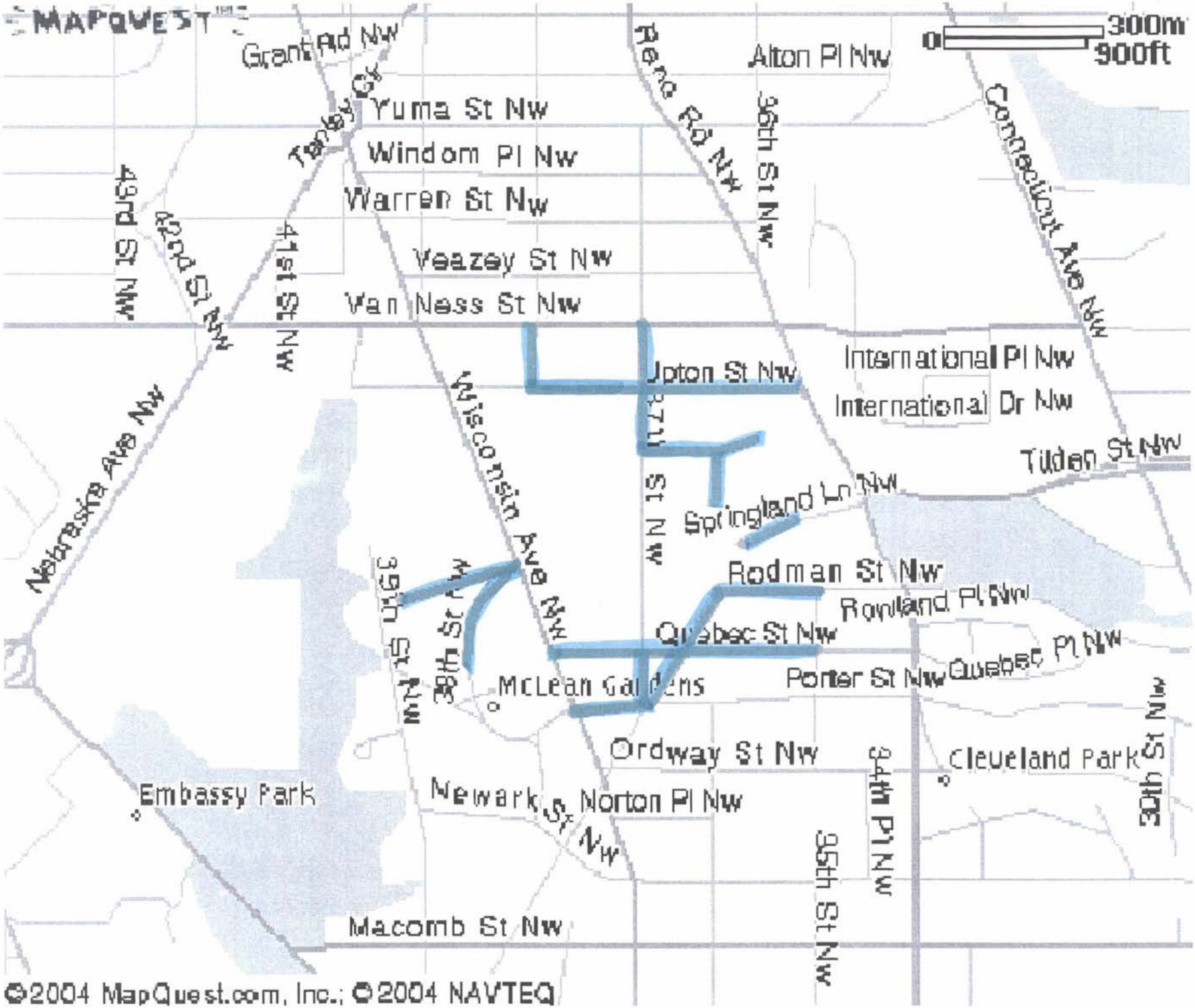
14. Notify the neighbors in the Notification Zone by mail, electronic mail, and by posting in conspicuous places on the worksite the contact information of the school liaison who will address neighborhood concerns about construction related matters.

15. The School recognizes that Wisconsin Avenue is busy during morning rush hour and will manage construction traffic in such a way as to minimize its impact.

16. The School does not anticipate the need for blasting. Should blasting be required, the School will provide neighbors with 48 hours notice. The School will give 24 hours notice (48 hours, if possible) to neighbors in the Notification Zone prior to any pile-driving activities.

17. If so desired by the neighbors, the School will work with neighbors and ANC 3C and 3F to create a Construction Liaison Committee.

18. Any questions or comments with regard to this plan may be directed to: Mike Saxenian, saxenianm@sidwell.edu or (202) 537-8120.


MAPQUEST
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300m
900ft
Grant Rd NW
Alton Pl NW
Yuma St NW
Windom Pl NW
Warren St NW
Veazey St NW
Van Ness St NW
Upton St NW
International Pl NW
International Dr NW
Tilden St NW
Springland Ln NW
Rodman St NW
Rowland Pl NW
Quebec St NW
Quebec Pl NW
Porter St NW
McLean Gardens
Ordway St NW
Cleveland Park
Newark St NW
Norton Pl NW
Embassy Park
Macomb St NW
Reno Rd NW
36th St NW
Connecticut Ave NW
49th St NW
42nd St NW
41st St NW
Nebraska Ave NW
Wisconsin Ave NW
39th St NW
38th St NW
34th Pl NW
35th St NW
30th St NW
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G

WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS

MEMORANDUM

TO: Colleeen Hawkinson, DDOT

FROM: Jami Milanovich, P.E.

DATE: May 12, 2004

RE: Additional Traffic Analysis
Upper and Middle School Renovation and Expansion
Wisconsin Avenue, Washington, D.C.

Based on feedback from ANC 3C, ANC 3F, and the community, Sidwell Friends School has begun exploring the possibility of increasing the size of the proposed garage by 111 parking spaces. Additionally, Sidwell proposes to continue utilizing the drop-off/pick-up area on 37th Street for only the 5th and 6th grade drop-off/pick-up operation. Furthermore, Sidwell proposed to increase the proposed enrollment cap to 850. The original traffic study evaluated an enrollment cap of 825 and recommended that the drop-off/pick-up area on 37th Street be restricted to carpools only (for all grades). In light of the proposed changes to Sidwell's proposal, we have conducted additional analyses to determine the ability of the proposed entrance, existing exit, and proposed drop-off/pick-up lane to accommodate the proposed increase in garage parking from 196 spaces to 307 spaces. We also evaluated the impact of increasing the proposed student cap to 850 on the proposed entrance, existing exit, and the drop-off/pick-up operation. The analyses were conducted under two scenarios: assuming 5th and 6th grade drop-offs/pick-ups occur on 37th Street and assuming no drop-offs/pick-ups occur on 37th Street.

Scenario 1: 5th and 6th Grade Drop-Off/Pick-up on 37th Street

Drop-off/Pick-up Evaluation

According to Sidwell, the number of 5th and 6th grade students is projected to be 136. Based on the observed auto occupancy for vehicles utilizing the drop-off/pick-up area on 37th Street, 1.27 students per vehicle are dropped-off during the AM peak hour and 1.19 students per vehicle are picked-up during the PM peak hour. Therefore, 107 vehicles would utilize 37th Street in the

morning and 114 vehicles would utilize 37th Street in the afternoon. However, not all of these trips would occur during the peak hour. Based on the existing distribution of traffic entering and exiting the School over time, approximately 90 percent of the morning arrivals (96 vehicles) occur during the peak hour, approximately 35 percent of the afternoon departures (40 vehicles) occur during the school peak hour, and approximately 30 percent of the afternoon departures (34 vehicles) occur during the commuter peak hour. During the AM peak hour, the estimated maximum queue on 37th Street will be 14 vehicles (note that the AM peak hour is the worst-case since the arrivals occur over a more concentrated time period).

Currently, 189 vehicles drop-off on 37th Street in the morning (162 vehicles during the peak hour) and 51 vehicles pick-up on 37th Street in the afternoon (25 vehicles during the school peak hour and 14 vehicles during the commuter peak hour. Therefore, if the drop-off/pick-up operation on 37th Street was limited to 5th and 6th grades, 66 vehicles currently utilizing 37th Street during the morning peak hour would be shifted to the drop-off lane in the proposed garage.

Currently, an estimated 43 spaces are required to accommodate the drop-off operation. Extrapolating, an increase in enrollment cap to 850 would increase the required drop-off space by three vehicles. An estimated 14 of the 46 drop-offs occurring at the peak time would occur on 37th Street; therefore, storage for 32 vehicles would be required on Wisconsin Avenue (either in the proposed garage or on Zartman Circle).

This approach does not account for students who currently drive but who may be restricted from driving in the future. Currently, 124 students drive to school during the busiest time of the year (surveys of upper school students were conducted in April when a higher percentage of students have drivers' licenses). Assuming 100 of the 111 additional parking spaces in the proposed garage would be designated as student parking, and off-site student parking is restricted, up to 24 students who currently drive could be dropped-off/picked-up under future conditions. This would translate into an additional three spaces being required to accommodate drop-off operations. In other words, storage for 35 vehicles would be required on the Wisconsin Avenue side. With an enrollment cap of 850, an additional five spaces (for a total of 37 spaces on the Wisconsin Avenue side) would be required. Current plans show that approximately 30 vehicles can be accommodated in the proposed garage for drop-off/pick-up operation.

Operational Analyses

Future peak hour traffic volumes at the proposed entrance on Wisconsin Avenue, opposite Rodman Street were adjusted to account for the shift in traffic from 37th Street to the proposed garage during the AM peak hour. During the PM peak hour, traffic would be shifted from the Wisconsin Avenue entrance to 37th Street. Likewise, future traffic volumes at the exit on Wisconsin Avenue were also adjusted. Operationally, the entrance and exit intersections on Wisconsin Avenue can accommodate the additional traffic if 5th and 6th grade drop-offs/pick-ups occur on 37th Street.

Scenario 2: No Drop-offs/Pick-ups on 37th Street

Drop-off/Pick-up Evaluation

If no drop-off/pick-up operation would be permitted on 37th Street, 46 spaces would be required in the proposed garage and on Zartman Circle to accommodate the estimated demand. An estimated 30 spaces would be available in the proposed garage and an estimated 6 spaces could be provided on Zartman Circle. Therefore, 78 percent of the demand would be met.

Operational Analyses

As before, future peak hour traffic volumes at the Wisconsin Avenue entrance and exit were adjusted to account for all drop-off/pick-ups occurring on the Wisconsin Avenue side. The additional traffic at the Wisconsin Avenue/Post Office Driveway/School/Exit intersection would necessitate modification to the existing signal timings.

The proposed entrance would operate at acceptable levels of service with the additional increase in traffic under this scenario.

Conclusions

1. Under an enrollment cap of 850, with 5th and 6th grade operation on 37th Street and assuming off-campus parking is not permitted, the drop-off/pick-up operation on Wisconsin Avenue (in the proposed garage and on Zartman Circle) would operate at capacity during the AM peak period.

2. Assuming off-campus parking is permitted, the 7th through 12th grade drop-off/pick-up operation on Wisconsin Avenue (in the proposed garage and on Zartman Circle) would operate at 89 percent of its capacity during the AM peak period.

3. If no drop-off/pick-up were permitted on 37th Street, only 78 percent of the demand for drop-offs would be met during the AM peak period.

4. Operationally, the entrance and exit intersections on Wisconsin Avenue could accommodate the projected traffic volumes with an enrollment cap of 850 if 5th and 6th grade drop-offs/pick-ups occur on 37th Street.

5. If no drop-offs/pick-ups occur on 37th Street, projected traffic volumes with a cap of 850 students indicate that the traffic signal at Wisconsin Avenue/Post Office Driveway/School/Exit would need to be modified (i.e. green time would need to be shifted from Wisconsin Avenue to the side streets during the AM peak hour).

H

SIDWELL FRIENDS SCHOOL
TRANSPORTATION MANAGEMENT PLAN
WASHINGTON, D.C.

Prepared for:
Sidwell Friends School

Prepared by:
Wells & Associates, LLC

January 2004

SIDWELL FRIENDS SCHOOL
TRANSPORTATION MANAGEMENT PLAN
WASHINGTON, D.C.

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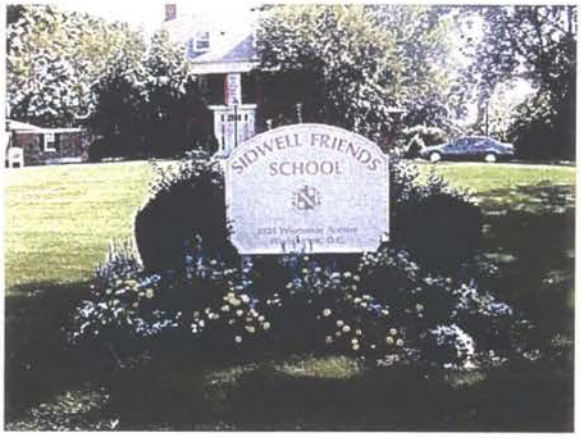
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Section 1
INTRODUCTION

Overview

Sidwell Friends School (Sidwell) is a PK-12, co-educational, Quaker day school that was founded in 1883. The Lower School is located on a five-acre campus on Edgemoor Lane in Bethesda, Maryland. The Middle and Upper Schools are located on a 15-acre campus at 3825 Wisconsin Avenue in the Tenleytown section of Northwest Washington, D.C., as shown on Figure 1-1.



As shown on Figure 1-2, the Wisconsin Avenue Campus is comprised of the Earl G. Harrison Jr. Upper School Building; the Middle School (Zavitz) Building; Kogod Center for the Arts; Richard Walter Goldman Memorial Library; Zartman House (administrative building); Sensner Building (maintenance services and school store); the Wannan and Kenworthy Gymnasiums; three athletic fields; eight tennis courts; and a six-lane track.

The Washington Home and Friendship Station Post Office are located immediately north, and adjacent to, the Sidwell campus. Hearst Elementary School and Hearst Recreation Center are located west of the campus, across 37th Street.

The Fannie Mae national headquarters and McLean Gardens are located west of the campus, across Wisconsin Avenue. Another building occupied by Fannie Mae, the James Johnson Building, is located on the east side of Wisconsin Avenue, immediately adjacent to Sidwell.

During the 2003-2004 school year, 342 students are enrolled in the Middle School and 459 students are enrolled in the Upper School. A total of 801 students are enrolled at the Wisconsin Avenue campus. Sidwell currently employs 172 full time educators on its DC Campus.

As shown on Figure 1-3, Sidwell proposes to construct: (1) renovate and expand the Middle School, (2) renovate the Arts Center, (3) construct a new gym and convert some existing athletic space to art uses, and (4) construct a new Quaker Meeting House. A 196-space underground parking structure is proposed beneath the existing athletic field.

Access to the garage is proposed via a new entrance that would be aligned opposite Rodman Street. Egress will continue via the existing exit shared with the post office and the James Johnson Building (Fannie Mae). A one-way service drive is proposed between the Johnson Building and the new parking deck.

Sidwell is currently operating under a 1996 BZA Order that limits the number of staff to 190 and the number of students to 780. The school is proposing to increase the enrollment cap to 825 students. No change is proposed to the current staff cap.

This report presents the Sidwell Traffic Management Plan (TMP). It includes a description of the current transportation policies and recommendations for the proposed traffic management plan. The proposed traffic management plan is presented in terms of the physical (or building) elements, traffic management elements, monitoring, and compliance.

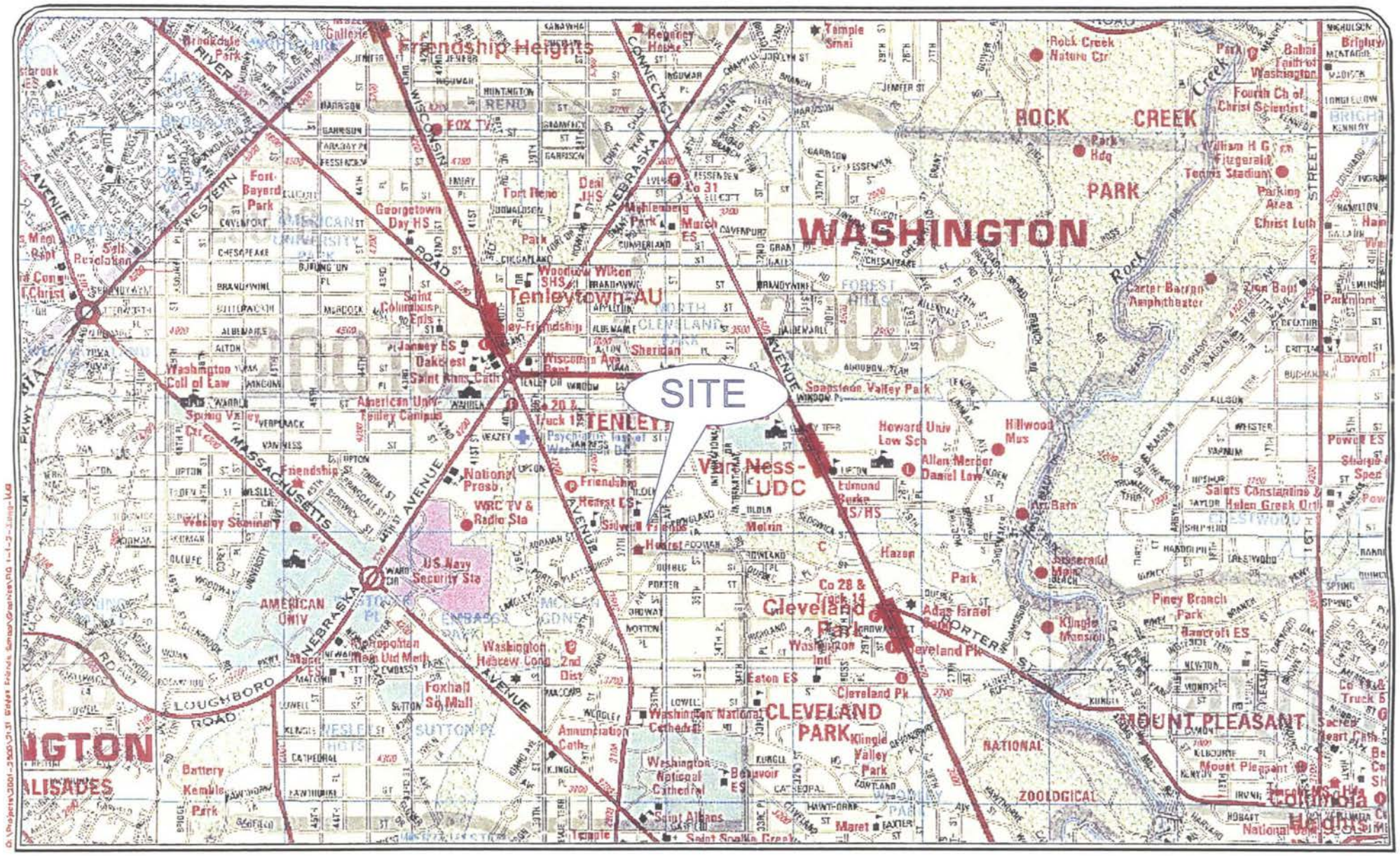


Figure 1–1
Site Location

North Schematic

Sidwell Friends School
Washington, D.C.

WELLS & ASSOCIATES, LLC.
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS



Figure 1–2
Existing Site Plan

North Schematic

Sidwell Friends School
Washington, D.C.

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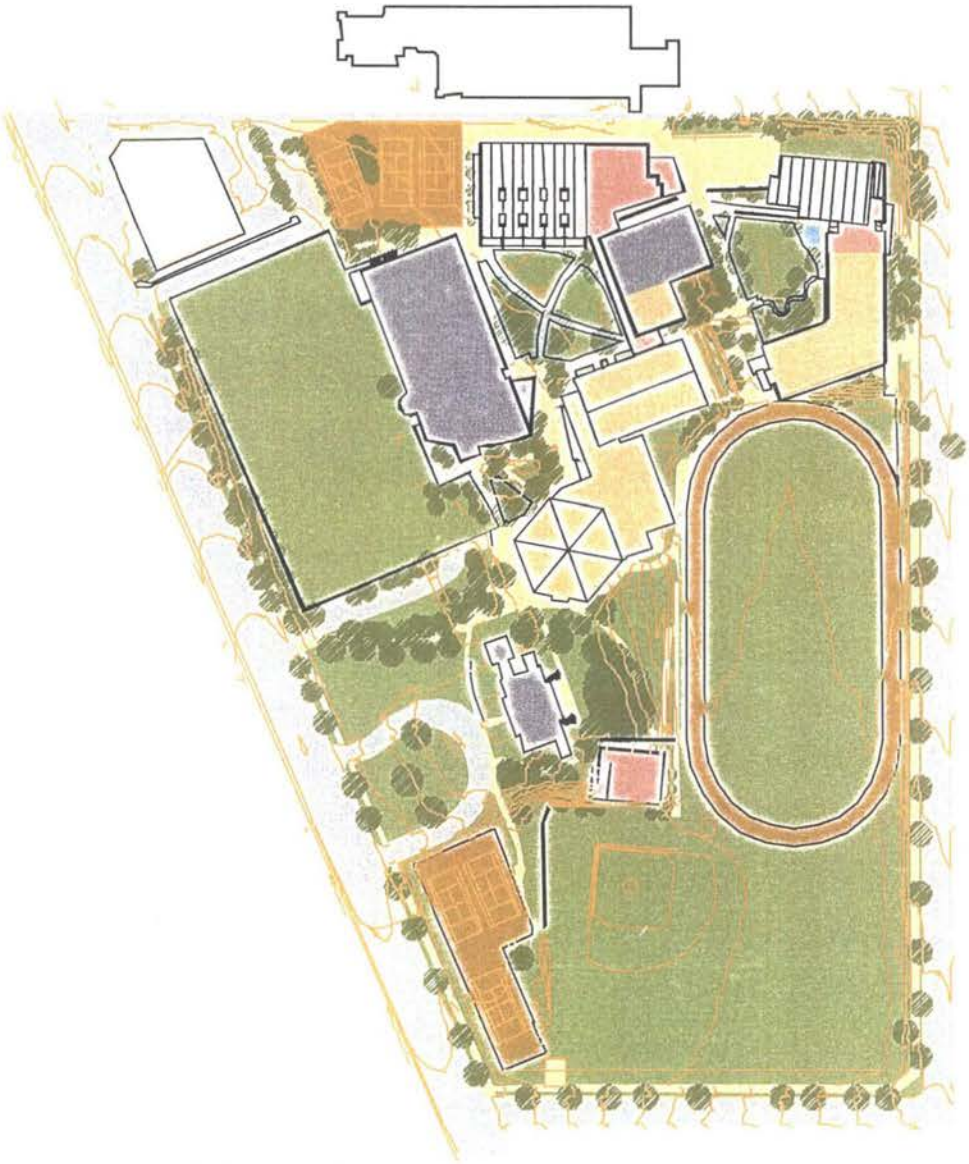


Figure 1–3
Proposed Site Plan

North
Schematic

Sidwell Friends School
Washington, D.C.

WELLS & ASSOCIATES, LLC.
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS

Section 2
CURRENT TRAFFIC MANAGEMENT PLAN

General. The following is a summary of Sidwell's current transportation policies for the 2003-2004 school year:

1. Students who have parental permission to drive to school and/or school sponsored events are required to register his/her vehicle.

2. Student parking is prohibited on campus between the hours of 7:00 AM and 3:00 PM.

3. Visitors must park in the designated visitor parking spaces.

Start/Dismissal Times. Middle and Upper School start and dismissal times are as follows:

Middle School:

7:30 AM:	Building opens.
7:55 AM:	First bell.
3:20 PM:	Classes end.
3:45 PM:	Doors locked.

Upper School:

7:00 AM:	Building opens.
8:00 AM:	Classes start.
3:19 PM:	Classes end.
4:00 PM:	Classrooms locked.
3:45 PM:	Doors locked.

Middle School. The following Middle School transportation policies are included in the Sidwell Friends School Handbook for Parents and Students:

"Drop-off and dismissal in Middle School are centered on 37th Street, a public thoroughfare in Washington. Hearst School dismisses its students at approximately the same time as Middle School, so the street can become congested. To provide the safest arrival and dismissal under these conditions, we ask that parents follow these guidelines:

1. *Please drop off and pick up children only on the southbound side of the street. Crossing the street is very dangerous, especially in the morning when we have no crossing assistance. Please treat 37th Street as a one-way street southbound during drop-off and pick-up at Middle School.*



Morning Drop Off on 37th Street

2. *During morning drop-off, do not leave your car in front of the building. This area is reserved for student drop-off only. If you have to park for any reason, please do so well away from the entrance to the building.*

3. *In the morning, please do not allow children to leave your car until you are safely pulled up to the curb. At dismissal time, there is a place between the orange cones to stop in front of the building to pick up your carpool if your carpool is ready to load. If the carpool is not ready to load, please move on to a parking spot away from the building*

4. *At dismissal time, if you park in the designated areas in front of the building to await your child or children, please park close to the curb and please do not leave your car. When you have loaded your car, please move along to allow for the next person.*

5. *Please do not turn into the Hearst driveway for parking or use the Hearst driveway to turn around. This is very dangerous for the children of both schools, and it badly snarls traffic.*

6. *It is very important to have clear expectations for your child(ren) at dismissal, and your arrival on 37th Street should coincide with her/his/their readiness to be picked up.*



Afternoon Pick Up on 37th Street

7. *For safety reasons, we do not cross students to the other side of 37th Street in front of the Middle School. Students may walk to the nearest intersection and stop sign to cross safely if they need to do so to walk home.*

8. *Although the School provides supervision during dismissal and at the close of the day, because of the many transportation options open to students and because of the large campus, parents and carpool drivers need to communicate clearly with students about pick-up expectations.*

   Students who ride bicycles to school must park them in the racks provided outside the Middle School building. Bikes must be securely locked" [Photos inserted by Wells & Associates].

Upper School. The following Middle School transportation policies are included in the Sidwell Friends School Handbook for Parents and Students:

"The speed limit on campus is 10 miles per hour.

Students may drive on campus to pick up and discharge passengers. They may not park anywhere on campus during the school day. Students who violate this rule are subject to DC traffic fines as well as disciplinary action by the School.

Students who have parental permission to drive to school are required to complete a Student Vehicle Registration form, which is available in the Security Office. Completion of this form is required from any student who drives to school or to school-sponsored events.

Parents who drive their children to school are asked to leave them in the Upper School parking lot, using the curb lane for dropping them off and picking them up so that traffic can move smoothly through the lot. The parking lot is crowded, so it is important that students watch carefully for moving cars when entering and leaving the lot and follow the traffic patterns of the cars.
We ask that parents not block traffic or parking spaces. Parents visiting for any reason are asked not to park in numbered spaces.

Students who ride bicycles to school must park them in the racks provided for this purpose and be sure that they are securely locked.

The Office cannot order cabs for students. When a student calls a cab, he or she should notify the dean's office and the Zartman House receptionist and should meet the cab in front of Zartman House." [Photos inserted by Wells & Associates].

Section 3
PROPOSED TRANSPORTATION MANAGEMENT PLAN

Goals. The goals of the proposed TMP are to:

1. Encourage the use of public transportation.
2. Reduce traffic on 37th Street without burdening residential streets and/or alleys.
3. Provide for an orderly flow of traffic on campus.

Physical Plan. The physical plan consists of the following traffic and parking elements:

Traffic. Approximately 31 on-site drop-off/pick-up spaces will be provided in one lane on the ground level beneath the athletic field. As proposed, these spaces are provided adjacent to the travel lane on the garage level.

Currently, approximately 17 spaces are available for drop-off/pick-up in the Wisconsin Avenue parking lot. Therefore, the number of drop-off/pick-up spaces would be increased two times over the existing capacity.

Access to the below-grade parking and the drop-off/pick-up lane will be provided from Wisconsin Avenue via a new entrance aligned opposite Rodman Street. Egress will continue to be provided via the existing driveway shared with the Post Office.

Parking. One hundred ninety-six (196) parking spaces are proposed on one underground parking level beneath the existing athletic field. Including parking on the Zartman Circle, a total of 212 parking spaces will be provided under proposed conditions, an increase of 20 spaces over existing conditions.

Traffic Management Plan. The proposed traffic management plan (TMP) should consist of the following elements:

1. Operations:
   - A. Regular operation of the school will be limited to the programs and activities of the Sidwell School.
   - B. The number of students shall not exceed 825 and the total number of faculty and staff shall not exceed 190.
2. Faculty, staff, and students who live close to the school are encouraged to walk.
3. Students, staff, and students who cannot walk to school are encouraged to take public transportation.
   - A. Students who live in the District of Columbia are eligible for Smart Student Metro Passes, which provide unlimited travel on Metrorail or Metrobus for school and school related events on a monthly basis. Sidwell will offer that benefit to all Virginia and Maryland families whose children use public transportation to come to and from school.
   - B. Sidwell will continue to make Metrochek available to its employees.
4. Those who choose to drive or be driven to school by a parent or guardian are encouraged to carpool.
5. The drop-off/pick-up plan consists of the following:
   - A. Sidwell vehicles must drop-off students in one of three places: (1) on 37th Street in front of the Middle School in the designated area, (2) on the Zartman Circle, (3) on the drop-off/pick-up lane in the new parking facility.
   - B. Vehicles dropping-off and/or picking-up students on 37th Street must do so on the west side of the street, traveling in a southbound direction.
   - C. Drop-offs/pick-ups on 37th Street will be prohibited except on the southbound side of the street in the designated area and will be limited to carpools only.
   - D. The area of the new drop-off/pick-up lane along the frontage of the school, adjacent to the stairs, will be designated for carpools of two or more students.
6. Sidwell will continue to operate shuttle bus service between the Wisconsin Avenue campus and the Lower School Campus in Bethesda, Maryland.
7. Student drivers are required to register their cars' makes/models and license plate numbers with the school, and to affix a Sidwell parking sticker to the back window of their cars. Students, even those with Zone 3 residential parking permits, are not allowed to park in any restricted spaces on Quebec Street, 37th Street, or Upton Street
8. Faculty, staff, students, and visitors are advised to obey all traffic regulations, including crossing streets only at designated crosswalks.

Section 4
CONCLUSIONS

The conclusions of this study are as follows:

1. The proposed transportation management plan (TMP) encourages carpooling and the use of public transportation for students and faculty/staff.

   The TMP also limits the drop-off/pick-up areas to the following locations:

   - 37th Street in front of the Middle School in the designated area
   - Zartman Circle
   - The drop-off/pick-up lane in the new parking facility.

2. The proposed new drop-off/pick-up lane on Wisconsin Avenue would increase on-site queueing/stacking capacity to two times the existing capacity.

3. The proposed Sidwell traffic plan would, for the first time, provide both full movement access to and egress from Wisconsin Avenue at two signalized intersections.

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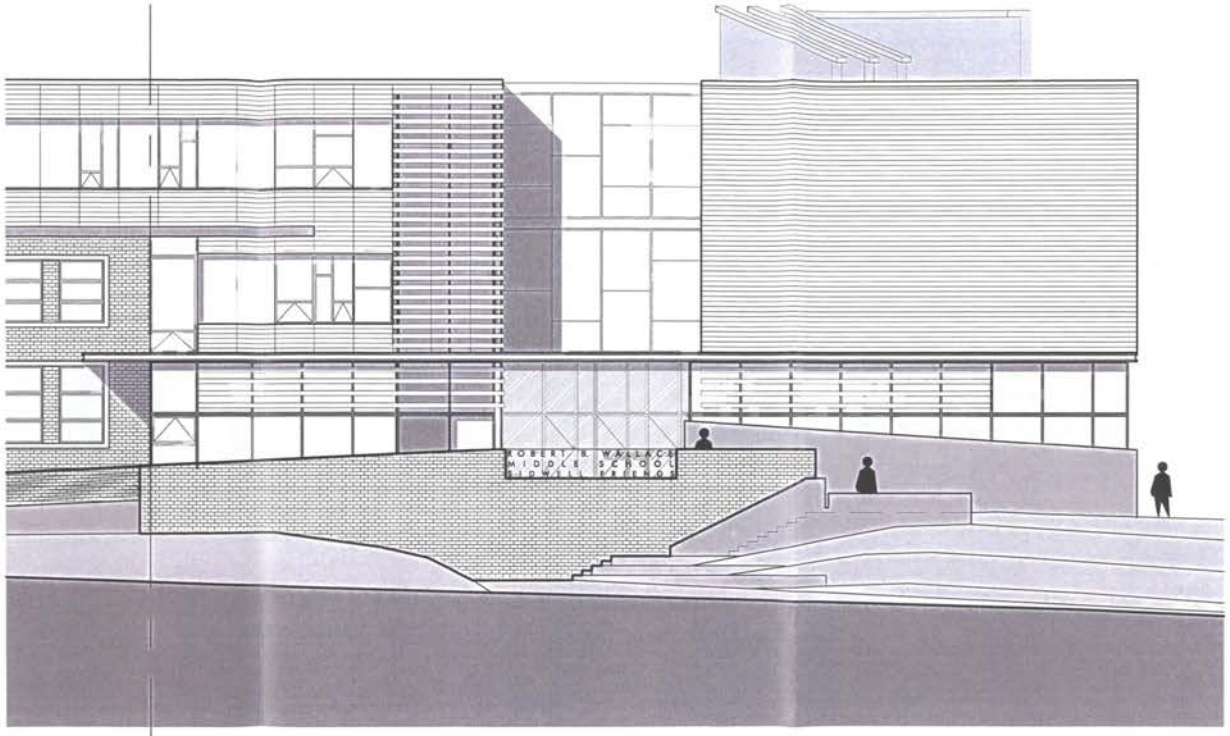


- North edge of addition pulled back to accommodate teaching garden
- Mature trees retained where possible
- Extensive new plantings

VIEW OF MIDDLE SCHOOL FROM SOUTHEAST







Existing Building | Addition Entry Library/Science and Art Classrooms

Sidwell Friends School

New 37th Street Entry

Middle School





Wetland Plants



Model



Sidwell Friends School

Campus Entry

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Impact upon Washington Home

Impact upon Washington Home

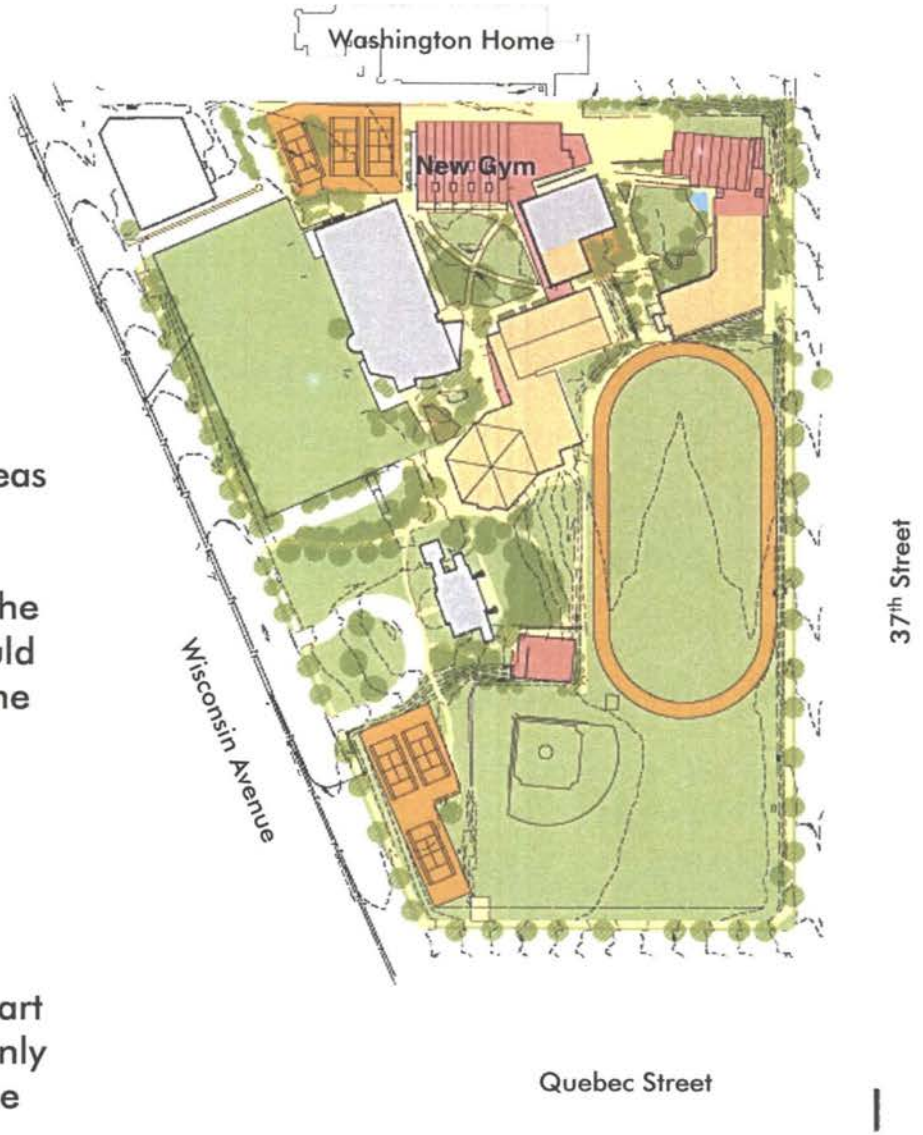
- Washington Home's Patio area faces tennis courts (currently parking), and is screened by trees. Most are evergreen.

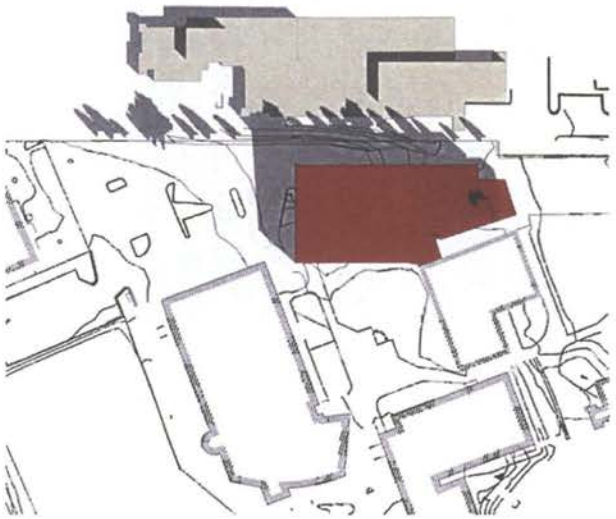
- New gym backs up mainly on mechanical areas of Washington Home

- Border between the Washington Home and the School is screened with trees. The School would be happy to enhance these plantings should the Home so desire.

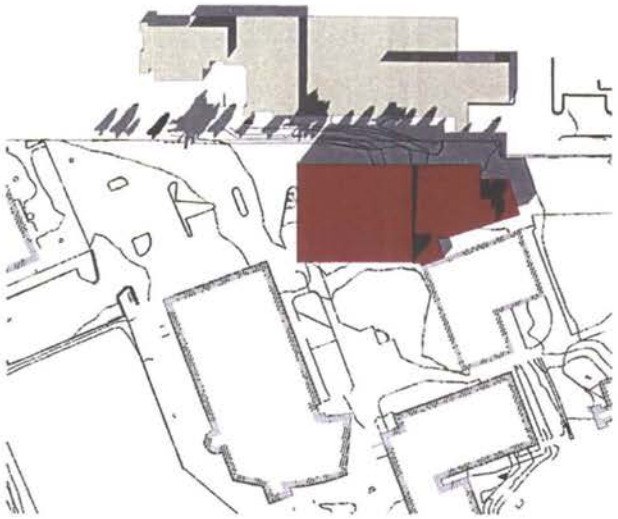
- New gym is 24 feet from property line, and about 44 feet from the Washington Home building

- South eastern portion of Home—the major part adjacent to the gym-- is mechanical space. Only two residential unit windows face directly to the gym. These are already separated from the school by trees

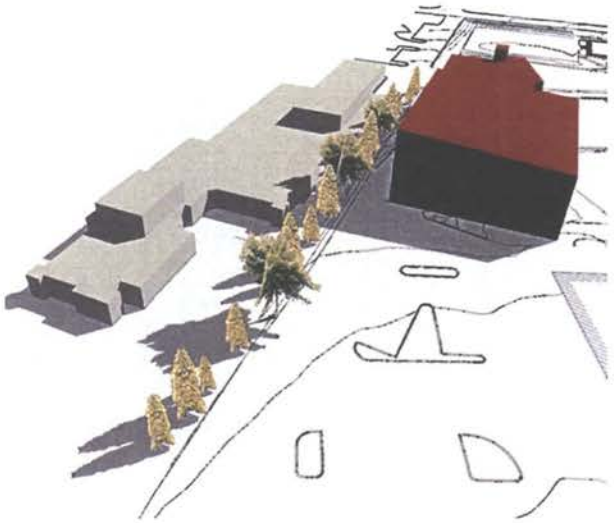


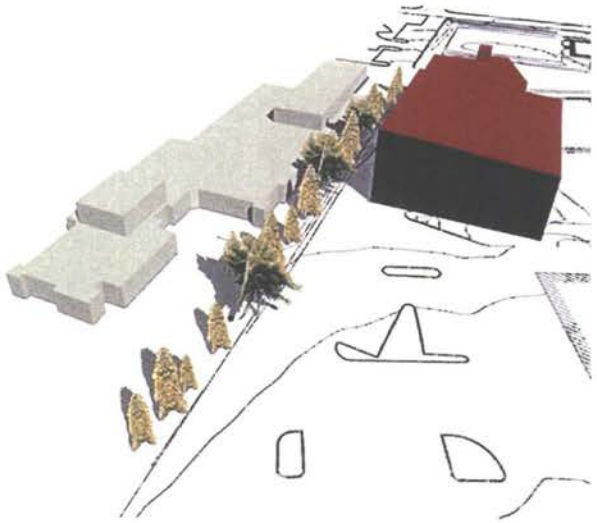


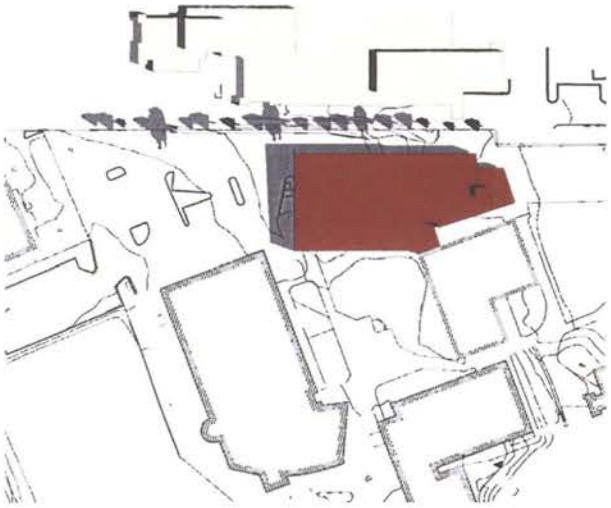
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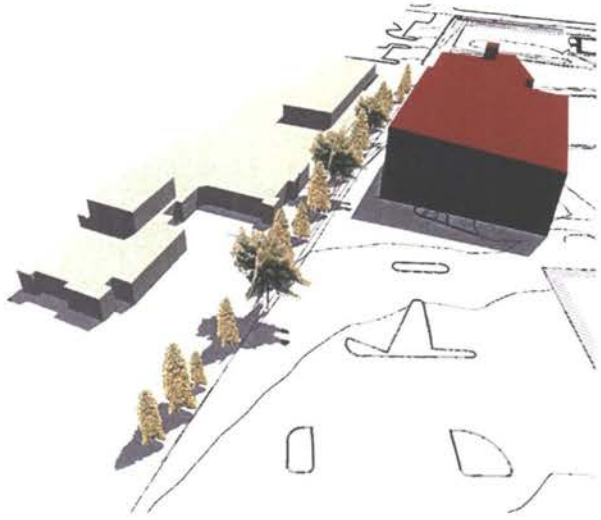


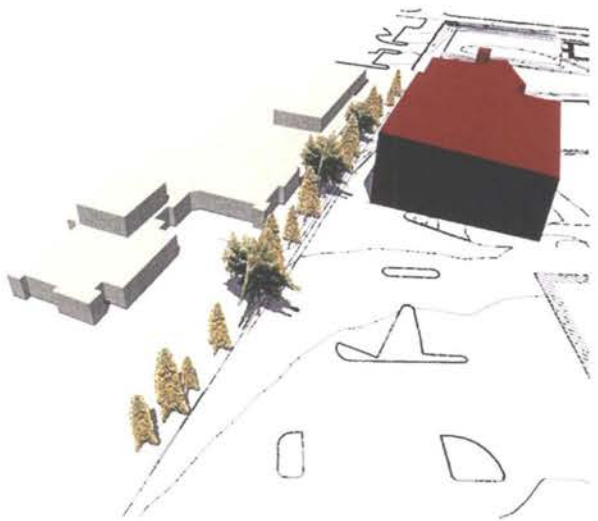


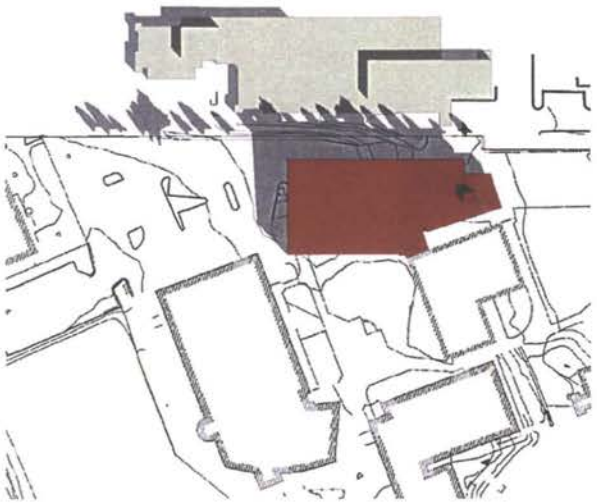
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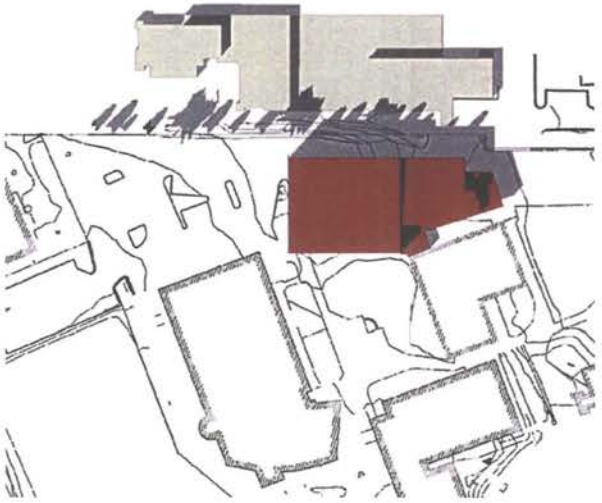
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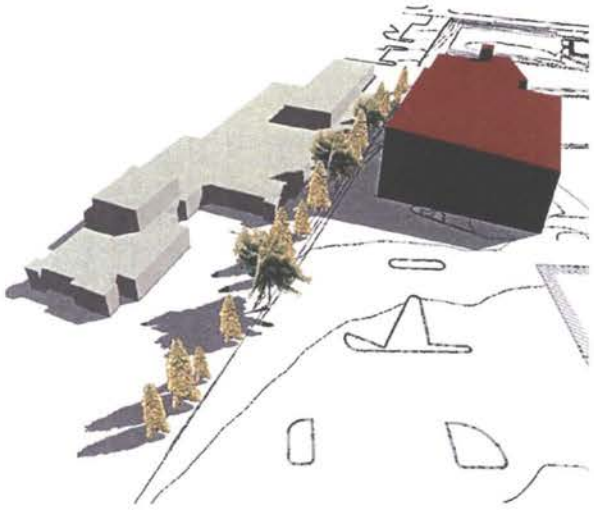


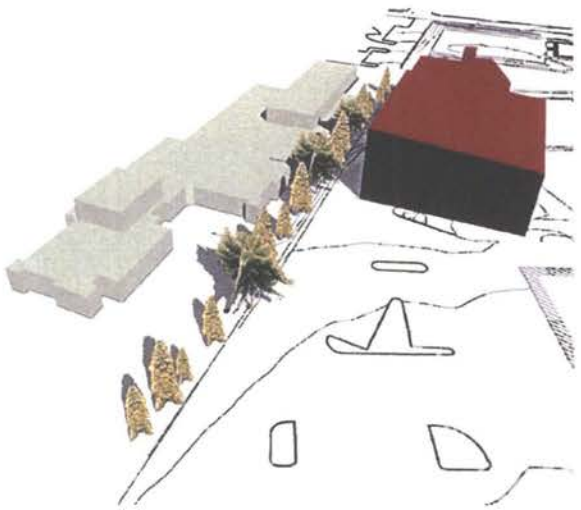


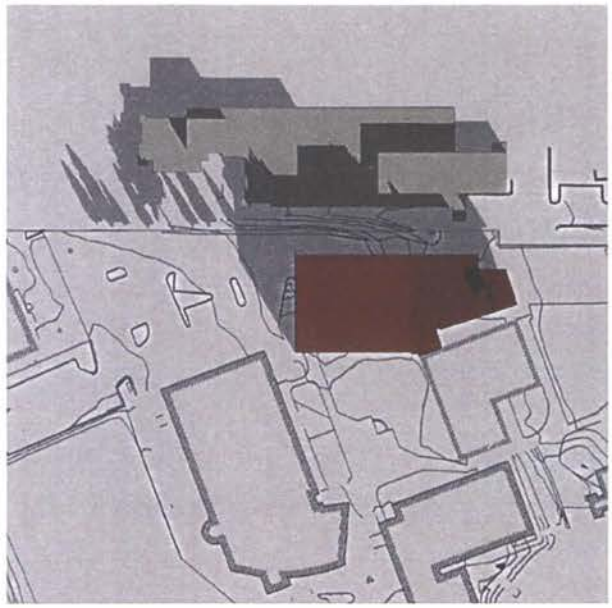
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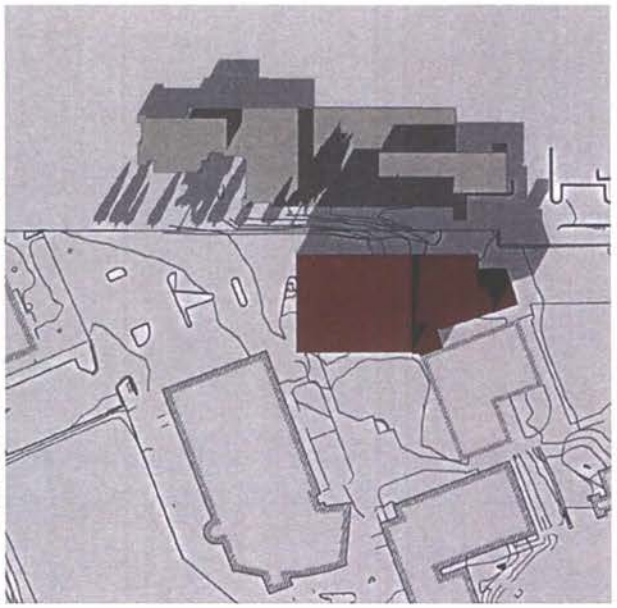
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