INTERSTATE 405 Corridor Program
Congestion Relief & Bus Rapid Transit Projects

APPENDIX G5

Supplemental Boring Project

I-405, SR520 to SR522 Stage 1 (Kirkland Stage 1)

Request For Proposal

July 15, 2005

Washington State Department of Transportation

SLATER AVE NE
NEW PEDESTRIAN CROSSING
SPINNEY HOMESTEAD PARK
NE 95TH PL
120 AVE NE
I-405
FORBES LAKE
NE 90TH ST
1ST PLACE NE
1ST AVE NE
1ST PLACE NE
KDB-1
KDB-2
KDB-3
KDB-4
KW-1
L2068
KW-2
L2068
FC-1
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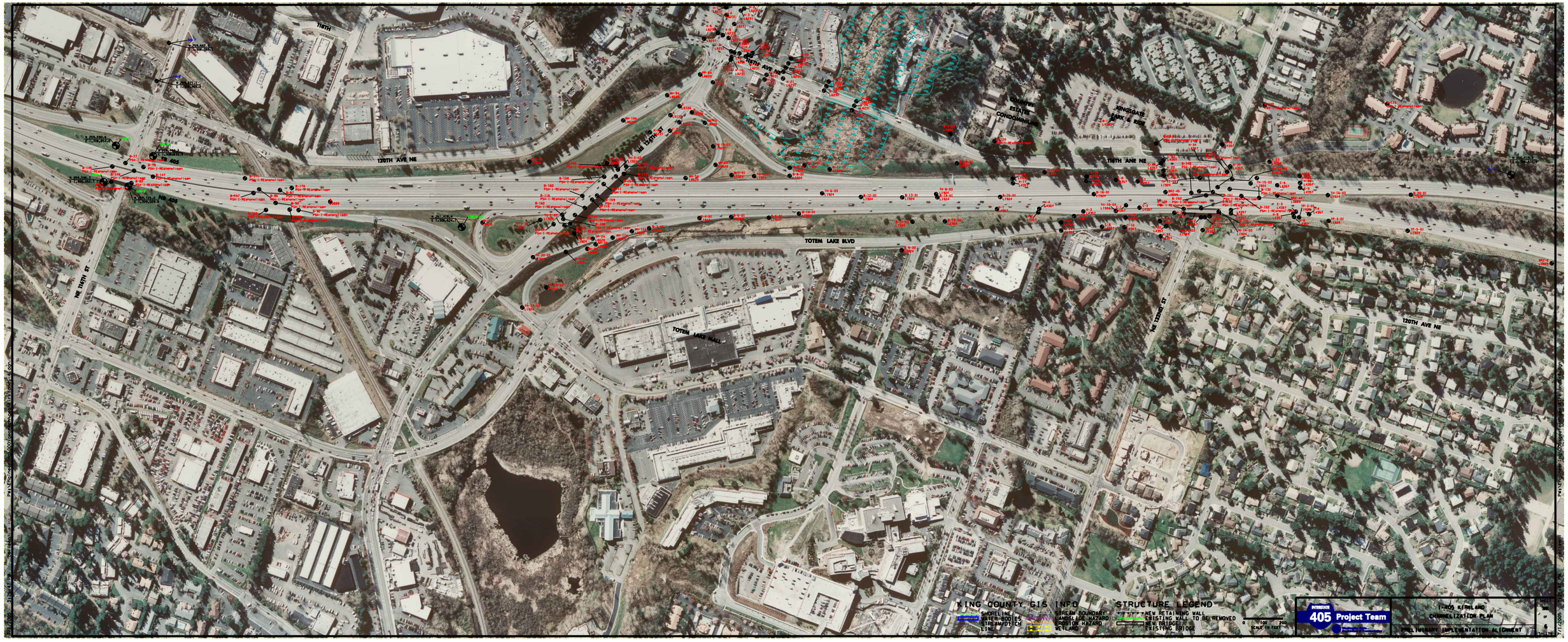
KING COUNTY GIS INFO
SHORELINE
RIVER MOUTH
STREAM/DITCH LINE
STREAM BOUNDARY
LANDSLIDE HAZARD
EROSION HAZARD
WETLAND
STRUCTURE LEGEND
NEW RETAINING WALL
EXISTING WALL TO BE REMOVED
NEW BRIDGE
EXISTING BRIDGE
100
SCALE: 1"=100'-0"
INTERSTATE 405 Project Team
I-405 KIRKLAND
CHANNEL/FASTION PLAN
PRELIMINARY IMPLEMENTATION ALIGNMENT
SHEET 2 OF 6 SHEETS


118TH
120TH AVE NE
NE 120TH ST
118TH AVE NE
TOTEM LAKE BLVD
TOTEM LAKE MALL
NE 118TH ST
NE 122ND ST
120TH AVE NE
KING COUNTY GIS INFO
SHORELINE
WATER BODIES
STREAM/DITCH LINE
STREAM BOUNDARY
LANDSLIDE HAZARD
FLOOD HAZARD
WETLAND
STRUCTURE LEGEND
NEW RETAINING WALL
EXISTING WALL TO BE REMOVED
NEW BRIDGE
EXISTING BRIDGE
0 100 200
SCALE IN FEET
INTERSTATE 405 Project Team
I-405 KIRKLAND
CHANNELIZATION PLAN
PHASE 1 NORTH IMPLEMENTATION ALIGNMENT

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22746

HOLE No. KDB-1-05

Sheet 1 of 2

Job No. XL-2068 SR 405 Elevation 279.0 ft (85.0 m)

Project KIRKLAND DESIGN BUILD STAGE 1 Driller Sean Verlo Lic# 2615

Site Address Vic I-405 & NE 124th St. Inspector Gabriel Taylor

Start June 16, 2005 Completion June 20, 2005 Well ID# Equipment CME 45 w/ autohammer

Station Offset Casing 40.0' Method Wet Rotary

Northing 253990.068 Easting 1308157.64 Latitude Longitude

County King Subsection SW/SW Section 33 Range 5 EWM Township 26 N

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
5	1		>>	15 23 38 (61)		D-1		Silty GRAVEL with sand, subrounded, very dense, greyish brown, moist, Homogeneous, FeO stains encountered gravels at 3.5' Length Recovered 1.1 ft, Length Retained 1.0 ft		
10	2 3			10 15 27 (42)		D-2		Well graded SAND with gravel, dense, greyish brown, moist, Homogeneous, gravel is subrounded. trace silt Length Recovered 1.2 ft, Length Retained 1.2 ft		
15	4 5			20 19 23 (42)		D-3		Well graded SAND with gravel, dense, greyish brown, moist, Homogeneous, trace silt, FeO stains Length Recovered 0.9 ft, Length Retained 0.9 ft	▽ 06/20/2005	
20	6			17 12		D-4		Silty SAND with gravel, dense, greyish brown, moist, Stratified, FeO stains 20.3-20.5		

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22746

HOLE No. KDB-1-05

Job No. XL-2068 SR 405 Elevation 279.0 ft (85.0 m)

Sheet 2 of 2

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Sean Verlo Lic# 2615

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
				23 (35)				encountered silty sand at 21.0' Length Recovered 0.9 ft, Length Retained 0.9 ft		
	7		>>	42 60/6 (60/6")		D-5		Silty GRAVEL with sand, subrounded, very dense, very dark greyish brown, moist, Homogeneous Length Recovered 0.7 ft, Length Retained 0.7 ft		
25	8									
30	9									
	10			21 22 20 (42)		D-6		Well graded SAND with gravel, dense, brown, moist, Homogeneous Length Recovered 1.2 ft, Length Retained 1.2 ft		
35	11									
	12		>>	35 30 60 (90)		D-8		Well graded SAND with gravel, very dense, grey, moist, Stratified, top 0.5' = well graded sand with gravel bottom 0.5 = sandy silt Length Recovered 1.0 ft, Length Retained 1.0 ft		
40	13							End of test hole boring at 41.5 ft below ground elevation. This is a summary Log of Test Boring. Soil/Rock descriptions are derived from visual field identifications and laboratory test data.		
45										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22743

HOLE No. KDB-2-05

Sheet 1 of 2

Job No. XL-2068 SR 405 Elevation 190.0 ft (57.9 m)

Project KIRKLAND DESIGN BUILD STAGE 1 Driller Sean Verlo Lic# 2615

Site Address Vic of I-405 & 116th St Inspector JoeJudd

Start June 15, 2005 Completion June 15, 2005 Well ID# Equipment CME 45 w/ autohammer

Station Offset Casing 4.0 Method Wet Rotary

Northing 257523.31 Easting 1308691.776 Latitude Longitude

County King Subsection NW 1/4 SW1/4 Section 33 Range 5 EWM Township 26 N

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
5	1			5 8 12 (20)		D-1		Silty SAND with gravel, medium dense, dark grayish brown, moist, Stratified, wood debris & fe.o stains throughout sample Length Recovered 1.0 ft, Length Retained 1.0 ft		
10	2			5 9 13 9 (22)		D-2		Silty SAND with gravel, medium dense, gray, moist, Homogeneous Length Recovered 1.4 ft, Length Retained 1.4 ft		
	3		>>	10 27 50 (77)		D-3		Silty SAND with gravel, very dense, dark greenish gray, moist, Stratified Length Recovered 1.1 ft, Length Retained 1.1 ft		
15	4		>>	18 55/6 (55/6")		D-4		Silty SAND with gravel, very dense, dark grayish brown, moist, Homogeneous Length Recovered 1.5 ft, Length Retained 1.5 ft		
	5		>>	52/6 (52/6")		D-5		Silty SAND with gravel, very dense, dark grayish brown, moist, Homogeneous Length Recovered 0.5 ft, Length Retained 0.5 ft		
20	6		>>	12 21		D-6		Sandy SILT, trace gravel, very dense, dark gray, moist, Homogeneous		

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22743

HOLE No. KDB-2-05

Job No. XL-2068 SR 405 Elevation 190.0 ft (57.9 m)

Sheet 2 of 2

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Sean Verlo Lic# 2615

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
				32 31 (53)				Length Recovered 2.0 ft, Length Retained 2.0 ft		
				7 19 25 31 (44)		D-7		Sandy SILT, trace gravel, dense, dark gray, moist, Homogeneous Length Recovered 2.0 ft, Length Retained 2.0 ft		
	7									
25				14 14 22 26 (36)		D-8		Sandy SILT, trace gravel, dense, dark gray, moist, Homogeneous Length Recovered 1.7 ft, Length Retained 1.7 ft		
	8			10 21 25 28 (46)		D-9		Sandy SILT, trace gravel, dense, dark gray, moist, Homogeneous Length Recovered 1.8 ft, Length Retained 1.6 ft		
30	9			8 18 31 (49)		D-10		Sandy SILT, dense, dark gray, moist, Homogeneous Length Recovered 1.4 ft, Length Retained 1.4 ft		
	10									
35			>>	12 53/6 (53/6")		D-11		Sandy SILT, very dense, olive gray, moist, Homogeneous, Fe.O stains throughout sample encountered gravels at 38.2. Length Recovered 0.9 ft, Length Retained 0.9 ft		
	11									
	12		>>	52/6 (52/6")		D-12		Silty GRAVEL with sand, subangular, very dense, strong brown, moist, Homogeneous, Fe.0 staining in sample. Length Recovered 0.5 ft, Length Retained 0.3 ft		
40								End of test hole boring at 39.5 ft below ground elevation. This is a summary Log of Test Boring. Soil/Rock descriptions are derived from visual field identifications and laboratory test data.		
	13							Bailed hole to 39.0 1/2 hour later no recharge		
45										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22744

HOLE No. KDB-3-05

Sheet 1 of 2

Job No. XL-2068 SR 405 Elevation 182.0 ft (55.5 m)

Project KIRKLAND DESIGN BUILD STAGE 1 Driller Joe Judd Lic# 2615

Site Address Vic of I-405 & 116th St Inspector Joe Judd

Start June 14, 2005 Completion June 14, 2005 Well ID# Equipment CME 45 w/ autohammer

Station Offset Casing 4.0 Method Wet Rotary

Northing 258271.168 Easting 1308780.463 Latitude Longitude

County King Subsection SE 1/4 NW1/4 Section 33 Range 5 EWM Township 26 N

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
5	1			10 14 15 (29)		D-1		Silty SAND with gravel, dense, dark grayish brown, moist, Homogeneous Length Recovered 1.0 ft, Length Retained 1.0 ft		
10	2 3			7 7 7 (14)		D-2		Silty SAND with gravel, medium dense, dark gray, moist, Stratified, wood debris throughout w/fe.o staining Length Recovered 1.1 ft, Length Retained 1.1 ft		
15	4			2 3 2 (5)		D-3		Sandy ORGANIC SOIL, medium stiff, grayish brown, wet, Stratified, attempted undi. at 15.0 no recovery Length Recovered 1.2 ft, Length Retained 1.2 ft		
20	5 6			4 7 8 (15)		D-4		Silty SAND, medium dense, grayish brown, wet, Stratified, wet poorly graded sand w/silt stratified. w/fe.o stains in silt Length Recovered 1.3 ft, Length Retained 1.3 ft		

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22744

HOLE No. KDB-3-05

Job No. XL-2068 SR 405 Elevation 182.0 ft (55.5 m)

Sheet 2 of 2

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Joe Judd Lic# 2615

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
	7			6 12 16 (28)		D-5		SILT, dense, dark gray, moist, Homogeneous Length Recovered 1.4 ft, Length Retained 1.4 ft		
25	8		>>	22 27 44 (71)		D-6		Silty SAND, very dense, dark gray, moist, Homogeneous, 29.2-29.5 wet Length Recovered 1.3 ft, Length Retained 1.3 ft		
30	9									
	10			20 50/6 (50/6")		D-7		Silty SAND, very dense, dark gray, wet, Homogeneous Length Recovered 0.7 ft, Length Retained 0.7 ft		
35	11									
	12		>>	27 38 50 (88)		D-8		Silty SAND, very dense, dark gray, wet, Homogeneous Length Recovered 1.3 ft, Length Retained 1.3 ft		
40	13							End of test hole boring at 39.5 ft below ground elevation. This is a summary Log of Test Boring. Soil/Rock descriptions are derived from visual field identifications and laboratory test data. Attempted bail test pulled sand inside casing. tripped drill rods water at 13.0 let stand over nite water at 9.0 next morning		
45										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22742

HOLE No. KDB-4-05

Sheet 1 of 2

Job No. XL-2068 SR 405 Elevation 191.0 ft (58.2 m)

Project KIRKLAND DESIGN BUILD STAGE 1 Driller Robert Shepherd Lic# 2710T

Site Address Vic of I-405 & 116th St Inspector James Fetterly

Start June 20, 2005 Completion June 20, 2005 Well ID# Equipment CME 55 w/ autohammer

Station Offset Casing 4"x34' Method Wet Rotary

Northing 258519.519 Easting 1309023.792 Latitude Longitude

County King Subsection NE/NW Section 33 Range 5 EWM Township 26 N

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
5	1			3 12 17 (29)		D-1		Well graded SAND with gravel, dense, light greyish brown, moist, Homogeneous Length Recovered 1.0 ft, Length Retained 1.0 ft		
10	2, 3, 4		>>	20 31 36 (67)		D-2		Silty SAND with gravel, very dense, grey, moist, Homogeneous, Harder drilling @ 6.0' Length Recovered 1.5 ft, Length Retained 1.3 ft		
15	5		>>	16 26 40 (66)		D-3		Sandy SILT with gravel, rounded, very dense, grey, moist, Homogeneous Length Recovered 1.5 ft, Length Retained 1.5 ft		
20	6		>>	27 31		D-4		Sandy SILT with gravel, subrounded, very dense, grey, moist, Homogeneous		

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22742

HOLE No. KDB-4-05

Job No. XL-2068 SR 405 Elevation 191.0 ft (58.2 m)

Sheet 2 of 2

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Robert Shepherd Lic# 2710T

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
				40 (71)				Length Recovered 1.5 ft, Length Retained 1.3 ft		
	7									
25			>>	22 38 50/5' (88/11")		D-5		Sandy SILT with gravel, subrounded, very dense, grey, moist, Homogeneous Length Recovered 1.4 ft, Length Retained 1.4 ft	▽ 06/20/2005	
	8									
30	9		>>	30 36 50/3' (86/9")		D-6		SILT, with trace sand and gravel, very dense, grey, moist, Homogeneous Length Recovered 1.3 ft, Length Retained 1.3 ft		
	10							End of test hole boring at 30.3 ft below ground elevation. This is a summary Log of Test Boring. Soil/Rock descriptions are derived from visual field identifications and laboratory test data. Bailed hole to 17.5' twice and hole recharged to 24.9'		
35	11									
40	12									
	13									
45										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22742

HOLE No. KDB-5-05

Sheet 1 of 3

Job No. XL-2068 SR 405 Elevation ft (m)

Project KIRKLAND DESIGN BUILD STAGE 1 Driller Sean Verlo Lic# 2615

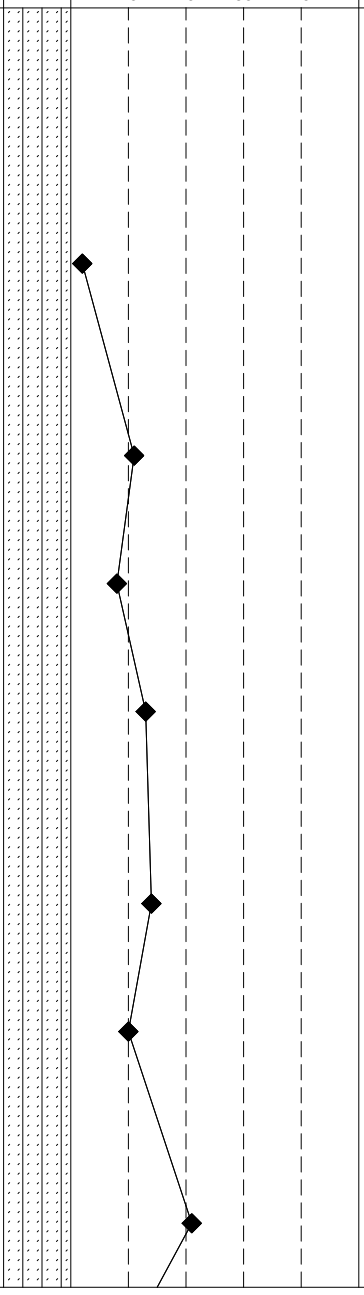
Site Address Vic. I-405 & NE 116th st. Inspector Gabriel Taylor

Start June 23, 2005 Completion June 23, 2005 Well ID# Equipment CME 45 w/ autohammer

Station Offset Casing 59.0 Method Wet Rotary

Northing Easting Latitude Longitude

County King Subsection NE/NW Section 33 Range 5 EWM Township 26 N



Depth (ft)	Meters (m)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
	1							
5		1 1 1 (2)		D-1		Silty SAND with gravel, very loose, yellowish brown, moist, Homogeneous, contains organic material gravel is subrounded Length Recovered 0.7 ft, Length Retained 0.7 ft		
	2	6 5 6 (11)		U-2 A B D-3 C		Silty SAND with gravel, medium dense, brown, moist, Homogeneous Length Recovered 1.0 ft, Length Retained 1.0 ft Silty SAND with gravel, medium dense, light grey, moist, Homogeneous Length Recovered 1.5 ft, Length Retained 1.5 ft		
10	3	2 3 5 5 (8)		D-4		Silty SAND with gravel, loose, light grey, moist, Homogeneous Length Recovered 0.7 ft, Length Retained 0.7 ft		
	4	4 6 7 11 (13)		D-5		Silty SAND with gravel, medium dense, light grey, moist, Homogeneous Length Recovered 1.4 ft, Length Retained 1.4 ft		
15	5	4 5 9 12 (14)		D-6		Silty SAND with gravel, medium dense, light grey, moist, Homogeneous, contains wood debris Length Recovered 1.4 ft, Length Retained 1.4 ft		
		8 5 5 5 (10)		D-7		Silty SAND with gravel, loose, light grey, moist, Homogeneous Length Recovered 1.3 ft, Length Retained 1.3 ft		
20	6	8 9		D-8		Silty SAND, medium dense, light grey, moist, Homogeneous	▽	

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22742

HOLE No. KDB-5-05

Job No. XL-2068 SR 405 Elevation ft (m)

Sheet 2 of 3

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Sean Verlo Lic# 2615

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
				12 12 (21)				Length Recovered 1.4 ft, Length Retained 1.4 ft 06/27/2005		
				3 4 5 38 (9)		D-9		Poorly graded SAND, dense, light grey, moist, Homogeneous Length Recovered 1.7 ft, Length Retained 1.7 ft		
	7									
			>>	17 37 (37/6")		D-10		Silty SAND with gravel, very dense, grey, moist, Homogeneous Length Recovered 1.0 ft, Length Retained 1.0 ft		
25										
	8									
			>>	22 43 (43/3")		D-11		Silty SAND, very dense, dark grey, moist, Homogeneous Length Recovered 0.8 ft, Length Retained 0.8 ft		
	9									
30										
	10									
			>>	14 33 39 (72)		D-12		Poorly graded SAND, very dense, dark grey, moist, Homogeneous Length Recovered 1.1 ft, Length Retained 1.1 ft		
35										
	11									
			>>	26 40 38 (78)		D-13		Sandy SILT, very dense, dark grey, moist, Homogeneous, moisture tin retained Length Recovered 1.1 ft, Length Retained 1.1 ft		
	12									
40										
	13									
45										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22742

HOLE No. KDB-5-05

Job No. XL-2068 SR 405 Elevation ft (m)

Sheet 3 of 3

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Sean Verlo Lic# 2615

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
	14									
	15		>>	26 53 (53/6")		D-15		SILT, very dense, dark grey, moist, Homogeneous Length Recovered 1.0 ft, Length Retained 1.0 ft		
50										
	16									
			>>	40 60 (60/5")		D-16		SILT, very dense, dark grey, moist, Homogeneous Length Recovered 0.9 ft, Length Retained 0.9 ft		
55										
	17									
	18		>>	24 60 (60/6")		D-17		SILT, very dense, dark grey, wet, Homogeneous Length Recovered 1.0 ft, Length Retained 1.0 ft		
60										
	19							End of test hole boring at 60 ft below ground elevation. This is a summary Log of Test Boring. Soil/Rock descriptions are derived from visual field identifications and laboratory test data.		
65										
	20									
	21									
70										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22743

HOLE No. KDB-6-05

Sheet 1 of 3

Job No. XL-2068 SR 405 Elevation ft (m)

Project KIRKLAND DESIGN BUILD STAGE 1 Driller Sean Verlo Lic# 2615

Site Address Vic. I-405 & NE 116th st. Inspector Gabriel Taylor

Start June 28, 2005 Completion June 28, 2005 Well ID# Equipment CME 45 w/ autohammer

Station Offset Casing 59.0 Method Wet Rotary

Northing Easting Latitude Longitude

County King Subsection SE/SW Section 28 Range 5 EWM Township 26 N

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
	1			20 17 17 15 (34)		D-1		Sandy SILT with gravel, dense, olive brown, moist, Homogeneous Length Recovered 1.5 ft, Length Retained 1.5 ft		
5										
	2			11 14 15 (29)		D-2		Sandy SILT with gravel, dense, olive, moist, Homogeneous Length Recovered 1.5 ft, Length Retained 1.5 ft		
10	3			15 26 23 (49)		D-3		Silty SAND with gravel, dense, olive, moist, Homogeneous Length Recovered 1.2 ft, Length Retained 1.2 ft		
	4			15 14 10 9 (24)		D-4		Silty SAND with gravel, medium dense, olive, moist, Homogeneous Length Recovered 1.0 ft, Length Retained 1.0 ft		
15				19 22 23 (45)		D-5		Silty SAND with gravel, dense, brown, moist, Homogeneous Length Recovered 1.0 ft, Length Retained 1.0 ft		
	5			3 7 19 15 (26)		D-6		Silty GRAVEL with sand, subrounded, dense, brown, moist, Homogeneous Length Recovered 0.7 ft, Length Retained 0.7 ft		
	6		>>	30 50		D-7		Silty SAND with gravel, very dense, brown, moist, Homogeneous		
20										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22743

HOLE No. KDB-6-05

Job No. XL-2068 SR 405 Elevation ft (m)

Sheet 2 of 3

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Sean Verlo Lic# 2615

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
				(50/6")				Length Recovered 1.0 ft, Length Retained 1.0 ft		
			>>	60 (60/5")		D-8		Silty SAND with gravel, very dense, brown, moist, Homogeneous Length Recovered 0.4 ft, Length Retained 0.4 ft		
								06/29/2005		
	7									
			>>	21 31 46 (77)		D-9		Silty SAND, very dense, brown, moist, Stratified, 24.0'-24.5' = silty SAND with gravel 24.5'-25.5' = silty SAND Length Recovered 1.4 ft, Length Retained 1.4 ft		
25										
	8		>>	34 60 (60/4")		D-10		SILT, very dense, brown, moist, Stratified, contains a 0.3' bed of silty SAND with heavy FeO stains dipping at 45 degrees. Length Recovered 0.9 ft, Length Retained 0.9 ft		
			>>	36 60 (60/2")		D-11		SILT, very dense, grey, moist, Stratified, 29.0'-29.7' = SILT 29.7'-30.0' = silty SAND Length Recovered 0.7 ft, Length Retained 0.7 ft		
	9									
30										
	10									
			>>	23 39 50 (89)		D-12		SILT, very dense, grey, moist, Homogeneous, moisture tin retained Length Recovered 1.4 ft, Length Retained 1.4 ft		
35										
	11									
	12		>>	9 21 60 (81)		D-13		Silty SAND, very dense, grey, moist, Homogeneous, sample contains wood. Length Recovered 1.4 ft, Length Retained 1.4 ft		
40										
	13									
			>>	25 60		D-14		Silty SAND, very dense, grey, moist, Laminated, contains laminae of poorly graded sand and silty sand with gravel.		
45										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22743

HOLE No. KDB-6-05

Job No. XL-2068 SR 405 Elevation ft (m)

Sheet 3 of 3

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Sean Verlo Lic# 2615

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
				(60/3")				Length Recovered 0.8 ft, Length Retained 0.8 ft		
	14									
	15		>>	30 60 (60/3")		D-15		SILT, very dense, grey, moist, Homogeneous, moisture tin retained Length Recovered 0.8 ft, Length Retained 0.8 ft		
50										
	16									
			>>	30 50 (50/4")		D-16		SILT, very dense, grey, moist, Homogeneous Length Recovered 0.8 ft, Length Retained 0.8 ft		
55										
	17									
	18		>>	25 50 (50/3")		D-17		SILT, very dense, grey, moist, Homogeneous Length Recovered 0.8 ft, Length Retained 0.8 ft		
60										
	19							End of test hole boring at 60 ft below ground elevation. This is a summary Log of Test Boring. Soil/Rock descriptions are derived from visual field identifications and laboratory test data.		
65										
	20									
	21									
70										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22742

HOLE No. KDB-7-05

Sheet 1 of 3

Job No. XL-2068 SR 405 Elevation 195.0 ft (59.4 m)

Project KIRKLAND DESIGN BUILD STAGE 1 Driller Sean Verlo Lic# 2615

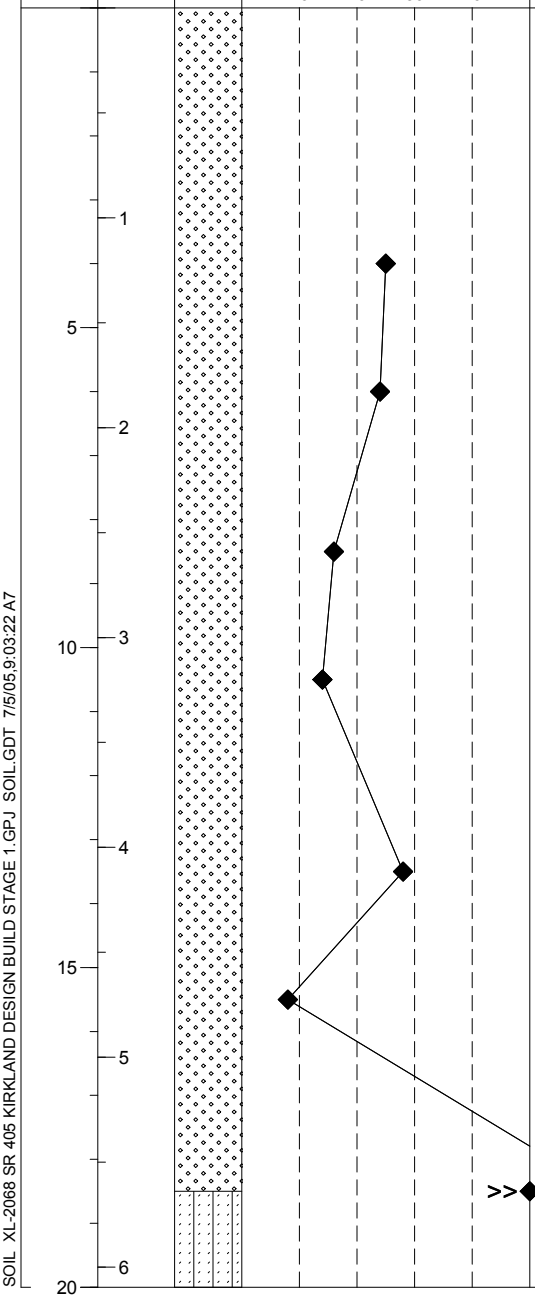
Site Address Vic. I-405 & NE 116th St. Inspector Gabriel Taylor

Start June 21, 2005 Completion June 21, 2005 Well ID# Equipment CME 45 w/ autohammer

Station Offset Casing 58.5 Method Wet Rotary

Northing 259596.989 Easting 1309036.286 Latitude Longitude

County King Subsection NE/NW Section 33 Range 5 EWM Township 26 N



SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
4 11 14 (25)		D-1		Well graded SAND with gravel, dense, yellowish brown, moist, Homogeneous, gravel is subrounded Length Recovered 1.0 ft, Length Retained 1.0 ft		
9 12 12 (24)		D-2		Well graded SAND with gravel, medium dense, yellowish brown, moist, Homogeneous, gravel is subrounded Length Recovered 0.9 ft, Length Retained 0.9 ft		
9 9 7 (16)		D-3		Well graded SAND with gravel, medium dense, yellowish brown, moist, Stratified, color change to light grey at 10.0' Length Recovered 1.1 ft, Length Retained 1.1 ft		
5 5 9 (14)		D-4		Well graded SAND with gravel, medium dense, light grey, moist, Stratified, color change to yellowish brown at 11.5' Length Recovered 1.2 ft, Length Retained 1.2 ft		
12 14 14 (28)		D-5		Well graded SAND with gravel, dense, yellowish brown, moist, Homogeneous, gravel is subrounded moisture tin retained Length Recovered 1.5 ft, Length Retained 1.5 ft		
10 4 4 7 (8)		D-6		Well graded SAND with gravel, loose, yellowish brown, moist, Stratified, top 0.8' = well graded yellowish brown sand bottom 0.6' = poorly graded light grey sand gravel is subrounded <10% gravel contains wood debris at bottom of sample Length Recovered 1.5 ft, Length Retained 1.5 ft		
2 3 60 (63)		D-7		Silty SAND, very dense, light grey, moist, Homogeneous, contains wood debris Length Recovered 1.5 ft, Length Retained 1.5 ft		

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22742

HOLE No. KDB-7-05

Job No. XL-2068 SR 405 Elevation 195.0 ft (59.4 m)

Sheet 2 of 3

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Sean Verlo Lic# 2615

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
			>>	100/4 (100/4")		D-8		Sandy SILT, very dense, light grey, moist, Homogeneous Length Recovered 0.3 ft, Length Retained 0.3 ft		
	7		>>	13 36 54 (90)		D-9		SILT with sand, very dense, light grey, moist, Homogeneous Length Recovered 0.9 ft, Length Retained 0.9 ft		
25				10 16 21 22 (37)		D-10		SILT with sand, dense, grey, moist, Homogeneous Length Recovered 2.0 ft, Length Retained 2.0 ft		
	8									
				16 16 20 35 (36)		D-11		SILT with sand, dense, grey, moist, Homogeneous Length Recovered 2.0 ft, Length Retained 1.7 ft		
30	9									
	10			8 12 16 31 (28)		D-12		SILT, medium dense, grey, moist, Homogeneous Length Recovered 2.0 ft, Length Retained 1.7 ft		
35	11									
			>>	9 15 50 (65)		D-13		SILT with sand, very dense, grey, moist, Homogeneous Length Recovered 1.5 ft, Length Retained 1.5 ft		
40	12									
	13		>>	12 16 37 50		D-14		SILT, very dense, grey, moist, Homogeneous Length Recovered 2.0 ft, Length Retained 1.7 ft		
45										

Washington State
Department of Transportation

LOG OF TEST BORING

Start Card S-22742

HOLE No. KDB-7-05

Job No. XL-2068 SR 405 Elevation 195.0 ft (59.4 m)

Sheet 3 of 3

Project KIRKLAND DESIGN BUILD STAGE 1

Driller Sean Verlo Lic# 2615

Depth (ft)	Meters (m)	Profile	Standard Penetration Blows/ft (10 20 30 40)	SPT Blows/6" (N)	Sample Type	Sample No. (Tube No.)	Lab Tests	Description of Material	Groundwater	Instrument
				(53)						
	14									
			>>	14 20 35 (55)		D-15		SILT, very dense, grey, moist, Homogeneous, contains trace gravel Length Recovered 1.5 ft, Length Retained 1.3 ft		
	15									
50										
	16									
			>>	9 19 34 (53)		D-16		SILT with sand, very dense, grey, moist, Homogeneous Length Recovered 1.5 ft, Length Retained 1.2 ft		
55										
	17									
			>>	16 26 50 (76)		D-17		SILT with sand, very dense, grey, moist, Homogeneous Length Recovered 1.2 ft, Length Retained 0.8 ft		
60	18									
								End of test hole boring at 60 ft below ground elevation. This is a summary Log of Test Boring. Soil/Rock descriptions are derived from visual field identifications and laboratory test data.		
	19									
65										
	20									
	21									
70										