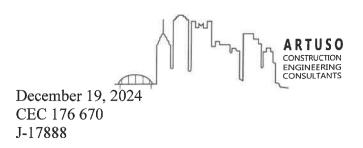


Infiltration Testing Report



Mr. Toby Partridge Michael Baker 100 Airside Drive Moon Township, PA 15108

RE: Infiltration Test Results and Test Pit Excavations Rura Field Center Township, Indiana County, PA

Dear Mr. Partridge,

We have completed the twenty-eight (28) test pits and infiltration tests for the proposed stormwater management areas for the Rura Field project just outside Homer City, Pennsylvania. Two (2) infiltration tests were performed in each test pit location. All tests were conducted utilizing a double-ring infiltrometer. The infiltrometer was seated two (2) inches into the bottom of the excavation at each test location. The tests were conducted at the proposed infiltration depth. All the tests were conducted according to the PA DEP Stormwater Manual. The tests pits were designated as TP-1 through TP-28. Each infiltration test was designated as A or B in each test pit location. See the attached sketch for the test pit locations. Test pit logs are also attached to the end of this letter. The infiltration test field results are also attached.

Test Pit Results

All twenty-eight (28) test pits encountered naturally occurring soils below the eight (8) to twelve (12) inches of topsoil encountered at the surface. The naturally occurring soils at the site consist of a light brown to orangish brown silty sandy clay and a light gray silty clay. Portions of the clayey soils have some interbedded sandy shale and sandstone fragments at various depths. The sandstone fragments vary in size from gravel size to boulder size. Portions of the clay layers with the larger rock fragments appears to be alluvial soils placed by flooding of the nearby creek. The clayey soils have a soft to stiff consistency. This is based on a scale for cohesive soils of very soft, soft, medium stiff, stiff, very stiff, and hard. The clay was damp to moist at the time of excavation. This is based on a moisture range of dry, damp, moist, wet, and saturated. All the test pits except TP-21 and TP-23 were terminated in the clay layers at depths ranging from three (3) to twelve (12) feet. At test pits TP-21 and TP-23, a stiff to hard residual sandy shale was encountered below the clay layer at a depth of two and one-half (2.5) feet and six (6) feet, respectively. TP-21 and TP-23 were terminated at the top of the shale layer. The hard sandy shale encountered at TP-23 should be considered a limiting zone. Therefore, at TP-23 the infiltration test was performed two feet above the limiting zone.

2018 WAVERLY STREET PITTSBURGH, PA 15218-2402 (412) 351-6465 CECTesting.com EMAIL: lab@cectesting.com Page 2 December 18, 2024 CEC 176 670

No limiting zones of groundwater or bedrock were encountered in any of the test pits except for the shale layer encountered at TP-23. All the infiltration tests except TP-23 were performed at the proposed infiltration elevation.

Test Results and Conclusions

Two (2) infiltration tests were conducted at the proposed infiltration elevation at each test pit location. All the tests were conducted in the silty, sandy clay layers. Each test received a one (1) hour pre-soak, and the test interval was based off the second half hour reading. All the tests except at TP-12A,B and TP-15A had pre-soak readings of less than two (2) inches. Therefore, test intervals at all the test pit locations were one-half hour. AT Test pits TP-12A,B and TP-15A, the pre-soak readings were over two (2) inches. Therefore, the test intervals at these locations were every ten (10) minutes. See the table on the next page for the stabilized infiltration rates obtained at each test location.

The infiltration rates in the table are the actual field results, and they do not include a factor of safety that is recommended in the PADEP stormwater manual. The manual recommends a factor of safety of between 2 and 10 for the final design calculations. The higher rates obtained in portions of the site soils is likely due to the larger sandstone cobbles and boulders that are interbedded at various depths within the alluvial soils encountered.

A websoil survey of the site was also performed from the USDA Natural Resources Conservation Services (NRCS). The survey indicates the site soils are composed of Allegheny silt loam, Buchanan loam, Chavies fine sandy loam, Ernest silt loam, Gilpin channery loam, Hazleton channery sandy loam, Lobdell silt loam, Monongahela silt loam, Purdy silt loam, Tyler silt loam, and Wharton silt loam. These soils rate as somewhat limited to very limited mostly due to wetness or water movement. The rates obtained during the testing confirmed these ratings as generally speaking the higher rates were obtained in alluvial areas that were designated at somewhat limited. A copy of the survey is attached at the end of this report.

Test Location	Approx. Surface Elevation	Infiltration Test Elevation (ft)	In the second	ed Rate hr.)
TP-1	988.1	985.0	A: 0.25	B: 0.25
TP-2	986.5	985.0	A: 0	B: 0.25
TP-3	986.0	985.0	A: 0.25	B: 0
TP-4	988.3	985.0	A: 0.25	B: 0.5
TP-5	987.7	985.0	A: 0.25	B: 0.25
TP-6	986.5	985.0	A: 0.5	B: 0.25
TP-7	1016.0	1014.0	A: 0.25	B: 0.23
TP-8	1006.3	1005.3	A: 0.5	B: 1.5
TP-9	995.8	988.0	A: 0.25	B: 0.25
TP-10	994.5	988.0	A: 2.0	B: 0.25
TP-11	990.1	988.0	A: 0.25	B: 0.25
TP-12	996.7	988.0	A: 6.0	B: 7.5
TP-13	990.3	988.0	A: 3.0	B: 0.25
TP-14	995.5	988.0	A: 1.0	B: 0.25
TP-15	993.5	988.0	A: 6.0	B: 0.5
TP-16	989.8	988.0	A: 0.5	B: 0.5
TP-17	992.8	988.0	A: 0.5	B: 0.5
TP-18	994.6	988.0	A: 0.25	B: 0.5
TP-19	989.8	988.0	A: 0.25	B: 0.25
TP-20	1003.5	1002.5	A: 0	B: 0
TP-21	1003.1	1001.1	A: 0.5	B: 0.5
TP-22	1003.7	1001.7		B: 0.5
TP-23*	1004.0	1000.0		B: 0.25
TP-24	999.2	993.0		B: 1.5
TP-25	1002.9	993.0		B: 0.5
TP-26	1002.0	993.0		B: 0.25
TP-27	1008.7	1006.7		B: 0.5
TP-28	1002.3	1000.3		B: 0.5

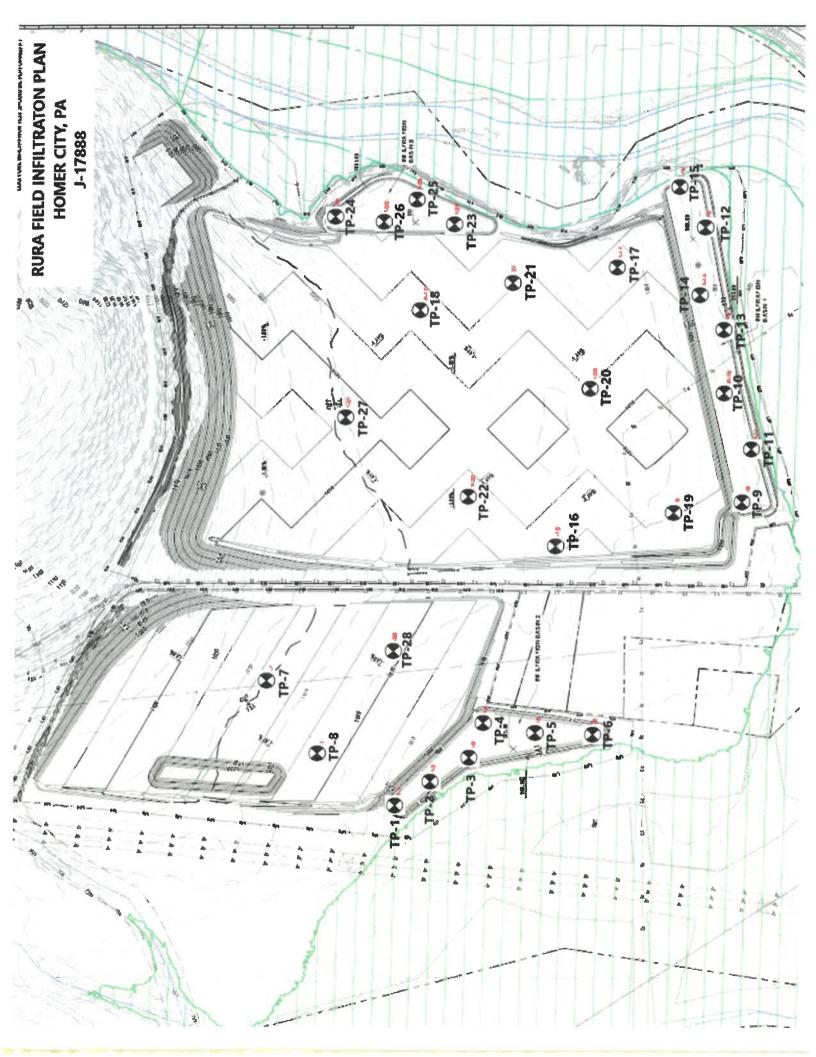
^{*}Test elevation adjusted due to limiting zone of sandy shale bedrock.

Please contact us if you have any questions or concerns regarding this information.

Sincerely,

Ralph Artuso, P.E. President

RA//kmc cc: File





TEST BORING LOG

BORING NO.: TP-1

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 11-25-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 988.10

WATER LEVELS:

AT COMPLETION: DRY
AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 11-25-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

DESCRIPTION OF MATERIAL 988.1' 0.0' SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist THICKNESS OF SAMPLES OF SAMP	RO	<u> JRING NU.:</u>	1 P-1 AT 24 HOURS: BA	<u> CKF</u>	ILLED	-	SH	EETI	OF 1
987.1' 1.0' SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist 2 Infiltration test			DESCRIPTION	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	OF	RQD, %	REMARKS
sandstone fragments, soft to stiff, damp to moist Infiltration test	988.1' 0.0'	'	TOPSOIL						
	987.1' 1.0'	2	SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist						Infiltration test at 3.1'
092.01 5.11	092 07 5 17	5							
983.0' 5.1' Bottom of test p 5.1' NO LIMITING ZONES OF BEDROCK OR-GROUNDWATER WERE ENCOUNTERED.		6	EDD OCK OD CDOLDIDWATED WED		I COLDI	TEDEN			Bottom of test pit at 5.1'



TEST BORING LOG

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 11-25-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 986.5

WATER LEVELS:

AT COMPLETION: DRY

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 11-25-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

BORING NO.: TP-2 SHEET 1 OF 1 AT 24 HOURS: BACKFILLED SPOON BLOWS/6in. THICKNESS RECOVERY (%) DESCRIPTION SAMPLE NO. ELEVATION OF REMARKS OF SYMBOL MATERIAL % SAMPLES RQD, 986.5 TOPSOIL 985.51 1.0 SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist Infiltration test at 1.5' 983.0' 3.5' Bottom of test pit at 6 NO LIMITING ZONES OF BEDROCK OR GROUNDWATER WERE ENCOUNTERED.



TEST BORING LOG

BORING NO.: TP-3

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 11-26-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 986.0

WATER LEVELS:

AT COMPLETION: DRY

AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 11-26-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A HLW. STEM AGR.: N/A

SHEET 1 OF 1

	DU	MINU I	10	11-3	AT 24 HOURS: E	ACICI	ILLED				OF
ELEVATION	OEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6In.	THICKNESS OF SAMPLES	RQD, %	REMARKS
986.0'	0.0'			TOPSOIL							
985.0'	1.0'	2		SANDY CLA sandstone frag	Y: Light orangish brown, traces ments, soft to stiff, damp to moi	of st					Infiltration test at 1.0'
983.0'	3.0'	3		SANDY CLA' medium brown moist	Y WITH SANDSTONE: Light t a, some cobbles, stiff, damp to	0					
982.5'	3.5'	5									Bottom of test pit at 3.5'

NO LIMITING ZONES OF BEDROCK OR GROUNDWATER WERE ENCOUNTERED.



TEST BORING LOG

BORING NO.: TP-4

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 11-26-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 988.3

WATER LEVELS:

AT COMPLETION: DRY
AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 11-26-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	DU	KING I	10	11	AT 24 HOURS:	DACK	TUDELD	T .			T T
ELEVATION	O DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
988.3' 987.3'	1.0'	1	8	TOPSOIL SANDY CLA sandstone frag	Y: Light orangish brown, some gments, soft to stiff, damp to m	e					
		4									Infiltration test at 3.3'
983.0'	5.3'	6 6 7 NG ZONE	S OF R	EDROCK OF	R GROUNDWATER W I	ERE EI	NCOUN	TERED.			Bottom of test pit at 5.3'



TEST BORING LOG

BORING NO.: TP-5

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 11-26-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 987.66

WATER LEVELS:

AT COMPLETION: DRY

AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 11-26-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

<u>D(</u>	MING	10	11-3 A1 24 HOURS: BA	CIXI					OF 1
ELEVATION BEPTH 67.2.4.6	LEGEND	SYMBOL	DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
987.7' 0.0 986.7' 1.0	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '		SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist						
	4								Infiltration test at 2.67'
982.7' 5.0	6	g OE D	EDROCK OR GROUNDWATER WERE	EN	COUN	TERED.			Bottom of test pit at 5.0'



TEST BORING LOG

BORING NO.: TP-6

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 11-26-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 986.5

WATER LEVELS:

AT COMPLETION: DRY

AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 11-26-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

ELEVATION	O DEPTH	LEGEND	SYMBOL	DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
986.5' 985.7'	0.0'			TOPSOIL SANDY CLAY: Light orangish brown, traces of						
		2		sandstone fragments, soft to stiff, damp to moist						Infiltration test at 1.5'
983.0'	3.5'	5		EDROCK OR GROUNDWATER WERI						Bottom of test pit at 3.5'



TEST BORING LOG

BORING NO.: TP-7

LOCATION: HOMER CITY, PA

DATE STARTED: 12-5-24

PROJECT: RURA FIELD

DRILLER: EXCAVATOR

SURFACE ELEVATION: 1016.04

WATER LEVELS:

AT COMPLETION: DRY

AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-5-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	DU.		10	A1 24 HOURS: BA	CKI		-	DII		OFI
ELEVATION	O DEPTH	LEGEND	SYMBOL	DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
1015.0	1.0'	2		SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist						Infiltration test at 2.0'
1012.0'	4.0'									Bottom of test pit at 4.0'
NOI	IMIT:	NG ZONES	S OF BI	EDROCK OR GROUNDWATER WERE	EN	COUN	TERED.			



TEST BORING LOG

BORING NO.: TP-8

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 11-25-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 1006.3

WATER LEVELS:

AT COMPLETION: DRY

AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 11-25-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

1006.31	O DEPTH	LEGEND	SYMBOL	DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
1006.3'	0.0'	1	-	SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist						Infiltration test at 1.0'
1003.3'	3.0'	3								Bottom of test pit at 3.0'
-NO I	IMIT	5 6	S OF B	EDROCK OR GROUNDWATER WER	EEN	icoun'	TERED. —			



TEST BORING LOG

BORING NO.: TP-9 AT 24 HOURS: BACKFILLED

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-3-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 995.81

WATER LEVELS:

AT COMPLETION: DRY

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-3-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

l .	DU.	KINGT	1U.:	AT 24 HOURS:	BACKI	ILLED		<u> 511.</u>	CLII	OF I
ELEVATION 595.8,	DEPTH	LEGEND	SYMBOL	DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
995.8'	0.0'	7777	<u> </u>	TOPSOIL						
994.8'	1.0'	4		SANDY CLAY WITH SANDSTONE: Light orangish brown, Some cobbles and boulders, soft to stiff, damp to moist						Infiltration test at 8.0'
985.8'	10.0'	10 12 NG ZONE	S OF B	EDPOCK OF GROUNDWATER WE	REFI	JCOUN'	TERED			Bottom of test pit at 10.0'
NOL	IMIT	ING ZONE	S OF B	EDROCK OR GROUNDWATER WE	KE EN	ICOUN'	TEKED.			



TEST BORING LOG

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-4-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 994.5

WATER LEVELS:

AT COMPLETION: DRY AT 24 HOURS: BACKELLED **CLIENT:** MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-4-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A SHEET LOF 1

BORING NO.			NO.:	TP-10	AT COMPLETION: AT 24 HOURS: BA			H	LW. STEM AG		N/A L OF 1
ELEVATION		LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
994.5' 993.7'	0.0' 0.8'	1.5 3 4.5	SYMBC	TOPSOIL SANDY CLA orangish brow soft to stiff, da	Y WITH SANDSTONE: Light n, Some cobbles and boulders,	RECOV	SAMPI	NOOAS	SAMPLES	RQD, 9	Infiltration test at 6.5'
986.0'	8.5'	9									Bottom of test pit at 8.5'

NO LIMITING ZONES OF BEDROCK OR GROUNDWATER WERE ENCOUNTERED.



BORING NO.: TP-11

TEST BORING LOG

LOCATION: HOMER CITY, PA

DATE STARTED: 12-3-24

PROJECT: RURA FIELD

DRILLER: EXCAVATOR

SURFACE ELEVATION: 990.1

WATER LEVELS:

AT COMPLETION: DRY AT 24 HOURS: BACKFILLED CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-3-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A HLW. STEM AGR.: N/A

	RO.	KING	NU.:	1 P-11 AT 24 H	OURS: BACK	FILLED		<u> 5.H.</u>	EEI I	OF 1
ELEVATION	рертн	LEGEND	SYMBOL	DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
990.1'	1.0'	1	S	TOPSOIL SANDY CLAY: Light orangish brows and stone fragments, soft to stiff, day						Infiltration test at 2.0'
986.1'	4.0'	5								Bottom of test pit at 4.0'
NOI	IMIT	NG ZONE	S OF B	EDROCK OR GROUNDWAT	ER WERE E	NCOUN	ITERED.			



TEST BORING LOG

BORING NO.: TP-12

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-5-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 996.7

WATER LEVELS:

AT COMPLETION: DRY
AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-5-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	DU	MING I	10	11-14	A1 24 HOURS: BA	CKF	ILLED		311		OF I
ELEVATION	DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
996.7'	0.0'	1,,,,,		TOPSOIL							
995.9'	0.8'	2 4 6		SANDY CLA orangish brow soft to stiff, da	Y WITH SANDSTONE: Light on, Some cobbles and boulders, amp to moist						
		10									Infiltration test at 8.7'
985.7'	11.0'	12									Bottom of test pit at 11.0'
NOL	IMIT	NG ZONE	S OF BI	EDROCK OF	R GROUNDWATER WER	E EN	ICOUN'	TERED.			



TEST BORING LOG

BORING NO.: TP-13

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-4-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 990.3

WATER LEVELS:

AT COMPLETION: DRY AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-4-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

990.3'	DEPTH	LEGEND	SYMBOL	DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
990.3'	0.0'	1		SANDY CLAY WITH SANDSTONE: Light orangish brown, some sandstone cobbles and						
		3		boulders, soft to stiff, damp to moist						Infiltration test at 2.3'
985.8'	4.5'	5 6 RIGINAL STATES	OF B	EDROCK OR GROUNDWATER WERE	EN	COUNT	TERED.—			Bottom of test pit at 4.5'



TEST BORING LOG

BORING NO.: TP-14

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-4-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 995.5

WATER LEVELS:

AT COMPLETION: DRY

AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-4-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	DU.	KINGI	10	11-14	AT 24 HOURS: BA	CKr.	LLED		311	CEI I	OF I
ELEVATION	DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
995.5'	0.0'	7777		TOPSOIL							
994.5'	1.0*	2		SANDY CLA sandstone frag	Y: Light orangish brown, traces of ments, soft to stiff, damp to moist						
992.5'	3.0'	4		SILTY CLAY	: Light gray, stiff, moist						
991.0'	4.5!			SANDY CLA brown, some c	Y WITH SANDSTONE: Light cobbles, stiff, damp to moist						
985.5'	10.0'	8									Infiltration test at 7.5'
		12									Bottom of test pit at 10.0'
NOI	IMIT	ING ZONE	S OF B	EDROCK OF	R GROUNDWATER WERE	EN	ICOUN'	TERED.			



TEST BORING LOG

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-5-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 993.5

WATER LEVELS:

AT COMPLETION: DRY

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-5-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

l	BORING NO.: TP-			TD 15	TP-15 AT COMPLETION: DRY AT 24 HOURS: BACKFILLED			Н	HLW. STEM AGR.: N/A SHEET 1 OF 1		
	BORING NO.: 7			TP-15 AT 24 HOURS: B.			ILLED		SH	EET 1	OF 1
ELEVATION	O.O DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
993.5'	0.0'	7777		TOPSOIL							
992.5'	1.0'	1.5 3 4.5		SANDY CLA orangish brow boulders, soft	Y WITH SANDSTONE: Light in, some sandstone cobbles and to stiff, damp to moist						Infiltration test at 5.5'
986.01	7.5'	7.5									Bottom of test pit at 7.5'
		-									

NO LIMITING ZONES OF BEDROCK OR GROUNDWATER WERE ENCOUNTERED.



BORING NO.: TP-16

TEST BORING LOG

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-3-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 989.8

WATER LEVELS:

AT COMPLETION: DRY
AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-3-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	BU.	KINGI	NU.:	1 P-10 AT 24 HOURS: BA	CKF	ILLED		<u>5H</u>	CC I I	OF I
ELEVATION	O DEPTH	LEGEND	SYMBOL	DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
989.8'	0.0'			TOPSOIL						
988.8'	1.0'	2		SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist						Infiltration test at 2.0'
985.8'	4.0'	5 S	S OF B	EDROCK OR GROUNDWATER WERI	E-EN	COUN'	TERED. –			Bottom of test pit at 4.0'
NO-L	IMIT	ING-ZONES	S OF BI	EDROCK OR GROUNDWATER WERI	3-EN	COUN	IEKED. –			



TEST BORING LOG

BORING NO.: TP-17

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-6-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 992.76

WATER LEVELS:

AT COMPLETION: DRY

AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-6-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

D.	MING	10	11-1/	A1 24 HOURS: DA		CLLD				OFT
992.8' 0.0'	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
992.8' 0.0'	7,77,7		TOPSOIL							
991.8' 1.0'	3		SANDY CLA sandstone frag	Y: Light orangish brown, traces of ments, soft to stiff, damp to moist						Infiltration test at 4.75'
986.0' 6.8'	6									Bottom of test pit at
	7.5 9	G OF B		R GROUNDWATER WERE	FA	COLIN'	repen			6.75'



TEST BORING LOG

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-10-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 994.5

WATER LEVELS:

AT COMPLETION: DRY

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-10-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	BO	RING N	1.0	TP-18	AT 24 HOURS: BA	CKF.	LLED		SH	EET 1	OF 1
ELEVATION 1947-2-1	O DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
994.5'	0.0'			TOPSOIL							
993.5'	1.0'	1.5		SANDY CLA sandstone frag	Y: Light orangish brown, traces of ments, soft to stiff, damp to moist						
992.0'	2.5'	3		SILTY CLAY	: Light gray, stiff, moist						
990.5'	4.0'	4.5	fragments stiff		Y: Light brown, some sandstone f, moist						Infiltration test at 6.5'
		7.5									
986.0'	8.5'	9									Bottom of test pit at 8.5'
NOL	.IMIT	ING ZONE	S OF B	 EDROCK OF	R GROUNDWATER WERE	EN	L COUN	TERED.			



BORING NO.: TP-19

TEST BORING LOG

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-3-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 989.8

WATER LEVELS:

AT COMPLETION: DRY
AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-3-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A HLW. STEM AGR.: N/A

	DU	VIII	10	11-17	A1 24 HOURS: DA	CLL	ILLED		511		OI I
ELEVATION	O DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
989.8'	1.0'	2		SANDY CLA sandstone frag	Y: Light orangish brown, traces of ments, soft to stiff, damp to moist						Infiltration test at 1.75'
985.8'	4.0'	5 6 CONE	SOFR	EDROCK OF	R GROUNDWATER WER	SEN	ICOUN'	TERED:			Bottom of test pit at 4.0'
NO L	IMIT	ING ZONE	S OF B	EDKOCK OF	GGKOUNDWA1EK WERI	L-EA	ICOUN	IEKEÐ.			



TEST BORING LOG

BORING NO.: TP-20

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-5-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 1003.5

WATER LEVELS:

AT COMPLETION: DRY
AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-5-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist 2 1000.5' 3.0' 3	DEPTH 1003.5, 0.0	LEGEND	DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
4		0' 1							Infiltration test at 1.0'
6	1000.5' 3.0'	4							Bottom of test pit at 3.0'



TEST BORING LOG

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-10-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 1003.13

WATER LEVELS:

AT COMPLETION: DRY

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-10-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	BO	RING N	IO.:	TP-21	AT 24 HOURS: BA	CKF	LLED		SH	EET 1	OF 1
ELEVATION	O DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
1003.1' 1002.4' 1001.5'	0.0'	2		SILTY CLAY	Y: Light orangish brown, traces of ments, soft to stiff, damp to moist : Light gray, stiff, moist D SILTY SHALE: Light brown,						Infiltration test at 2.0'
999.1'	4.0'	5					,				Bottom of test pit at 4.0'

NO LIMITING ZONES OF BEDROCK OR GROUNDWATER WERE ENCOUNTERED. –



TEST BORING LOG

LOCATION: HOMER CITY, PA

DATE STARTED: 12-2-24

PROJECT: RURA FIELD

DRILLER: EXCAVATOR

SURFACE ELEVATION: 1003.73

WATER LEVELS:

AT COMPLETION: DRY AT 24 HOURS: BACKELLED **CLIENT:** MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-2-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	BORING NO			TP-22	AT COMPLETION: AT 24 HOURS: BA			H	LW. STEM A		OF 1
ELEVATION	O DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
1003.7'	1.0'	1 2		SANDY CLA to brown, trace stiff, damp to s	Y: Light orangish brown and gray es of sandstone fragments, soft to moist						Infiltration test at 2.0'
		5 6	S OF B	EDROCK OF	R GROUNDWATER WERI	EEN	GOUN'	TERED:			Bottom of test pit at 4.0'



TEST BORING LOG

DATE STARTED: 12-10-24

PROJECT: RURA FIELD

DRILLER: EXCAVATOR

SURFACE ELEVATION: 1004.0

LOCATION: HOMER CITY, PA

WATER LEVELS:

AT COMPLETION: DRY AT 24 HOURS: BACKFILLED **CLIENT:** MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-10-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A HLW. STEM AGR.: N/A

	BORING NO			TP-23	AT COMPLETION AT 24 HOURS: BA			H	LW. STEM A SH		N/A OF 1
ELEVATION	рертн	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
1004.0'	0.0' 1.0'	3		sandstone frag	Y: Light orangish brown, traces of gments, soft to stiff, damp to moist LE: Light brown, hard, damp						Infiltration test at 4.0'
997.7'	6.31				W WAS ENCOUNTEDED	AT	AT DEP	TH OF EIGH	r (0) FEET		Bottom of test pit at 6.3'

A LIMITING ZONE OF SHALE BEDROCK WAS ENCOUNTERED AT AT DEPTH OF EIGHT (8) FEET. THE INFILTRATION TEST WAS PERFORMED IN SANDY CLAY LAYER AT A DEPTH OF FOUR (4) FEET.



TEST BORING LOG

BORING NO.: TP-24

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-6-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 999.23

WATER LEVELS:

AT COMPLETION: DRY
AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-6-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	DU.	KINGI	10	11-47	A1 24 HOURS: BA	CKI.	LLLLD		DIA	2227	OF I
ELEVATION	O.O. DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
999.2'	1.0	777777 777777 777777		TOPSOIL							
		3		SANDY CLA sandstone frag	Y: Light orangish brown, traces of ments, soft to stiff, damp to moist						
995.2'	4.0'	4.5		SANDY CLA fragments, stif	Y: Light brown, some sandstone f, moist						Infiltration test at 6.25'
		7.5									
990.7'	8.5'	9									Bottom of test pit at 8.5'
NO L	IMIT	ING ZONE	S OF B	EDROCK OF	R GROUNDWATER WERE	EN	ICOUN'	TERED.			



TEST BORING LOG

RORING NO · TP-25

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-6-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 1002.9

WATER LEVELS:

AT COMPLETION: DRY
AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-6-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	BO	<u>RING 1</u>	NO.:	TP-25	AT 24 HOURS: BA	CKF	ILLED		SH	EET 1	OF 1
1002.9'	O DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
1002.9'	0.0'	7777		TOPSOIL							
1001.9'	1.0'	2		SANDY CLA sandstone frag	Y: Light orangish brown, traces of ments, soft to stiff, damp to moist						
998.9'	4.0'	4 ///		SILTY, SANE	DY CLAY: Light brown and gray,						
		6		some sandston	e fragments, stiff, moist						
		10									Infiltration test at 9.9'
990.9'	12.0'		S OF R	FDROCK OR	. GROUNDWATER WERE	EN	COUN'	TERED			Bottom of test pit at 12.0'
THOL	/11V11 1 1	HO POINE	OIDI		CITODIA MILITAR WEIGH	1					



2018 Waverly Street (412) 351-6465

TEST BORING LOG

Pittsburgh, PA 15218

DATE STARTED: 12-6-24 DRILLER: EXCAVATOR

LOCATION: HOMER CITY, PA

PROJECT: RURA FIELD

SURFACE ELEVATION: 1002.0

WATER LEVELS:

AT COMPLETION: DRY AT 24 HOURS: BACKELLED CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-6-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A HLW. STEM AGR.: N/A

	RO]	RINGN	IO.:	TP-26 AT COMPLETION: DRY AT 24 HOURS: BACKFILLED				HLW. STEM AGR.: N/A SHEET 1 OF 1			
ELEVATION	DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
1002.0'	0.0'	,,,,		TOPSOIL							
1001.0'	1.0'	2		SANDY CLA sandstone frag	Y: Light orangish brown, traces of ments, soft to stiff, damp to moist						
997.0'	5.0'	6		SILTY CLAY fragments, stif	: Light gray, some sandstone f, moist						
995.0'	7.0'	8		SANDY CLA sandstone, stif	Y: Light brown, traces of f, moist						Infiltration test at 9.0'
991.0'	11.0'	12									Bottom of test pit at 11.0'



TEST BORING LOG

BORING NO.: TP-27

PROJECT: RURA FIELD

LOCATION: HOMER CITY, PA

DATE STARTED: 12-2-24

DRILLER: EXCAVATOR

SURFACE ELEVATION: 1008.72

WATER LEVELS:

AT COMPLETION: DRY
AT 24 HOURS: BACKFILLED

CLIENT: MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 12-2-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A

HLW. STEM AGR.: N/A

	BO	<u>RING I</u>	<u> </u>	TP-27	AT 24 HOURS: BA	CKF	LLED		SH	EET 1	OF 1
ELEVATION	O DEPTH	LEGEND	SYMBOL		DESCRIPTION OF MATERIAL	RECOVERY (%)	SAMPLE NO.	SPOON BLOWS/6in.	THICKNESS OF SAMPLES	RQD, %	REMARKS
1008.7'	0.0'	[,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	91	TOPSOIL							
1007.7'	1.0'	1		SILTY CLAY moist	: Light gray, soft to medium stiff,						
1007.2'	1.5'	_233		SANDY CLA fragments, me	Y: Light brown, some sandstone dium stiff to stiff, damp to moist						Infiltration test at 2.0'
NO I	4.0'	5 6 NG ZONE	S OF P	EDROCK OF	R GROUNDWATER-WERF	SEN	ICOUN'	FERED.			Bottom of test pit at 4.0'
NOI	IMIT	NG-ZONE	S OF B	EDROCK OF	R GROUNDWATER-WERE	EN	ICOUN ²	IERED.			



2018 Waverly Street (412) 351-6465

TEST BORING LOG

Pittsburgh, PA 15218

DATE STARTED: 11-25-24

PROJECT: RURA FIELD

DRILLER: EXCAVATOR

SURFACE ELEVATION: 1002.3

LOCATION: HOMER CITY, PA

WATER LEVELS:

AT COMPLETION: DRY AT 24 HOURS: BACKELLED **CLIENT:** MICHAEL BAKER

PROJECT NO.: J-17888

DATE COMPLETED: 11-25-24

LOGGED BY: ZMW

LOG TYPE: TEST PIT LOG

SPOON SIZE: N/A HLW. STEM AGR.: N/A

DESCRIPTION OF MATERIAL STATE OF SAMPLES SAMPL	DODING NO - TD 70 SHEET LOE 1	HLW. STEM AGR.: N/A SHEET 1 OF 1			
1001.3' 1.0' 1	BOILT OF THE STATE				
1001.3' 1.0' SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist SANDY CLAY: Light orangish brown traces of sandstone fragments, soft to stiff, damp to moist Infiltration test at 2.0' Bottom of test pit at 4.0' 5.		RKS			
5	1001.3' 1.0' SANDY CLAY: Light orangish brown, traces of sandstone fragments, soft to stiff, damp to moist Infiltration tes				
NO LIMITING ZONES OF BEDROCK OR GROUNDWATER WERE ENCOUNTERED.—	5	t pit at			



2018 WAVERLY STREET PITTSBURGH, PA 15218 PHONE: (412)-351-6465 FAX: (412)-351-6401

INFILTRATION INSPECTION REPORT

CLIENT: Michael B	aker			REPORT NO.:						
PROJECT: Rura Fie	eld				JOB NUMBER: J-17888					
LOCATION: Homer	City, P.	A			INSPE	CTOR:	Alex C	risan		
INSPECTION TYPE	5, 2024									
Interval Time	/									
TEST LOCATION		W	ATER I	EVEL	READIN	IG (in.)		INFILTRATION RATE (in/hr.)		
TP-1A @ 3.1' Pre Soak: 1/8"	1/8"	1/8"?	1/827	1/8*?				0.25" / Hour		
TP-1B @ 3.1' Pre-Soak: 1/8"	1/8"	1/8"	1/822	1/8??				0.25"/ Hour		
TP-2A @ 1.5' Pre-Soak: 1/8"	1/822	022	0"	022				0"/Hour		
TP-2B @ 1.5' Pre-Soak: 1/8"	1/8??	1/8"	1/822	1/822				0.25"/Hour		
TP-8A @ 1.0' Pre-Soak: ¼"	1/427	1/4"	1/422	1/422				0.5"/Hour		
TP-8B @ 1.0' Pre-Soak: 1"	1"	3/422	3/422	3/422				1.5"/Hour		
TP-28A @ 2.0' Pre-Soak: ½"	1/422	1/8"	1/8??	1/8**				0.25"/Hour		
TP-28B @ 2.0' Pre-Soak: '4"	1/422	1/422	1/422	1/422				0.5"/Hour		

No limiting zones of bedrock or groundwater were encountered. All tests were in stiff, silty sandy clay. Some interbedded sandstone fragments were noted in the clay.



2018 WAVERLY STREET PITTSBURGH, PA 15218 PHONE: (412)-351-6465

FAX: (412)-351-6401

INFILTRATION INSPECTION REPORT

CLIENT: Michael B	Baker			REPORT NO.:						
PROJECT: Rura Fie					JOB NUMBER: J-17888					
LOCATION: Homer		A			INSPEC	TOR: A	Alex C	risan		
INSPECTION TYPE			DATE:	Novem	ber 26	, 2024				
Interval Time	/:30	/ :30	/ :30	/ :30	///	/	/			
TEST LOCATION		V	ATER I	EVEL	READING	in.)		INFILTRATION RATE (in/hr.)		
TP-3A @ 1.0' Pre Soak: 1/8"	1/8"	1/8"	1/8"?	1/8*?				0.25" / Hour		
TP-3B @ 1.0' Pre-Soak: 1/8"	1/8"	1/822	0"	0"				0"/ Hour		
TP-4A @ 3.3' Pre-Soak: ¼"	1/822	1/822	1/822	1/8"?				0.25"/Hour		
TP-4B @ 3.3' Pre-Soak: 3/8"	1/422	1/422	1/422	1/422				0.5"/Hour		
TP-5A @ 2.67' Pre-Soak: ½"	1/8??	1/822	1/822	1/8??				0.25"/Hour		
TP-5B @ 2.67' Pre-Soak: ½"	1/8??	1/822	1/8**	1/8"?				0.25"/Hour		
TP-6A @ 1.5' Pre-Soak: 3%"	3/822	1/4??	1/422	1/422				0.5"/Hour		
TP-6B @ 1.5' Pre-Soak: ½"	1/422	1/422	1/8"	1/822				0.25"/Hour		

No limiting zones of bedrock or groundwater were encountered. All tests were in stiff, silty sandy clay.



FAX: (412)-351-6401

INFILTRATION INSPECTION REPORT

CLIENT: Michael B	aker				REPC	RT NO	.:		
PROJECT: Rura Fie	eld				JOB NUMBER: J-17888				
LOCATION: Homer	City, P.	A			INSPI	ECTOR	: Alex C	Crisan	
INSPECTION TYPE	: Infilt	ration]		DATE	: Dece	mber 4	, 2024		
Interval Time	/:30	/ :30	/ :30	/ :30					
TEST LOCATION		W	ATER L	EVEL	READI	NG (in.)		INFILTRATION RATE (in/hr.)	
TP-7A @ 2.0' Pre Soak: ¼"	1/4"	1/8"	1/8"	1/8"				0.25" / Hour	
TP-7B @ 2.0° Pre-Soak: ¼"	1/4"	1/4"2	1/422	1/4"				0.5"/ Hour	
TP-10A @ 6.5' Pre-Soak: 1½"	11/4"	1"	1"	1"				2.0"/Hour	
TP-10B @ 6.5' Pre-Soak: 1/8"	1/8"	1/8"	1/8"	1/822				0.25"/Hour	
TP-13A @ 2.3' Pre-Soak: 1¾"	11/2"	1½"	1½"	1½"				3.0"/Hour	
TP-13B @ 2.3' Pre-Soak: ¼"	1/4"	1/4"	1/8"	1/8**				0.25"/Hour	
TP-14A @ 7.5' Pre-Soak: ¾"	3/422	1/2"	1/2"	1/2 22				1.0"/Hour	
TP-14B @ 7.5' Pre-Soak: 1/8"	1/422	1/8??	1/8"	1/8*2				0.25"/Hour	

No limiting zones of bedrock or groundwater were encountered.

Tests at TP-7A,B, TP-10B, TP-13B, and TP-14B were in stiff, silty sandy clay.

Tests at TP-10A, TP-13A, and TP-14A were is stiff sandy clay with some sandstone fragments and cobbles.



FAX: (412)-351-6401

INFILTRATION INSPECTION REPORT

CLIENT: Michael B	aker				REPORT	NO.:			
PROJECT: Rura Fie	eld				JOB NUMBER: J-17888				
LOCATION: Homer	City, P	A			INSPECT	OR: Alex	k Crisan		
INSPECTION TYPE	: Infilt	ration 7	DATE: I) ecember	3, 2024				
Interval Time	/:30	/ :30	/ :30	/ :30	///				
TEST LOCATION		W	VATER L	LEVEL	READING ((in.)	INFILTRATION RATE (in/hr.)		
TP-9A @ 8.0' Pre Soak: '%"	1/8"?	1/8"	1/8"	1/822			0.25" / Hour		
TP-9B @ 8.0' Pre-Soak: '%"	1/8"	1/822	1/822	1/8??			0.25"/ Hour		
TP-11A @ 2.0' Pre-Soak: ¼"	1/422	1/822	1/822	1/823			0.25"/Hour		
TP-11B @ 2.0' Pre-Soak: ½"	1/822	1/822	1/8"	1/8"			0.25"/Hour		
TP-16A @ 2.0' Pre-Soak: ¼"	1/422	1/422	1/422	1/422			0.5"/Hour		
TP-16B @ 2.0' Pre-Soak: ½"	1/2"	1/2 22	1/422	1/422			0.5"/Hour		
TP-19A @ 1.75° Pre-Soak: ¼"	1/822	1/822	1/822	1/8"?			0.25"/Hour		
TP-19B @ 1.75' Pre-Soak: 1/8"	1/822	1/8"?	1/8**	1/8"			0.25"/Hour		

No limiting zones of bedrock or groundwater were encountered. All tests were in stiff, silty sandy clay.



2018 WAVERLY STREET PITTSBURGH, PA 15218 PHONE: (412)-351-6465 FAX: (412)-351-6401

INFILTRATION INSPECTION REPORT

CLIENT: Michael B	aker				REPOR	T NO.:			
PROJECT: Rura Fie	eld				JOB NUMBER: J-17888				
LOCATION: Homer	City, P	A			INSPECTOR: Alex Crisan				
INSPECTION TYPE	: Infil	tration]	Γests		DATE:	Decen	ıber 5,	2024	
Interval Time	/:30		/ :30	/ :30	//	/			
TEST LOCATION		V	VATER I	LEVEL	READIN	G (in.)		INFILTRATION RATE (in/hr.)	
TP-15B @ 5.5' Pre Soak: ¼"	1/4??	1/4"	1/4"	1/427				0.5" / Hour	
TP-17A @ 4.75' Pre-Soak: ¼"	1/4**	1/422	1/422	1/422				0.5"/ Hour	
TP-17B @ 4.75' Pre-Soak: ½"	1/422	1/422	1/422	1/422				0.5"/Hour	
TP-20A @ 1.0' Pre-Soak: 1/8"	1/822	1/822	0"	022				0.0"/Hour	
TP-20B @ 1.0' Pre-Soak: '%"	1/8"?	0"	0"	022				0"/Hour	
Interval Time	/:10	:10	/:10	/:10	/ :10	/	/		
TEST LOCATION		WA	TER LE	VEL RI	EADING (in.)		INFILTRATION RATE (in/hr.)	
TP-12A @ 8.7' Pre-Soak: 4"	1"	1"	1"	1"				6.0"/Hour	
TP-12B @ 8.7' Pre-Soak: 41/2"	11/4"	11/4"	11/4"	11/4"				7.5"/Hour	
TP-15A @ 5.5' Pre-Soak: 4"	122	1"	1"	127				6.0"/Hour	

No limiting zones of bedrock or groundwater were encountered.

Tests at TP-12A,B and TP-15A were in stiff, silty sandy clay with sandstone fragments and some cobbles.

Tests at TP-15B, TP-17A,B, and TP-20A,B were is stiff, sandy clay with traces of sandstone fragments.



FAX: (412)-351-6401

INFILTRATION INSPECTION REPORT

CLIENT: Michael Ba	aker				REPORT NO.:				
PROJECT: Rura Fiel	d				JOB NUMBER: J-17888				
LOCATION: Homer	City, P	A			INSPECTOR: Alex Crisan				
INSPECTION TYPE	1000		Cests		DATE	: Dece	mber 10,	, 2024	
Interval Time	/:30	:30	/ :30	/:30			/ .		
TEST LOCATION		W		INFILTRATION RATE (in/hr.)					
TP-18A @ 6.5' Pre Soak: ¼"	1/4??	1/8'?	1/8"	1/8"				0.25" / Hour	
TP-18B @ 6.5' Pre-Soak: ¼"	1/4"	1/422	1/422	1/422				0.5"/ Hour	
TP-21A @ 2.0' Pre-Soak: 3%"	3/822	1/422	1/422	1/422				0.5"/Hour	
TP-21B @ 2.0' Pre-Soak: '4''	1/422	1/422	1/422	1/422				0.5"/Hour	
Interval Time	/:10	:10	/:10	/:10	:10	0/			
TEST LOCATION		WA	TER LE	VEL RI	EADING	in.)		INFILTRATION RATE (in/hr.)	

No limiting zones of bedrock or groundwater were encountered. All tests were in stiff, silty sandy clay. Portions of the clay layer had some interbedded sandstone fragments.



FAX: (412)-351-6401

INFILTRATION INSPECTION REPORT

CLIENT: Michael B	aker				REPO	RT NC).:			
PROJECT: Rura Fie	ld				JOB N	UMBE	R: J-17	888		
LOCATION: Homer	City, P	A			INSPECTOR: Alex Crisan					
INSPECTION TYPE			Γests		DATE	: Dec	ember 2,	2024		
Interval Time	/:30	:30	/ :30	:30						
TEST LOCATION		V	VATER I	LEVEL	READI	NG (in.)	!	INFILTRATION RATE (in/hr.)		
TP-22A @ 2.0' Pre Soak: ½"	1/2"	1/2"	1/4"	1/422				0.5" / Hour		
TP-22B @ 2.0' Pre-Soak: ¾"	1/2"	1/222	1/4??	1/422				0.5"/ Hour		
TP-27A @ 2.0' Pre-Soak: ½"	1/422	1/422	1/4??	1/4"				0.5"/Hour		
TP-27B @ 2.0' Pre-Soak: ¼"	1/422	1/422	1/422	1/4"?				0.5"/Hour		
Interval Time	/:10	/:10	/:10	/:10	:10)/				
TEST LOCATION		WA		INFILTRATION RATE (in/hr.)						

No limiting zones of bedrock or groundwater were encountered. All tests were in stiff, silty sandy clay. Portions of the clay layer had some interbedded sandstone fragments.



2018 WAVERLY STREET PITTSBURGH, PA 15218 PHONE: (412)-351-6465 FAX: (412)-351-6401

INFILTRATION INSPECTION REPORT

CLIENT: Michael B	Baker				REPOR	T NO.:			
PROJECT: Rura Fie	eld				JOB NUMBER: J-17888				
LOCATION: Home	r City, P	A			INSPEC	TOR: Al	ex Crisan		
INSPECTION TYPE	E: Infil	tration [DATE:	Decemb	er 6, 2024			
Interval Time	/:30	:30	:30	:30	///	/ /			
TEST LOCATION		V	VATER I	LEVEL	READING	G (in.)	INFILTRATION RATE (in/hr.)		
TP-23A @ 4.0' Pre Soak: ½"	1/4"	1/8"	1/8"	1/8"			0.25" / Hour		
TP-23B @ 4.0' Pre-Soak: ¼"	1/4"	1/422	1/8"2	1/822			0.25"/ Hour		
TP-24A @ 6.25' Pre-Soak: ½"	1/2"?	1/2"	1/222	1/2"			1.0"/Hour		
TP-24B @ 6.25' Pre-Soak: 1"	1"	3/4 ??	3/4 22	3/422			1.5"/Hour		
TP-25A @ 9.9' Pre-Soak: ½"	1/227	1/2"	1/222	1/222			1.0"/Hour		
TP-25B @ 9.9' Pre-Soak: ¼"	1/422	1/4"	1/4??	1/422			0.5"/Hour		
TP-26A @ 9.0' Pre-Soak: ¼"	1/822	1/8**	1/8"	1/822			0.25"/Hour		
TP-26B @ 9.0' Pre-Soak: 1/8"	1/8"	1/822	1/8"	1/822			0.25"/Hour		

A limiting zone of shale bedrock was encountered at TP-23 at a depth of six (6) feet. The test at TP-23 was performed at 4.0' in the sandy clay.

No limiting zones of bedrock or groundwater were encountered in tests at TP-24,25, or 26. These tests were performed in stiff, silty sandy clay. Portions of the clay layer have some interbedded sandy shale and sandstone fragments.

12/16/2024 Page 1 of 10

Web Soil Survey National Cooperative Soil Survey

USDA

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Date(s) aerial images were photographed: Sep 11, 2021—Nov Maps from the Web Soil Survey are based on the Web Mercator distance and area. A projection that preserves area, such as the line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil The orthophoto or other base map on which the soil lines were Enlargement of maps beyond the scale of mapping can cause compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor projection, which preserves direction and shape but distorts Soil map units are labeled (as space allows) for map scales Source of Map: Natural Resources Conservation Service Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. The soil surveys that comprise your AOI were mapped at Please rely on the bar scale on each map sheet for map Coordinate System: Web Mercator (EPSG:3857) Soil Survey Area: Indiana County, Pennsylvania MAP INFORMATION Warning: Soil Map may not be valid at this scale. shifting of map unit boundaries may be evident. Survey Area Data: Version 21, Sep 4, 2024 Web Soil Survey URL: 1:50,000 or larger. measurements. Aerial Photography Background MAP LEGEND Not rated or not available Not rated or not available Not rated or not available Area of Interest (AOI) Streams and Canals Interstate Highways Somewhat limited Somewhat limited Somewhat limited Severely limited Severely limited Severely limited Major Roads Local Roads Soil Rating Polygons **US Roufes** Not limited Not limited Not limited Area of Interest (AOI) Soil Rating Points Soil Rating Lines Rails Nater Features Transportation ‡

Infiltration Systems, Deep

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
AhB	Allegheny silt loam, 3 to 8	Somewhat limited	Allegheny (85%)	Water movement (0.45)	4.8	4.9%
	percent slopes			Adsorptive capacity (0.24)		
				Slope (0.08)		
				Vegetation establishment (0.05)		
BuB	Buchanan loam,	Severely limited	Buchanan (90%)	Wetness (1.00)	9.6	9.9%
	3 to 8 percent slopes			Vegetation establishment (0.28)		
				Adsorptive capacity (0.23)		
				Slope (0.04)		
			Andover (5%)	Wetness (1.00)		
				Vegetation establishment (0.19)		
				Adsorptive capacity (0.03)		
			, ,	Wetness (1.00)		
				Flooding (0.50)		
				Adsorptive capacity (0.25)		
		F:		Vegetation establishment (0.10)		
BuC	Buchanan loam,	Severely limited	Buchanan (85%)	Wetness (1.00)	4.5	4.6%
	8 to 15 percent slopes			Slope (0.70)		
				Vegetation establishment (0.28)		
				Adsorptive capacity (0.23)		
			Laidig (5%)	Wetness (1.00)		
				Slope (0.70)		
				Vegetation establishment (0.39)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Adsorptive capacity (0.18)		
			Philo (3%)	Wetness (1.00)		
				Flooding (0.50)		
				Adsorptive capacity (0.25)		
				Vegetation establishment (0.10)		
			Andover (3%)	Wetness (1.00)		
				Vegetation establishment (0.19)		
				Slope (0.08)		
				Adsorptive capacity (0.03)		
ChA	Chavies fine sandy loam, 0 to 2 percent slopes		Chavies (85%)	Adsorptive capacity (0.15)	6.3	6.5%
				Vegetation establishment (0.05)		
ĒrB	Ernest silt loam,	Severely limited	Ernest (85%)	Wetness (1.00)	0.1	0.1%
	3 to 8 percent slopes			Vegetation establishment (0.20)		
				Adsorptive capacity (0.15)		
				Slope (0.08)		
			Buchanan (5%)	Wetness (1.00)		
				Vegetation establishment (0.23)		
				Adsorptive capacity (0.19)	ē	
				Slope (0.08)		
			Brinkerton (5%)	Wetness (1.00)		
			1	Adsorptive capacity (0.25)		
				Vegetation establishment (0.16)		
				Slope (0.13)		
ЭсВ	Gilpin channery silt loam, 3 to 8 percent slopes	Severely limited	Gilpin (85%)	Hard bedrock (1.00)	5.3	5.5%

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Adsorptive capacity (0.25)		
				Vegetation establishment (0.11)		
				Slope (0.08)		
			Wharton (10%)	Wetness (1.00)		
				Water movement (1.00)		
				Vegetation establishment (0.16)		
				Slope (0.08)		
				Adsorptive capacity (0.06)		
			Weikert (5%)	Hard bedrock (1.00)		
				Adsorptive capacity (0.25)		
				Vegetation establishment (0.14)		
				Slope (0.08)		
InC	Hazleton	Somewhat	Hazleton (80%)	Slope (0.70)	1.2	1.2%
	channery sandy loam, 8 to 15 percent	limited		Hard bedrock (0.55)		
	slopes			Vegetation establishment (0.34)		
				Adsorptive capacity (0.25)		
			Clymer (10%)	Hard bedrock (0.88)		ı
				Slope (0.70)		
				Adsorptive capacity (0.25)		
				Vegetation establishment (0.16)		
_oA	Lobdell silt loam,	Severely limited	Lobdell (85%)	Wetness (1.00)	0.5	0.5%
	0 to 3 percent slopes,			Flooding (0.50)		
	occasionally flooded			Water movement (0.45)		
				Adsorptive capacity (0.23)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Vegetation establishment (0.16)		
			Holly (5%)	Wetness (1.00)		
				Water movement (0.78)		
				Flooding (0.50)		
				Adsorptive capacity (0.25)		
				Vegetation establishment (0.16)		
			Orrville (5%)	Wetness (1.00)		
				Flooding (0.50)		
				Vegetation establishment (0.05)		
			Melvin (5%)	Wetness (1.00)		
				Flooding (0.50)		
				Water movement (0.45)		
				Vegetation establishment (0.16)		
MoA	Monongahela silt	Severely limited	Monongahela	Wetness (1.00)	58.1	59.8%
	loam, 0 to 3 percent slopes		(85%)	Vegetation establishment (0.32)		
				Adsorptive capacity (0.25)		
			Purdy (5%)	Water movement (1.00)		
				Wetness (1.00)		
				Adsorptive capacity (0.11)		
				Vegetation establishment (0.02)		
PuÁ	Purdy silt loam, 0 to 2 percent	Severely limited	Purdy (75%)	Water movement (1.00)	0.8	0.8%
	slopes			Wetness (1.00)		
				Adsorptive capacity (0.11)		
				Vegetation establishment (0.02)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
			Tyler (15%)	Wetness (1.00)		
				Vegetation establishment (0.32)		
				Adsorptive capacity (0.25)		
			Monongahela	Wetness (1.00)		
			(10%)	Adsorptive capacity (0.20)		
				Vegetation establishment (0.00)		
ТуА	Tyler silt loam, 0	Severely limited	Tyler (85%)	Wetness (1.00)	5.5	5.6%
	to 2 percent slopes			Vegetation establishment (0.32)	-	
				Adsorptive capacity (0.25)		
			Monongahela	Wetness (1.00)		
			(10%)	Adsorptive capacity (0.20)		
				Vegetation establishment (0.00)		
			Purdy (5%)	Water movement (1.00)		
				Wetness (1.00)		
				Adsorptive capacity (0.11)		
				Vegetation establishment (0.02)		
W	Water	Not rated	Water (100%)		0.5	0.6%
WhC	Wharton silt	Severely limited	Wharton (80%)	Wetness (1.00)	0.1	0.1%
	loam, 8 to 15 percent slopes			Water movement (1.00)		
				Slope (0.70)		
				Vegetation establishment (0.16)		
				Adsorptive capacity (0.06)		
			Ernest (5%)	Wetness (1.00)		
				Slope (0.70)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AO
				Vegetation establishment (0.05)		
				Adsorptive capacity (0.01)		
			Rarden (5%)	Wetness (1.00)		
				Slope (0.70)		
				Soft bedrock (0.50)		
				Adsorptive capacity (0.25)		
				Vegetation establishment (0.23)		
ls for Area	of Interest				97.1	100.0

Rating	Acres in AOI	Percent of AOI
Severely limited	84.3	86.8%
Somewhat limited	12.3	12.6%
Null or Not Rated	0.5	0.6%
Totals for Area of Interest	97.1	100.0%

Description

Deep infiltration systems are stormwater management practices that are placed 3 to 5 feet in the ground, depending on the application. These systems include rain gardens, bioretention basins, and infiltration basins. They slow the movement of stormwater to surface waters and also filter a significant portion of pollutants from the stormwater. The fundamental function of these systems is to hold the runoff generated from the first 1 inch of rainfall during a 24-hour storm preceded by 48 hours of no measurable precipitation. There should be little or no ponding at the surface. The water should infiltrate into the surrounding soil in 24 to 48 hours. Only that part of the soil between depths of 24 and 80 inches is evaluated.

The ratings are based on the soil properties that affect infiltration of the stormwater, construction and maintenance of the system, and public safety and health. Saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect the transmission of rainwater. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the water in downslope areas. Some slopes may become unstable and move upon addition of water.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the bottom of the system. In these soils the deep infiltration system may not adequately filter the stormwater, particularly if the adsorptive capacity of the soil below the system is low. As a result, the ground water may become contaminated. In areas underlain by limestone, solution channels and subsequent subsidence may damage adjacent infrastructure. Also, areas underlain by limestone may be subject to ground-water contamination.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified infiltration system. "Not limited" indicates that the soil has features that are very favorable for the specified system. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified system.

The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified system. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified system (1.00) and the point at which the soil feature is not a limitation (0.00).

The accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer lists the map unit components. These

components are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as the one indicated for the map unit. The percent composition of each component in a particular map unit is shown to help the user better understand the percentage of each map unit that has the rating indicated. Other components with different ratings may occur in each map unit. The complete ratings list for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

Tie-break Rule: Higher