WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-16A

Page 1 of 1

Project:	Proposed Mixed-Use Development	**WAI Project No.:**	GS2016988.000
Location:	Liberty Street & Maple Street; Paterson, Passaic County, NJ	**Client:**	Shore Point Engineering

				Water Depth | Elevation (feet bgs) | (feet)	Cave-In Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± 130.0 feet	**Date Started:**	3/25/2020		
Termination Depth:	9.0 feet bgs	**Date Completed:**	3/25/2020		
Proposed Location:	Building	**Logged By:**	MH	**During:** NE | ---	
Drill / Test Method:	HSA / SPT	**Contractor:**	JG	**At Completion:** --- | ---	**At Completion:** --- | ---
		Equipment:	CME-55	**24 Hours:** --- | ---	**24 Hours:** --- | ---

SAMPLE INFORMATION						DEPTH	STRATA	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (In.)	N	(feet)			
						0.0		Offset B-16 4' West Augered to Refusal	
						5.0			
						9.0			
								Boring Log B-16A Terminated at a Depth of 9.0 Feet Below Ground Surface Due to Auger Refusal	
						10.0			
						15.0			
						20.0			
						25.0			

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-17

Page 1 of 1

Project:	Proposed Mixed-Use Development	**WAI Project No.:**	GS2016988.000
Location:	Liberty Street & Maple Street; Paterson, Passaic County, NJ	**Client:**	Shore Point Engineering
Surface Elevation:	± 130.0 feet	**Date Started:**	3/25/2020
Termination Depth:	18.1 feet bgs	**Date Completed:**	3/25/2020
Proposed Location:	Building	**Logged By:**	MH
Drill / Test Method:	HSA / SPT	**Contractor:**	JG
		Equipment:	CME-55

Water Depth | Elevation (feet bgs) | (feet)		Cave-In Depth | Elevation (feet bgs) | (feet)	
During:	15.0P | 115.0	At Completion:	— | —
At Completion:	18.0 | 112.0	24 Hours:	— | —
24 Hours:	--- | ---		

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
						0.5	PAVEMENT		3" Asphalt, 3" Subbase Stone	
							FILL			
1 - 3	S-1	X	6 - 8 - 13 - 29	12	22				Brown Silty Sand with Gravel, Debris, Moist (FILL)	Debris: Trace Cinders
3 - 5	S-2	X	8 - 32 - 11 - 9	20	43	4.0			As Above, Dark Gray (FILL)	
									Brown Silty Sand, Moist, Dense (SM)	Apparent Re-Worked Material 4.0 fbgs to 9.0 fbgs
5 - 7	S-3	X	9 - 22 - 10 - 11	20	32	5.0			Brown Poorly Graded Sand with Silt, Moist (FILL)	
7 - 9	S-4	X	6 - 5 - 5 - 5	20	10	9.0				
9 - 11	S-5	X	5 - 5 - 11 - 22	20	16	10.0			Brown Silty Sand, Debris, Moist (FILL)	
11 - 13	S-6	X	18 - 18 - 18 - 19	20	36				As Above (FILL)	
						13.0	RESIDUAL			
13 - 15	S-7	X	5 - 4 - 4 - 4	20	9				Brown Silty Sand, Very Moist, Loose (SM)	
15 - 17	S-8	X	3 - 3 - 3 - 8	22	6	15.0			As Above, Wet (SM)	
						18.0			No Recovery, Presumed Rock	Stick in Spoon
18 - 18.1	S-9	X	50/1"	NR	50/1"				Boring Log B-17 Terminated at a Depth of 18.0 Feet Below Ground Surface Due to Auger Refusal	
						20.0				
						25.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-18

Page 1 of 1

Project:	Proposed Mixed-Use Development	**WAI Project No.:**	GS2016988.000
Location:	Liberty Street & Maple Street; Paterson, Passaic County, NJ	**Client:**	Shore Point Engineering
Surface Elevation:	± 130.0 feet	**Date Started:**	3/25/2020
Termination Depth:	6.5 feet bgs	**Date Completed:**	3/25/2020
Proposed Location:	Building	**Logged By:**	MH
Drill / Test Method:	HSA / SPT	**Contractor:**	JG
		Equipment:	CME-55

Water Depth | Elevation (feet bgs) | (feet)		Cave-In Depth | Elevation (feet bgs) | (feet)	
During:	NE | ---	At Completion:	— | —
At Completion:	--- | ---	24 Hours:	— | —
24 Hours:	--- | ---		

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0				
						0.5	PAVEMENT		3" Asphalt, 3" Subbase Stone	
							FILL			
1 - 3	S-1	X	5 - 7 - 21 - 15	12	28				Dark Gray Silty Sand, Debris, Moist (FILL)	Debris: Trace Cinders, Trace Concrete
3 - 5	S-2	X	14 - 18 - 9 - 7	10	27				As Above (FILL)	Debris: Trace Coal, Wood
						5.0				
5 - 6.4	S-3	X	5 - 7 - 50/5"	3	57/11"				Low Recovery, Presume As Above (FILL)	Gravel In Spoon Tip
						6.5				
									Boring Log B-18 Terminated at a Depth of 6.5 Feet Below Ground Surface Due to Auger Refusal; Offset to B-18A	
						10.0				
						15.0				
						20.0				
						25.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-18A

Page 1 of 1

Project:	Proposed Mixed-Use Development	**WAI Project No.:**	GS2016988.000
Location:	Liberty Street & Maple Street; Paterson, Passaic County, NJ	**Client:**	Shore Point Engineering

				Water Depth | Elevation (feet bgs) | (feet)	Cave-In Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± 130.0 feet	**Date Started:**	3/25/2020	**During:** NE | ---	
Termination Depth:	6.5 feet bgs	**Date Completed:**	3/25/2020	**At Completion:** --- | ---	**At Completion:** --- | ---
Proposed Location:	Building	**Logged By:**	MH	**24 Hours:** --- | ---	**24 Hours:** --- | ---
Drill / Test Method:	HSA / SPT	**Contractor:**	JG		
		Equipment:	CME-55		

SAMPLE INFORMATION						DEPTH	STRATA	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)			
						0.0		Offset B-18 5' West Augered to Refusal	
						5.0			
						6.5		Boring Log B-18A Terminated at a Depth of 6.5 Feet Below Ground Surface Due to Auger Refusal on Boulder/Rock	
						10.0			
						15.0			
						20.0			
						25.0			

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-19

Page 1 of 1

Project:	Proposed Mixed-Use Development	**WAI Project No.:**	GS2016988.000
Location:	Liberty Street & Maple Street; Paterson, Passaic County, NJ	**Client:**	Shore Point Engineering
Surface Elevation:	± 130.0 feet	**Date Started:**	3/25/2020
Termination Depth:	20.0 feet bgs	**Date Completed:**	3/25/2020
Proposed Location:	Building	**Logged By:**	MH
Drill / Test Method:	HSA / SPT	**Contractor:**	JG
		Equipment:	CME-55

Water Depth | Elevation (feet bgs) | (feet)		Cave-In Depth | Elevation (feet bgs) | (feet)	
During:	13.0 | 117.0	At Completion:	-- | --
At Completion:	13.0 | 117.0	24 Hours:	-- | --
24 Hours:	-- | --		

SAMPLE INFORMATION						DEPTH	STRATA		DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	No	Type	Blows Per 6"	Rec. (in.)	N	(feet)				
						0.0	CONCRETE		4" Concrete	
						0.4	FILL			
1 - 3	S-1	X	4 - 4 - 6 - 12	20	10				Brown Sand, Moist (FILL)	Reworked Material 1.0 fbgs to 7.0 fbgs
3 - 5	S-2	X	20 - 11 - 8 - 6	22	19				As Above (FILL)	
						5.0				
5 - 7	S-3	X	4 - 3 - 4 - 4	3	7				As Above (FILL)	
						7.0				
7 - 9	S-4	X	4 - 6 - 9 - 11	16	15				Dark Gray to Black Cinders, Moist (FILL)	Trace Brick
						9.0				
9 - 11	S-5	X	11 - 9 - 6 - 5	14	15	10.0			Brown Silty Sand, Debris, Moist (FILL)	Debris: Coal, Cinders
						11.0				
11 - 13	S-6	X	4 - 4 - 4 - 4	20	8		RESIDUAL		Brown Sandy Silt, Very Moist, Loose (ML)	
						13.0				
13 - 15	S-7	X	4 - 5 - 5 - 6	20	10				Brown Silty Sand, Wet, Medium Dense (SM)	
						15.0				
18 - 19.8	S-8	X	5 - 7 - 16 - 50/3"	16	23	19.0			As Above (SM)	
						20.0	WEATHERED ROCK		Reddish-Brown Weathered Rock Weathered Rock, Wet, Very Dense (WR)	
									Boring Log B-19 Terminated at a Depth of 20.0 Feet Below Ground Surface Due to Auger Refusal	
						25.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Soil Profile Pit No.: SPP-1

Project:	Proposed Mixed-Use Development	**WAI Project No.:**	GJ2016988.000
Location:	Liberty Street & Maple Street; Paterson, Passaic County, NJ	**Client:**	Shore Point Engineering

				Water Depth (feet bgs) | Elevation (feet)		Estimated Seasonal High Groundwater Depth (feet bgs) | Elevation (feet)
Surface Elevation:	± 158.0 feet	**Date Started:**	3/18/2020			
Termination Depth:	11.0 feet bgs	**Date Completed:**	3/18/2020			
Proposed Location:	SWM	**Logged By:**	MH	**During:**	NE | ---	
Excavating Method:	Test Pit Excavation	**Contractor:**	MC	**At Completion:**	--- | ---	**At Completion:** --- | ---
Test Method:	Visual Observation	**Rig Type:**	Deere 4105	**24 Hours:**	--- | ---	

SAMPLE INFORMATION			DEPTH		HORIZON	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	Number	Type	feet				
			0.0				
				0 - 1	TOPSOIL	12" Topsoil	
			1.0				
				1 - 4	FILL	Gray (2.5YR 5/1) LOAMY SAND; 5% Gravel, <5% Boulders; Granular; Moist; Friable 10% Roots; No Mottling; Clear Boundary	Debris: Concrete, Bricks
			2.0				
			3.0				
			4.0				
				4 - 11	GLACIAL DEPOSITS	Brown (7.5YR 4/4) LOAMY SAND; <5% Gravel; Granular; Moist; Friable; No Roots; No Mottling; Clear Boundary	Infiltration Test @ 4.0 fbgs
			5.0				
			6.0				
			7.0				
			8.0				
			9.0				
			10.0				
			11.0				
						Soil Profile Pit SPP-1 Terminated at a Depth of 11.0 Feet Below Ground Surface Due to Bucket Refusal on Boulder/Rock	
			12.0				
			13.0				
			14.0				
			15.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Soil Profile Pit No.: SPP-2

Project:	Proposed Mixed-Use Development	**WAI Project No.:**	GJ2016988.000
Location:	Liberty Street & Maple Street; Paterson, Passaic County, NJ	**Client:**	Shore Point Engineering

				Water Depth (feet bgs) | Elevation (feet)	Estimated Seasonal High Groundwater Depth (feet bgs) | Elevation (feet)
Surface Elevation:	± 158.0 feet	**Date Started:**	3/18/2020		
Termination Depth:	12.0 feet bgs	**Date Completed:**	3/18/2020		
Proposed Location:	SWM	**Logged By:**	MH	**During:** NE | ---	
Excavating Method:	Test Pit Excavation	**Contractor:**	MC	**At Completion:** --- | ---	**At Completion:** --- | ---
Test Method:	Visual Observation	**Rig Type:**	Deere 4105	**24 Hours:** --- | ---	

SAMPLE INFORMATION			DEPTH		HORIZON	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	Number	Type	feet				
			0.0				
				0 - 0.4	TOPSOIL	5" Topsoil	
				0.4 - 12	GLACIAL DEPOSITS	Brown (7.5YR 4/4) SAND; 5% Gravel; Granular; Moist; Friable; No Roots; No Mottling; Clear Boundary	
			1.0				
			2.0				
			3.0				
			4.0				Infiltration Test @ 4.0 fbgs
			5.0				
			6.0				
			7.0				
			8.0				Some Boulders 8.0 fbgs to 12.0 fbgs
			9.0				
			10.0				
			11.0				
			12.0				
						Soil Profile Pit SPP-2 Terminated at a Depth of 12.0 Feet Below Ground Surface	
			13.0				
			14.0				
			15.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Soil Profile Pit No.: SPP-3

Project:	Proposed Mixed-Use Development	**WAI Project No.:**	GJ2016988.000
Location:	Liberty Street & Maple Street; Paterson, Passaic County, NJ	**Client:**	Shore Point Engineering

				Water Depth | Elevation (feet bgs) | (feet)	Estimated Seasonal High Groundwater Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± 158.0 feet	**Date Started:**	3/18/2020		
Termination Depth:	12.0 feet bgs	**Date Completed:**	3/18/2020		
Proposed Location:	SWM	**Logged By:**	MH	**During:** NE | ---	
Excavating Method:	Test Pit Excavation	**Contractor:**	MC	**At Completion:** --- | ---	**At Completion:** --- | ---
Test Method:	Visual Observation	**Rig Type:**	Deere 4105	**24 Hours:** --- | ---	

SAMPLE INFORMATION			DEPTH		HORIZON	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	Number	Type	feet				
			0.0				
				0 - 0.5	TOPSOIL	6" Topsoil	
				0.5 - 3	GLACIAL DEPOSITS	Brown (7.5YR 4/4) LOAMY SAND; <5% Gravel; Granular; Moist; Friable; No Roots; No Mottling; Clear Boundary	
			1.0				
			2.0				
			3.0				
				3 - 5		Brown (7.5YR 4/4) SANDY CLAY LOAM; <5% Gravel; Platy; Moist; Sticky; No Roots; No Mottling; Clear Boundary	
			4.0				Infiltration Test @ 4.0 fbgs
			5.0				
				5 - 12		Brown (7.5YR 4/4) SAND; 5% Gravel; Granular; Moist; Friable; No Roots; No Mottling; Clear Boundary	
			6.0				
			7.0				
			8.0				
			9.0				
			10.0				
			11.0				
			12.0				
			13.0			Soil Profile Pit SPP-3 Terminated at a Depth of 12.0 Feet Below Ground Surface	
			14.0				
			15.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Soil Profile Pit No.: SPP-4

Project:	Proposed Mixed-Use Development	**WAI Project No.:**	GJ2016988.000
Location:	Liberty Street & Maple Street; Paterson, Passaic County, NJ	**Client:**	Shore Point Engineering

				Water Depth | Elevation (feet bgs) | (feet)	Estimated Seasonal High Groundwater Depth | Elevation (feet bgs) | (feet)
Surface Elevation:	± 158.0 feet	**Date Started:**	3/18/2020		
Termination Depth:	12.0 feet bgs	**Date Completed:**	3/18/2020		
Proposed Location:	SWM	**Logged By:**	MH	**During:** NE | ---	
Excavating Method:	Test Pit Excavation	**Contractor:**	MC	**At Completion:** --- | ---	**At Completion:** --- | ---
Test Method:	Visual Observation	**Rig Type:**	Deere 4105	**24 Hours:** --- | ---	

SAMPLE INFORMATION			DEPTH		HORIZON	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	Number	Type	feet				
			0.0				
				0 - 0.4	TOPSOIL	5" Topsoil	
				0.4 - 12	GLACIAL DEPOSITS	Brown (7.5YR 4/4) SAND; <5% Gravel; Granular; Moist; Friable; No Roots; No Mottling; Clear Boundary	
			1.0				
			2.0				
			3.0				
			4.0				
			5.0				
			6.0				
			7.0				
			8.0				
			9.0				Cobbles @ 9.0 fbgs to 12.0 fbgs
			10.0				
			11.0				
			12.0				
			13.0			Soil Profile Pit SPP-4 Terminated at a Depth of 12.0 Feet Below Ground Surface	
			14.0				
			15.0				

NOTES: bgs = below ground surface, NA = Not Applicable, NE = Not Encountered, NS = Not Surveyed, P = Perched

WHITESTONE ASSOCIATES, INC.

INFILTRATION TEST

Client: Shore Point Engineering

Project: Prop. Mixed-Use Development

Location: Paterson, NJ

File No. GS2016988.000

Surf. Elev. 158.00

Test Hole No.: SPP-1

Date: 3/18/2020

Weather: Sunny, 56° F

Field Engineer: M. Hengler

Test Depth Ft. | Elev.: 4.00 | 154.00

Reading No.	Time		Water Level Reading (inches)		Water Level Fall (Inches)	Time Interval (Hours)	Rate of Flow (Inches/Hour)
	Start	Finish	Start	Finish			
PS	9:00 AM	9:20 AM	8.0	5.0	3.0	0.33	9.0
R-1	9:20 AM	9:40 AM	8.0	5.0	3.0	0.33	9.0
R-2	9:40 AM	10:00 AM	8.0	5.0	3.0	0.33	9.0

Field i = 0.0 in/hr

NOTES: PS = Pre Soak; NS = Not Surveyed

WHITESTONE ASSOCIATES, INC.

INFILTRATION TEST

Client:	Shore Point Engineering	**Test Hole No.:**	SPP-2
Project:	Prop. Mixed-Use Development	**Date:**	3/18/2020
Location:	Paterson, NJ	**Weather:**	Sunny, 56° F
File No.	GS2016988.000	**Field Engineer:**	M. Hengler
Surf. Elev.	160.00	**Test Depth Ft. | Elev.:**	4.00 | 156.00

Reading No.	Time		Water Level Reading (inches)		Water Level Fall (Inches)	Time Interval (Hours)	Rate of Flow (Inches/Hour)
	Start	Finish	Start	Finish			
PS	9:45 AM	10:05 AM	8.0	4.0	4.0	0.33	12.0
R-1	10:05 AM	10:25 AM	8.0	5.0	3.0	0.33	9.0
R-2	10:25 AM	10:45 AM	8.0	5.0	3.0	0.33	9.0
R-3	10:45 AM	11:05 AM	8.0	5.0	3.0	0.33	9.0

Field i = 0.0 in/hr

NOTES: PS = Pre Soak; NS = Not Surveyed

WHITESTONE ASSOCIATES, INC.

INFILTRATION TEST

Client: Shore Point Engineering

Project: Prop. Mixed-Use Development

Location: Paterson, NJ

File No. GS2016988.000

Surf. Elev. 158.00

Test Hole No.: SPP-4

Date: 3/18/2020

Weather: Sunny, 56° F

Field Engineer: M. Hengler

Test Depth Ft. | Elev.: 4.00 | 154.00

Reading No.	Time		Water Level Reading (inches)		Water Level Fall (Inches)	Time Interval (Hours)	Rate of Flow (Inches/Hour)
	Start	Finish	Start	Finish			
PS	10:50 AM	11:10 AM	8.0	4.0	4.0	0.33	12.0
R-1	11:10 AM	11:30 AM	8.0	4.0	4.0	0.33	12.0
R-2	11:30 AM	11:50 AM	8.0	4.0	4.0	0.33	12.0

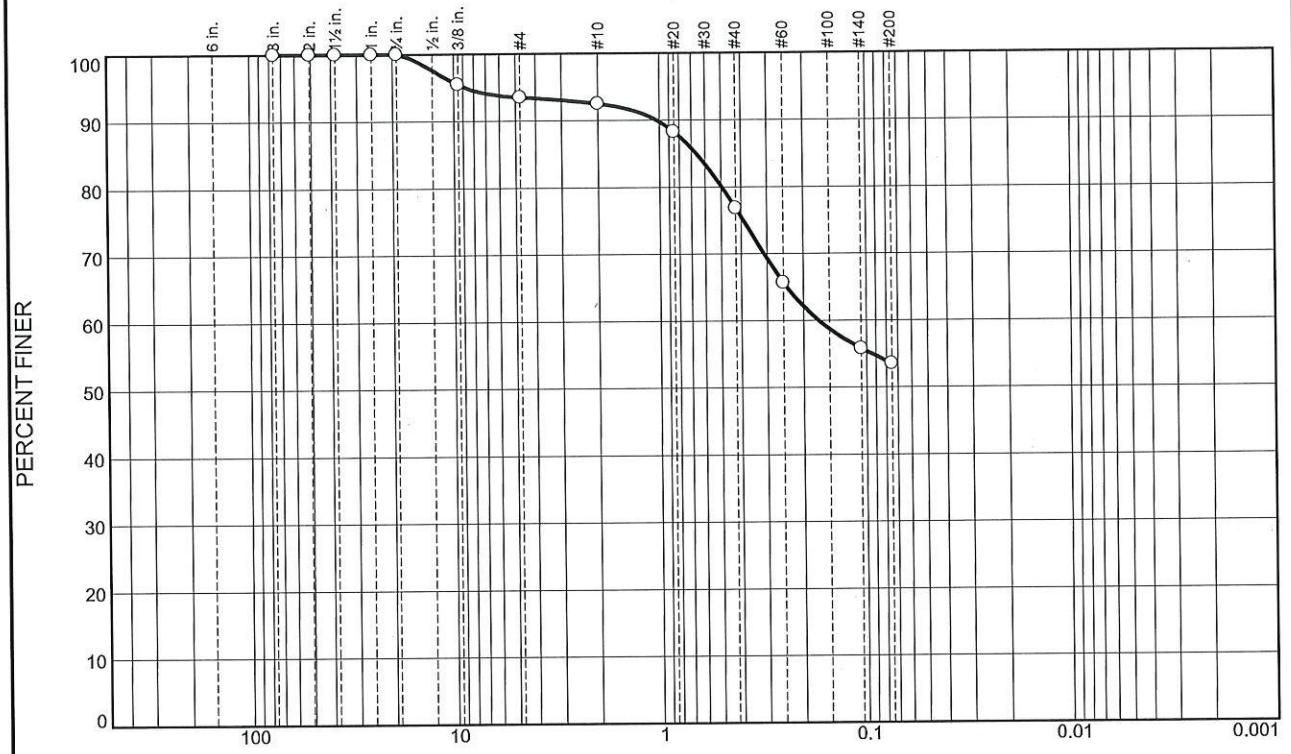
Field i = 0.0 in/hr

NOTES: PS = Pre Soak; NS = Not Surveyed

WHITESTONE
ASSOCIATES, INC.

APPENDIX B
Laboratory Test Results

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	6.5	1.0	15.7	23.3	53.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	95.4		
#4	93.5		
#10	92.5		
#20	88.2		
#40	76.8		
#60	65.6		
#140	55.8		
#200	53.5		

* (no specification provided)

Material Description

Sandy Lean Clay

Atterberg Limits

PL= 18 LL= 27 PI= 9

Coefficients

D_{90}= 1.0367 D_{85}= 0.6634 D_{60}= 0.1699
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-4(2)

Remarks

W_n = 17.2 %

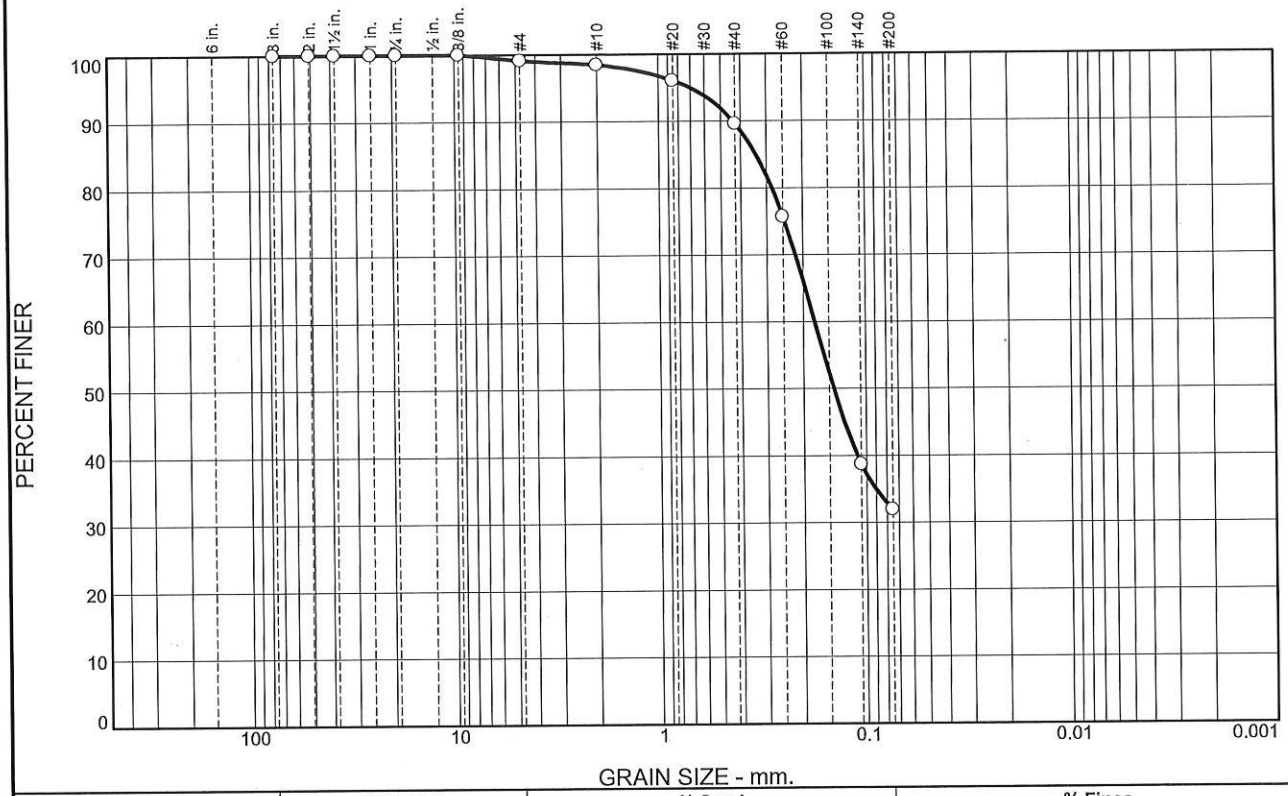
Source of Sample: B-2 **Depth:** 6.0' - 8.0'
Sample Number: S-4

Date: 04/08/2020

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Shore Point Engineering
Project: Proposed Mixed-Use Development
Liberty Street & Maple Street, Paterson, Passaic County, NJ
Project No: GS2016988.000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.9	0.6	8.9	57.7	31.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	100.0		
#4	99.1		
#10	98.5		
#20	96.1		
#40	89.6		
#60	75.7		
#140	38.7		
#200	31.9		

* (no specification provided)

Material Description

Silty Sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.4364 D_{85}= 0.3381 D_{60}= 0.1764
D_{50}= 0.1428 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

W_n = 11.7 %

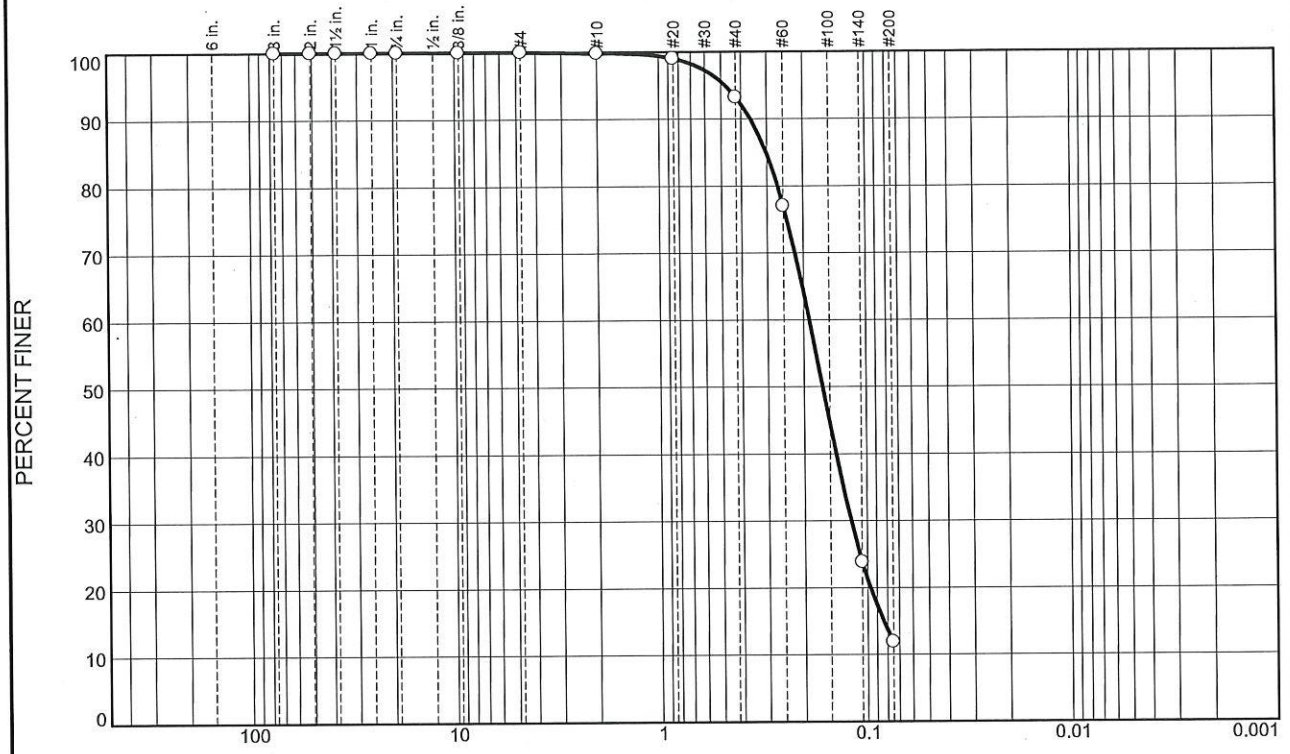
Source of Sample: B-4 **Depth:** 2.0' - 4.0'
Sample Number: S-2

Date: 04/08/2020

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Shore Point Engineering
Project: Proposed Mixed-Use Development
Liberty Street & Maple Street, Paterson, Passaic County, NJ
Project No: GS2016988.000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.2	6.6	81.3	11.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	100.0		
#4	100.0		
#10	99.8		
#20	99.0		
#40	93.2		
#60	77.0		
#140	23.8		
#200	11.9		

* (no specification provided)

Material Description

Poorly Graded Sand with Silt

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.3610 D_{85}= 0.3029 D_{60}= 0.1883
D_{50}= 0.1627 D_{30}= 0.1194 D_{15}= 0.0834
D_{10}= C_u= C_c=

Classification

USCS= SP-SM AASHTO= A-2-4(0)

Remarks

W_n = 4.3 %

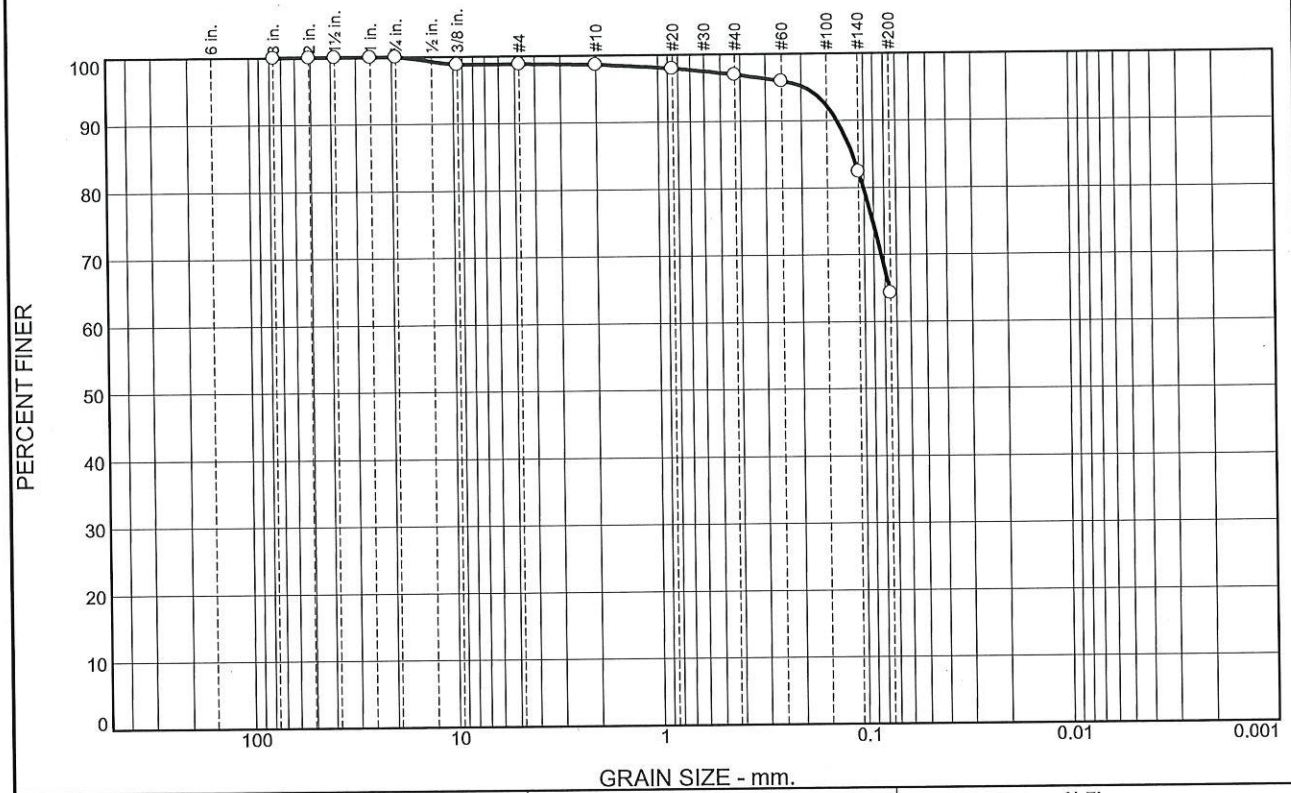
Source of Sample: B-5 **Depth:** 4.0' - 6.0'
Sample Number: S-3

Date: 04/08/2020

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Shore Point Engineering
Project: Proposed Mixed-Use Development
Liberty Street & Maple Street, Paterson, Passaic County, NJ
Project No: GS2016988.000 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.2	0.2	1.6	32.8	64.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	98.8		
#4	98.8		
#10	98.6		
#20	98.0		
#40	97.0		
#60	95.9		
#140	82.4		
#200	64.2		

* (no specification provided)

Material Description

Sandy Silt

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.1342 D_{85}= 0.1134 D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= ML AASHTO= A-4(0)

Remarks

W_n = 18.8 %

Source of Sample: B-10 **Depth:** 8.0' - 10.0'
Sample Number: S-5

Date: 04/08/2020

WHITESTONE ASSOCIATES, INC.
Warren, New Jersey

Client: Shore Point Engineering
Project: Proposed Mixed-Use Development
Liberty Street & Maple Street, Paterson, Passaic County, NJ
Project No: GS2016988.000 **Figure**

Tube Permeameter Test Data

Job Number: GS2016988.000
Project: Proposed Development
Client: Shore Point Engineering
Lab Tech: MH

Sample ID: **Profile Pit No.:** SPP-3 **Sample No.:** T-1 **Depth:** 4.0'

COUNTY/MUNICIPALITY Edison BLOCK _____ LOT _____

1. Test Number 1 Replicate (letter) A Date Collected _____

2. Material Tested: _____ Fill X Test in Native Soil

3. Type of Sample: X Undisturbed _____ Disturbed

4. Sample Dimensions: Inside Radius of Sample Tube, R, in cm 1.91
   Length of Sample, L, in inches 3.00

5. Bulk Density Determination (Disturbed Samples Only): N/A

6. Sample Weight (Wt. Tube Containing Sample-Wt. of Empty Tube), grams 0.00

   Wt. of Tube Containing Sample _____
   Wt. of Empty Tube _____

7. Sample Volume (L x 2.54 cm./inch x 3.14R2), cc. 86.83

8. Bulk Density (Sample Wt./Sample Volume), grams/cc. 0 > 1.2

9. Standpipe Used: X No _____ Yes, Indicate Internal Radius, cm. N/A

10. Height of Water Level Above Rim of Test Basin, in inches:

    At the Beginning of Each Test Interval, H1 5.00
    At the End of Each Test Interval, H2 4.99

11. Rate of Water Level Drop (Add additional lines if needed):

Time, Start of Test Interval, T1	Time End of Test Interval T2	Length of Test Interval, T, Minutes
		1440.00

* No appreciable movement after 24 hours.

12. Calculation of Permeability: K, (in/hr) = 60 min/hr x r2/R2 x L(in)/T(min) x ln (H1/H2) T= 1440.00

    K (in/hr) = 0.00 **Classification:** **K0**

13. Defects in the Sample (Check appropriate items):

    X None

    _____ Soil/Tube Contact _____ Large Gravel _____ Large Roots

    _____ Dry Soil _____ Smearing _____ Compaction

    _____ Other - Specify _____

Tube Permeameter Test Data

Job Number: GS2016988.000
Project: Proposed Development
Client: Shore Point Engineering
Lab Tech: MH

Sample ID: **Profile Pit No.:** SPP-3 **Sample No.:** T-1 **Depth:** 4.0'

COUNTY/MUNICIPALITY Edison BLOCK _____ LOT _____

1. Test Number 1 Replicate (letter) B Date Collected _____

2. Material Tested: _____ Fill X Test in Native Soil

3. Type of Sample: X Undisturbed _____ Disturbed

4. Sample Dimensions: Inside Radius of Sample Tube, R, in cm 1.91
   Length of Sample, L, in inches 3.00

5. Bulk Density Determination (Disturbed Samples Only): N/A

6. Sample Weight (Wt. Tube Containing Sample-Wt. of Empty Tube), grams 0.00

   Wt. of Tube Containing Sample _____
   Wt. of Empty Tube _____

7. Sample Volume (L x 2.54 cm./inch x 3.14R2), cc. 86.83

8. Bulk Density (Sample Wt./Sample Volume), grams/cc. 0 > 1.2

9. Standpipe Used: X No _____ Yes, Indicate Internal Radius, cm. N/A

10. Height of Water Level Above Rim of Test Basin, in inches:

    At the Beginning of Each Test Interval, H1 5.00
    At the End of Each Test Interval, H2 4.99

11. Rate of Water Level Drop (Add additional lines if needed):

Time, Start of Test Interval, T1	Time End of Test Interval T2	Length of Test Interval, T, Minutes
		1440.00

* No appreciable movement after 24 hours.

12. Calculation of Permeability: K, (in/hr) = 60 min/hr x r2/R2 x L(in)/T(min) x ln (H1/H2) T= 1440.00

    K (in/hr) = 0.00 **Classification:** **K0**

13. Defects in the Sample (Check appropriate items):

    X None

    _____ Soil/Tube Contact _____ Large Gravel _____ Large Roots

    _____ Dry Soil _____ Smearing _____ Compaction

    _____ Other - Specify _____

WHITESTONE
ASSOCIATES, INC.

APPENDIX C
Supplemental Information
(USCS, Terms & Symbols)

WHITESTONE
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Environmental & Geotechnical Engineers & Consultants

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BUILDING B, SUITE 101
MANASQUAN, NJ 08736
732.592.2101
whitestoneassoc.com

UNIFIED SOIL CLASSIFICATION SYSTEM

SOIL CLASSIFICATION CHART

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

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS FOR SAMPLES WITH 5% TO 12% FINES

GRADATION*

% FINER BY WEIGHT

TRACE..... 1% TO 10%
LITTLE..... 10% TO 20%
SOME..... 20% TO 35%
AND..... 35% TO 50%

COMPACTNESS*
Sand and/or Gravel

RELATIVE DENSITY

LOOSE. ..... 0% TO 40%
MEDIUM DENSE.... 40% TO 70%
DENSE..... 70% TO 90%
VERY DENSE..... 90% TO 100%

CONSISTENCY*
Clay and/or Silt

RANGE OF SHEARING STRENGTH IN POUNDS PER SQUARE FOOT

VERY SOFT..... LESS THAN 250
SOFT..... 250 TO 500
MEDIUM..... 500 TO 1000
STIFF..... 1000 TO 2000
VERY STIFF..... 2000 TO 4000
HARD..... GREATER THAN 4000

** VALUES ARE FROM LABORATORY OR FIELD TEST DATA, WHERE APPLICABLE. WHEN NO TESTING WAS PERFORMED, VALUES ARE ESTIMATED.*

L:\Geotechnical Forms and References\Reports\USCSTRMSSYM NJ-Wall.docx

Other Office Locations:

WARREN, NJ 908.668.7777
CHALFONT, PA 215.712.2700
SOUTHBOROUGH, MA 508.485.0755
ROCKY HILL, CT 860.726.7889
EVERGREEN, CO 303.670.6905

WHITESTONE
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2430 HIGHWAY 34
BUILDING B, SUITE 101
MANASQUAN, NJ 08736
732.592.2101
whitestoneassoc.com

GEOTECHNICAL TERMS AND SYMBOLS

SAMPLE IDENTIFICATION

The Unified Soil Classification System is used to identify the soil unless otherwise noted.

SOIL PROPERTY SYMBOLS

N: Standard Penetration Value: Blows per ft. of a 140 lb. hammer falling 30" on a 2" O.D. split-spoon.
Qu: Unconfined compressive strength, TSF.
Qp: Penetrometer value, unconfined compressive strength, TSF.
Mc: Moisture content, %.
LL: Liquid limit, %.
PI: Plasticity index, %.
δd: Natural dry density, PCF.
▼: Apparent groundwater level at time noted after completion of boring.

DRILLING AND SAMPLING SYMBOLS

NE: Not Encountered (Groundwater was not encountered).
SS: Split-Spoon - 1 ⅜" I.D., 2" O.D., except where noted.
ST: Shelby Tube - 3" O.D., except where noted.
AU: Auger Sample.
OB: Diamond Bit.
CB: Carbide Bit
WS: Washed Sample.

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

Term (Non-Cohesive Soils)	Standard Penetration Resistance
Very Loose	0-4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	Over 50

Term (Cohesive Soils)	Qu (TSF)
Very Soft	0 - 0.25
Soft	0.25 - 0.50
Firm (Medium)	0.50 - 1.00
Stiff	1.00 - 2.00
Very Stiff	2.00 - 4.00
Hard	4.00+

PARTICLE SIZE

Boulders	8 in.+	Coarse Sand	5mm-0.6mm	Silt	0.074mm-0.005mm
Cobbles	8 in.-3 in.	Medium Sand	0.6mm-0.2mm	Clay	-0.005mm
Gravel	3 in.-5mm	Fine Sand	0.2mm-0.074mm		

Other Office Locations:

WARREN, NJ 908.668.7777
CHALFONT, PA 215.712.2700
SOUTHBOROUGH, MA 508.485.0755
ROCKY HILL, CT 860.726.7889
EVERGREEN, CO 303.670.6905

EWMA
INNOVATIVE | EXPERIENCED | RESPONSIVE

Phase I Environmental Site Assessment/ Preliminary Assessment Report

Hinchliffe Stadium Rehabilitation Project
1-27 Jasper Street
Block 801, Lot 7 and a portion of Lot 23
Paterson, Passaic County, NJ 07506

Submitted to:
RPM Development Group
77 Park Street
Montclair, New Jersey 07042

Submitted by:
EWMA
100 Misty Lane, POB 5430
Parsippany, NJ 07054-2741

April 2020

Project 210290

Prepared by Bradley N. Chupick
Senior Environmental Scientist

Reviewed by Victoria Reed
Director, Real Estate Services

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Executive Summary

On March 16, 2020, EWMA conducted a Phase I Environmental Site Assessment (ESA)/Preliminary Assessment (PA) of the Property located at Block 801, Lot 7 and a portion of Lot 23, Paterson, Passaic County, New Jersey (the Property). EWMA has performed the Phase I ESA in conformance with the scope and limitation of ASTM Standard Practice E 1527-13. This Phase I ESA also includes elements of the Preliminary Assessment (PA) process pursuant to the New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for Site Remediation (TRSR), N.J.A.C. 7:26E to allow for the entity acquiring the Property to qualify for eligibility under the New Jersey Spill Act's innocent purchaser defense.

Our review of general property information, observation of adjacent properties, research of historical property information, including a review of environmental records, and a Property visit revealed the following:

	No Further Action	BER	REC	HREC	CREC	De Minimis	AOC
Historical Use of the Property	X						
Current Operations	X						
Hazardous Materials	X						
Potable Well	X						
Evidence of a Spill / Discharge	X						
Storage Tanks/Pipelines	X						
Migrating Hazardous Substances	X						
Air vents and Ducts	X						
Historic Fill			X-1				X-1
Storm Water/Drains	X						
Regulatory Database Review	X						
Solid Waste	X						
Septic Systems	X						
Railroad Siding	X						
ISRA Applicability	X						
Historic Agricultural Use	X						

BER – Business Environmental Risk
REC-Recognized Environmental Condition
HREC-Historic Recognized Environmental Condition
CREC-Controlled Recognized Environmental Condition
AOC – Area of Concern

2. Site Description

2.1 Location and Legal Description

Current Property Owner	Lot 7 is owned by Paterson Public Schools/Business Office and Lot 23 is owned by the City of Paterson
Property Street Address	Jasper Street (**Figure 1** and **Figure 2**)
Block and Lot	Block 801, Lot 7 and a portion of 23 (**Figure 3**)
City	City of Paterson
County	Passaic
State	New Jersey
Acreage of Land	Lot 7 – 0.88 acres, Lot 23 – 2 acres
Building Square Footage	N/A
Building Construction	No permanent structures present. One plastic 100 square foot shed.
Current Tenant	Vacant
Property Zoning Information	B-2 - Business zoned

2.2 Site and Vicinity General Characteristics

The Property is within a commercial and residential area in the southeastern portion of the City of Paterson, Passaic County, New Jersey. The Property is located to the northeast side of Hinchliffe Stadium, and south of the intersection of Maple Street in the City of Paterson, Passaic County, New Jersey. The Property is within a mixed commercial and residential area. The Property is undeveloped, is generally rectangular in shape, and is in close proximity to the Paterson Great Falls National Historic Park.

2.3 Current Uses of the Property

The Property is zoned "B-2" for neighborhood business use. The Property is known as Lot 7 and a portion of Lot 23, City of Paterson, NJ. A chain link fence surrounds the northern, eastern and western portions of the Property. No permanent structures are located on the Property. Small wooden garden frames were used by the Paterson Public Community "Elysian Fields" Garden group. In addition, a plastic 100 square foot storage shed is located on the Property and is currently empty. The remainder of the Property consists of undeveloped wooded and grassy areas.

The Property was used by the public as the Paterson Public Community "Elysian Fields" Garden. Based on this information, the operations conducted onsite were not subject to the provisions of the New Jersey Industrial Site Recovery Act (ISRA), N.J.S.A. 13:1K-6

ets, eq. and N.J.A.C. 7:26B should a triggering event occur (such as the sale of the Property or their cessation of operations).

2.4 Description of Structures, Roads, Other Improvements on the Site

Item	Details
Building Construction	No permanent structures. Plastic 100 square foot storage shed onsite.
Basement	No building or basement.
Electric	Public Service Electric and Gas (PSE&G)
Gas	Public Service Electric and Gas (PSE&G)
Water	Passaic Valley Water Commissioners
Sanitary Sewer	Passaic Valley Sewerage Authority Sanitary-Combined
Storm Sewer	Paterson Municipal Utility Authority Sanitary-Combined
Road Access	Maple Street
Parking Lots	Asphalt-paved on the northern portion.
Areas of Landscaping	Grass areas on the east, south, and western portions of the Property.

There are no structures onsite; however, wastewater in the area is discharged through the Passaic Valley Sewerage Authority. No evidence of a septic system or other wastewater treatment system was observed on the Property. PSE&G provides electricity service and natural gas to the Property.

2.5 Regional Geology / Hydrogeology

Item	Details
USGS Quadrangle Map Used	Paterson, NJ (2014)
Site Elevation (MSL)	155 feet
Site Geology	Piedmont Physiographic Province, siltstone and shale
Soil Unit	The soil is described as well-drained within the Holyoke-rock outcrop complex. NJDEP's GeoWeb mapping program also designates the surficial geology of the area as Rahway Till, composed of clayey silt to sandy silt with some to many pebbles and cobbles deposited from glacial ice during the late Wisconsin glaciations. Bedrock geology is classified as fine to mid-grained Orange Mountain Basalt.
Principal Aquifer	Passaic Aquifer

Depth to Water (Feet BSL)	Based on EDR Geo-Check information groundwater is generally located approximately within 10 feet below grade
Estimated Direction of Groundwater Flow	To the south toward the Passaic River and Great Falls (Based on the site visit and the EDR database).
Closest Water Bodies (Feet from Site and Direction)	The Passaic River and Great Falls is located immediately to the south of the Property. (Based on the site visit and the EDR database).
Historic Fill Map	According to the Paterson, NJ topographic map a portion of the Property is identified as being developed with historic fill. (See **Figure 3A**)

According to the Paterson, NJ topographic map a portion of the Property (along the southwestern border) is identified as being developed with historic fill. Please refer to **Figure 3A** for NJDEP's GeoWeb map. Historic fill generally constitutes a concern when it contains industrial waste, construction and demolition debris, coal ash, dredge spoils, or other potentially contaminated anthropogenic materials. The presence of historic fill material is considered an AOC and is discussed in **Section 8.0.**

AREA
OF
Concern

3. Adjacent Properties

Adjoining properties are generally used for commercial retail and residential purposes. The following uses were noted at the time of EWMA's site visit:

Adjoining Properties	Name	Address	Operations
North	Electronic Transformer Corporation	460 Totowa Avenue	Electronics Manufacturing
South	Hinchliffe Stadium	186-218 Maple Street	Residential Properties
East	Passaic River and Great Falls	N/A	Passaic River
West	Residential Properties	Liberty Street	Residential Properties

EWMA did not observe obvious RECs/AOCs on the adjacent properties during the site visit.

4. Records Review

4.1 Standard Environmental Records Sources

EWMA reviewed the latest information from federal, state and local agencies concerning sites within the "approximate minimum search distance" specified in ASTM E 1527-13. EWMA reviewed the database report prepared by Environmental Data Resources, Inc. (EDR) that is included as **Appendix 5** to evaluate whether there are off-site sources of environmental contamination that could impact the site.

The EDR report identified 507 sites within the searched radii. The Property was not identified in any of the databases. The remaining sites are not considered RECs in connection with the Property because either: a) they are topographically downgradient of the Property based upon their locations using the EDR Overview & Detail Maps and approximate topographic elevations using the 7.5 minute USGS Topographic Map for the Paterson, NJ Quadrangle; b) they are at too great a distance from the Property; c) there is no documentation that a discharge has occurred; or d) an indicated spill case has been closed by the appropriate regulatory agency.

Please note that according to the attached EDR Report, 19 "orphan" sites are located within the searched radii. Orphan sites have a federal or state classification, but due to an address or zip code deficiency they were not plotted on the EDR maps. None of the listed orphan sites are considered RECs/AOCs.

4.2 Aerial Photographs

EWMA reviewed copies of historical aerial photographs to evaluate RECs/AOCs associated with the Property. Aerial photographs were reviewed at www.historicaerials.com, which depict the Property in the years 1931, 1953, 1954, 1966 1970, 1979, 1987, 1995, 2002, 2006, 2007, 2008, 2010, 2012, 2013, and 2015. A description of relevant features on each photograph reviewed follows.

Date(s)	Subject Property Description	Surrounding Area Descriptions
1931	The quality of the photograph is poor. The Property is undeveloped and no structures are shown. Extensive filling and grading is shown.	**North**: Commercial buildings are shown. **South:** Filling and grading is shown. **East:** Filling and grading is shown followed by the Passaic River. **West:** Filling and grading is shown. .

1953, 1954	The photograph is similar to the previous photograph. Vacant with evidence of filling and grading,	**North**: Commercial buildings are shown. **South:** Hinchliffe Stadium is shown constructed. **East:** Filling and grading is shown followed by the Passaic River. **West: Paterson** School No. 5 is shown constructed.
1966 1970	The Property and site features appear similar to the previous aerial photograph. However, no active filling is shown.	**North:** No significant changes. **South:** No significant changes. **East:** No significant changes. **West**: No significant changes.
1979	The photograph is similar to the previous photograph.	**North:** A commercial building is shown constructed to the northeast. **South:** No significant changes. **East:** No significant changes. **West:** No significant changes.
1987 1995	The Property appears similar to the previous aerial photographs.	**North:** No significant changes **South:** No significant changes. **East:** No significant changes. **West:** No significant changes.
2002, 2006, 2007, 2008	The Property appears similar to the previous aerial photographs. However, some disturbance and it appeared that the Property is fenced in.	**North:** No significant changes. **South:** No significant changes. **East:** No significant changes. **West**: No significant changes.
2010, 2012, 2013 2015	No significant changes. However, some clearing of vegetation is shown. These activities appear to be associated with the Paterson Garden group. By 2010 the Property is as it appears today.	The adjacent properties appear in their current configuration.

EWMA's review of the historical aerial photographs revealed that filling was evident at the Property and surrounding properties from approximately 1931 through 1954. According to historical records and a review of Sanborn maps (predating the aerial photographs) indicated that a reservoir known as the Middle Reservoir occupied the Property from at least 1915 through the mid 1950's. The presence of the Middle Reservoir in itself is not an environmental concern; however, this water body was drained and filled to grade as indicated in the aerial photographs. Fill material was imported to fill the reservoir and raise the Property to grade. Historic fill generally constitutes a concern when it contains industrial waste, construction and demolition debris, coal ash, dredge spoils, or other potentially contaminated anthropogenic materials. The quality of the fill material used to fill the reservoir is unknown at this time and therefore historic fill material is considered a REC/AOC. See **Section 8.0** for recommendations.

5. Site Reconnaissance

5.1 The Property

EWMA performed a reconnaissance of the Property on March 16, 2020. EWMA was unescorted during the Property walkthrough. EWMA walked the Property and observed site features. EWMA's visit was documented with photographs taken using a digital camera.

Please refer to the Photographic Log included in **Appendix 4**, which is presented with this report to document the physical conditions observed during the inspection performed by EWMA.

Observation	Interior	Exterior
Hazardous Substances and/or Petroleum Products in Connection with Property Use		
Hazardous Substance and Petroleum Product Containers and/or Unidentified Containers not in Connection with Property Use		
Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs / USTs)		
Strong, Pungent or Noxious Odors		
Pools of Liquid		
Drums		X
Electrical or Mechanical Equipment Likely to Contain Fluids		
Heating/Cooling		
Stains or Corrosion		
Drains, Sumps and Clarifiers		
Pits, Ponds and Lagoons		
Stressed Vegetation		
Solid Waste Disposal		X
Evidence of Fill Materials		X
Waste Water Discharges		
Wells		
Septic Systems		

The following was noted at the Property:

5.2 Storage Tanks

ASTs, USTs, or vent pipes, fill pipes or access ways indicating the presence of USTs were not observed at the Property during the site visit.

5.3 Electrical or Mechanical Equipment Likely to Contain Fluids

Transformers and electrical equipment were not observed at the Property during the Property visit or identified in interviews or record reviews.

5.4 Heating / Cooling

Heating or cooling systems were not observed at the Property during the Property visit or identified in interviews or record reviews.

5.5 Drains, Sumps, and Clarifiers

Drains, Sumps or Clarifiers were not observed at the Property during the Property visit or identified in interviews or record reviews.

5.6 Pits, Ponds or Lagoons

No pits, ponds or lagoons were observed at the Property during the site visit.

5.7 Indication of Solid Waste Disposal

EWMA observed used tires and some wood debris discarded in the southwestern portion of the Property. These materials are not considered a REC/AOC and EWMA recommends that they are properly disposed.

5.8 Evidence of Fill Materials

EWMA's review of the historical aerial photographs revealed that filling was evident at the Property and surrounding properties from approximately 1931 through 1954. According to historical records and a review of Sanborn maps, a reservoir known as the Middle Reservoir occupied the Property from at least 1915 through the mid-1950s. The presence of the Middle Reservoir in itself is not an environmental concern; however, this water body was drained and filled to grade as indicated in the aerial photographs. Fill material was imported to fill the reservoir and raise the Property to grade. Historic fill generally constitutes a concern when it contains industrial waste, construction and demolition debris, coal ash, dredge spoils, or other potentially contaminated anthropogenic materials. The quality of the fill material used to fill the reservoir is unknown at this time and, therefore, historic fill material is considered a REC/AOC.

SOIL TESTING RESULTS

In addition, the Paterson, NJ topographic map identifies a portion of the Property (along the southwestern border) as being developed with historic fill. Please refer to **Figure 3A** for NJDEP's GeoWeb Map. Historic fill generally constitutes a concern when it contains industrial waste, construction and demolition debris, coal ash, dredge spoils, or other potentially contaminated anthropogenic materials. The presence of historic fill material is considered a REC/AOC and discussed in **Section 8.0.**

5.8.1 Odors

Strong, pungent, or noxious odors were not observed at the Property during the Property visit or identified in interviews or record reviews.

5.8.2 Drums

EWMA observed one blue plastic 55- drum on the Property. Upon inspection the drum was used to dispose of trash and was placed they by the City of Paterson Department of Public Works. Since the drum only contained household type trash it is not considered a REC/AOC.

5.8.3 Pools of Liquid

Standing surface waters or pools of liquid potentially containing hazardous substances or petroleum products were not observed at the Property during the visit or identified in interviews or record reviews.

5.8.4 Stains or Corrosion

Stains or corrosions potentially caused by hazardous substances or petroleum products were not observed at the exterior portion of the Property during the visit and were not identified in interviews and record reviews.

5.8.5 Drains and Sumps

Storm water or roof drains were not observed at the exterior portion of the Property during the visit and were not identified in interviews and record reviews.

5.8.6 Pits, Ponds or Lagoons

Pits or lagoons potentially containing hazardous substances were not observed at the Property during the site visit or identified in interviews or record reviews.

5.8.7 Stressed Vegetation

Areas of stressed vegetation known to have been caused by hazardous substances or petroleum products were not observed at the Property during the visit and were not identified in interviews or record reviews.

5.8.8 Waste Water

Waste water known to contain hazardous substances or petroleum products were not observed at the Property during the visit or identified in interviews or record reviews.

5.8.9 Wells

Wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells) were not observed at the Property during the site visit.

5.8.10 Septic Systems

Indications of the presence of on-site septic systems or cesspools were not observed at the Property during the visit or identified in interviews or record reviews.

6. Vapor Intrusion

The potential for subsurface vapor encroachment from volatile organic compounds and petroleum products on the Property or from nearby properties listed in the above databases with known or suspected releases was evaluated.

6.1 Subject Property

No activity and use limitations at the Property indicating potential vapor intrusion were identified during this assessment. Based on standard sources reviewed and observations made during the property visit, no significant subsurface releases of chemicals of concern have occurred on the Property.

6.2 Adjacent Properties

Currently, adjoining properties are generally used for a mixture of commercial and residential purposes. Based on standard sources reviewed and observations made during the property visit, no significant subsurface releases of chemicals of concern have occurred on the adjacent properties.

7. Interviews

EWMA requested environmental records including reports of spills, hazardous materials releases/responses, USTs, and hazardous materials storage at the Property. Information pertaining to the Open Public Records Act (OPRA) and Freedom of Information Act (FOIA) requests is included in **Appendix 8**.

Interview	OPRA Request Sent	Individual Contacted	Comments/Concern
Interview with Property Owner, Property Manager		Mr. Joseph Portelli, VP RPM Development Group	Provided site information. No concerns identified.
Phase I ESA Questionnaire	3/12/2020	NA	Not completed
Building Department/Code Enforcement	3/12/2020	City of Paterson	Discussed below
Public Works	3/12/2020	City of Paterson	No records identified
Zoning / Land Use Records	3/12/2020	City of Paterson	B-2- (Business Use)
Property Tax Files	3/12/2020	City of Paterson	Discussed below
Health Department Records	3/12/2020	Passaic County	No records identified
Fire Department Records	3/12/2020	City of Paterson	No records identified
NJDEP Records	3/12/2020	NJDEP Record Access Officer	No records identified
US Environmental Protection Agency Records	3/12/2020	My PropertyInfo	Discussed below

City of Paterson Property Tax Files

According to the tax record cards, the Property is identified as Block 801, Lot 7 and a portion of Lot 23, Paterson, Passaic County, New Jersey. Lot 7 is owned by Paterson Public Schools/Business Office and Lot 23 is owned by the City of Paterson.

City of Paterson Zoning Department
According to the City of Paterson Zoning office the Property is located in a "B-2" for business use area.

City of Paterson Building Department Files
The City of Paterson Building Department provided general property records.

City of Paterson Fire Department Files
According to a Fire Official from the City of Paterson Fire Department Records Bureau, no records including reports of spills, hazardous materials releases/responses and hazardous materials storage were on file for the Property within the Department.

City of Paterson Health Department
EWMA has not received a response from the City of Paterson Health Department. If files are received after the preparation of this report that may change the findings EWMA will forward an addendum. A copy of our request letter and their response is provided in **Appendix 8**.

Passaic County Public Records
EWMA has not received a response from the Passaic County Public Records. If files are received after the preparation of this report that may change the findings EWMA will forward an addendum. A copy of our request letter and their response is provided in **Appendix 8**.

NJDEP Records
On March 15, 2020, EWMA submitted an electronic OPRA request to NJDEP for environmental information related to the Property. On March 20, 2020, EWMA received notification from the NJDEP that no records exist for the Property. Copies of the request and the NJDEP response are provided in **Appendix 8**.

United States Department of Environmental Protection Agency Records
MyPropertyInfo is a single reporting tool for obtaining USEPA information from multiple EPA databases. This tool allows firms to search EPA databases on a specific property without filing a FOIA request. The USEPA MyProperty Info online responses stated that no records were on file for the Property.

8. Findings, Opinions & Conclusions

EWMA has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 for Block 801, Lot 7 and a portion of Lot 23, Paterson, Passaic County, New Jersey (the Property). Any exceptions to, or deletions from, this practice are described in **Appendix1** of this report.

Our review of general property information, observation of adjacent properties, research of historical property information, including a review of environmental records, and a Property visit revealed the following RECs/AOCs through the performance of this Phase I ESA/PA as summarized below.

1. Historic Fill Related to a Former Reservoir:
EWMA's review of the historical aerial photographs revealed that filling was evident at the Property and surrounding properties from approximately 1931 through 1954. According to historical records and a review of Sanborn maps, a reservoir known as the Middle Reservoir occupied the Property from at least 1915 through the mid-1950s. The presence of the Middle Reservoir in itself is not an environmental concern; however, the water body was drained and filled to grade as indicated in the aerial photographs. Fill material was imported to fill the reservoir and raise the Property to grade. Historic fill generally constitutes a concern when it contains industrial waste, construction and demolition debris, coal ash, dredge spoils, or other potentially contaminated anthropogenic materials. The quality of the fill material used to fill the reservoir is unknown at this time and therefore historic fill material is considered a REC/AOC.

No evaluation is required under NJDEP regulations at this time. However, should a triggering event occur at the Property such as a release to subsurface or construction/activities occur which involve the disturbance and/or disposal of the site soils, appropriate site investigation sampling may be necessary to determine the quality of the soil. If historic fill material is confirmed to be present at the Property, it can be administratively addressed by recording a Deed Notice and obtaining a Remedial Action Permit for soils.

SOIL SAMPLING Results to determine quality of soil

9. References

A listing of the published reference sources relied upon in preparing this Phase I Environmental Site Assessment is included as **Appendix 9**.

10. Certification of Environmental Professionals

I, Bradley N. Chupick, declare that, to the best of my knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. I, Bradley N. Chupick, have the specific qualifications based on education, training and experience to assess the Property of the nature, history, and setting of the subject Property. I, Bradley N. Chupick, have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Statements of qualification for the environmental professionals who performed this Phase I are included as **Appendix 10.**

CITY OF PATERSON

ZONING BOARD OF ADJUSTMENT

RESOLUTION

WHEREAS, the Zoning Board of Adjustment of the City of Paterson (hereinafter referred to as the "Board") is empowered to hear and determine applications for development pursuant to the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq. and the Zoning and Land Development Ordinance of the City of Paterson, Section 100 et seq. (hereinafter referred to as the "Ordinance"); and

WHEREAS, HINCHLIFFE MASTER URBAN RENEWAL, L.P. is the applicant (hereinafter referred to as the "Applicant") with regard to property located at 1-27 Jasper Street, also known as, Block 801, Lot 7.01, and Passaic Falls Tract, also known as, Block 801, Lot 23 and proposed to be subdivided and identified as Lot 23.01, in the City of Paterson, County of Passaic, New Jersey (collectively the "Property"); and

WHEREAS, the Property is located in the Public Use District Zone and the National Park Gateway District Zone of the First Ward Redevelopment Plan; and

WHEREAS, the application is to construct a six-story mixed-use building on Jasper Street consisting of a childcare facility on the first floor ("Childcare Facility") and seventy-five (75) age-restricted, income-restricted housing units on the second through sixth floors ("Senior Housing") (The Senior Housing and the Childcare Facility are collectively referred to as the "Housing Component"). Applicant is proposing a ground floor parking garage with eleven (11) spaces; seven (7) off-street parking spaces; and on June 22, 2020, the Applicant received approval by the City of Paterson Planning Board for off-street parking in a new four-story accessory parking garage consisting of approximately 315 parking spaces to be constructed on Block 801, Lot 23.01. Applicant proposes a total of 333 parking spaces, whereas, 248 are required. The Applicant is seeking use, bulk, and "D" variances, as well as, preliminary and final site plan approvals; and

WHEREAS, the application was heard on July 27, 2020; and

WHEREAS, Marsha M. Moore, Esq., of Post Polak, P.A., appeared on behalf of the Applicant; Joseph Portelli appeared as Vice President of the RPM Development Group; Christopher Westcott appeared as the Architect; Kevin Shelly appeared as the Engineer;

Matthew Seckler appeared as the Traffic Engineer; George Wheatle Williams appeared as the Planner; and Bashar Sabbagh, and Luis Velez appeared as Interested Parties; and

WHEREAS, Exhibit A-1, Architectural Rendering (A-1.00); Exhibit A-2, Architectural Rendering (A-1.01); Exhibit A-3, Architectural Rendering (A-1.02); Exhibit A-4, Architectural Rendering (A-1.03); Exhibit A-5, Architectural Rendering (A-1.04); Exhibit A-6, Architectural Rendering (A-1.05); Exhibit A-7, Architectural Rendering (A-2.00); Exhibit A-8, Architectural Rendering (A-2.01); Exhibit A-9, Architectural Rendering (A-3.00); Exhibit A-10, Hinchliffe Residential Rendering; Exhibit A-11, Revised Site Plan Sheet dated, 7/14/2020; and Exhibit A-12, Site Plan Set were marked for identification; and

WHEREAS, Applicant proposes a mixed-use building on Jasper Street with the first floor consisting of a Childcare Facility and parking garage and the second through sixth floors consisting of Senior Housing with one (1) studio unit, eleven (11) one-bedroom units, and three (3) two-bedroom units on each floor, for a total of seventy-five (75) residential units; and

WHEREAS, Mr. Portelli reviewed the overall operations and indicated that the Senior Housing will be for independent living only, age-restricted and income-restricted to seniors 55 and older with an approximate income maximum of $56,000 based on the HUD 2020 income limits and subject to change yearly, with the exception of one unrestricted unit for a full-time live-in superintendent; and

WHEREAS, the Childcare Facility will be for preschoolers ages 3 to 4, and the end-user has not yet been determined, but Applicant acknowledges it can be a private operator, affiliated with the Paterson Public School District, or a nonprofit; and

WHEREAS, the surface lot on the proposed Jasper Street site will primarily be for the pick-up and drop-off of the Childcare Facility; the ground floor garage will be for a combination of the Childcare staff and management staff; the Senior Housing tenants will utilize the adjacent parking garage and have their own key for access; and the accessory parking garage will be available to residential tenants, users of the stadium, restaurant, and exhibition space, as well as, the general public; and

WHEREAS, Mr. Portelli indicated that be believes Applicant is compliant with the Americans with Disabilities Act (ADA) as one (1) handicapped space is proposed within the

Jasper Street ground floor parking garage and eight (8) handicapped spaces are proposed in the accessory garage, but Mr. Paparozzi indicated that he believes thirteen (13) handicapped spaces are required. Applicant agrees to be in compliance with the ADA; and

WHEREAS, variances requested are for use and "D" variances to permit the Housing Component in the Public Use District of the First Ward Redevelopment Plan, which is not permitted; floor area ratio (1.4 maximum, 3.0 proposed per City's planner, 2.93 proposed per Applicant); density (50 units/acre, 33 units allowed, 75 units proposed); and "C" bulk variances including minimum front setback (25 ft. required, 5.2 ft. proposed); minimum side setback – one (15 ft. required, 4.5 ft. proposed); minimum side setback – both (30 ft. required, 23.2 ft. proposed); rear setback (20' required, 10' proposed; lot coverage (20% maximum, 49.8% proposed); open space (15,500 sq. ft. required, 0 sq. ft. proposed; dumpster (10 ft. from building required, 0 ft. proposed); parking (all residential parking should be located on the same lot as the building, some parking proposed on Lot 23.01); size of two-bedroom units (900 sq. ft. required, 875 sq. ft. proposed per City's planner); and

WHEREAS, Mr. Westcott reviewed the architectural plans with the Board, and at the eastern edge of the Jasper Street site there is a trash compactor room to be used by the

residential units, which will be wheeled directly out into a trash enclosure outside of the building until brought out onto the street for pick up; and the first floor of the building also consists of a residential lobby with entrances from the parking garage or plaza, a management office, a package room, amenity room with a kitchenette and seating area, ADA-compliant bathrooms, and utility rooms; and

WHEREAS, all proposed apartments will include a modern kitchen and bathroom design with Energy-Star-rated and water-sensor-rated appliances, and the bathrooms will have blocking behind the toilets and in the showers to allow for grab bars in the future; and

WHEREAS, Applicant proposes laundry facilities in the center of the building accessible to all units on each floor, in addition, to janitor's closets and telecom closets; heating and cooling in each unit will be done via through-wall, energy-efficient packaged units in each bedroom and living room or a different system as recommended by the engineers of the building; and all residential and public spaces will have LED lighting; and

WHEREAS, the building facade will consist of brick veneer, masonry veneer cornice and base, fiber cement panel siding, and seam metal roofing, all with varying colors of gray, beige,

and white to match the surrounding area; and signage is proposed in the front, which will match the colors of the building; and

WHEREAS, based on Paterson's zoning ordinance, all four area requirements are based on the exterior face and exterior wall and centerline of demising wall units, which is typically about 10%more of the square footage, so all two-bedroom units will be over the 900 sq. ft. minimum and do not require a variance; and

WHEREAS, Mr. Paparozzi reviewed Mr. Westcott's plans and indicated that per testimony and clarification, all units meet the minimum square footage requirements; and although no tenant is presently proposed in the Childcare Facility, the number of children that are allowed to attend is determined by the Department of Children and Families based on the design and square footage; and

WHEREAS, as a security measure cameras will be installed and the Senior Housing tenants will have key fob access at all building entrances, stairwells, and parking garages, but no direct access between the Senior Housing and the Childcare facility; and

WHEREAS, Mr. Westcott noted that typically in urban environments, the intent would be to create a wall structure on the outside of the building with an STC or sound transmission coefficient ratio that allows for lower noise levels inside the building; and

WHEREAS, the architectural designs accommodate the trash and recyclable room on each floor to allow for either trash and recycling containers in each residential unit or access to a trash chute; and

WHEREAS, Mr. Shelly reviewed the engineering aspects of the application with the Board, and noted that access to the accessory parking garage will be through an access drive located in between the proposed residential building and Hinchliffe Stadium; and noted that the Senior Housing units will be designated parking spaces to ensure there is always available parking; and

WHEREAS, Mr. Shelly noted that Applicant proposes a stormwater infiltration basin underneath the access drive to handle the increased runoff generated by the proposed development; LED lighting; an attractive landscape design; and a courtyard adjacent to the residential building, equipped with benches and play tables to create an outdoor amenity

space; and the proposed site is surrounded by recreational spaces, including, but not limited to Vista Park, Hinchliffe Stadium, Mary Ellen Kramer Park, and the Great Falls; and

WHEREAS, Mr. Seckler reviewed the traffic and parking assessment report dated, April 9, 2020, and indicated that from a traffic and parking perspective, Applicant satisfies required standards, but the entrance and exit to the parking garage is through an access drive connected to Hinchliffe Stadium; and

WHEREAS, a Commissioner expressed concerns of the amount of congestion presently in the area and the roadways surrounding the site being narrow, potentially causing traffic issues, additional congestion, and bottlenecking; and

WHEREAS, to address these concerns Mr. Paparozzi suggested that during events at the stadium Applicant provides security and traffic control, possibly from the Paterson Police; and

WHEREAS. Mr. Paparozzi expressed his concerns and noted that residents should park closer to the residential building in the parking deck; that the Senior Housing tenants should be provided a designated parking space in the accessory garage; that the surface parking spaces should be designated as drop-off and pick-up spaces for the Childcare Facility; and

that there should be a covered walkway between the parking garage and the residential building; and

WHEREAS, Mr. Williams reviewed the planning aspects of the application and justification for the variance reliefs proposed, and testified that in his professional opinion, the proposed development advances the intent and purpose of the First Ward Redevelopment Plan, such as assembling parcels for large development, promoting mixed-use development, and promoting restoration of Hinchliffe Stadium. It also advances the intent and purpose of the Master Plan, such as land use goals – mixed-use, targeted opportunity sites that will serve as catalysts and symbols of revitalization and increasing the supply of affordable housing; and

WHEREAS, Mr. Williams testified that in addition to being inherently beneficial, the application also advances several purposes of zoning pursuant to N.J.S.A. 40:55D-2, in particular Section L, which is to provide senior housing; and

WHEREAS, on November 6, 2019, the Paterson Planning Board granted approval to renovate the existing Hinchliffe Stadium containing 7,800 seats and associated improvements; and this application is part of the overall renovation of the adjacent Hinchliffe Stadium and its immediate surroundings, including a restaurant and a Negro League Baseball exhibition; and

WHEREAS, on June 22, 2020, the Paterson Planning Board also approved a proposal to demolish an existing one-story structure on Maple Street and construct a mixed-use building with exhibition space on the first floor and a restaurant on the second floor; and

WHEREAS, the courts have stated that childcare centers and affordable senior housing are deemed inherently beneficial uses; and

WHEREAS, a study for the New Jersey Housing and Mortgage Finance Agency (NJHMFA) concluded that there is a need for affordable housing with a large number of income-eligible households in the area; and

WHEREAS, Applicant intends to complete construction in approximately 18 months (Spring 2022), and the proposed uses are considered inherently beneficial; and

WHEREAS, the Applicant's expert placed the design; proposed use and lay out on the record; and

WHEREAS, all testimony and representations made on the record are made part of this resolution as if fully detailed within; and

WHEREAS, after considering the testimony given and reviewing the plans filed herein, the Board makes the following findings of fact based upon evidence adduced at the public hearing:

1. The application will not create any undue interference and/or hardship to the neighborhood.
2. The application is appropriate for the neighborhood.
3. The application meets both the positive and negative criteria of the MLUL. The use is inherently beneficial and presumptively serves the public good. Applicant has met the Sica v. Board of Adjustment of Tp. of Wall four-part test with respect to inherently beneficial uses.
4. The application will not create any substantial detriment to the public good and meets the negative criteria. There will be no substantial impairment to the zone plan or ordinance.
5. The application will not create a parking hindrance to the neighborhood.
6. The site can accommodate the increase in floor area ratio and density. The deviation from the bulk standards will achieve a better overall development.
7. Commissioner Fermin of the Board made a motion for the approval of the application; subject to the review and approval, but not limited to, the City Engineer, Passaic County Planning Board, Passaic County Engineer; H.E.P. Soil Conservation District, and the building codes of NJ. Also, subject to the conditions noted by the Board Planner: (1) that the Senior Housing tenants park closer to the residential building in the parking deck; (2) that the spaces on the north side of the building off Jasper Street be designated drop-off and pick-up for the Childcare Facility; (3) that police or another form of security are present during an event at the stadium; and (4) that a roof covering be installed over the walkway between the parking garage and the residential building entrance. Commissioner Levine seconded the motion.

NOW, THEREFORE, BE IT RESOLVED that the above application for use, density, floor area ratio and "c" variances relief and preliminary and final site plan approval is hereby approved after a motion and vote by the Board, subject to the following:

1. All applicable federal, state, county and local codes, and requirements;
2. Fire department regulations, building department regulations, the requirements of the engineering department, and all applicable laws, codes and regulations;
3. The adherence of the Applicant to the architectural plans filed herein and prepared by the Applicant's architect;
4. The Applicant obtaining all permits and approvals from other municipal, county, state and/or federal agencies having jurisdiction; and
5. The adherence of the Applicant to all its representations and conditions placed on the record at all of the Public Hearings, including, but not limited to July 27, 2020.

ATTEST:

Margarita Vega

MARGARITA VEGA, Secretary

APPROVED BY THE CITY OF PATERSON ZONING BOARD OF ADJUSTMENT

PAMELA DUMAS, Vice-Chairperson

DATED: August 13, 2020

Votes in Favor of Application 5

Votes Against Application 2

Abstentions 0

Date of Hearing: July 27, 2020; Adoption of Resolution: August 13, 2020

Fermin, yes; Levine, yes; Minauro, yes; Rohim, no; Watkins, yes; Dumas, yes; Thaxton, no.

Cameron, PG * March 2021 Phase I Environmental Site Assessment, prepared by EWMA * August 2021 Limited Environmental Investigation of Migration to Ground Water Pathway Letter Report, prepared by A.T. Cameron, PG

Field Inspection [Optional]: Date and completed by:
DIANA VAZQUEZ 10/6/2020 12:00:00 AM

DSC01003.JPG

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:
EPA NEPAssist, FEMA Flood Map Service Center, US Fish and Wildlife Service, National Wetlands Inventory, EPA EJScreen, U.S. Census Bureau, Federal Aviation Administration Airport Master Record, U.S. Department of Transportation, Google Maps, NJ SHPO, NJ Department of Environmental Protection, Passaic Valley Sewer Commission, Life Management (social services agreement), MaGrann Associates (builder's upgrade letter), City of Paterson Zoning Board of Adjustments

List of Permits Obtained:
The project was presented before the City of Paterson Zoning Board of Adjustments for the following variances: use, "C" and "D" variances to permit the Housing Component in the Public Use District Zone of the First Ward Redevelopment Plan, which were approved as per the Resolution.

Public Outreach [24 CFR 58.43]:
A public notice has not been published as of the date of this report.

Cumulative Impact Analysis [24 CFR 58.32]:
The proposed project would result in short-term temporary construction-related impacts and minor adverse impacts related to the development of 75 dwelling units. The project would implement best management practices to avoid or reduce the potential for impacts. Overall, development of the proposed project would result in short-term negligible cumulative effects when combined with other projects in the area.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]

No Action Alternative [24 CFR 58.40(e)]

Under the No Action Alternative, no development would occur at the project site in the near term, and the site would remain underutilized. The environmental impacts associated with the proposed project would not occur under the No Action Alternative, nor would the beneficial effects of the project, including the addition of senior affordable housing to the Paterson area. The No Action Alternative would not preclude the site from being developed at a future date in a manner consistent with its zoning designation.

Summary of Findings and Conclusions:
The subject property is located in an area of growth and is currently underutilized land. Development of the proposed project would result in short-term temporary construction-related impacts and minor adverse impacts related to the construction of 75 new dwelling units.

Mitigation Measures and Conditions [CFR 1505.2(c)]:
Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure or Condition	Comments on Completed Measures	Mitigation Plan	Complete
Contamination and Toxic Substances	The only REC/area of concern that was mentioned was the presence of historic fill material. According to historical records and a review of Sanborn maps, a reservoir known as the Middle Reservoir occupied the Property from at least 1915 through the mid-1950s. The presence of the Middle Reservoir in itself is not an environmental concern; however, the water body was drained and filled to grade as indicated in the aerial photographs. Fill material was imported to fill the	N/A	In accordance with the HUD MAP Guide, new construction should follow the ANSI/AARST CC-1000 (2018) Soil Gas System in New Construction of Buildings and post construction testing must	

	reservoir and raise the Property to grade. Historic fill generally constitutes a concern when it contains industrial waste, construction and demolition debris, coal ash, dredge spoils, or other potentially contaminated anthropogenic materials. The quality of the fill material used to fill the reservoir is unknown at this time and therefore historic fill material is considered a REC/AOC. No evaluation is required under NJDEP regulations at this time. However, should a triggering event occur at the Property such as a release to subsurface or construction/activities occur which involve the disturbance and/or disposal of the site soils, appropriate site investigation sampling may be necessary to determine the quality of the soil. The soil sampling test results came back with no detection. Radon According to the EPA, the radon zone level for the area is Zone 2, which has a predicted average indoor screening level between 2 pCi/L and 4 pCi/L, equal to or below the action level of 4 pCi/L set forth by the US EPA. While the subject property currently consists of vacant land, it is AEI's understanding that the subject property is planned for redevelopment with a multifamily residential		be performed after construction is complete.	

	building in connection with HUD HOME financing. As such, in accordance with the HUD MAP Guide, new construction should follow the ANSI/AARST CC-1000 (2018) Soil Gas System in New Construction of Buildings and post construction testing must be performed after construction is complete. Asbestos and Lead-based Paint The subject property is currently vacant land. EWMA's site reconnaissance noted the only structure on site was a plastic shed. Consequently, no building components likely to contain lead-based paints or suspect asbestos-containing materials were noted on site. With implementation of the recommended mitigation, the project will be in compliance with contamination and toxic substances requirements.			
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	None	N/A		
Soil Suitability / Slope/ Erosion / Drainage and Storm Water Runoff	None	N/A		
Hazards and Nuisances including Site Safety and Site-Generated Noise	None	N/A		
Energy	None	N/A		

Consumption/Energy Efficiency				
Employment and Income Patterns	N/A	N/A		
Demographic Character Changes / Displacement	N/A	N/A		
Educational and Cultural Facilities (Access and Capacity)	N/A	N/A		
Commercial Facilities (Access and Proximity)	N/A	N/A		
Health Care / Social Services (Access and Capacity)	N/A	N/A		
Solid Waste Disposal and Recycling (Feasibility and Capacity)	N/A	N/A		
Waste Water and Sanitary Sewers (Feasibility and Capacity)	N/A	N/A		
Water Supply (Feasibility and Capacity)	N/A	N/A		
Public Safety - Police, Fire and Emergency Medical	N/A	N/A		
Parks, Open Space and Recreation (Access and Capacity)	N/A	N/A		
Transportation and Accessibility (Access and Capacity)	N/A	N/A		
Unique Natural Features /Water Resources	N/A	N/A		
Vegetation / Wildlife (Introduction, Modification, Removal, Disruption,	N/A	N/A		

etc.)				
Other Factors	N/A	N/A		
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	According to April 2020 FWS data, there are documented bat maternity occurrences in the City of Paterson. Based on the FWS New Jersey Field Office Project Screening Chart for the Indiana bat, the recommended seasonal restriction on tree clearing in municipalities with maternity occurrence is April 1 to September 30. Tree clearing activities for the proposed project should not exceed an area of 5 acres and should not occur between April 1 and September 30. Based on these assumptions, No Adverse Effect to the Indiana Bat is anticipated. If tree clearing is proposed during the restricted season, project information must be submitted to the FWS New Jersey Field Office.	N/A		

Project Mitigation Plan

In accordance with the HUD MAP Guide, new construction should follow the ANSI/AARST CC-1000 (2018) Soil Gas System in New Construction of Buildings and post construction testing must be performed after construction is complete. The post-construction testing of radon is planned to be performed by AT Cameron, PG in Fall 2022.

Radon Testing Proposal mitigation.pdf

Supporting documentation on completed measures

A T Cameron, PG

273 Thompson Ave., Middletown, NJ 07748
732-787-440 732-787-3859

September 3, 2021

Michael Knab
RPM Development Group
77 Park Street
Montclair, NJ 07742

Via e-mail mknap@rpmdev.com

Re: Radon Testing at:

Hinchliffe Residential Project
New 6-Story Age Restricted Multi-Family Building
1-27 Jasper Street
Patterson, NJ 07502

Dear Mr. Knab:

A.T. Cameron, PG is pleased to provide this proposal to conduct Radon testing in the above referenced building. It is anticipated that the building will be completed in the fall of 2022.

Radon testing is proposed to be conducted after the building envelope is sealed but prior to occupancy. As noted above this is anticipated to be in November 2022. The building does not have a basement. There are no apartments planned for the 1st floor. Part of the 1st floor will be a parking garage. The remaining five floors will each have three two-bedroom apartments and 12 one-bedroom apartments.

Radon Tests

1st Floor	Day Care Center approx. 5,000 square feet 3 tests
	Management Office 1 test
	Amenity Room 2 tests
2nd Floor	Six Apartments above Parking garage 6 tests
	Remaining nine apartments 2 tests
3rd Floor	15 Apartments 2 tests
4th Floor	15 Apartments 2 tests
5th Floor	15 Apartments 2 tests
6th Floor	15 Apartments 2 tests

Total number of Radon Tests Proposed	22
Duplicate Radon Tests Proposed (10%)	3
Blank Radon Test Proposed (5%)	2
Total Tests	27

Cost Estimate

Cost of Radon tests @$30/test	$810.00
Cost for placement and retrieval test units	$2000.00
Two days @$1,000/Day	
Review Radon Results Discuss Results with Owner	$1,000.00
Total Estimated Cost	$3,810.00

All radon testing to be conducted in accordance with NJDEP rules and regulations by New Jersey certified radon measurement business.

This is an estimate based on the current testing procedures and protocols. Should procedures and protocols change when testing is conducted the costs may vary. Although it is not anticipated that laboratory testing cost or labor cost will increase, we do not guarantee per unit costs when testing is conducted.

Should you have questions please call.

Sincerely,

Aubrey T. Cameron

A. T. Cameron, PG

APPENDIX A: Related Federal Laws and Authorities

Airport Hazards

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D

1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?

✓ **No**

Based on the response, the review is in compliance with this section. Document and upload the map showing that the site is not within the applicable distances to a military or civilian airport below

Yes

Screen Summary

Compliance Determination

The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements. (REFER TO NEPASSIST MAPS.)

Supporting documentation

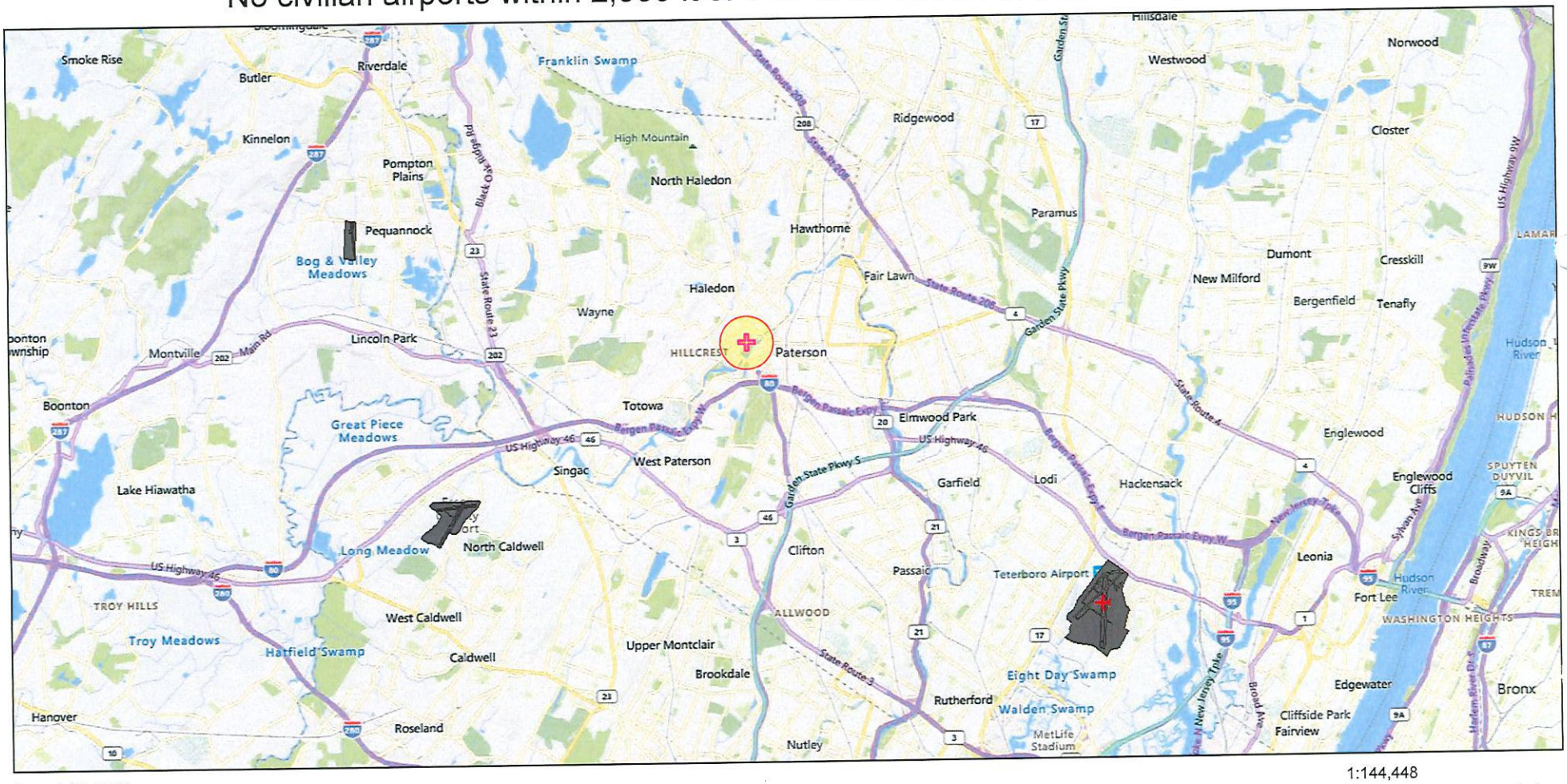
No military airports map - 1-27 JASPER ST.pdf
No civilian airports map - 1-27 JASPER ST.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

No civilian airports within 2,500 ft of 1-27 JASPER ST PATERSON, NJ 07522



August 21, 2020

Project Buffer

Search Result (point)

Airport Points

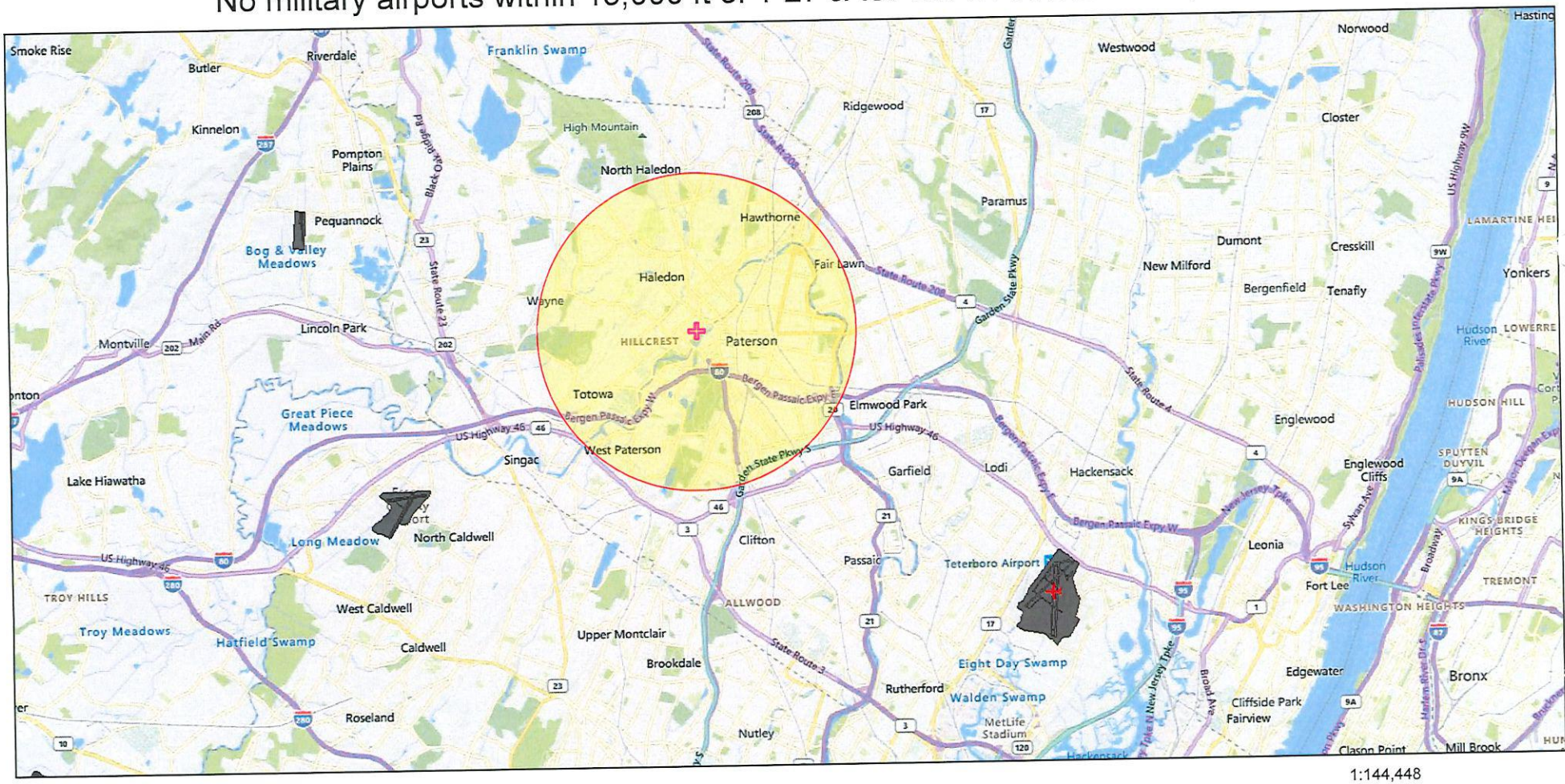
Airport Polygons

1:144,448

0 1.25 2.5 5 mi

0 2 4 8 km

No military airports within 15,000 ft of 1-27 JASPER ST PATERSON, NJ 07522



August 21, 2020

Project Buffer

Search Result (point)

Airport Points

Airport Polygons

1:144,448

0 1.25 2.5 5 mi

0 2 4 8 km

Coastal Barrier Resources

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	

1. Is the project located in a CBRS Unit?

✓ No

Document and upload map and documentation below.

Yes

Compliance Determination

This project is not located in a CBRS Unit. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act. (REFER TO CBRS MAPS.)

Supporting documentation

CBRS MAP - 1-27 JASPER ST.pdf
CBRS NJ.pdf

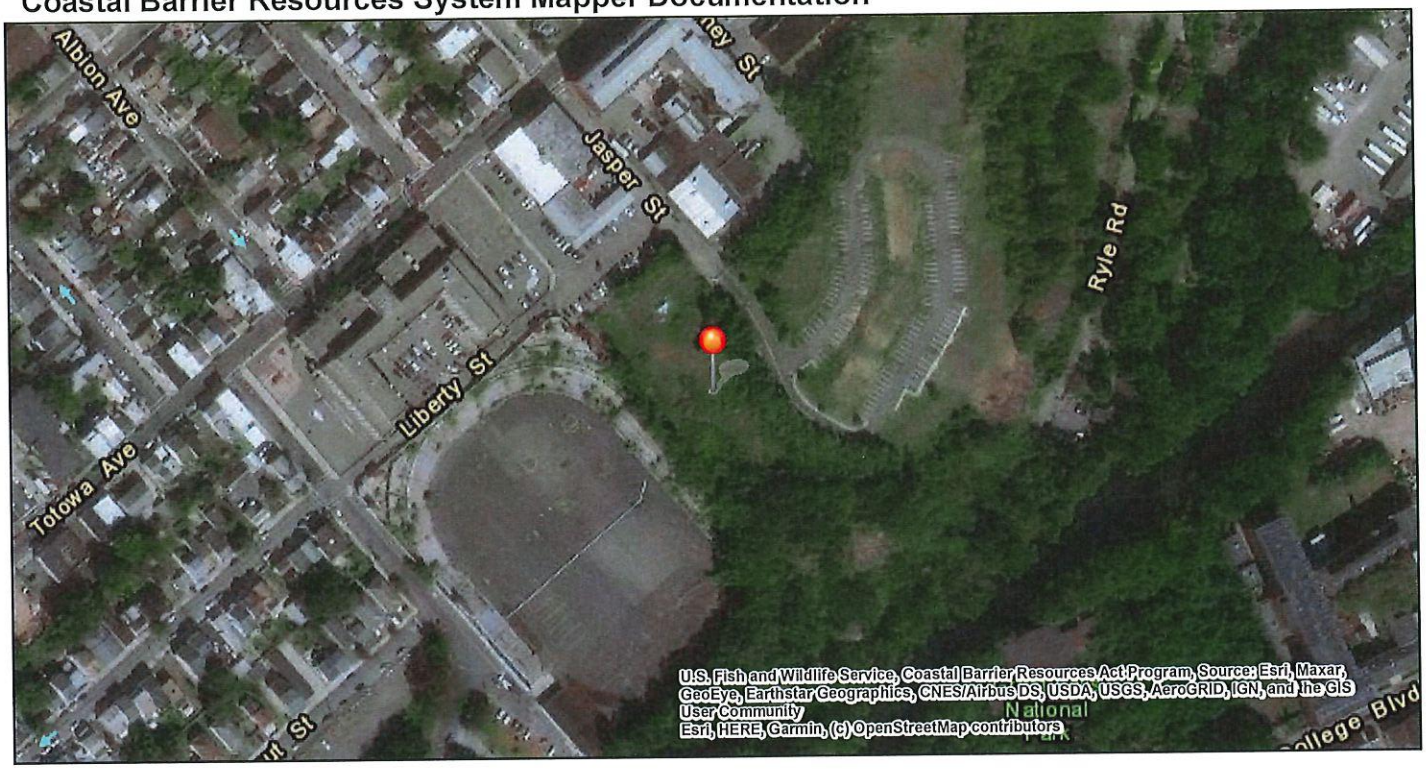
Are formal compliance steps or mitigation required?

Yes

✓ No

U.S. Fish and Wildlife Service

Coastal Barrier Resources System Mapper Documentation



CBRS Units

- Otherwise Protected Area
- System Unit
- CBRS Buffer Zone
- -74.18048, 40.919024

0 65 130 260 390 ft

1:4,514

The pin location displayed on the map is a point selected by the user. Failure of the user to ensure that the pin location displayed on this map correctly corresponds with the user supplied address/location description below may result in an invalid federal flood insurance policy. **The U.S. Fish and Wildlife Service (Service) has not validated the pin location with respect to the user supplied address/location description below. The Service recommends that all pin locations be verified by federal agencies prior to use of this map for the provision or denial of federal funding or financial assistance** . Please note that a structure bisected by the Coastal Barrier Resources System (CBRS) boundary (i.e., both "partially in" and "partially out") is within the CBRS and therefore affected by CBRA's restrictions on federal flood insurance. A pin placed on a bisected structure must be placed on the portion of the structure within the unit (including any attached features such as a deck or stairs).

User Name: DIANA VAZQUEZ
User Organization: CITY OF PATERSON CD
User Supplied Address/Location Description: 1-27 JASPER ST PATERSON, NJ 07522
Pin Location: Outside CBRS
Pin Flood Insurance Prohibition Date: N/A
Pin System Unit Establishment Date: N/A

The user placed pin location is not within the CBRS. The official CBRS maps are accessible at https://www.fws.gov/cbra/maps/index.html .

The CBRS information is derived directly from the CBRS web service provided by the Service. This map was exported on 8/21/2020 and does not reflect changes or amendments subsequent to this date. The CBRS boundaries on this map may become superseded by new boundaries over time.

This map image may be void if one or more of the following map elements do not appear: basemap imagery, CBRS unit labels, prohibition date labels, legend, scale bar, map creation date. For additional information about flood insurance and the CBRS, visit: https://www.fws.gov/cbra/Flood-Insurance.html .

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

NEW JERSEY

Number of CBRS Units:	24
Number of System Units:	*9*
Number of Otherwise Protected Areas:	*15*
Total Acres:	87,476
Upland Acres:	*3,838*
Associated Aquatic Habitat Acres:	*83,638*
Shoreline Miles:	49

N

Map Date: December 16, 2016

Boundaries of the John H. Chafee Coastal Barrier Resources System (CBRS) shown on this map were transferred from the official CBRS maps for this area and are depicted on this map (in red) for informational purposes only. The official CBRS maps are enacted by Congress via the Coastal Barrier Resources Act, as amended, and are maintained by the U.S. Fish and Wildlife Service. The official CBRS maps are available for download at hhttp://www.fws.gov/CBRA.

Flood Insurance

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).

1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?

No. This project does not require flood insurance or is excepted from flood insurance.

✓ Yes

2. Upload a FEMA/FIRM map showing the site here:

FIRMETTE MAP - 1-27 JASPER ST.pdf

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

✓ No

Based on the response, the review is in compliance with this section.

Yes

Screen Summary

Compliance Determination

The structure or insurable property is not located in a FEMA-designated Special Flood

Hazard Area. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance requirements. Based on a review of FEMA Flood Insurance Rate Map (FIRM) Community Panel Number 34031C0216G, dated April 17, 2020, the subject property is located in Zone X (unshaded), areas of minimal flood hazard outside of the 100- and 500-year floodplains. No preliminary or pending FIRM panels were identified for the project area. Additionally, the subject property is located in the City of Paterson, Community #340404, which is a participating community in the National Flood Insurance Program (NFIP). (REFER TO FIRM MAP 34031C0216G EFF. 4/17/2020)

Supporting documentation

Are formal compliance steps or mitigation required?

Yes

✓ No

National Flood Hazard Layer FIRMette

FEMA

74°11'10"W 40°55'23"N

74°10'32"W 40°54'56"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile *Zone*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 — Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/21/2020 at 2:53 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Air Quality

General requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93

1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?

✓ Yes

No

Air Quality Attainment Status of Project's County or Air Quality Management District

2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?

No, project's county or air quality management district is in attainment status for all criteria pollutants.

✓ Yes, project's management district or county is in non-attainment or maintenance status for the following criteria pollutants (check all that apply):

✓ Carbon Monoxide

Lead

Nitrogen dioxide

Sulfur dioxide

✓ Ozone

Particulate Matter, <2.5 microns

Particulate Matter, <10 microns

3. What are the *de minimis* emissions levels (40 CFR 93.153) or screening levels for the non-attainment or maintenance level pollutants indicated above

Carbon monoxide	100.00	ppm (parts per million)
Ozone	100.00	ppb (parts per million)

Provide your source used to determine levels here:
CONSULTED WITH DEP, BUREAU OF EVALUTION AND PLANNING, REFER TO LETTER

4. **Determine the estimated emissions levels of your project. Will your project exceed any of the de minimis or threshold emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?**

✓ No, the project will not exceed *de minimis* or threshold emissions levels or screening levels.

Enter the estimate emission levels:

Carbon monoxide	0.00	ppm (parts per million)
Ozone	0.00	ppb (parts per million)

Based on the response, the review is in compliance with this section.

Yes, the project exceeds *de minimis* emissions levels or screening levels.

Screen Summary
Compliance Determination
The project's county or air quality management district is in non-attainment status for the following: Carbon monoxide, Ozone. This project does not exceed de minimis emissions levels or the screening level established by the state or air quality management district for the pollutant(s) identified above. The project is in compliance with the Clean Air Act. In a letter dated June 2, 2021, the New Jersey Department of

Environmental Protection (NJDEP) determined that the anticipated emissions of the proposed project would not exceed general conformity de minimis or threshold emission levels for criteria pollutants and would therefore be in conformance with the New Jersey State Implementation Plan. Based on the above information, the project is in compliance with the Clean Air Act.

Supporting documentation

AIR QUALITY NAAQS TABLE.pdf
AIR QUALITY - DE MINIMIS TABLES.pdf
AIR QUALITY - Construction Equipment Projection.xlsx
AIR QUALITY - pm map.pdf
AIR QUALITY - pm 2pt5 map.pdf
AIR QUALITY - ozone map.pdf
AIR QUALITY - so2 map.pdf
AIR QUALITY - no info.pdf
AIR QUALITY - lead map.pdf
AIR QUALITY - co list page 4.pdf
Air Quality in complinace letter - Hinchliffe HUD Letter 6-2-21.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
401 East State Street 2nd floor
P.O. Box 420, Mail Code 401-02
Trenton, New Jersey 08625-0420
Tel. (609) 984-1484
https://www.state.nj.us/dep/daq/

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

SHAWN M. LATOURETTE
Acting Commissioner

June 2, 2021

Ms. Diana Vazquez
Program Monitor/Inspector
Community Development
City of Patterson
125 Ellison Street – 2nd Floor
Patterson, New Jersey 07505

Re: Hinchliffe Housing Urban Renewal Associates
HUD #: Not Available

Dear Ms. Vazquez:

This letter is in response to your October 29, 2020, email regarding the above proposed project which is located at 1 - 27 Jasper Street, Patterson, New Jersey (Block 801, Lot 7.01). The proposed project is new construction of a six-story mixed-use multi-family building which will include 75 units and a four-story parking garage.

The State of New Jersey is in nonattainment under the 8-hour ozone standard and Passaic County is in maintenance of the 2006 24- hour PM2.5 standard. The Bureau of Evaluation and Planning has reviewed the information that was provided on this project. Based on our review, it appears that the scope of this project would result in emission levels that are below the General Conformity de minimis levels (40 CFR93.153). Therefore, in accordance with the United States Environmental Protection Agency's General Conformity regulations, this project would be considered as conforming to the New Jersey State Implementation Plan.

Sincerely,

Angela Skowronek

Angela Skowronek
Environmental Specialist 3
Bureau of Evaluation and Planning

EPA United States Environmental Protection Agency

Carbon Monoxide (1971) Maintenance Area (Redesignated from Nonattainment) State/Area/County Report

Data is current as of September 30, 2020

ALASKA (Region X)

Anchorage, AK (Serious - Maintenance)
Anchorage Municipality (P)
Portion of Anchorage urban area

Fairbanks, AK (Serious - Maintenance)
Fairbanks North Star Borough (P)
Portion of Fairbanks urban area

ARIZONA (Region IX)

Phoenix, AZ (Serious - Maintenance)
Maricopa County (P)

Tucson, AZ (Not Classified - Maintenance)
Pima County (P)
Portion of Tucson urban area

CALIFORNIA (Region IX)

Bakersfield, CA (Not Classified - Maintenance)
Kern County (P)

Chico, CA (Moderate <= 12.7ppm - Maintenance)
Butte County (P)

Fresno, CA (Moderate > 12.7ppm - Maintenance)
Fresno County (P)
Fresno Urbanized Area (11/20/85, 50 FR 47735)

Lake Tahoe North Shore, CA (Not Classified - Maintenance)
Placer County (P)

Lake Tahoe South Shore, CA (Moderate <= 12.7ppm - Maintenance)
El Dorado County (P)

Los Angeles-South Coast Air Basin, CA (Serious - Maintenance)
Los Angeles County (P)
Orange County
Riverside County (P)
San Bernardino County (P)

Modesto, CA (Moderate <= 12.7ppm - Maintenance)
Stanislaus County (P)

Sacramento, CA (Moderate <= 12.7ppm - Maintenance)
Placer County (P)
Sacramento County (P)
Yolo County (P)

San Diego, CA (Moderate <= 12.7ppm - Maintenance)
San Diego County (P)

San Francisco-Oakland-San Jose, CA (Moderate <= 12.7ppm - Maintenance)
Alameda County (P)
Contra Costa County (P)
Marin County (P)
Napa County (P)
San Francisco County
San Mateo County (P)

Santa Clara County (P)
Solano County (P)
Sonoma County (P)

Stockton, CA (Moderate <= 12.7ppm - Maintenance)
San Joaquin County (P)

COLORADO (Region VIII)
Colorado Springs, CO (Moderate <= 12.7ppm - Maintenance)
El Paso County (P)
Teller County (P)

Denver-Boulder, CO (Serious - Maintenance)
Adams County (P)
Denver Metro Area
Arapahoe County (P)
Denver Metro Area
Boulder County (P)
Denver Metro Area
Broomfield County
Denver County
Douglas County (P)
Denver Metro Area
Jefferson County (P)
Denver Metro Area

Fort Collins, CO (Moderate <= 12.7ppm - Maintenance)
Larimer County (P)

Greeley, CO (Not Classified - Maintenance)
Weld County (P)

Longmont, CO (Moderate <= 12.7ppm - Maintenance)
Boulder County (P)
Portion of Longmont
Weld County (P)
Portion of Longmont

CONNECTICUT (Region I)
Hartford-New Britain-Middletown, CT (Moderate <= 12.7ppm - Maintenance)
Hartford County (P)
Litchfield County (P)
Plymouth Town
Middlesex County (P)
Tolland County (P)

New Haven-Meriden-Waterbury, CT (Not Classified - Maintenance)
Fairfield County (P)
Shelton City
Litchfield County (P)
Bethlehem Town, Thomaston Town, Watertown, Woodbury Town.
New Haven County

New York-N. New Jersey-Long Island, NY-NJ-CT (Moderate > 12.7ppm - Maintenance)
Fairfield County (P)
All cities and townships except Shelton city
Litchfield County (P)
Bridgewater town, New Milford town

DISTRICT OF COLUMBIA (Region III)
Washington, DC-MD-VA (Moderate <= 12.7ppm - Maintenance)
District of Columbia

IDAHO (Region X)
Boise-Northern Ada County, ID (Not Classified - Maintenance)
Ada County (P)
Northern half of Ada Co

INDIANA (Region V)
East Chicago, IN (Not Classified - Maintenance)
Lake County (P)

Indianapolis, IN (Not Classified - Maintenance)
Marion County (P)

MARYLAND (Region III)
Baltimore, MD (Moderate <= 12.7ppm - Maintenance)
Baltimore city (P)

Washington, DC-MD-VA (Moderate <= 12.7ppm - Maintenance)
Montgomery County (P)
Election Districts 4, 7, 13
Prince George's County (P)
Election Districts 2, 6, 12, 16, 17, 18

MASSACHUSETTS (Region I)
Boston, MA (Moderate <= 12.7ppm - Maintenance)
Middlesex County (P)
Cities of: Cambridge, Everett, Malden, Medford, and Somerville.
Norfolk County (P)
Quincy CIty
Suffolk County (P)
Cities of: Boston, Chelsea, and Revere

Lowell, MA (Not Classified - Maintenance)
Middlesex County (P)
Lowell City

Springfield, MA (Not Classified - Maintenance)
Hampden County (P)
Springfield City

Waltham, MA (Not Classified - Maintenance)
Middlesex County (P)
Waltham City

Worcester, MA (Not Classified - Maintenance)
Worcester County (P)
City of Worcester

MICHIGAN (Region V)
Detroit, MI (Not Classified - Maintenance)
Macomb County (P)
A portion of Detroit
Oakland County (P)
A portion of Detroit
Wayne County (P)
A portion of Detroit

MINNESOTA (Region V)
Duluth, MN (Moderate <= 12.7ppm - Maintenance)
St. Louis County (P)
City of Duluth

Minneapolis-St. Paul, MN (Moderate <= 12.7ppm - Maintenance)
Anoka County
Carver County (P)
Dakota County (P)
Hennepin County
Ramsey County
Scott County (P)
Washington County (P)
All cities and townships except Denmark Township.
Wright County (P)

MISSOURI (Region VII)
St. Louis, MO (Not Classified - Maintenance)
St. Louis County (P)
The area encompassed by the I-270 and the Mississippi River.
St. Louis city

MONTANA (Region VIII)
Billings, MT (Not Classified - Maintenance)
Yellowstone County (P)

Certain ranges and townships

Great Falls, MT (Not Classified - Maintenance)
Cascade County (P)

Missoula, MT (Moderate <= 12.7ppm - Maintenance)
Missoula County (P)

NEVADA (Region IX)
Lake Tahoe, NV (Not Classified - Maintenance)
Carson City (P)
Hydrographic Area 90
Douglas County (P)
Hydrographic Area 90
Washoe County (P)
Hydrographic Area 90

Las Vegas, NV (Serious - Maintenance)
Clark County (P)
Las Vegas Valley Hydrographic Area 212

Reno, NV (Moderate <= 12.7ppm - Maintenance)
Washoe County (P)
Truckee Meadows Hydrographic Area 87

NEW HAMPSHIRE (Region I)
Manchester, NH (Not Classified - Maintenance)
Hillsborough County (P)
City of Manchester

Nashua, NH (Not Classified - Maintenance)
Hillsborough County (P)
City of Nashua

NEW JERSEY (Region II)
Atlantic City, NJ (Not Classified - Maintenance)
Atlantic County (P)
The City of Atlantic City

Burlington, NJ (Not Classified - Maintenance)
Burlington County (P)
City of Burlington

Freehold, NJ (Not Classified - Maintenance)
Monmouth County (P)
Borough of Freehold

Morristown, NJ (Not Classified - Maintenance)
Morris County (P)
City of Morristown

New York-N. New Jersey-Long Island, NY-NJ-CT (Moderate > 12.7ppm - Maintenance)
Bergen County
Essex County
Hudson County
Passaic County (P)
City of Clifton, City of Patterson, City of Passaic
Union County

Penns Grove, NJ (Not Classified - Maintenance)
Salem County (P)

Perth Amboy, NJ (Not Classified - Maintenance)
Middlesex County (P)
City of Perth Amboy

Philadelphia-Camden Co, PA-NJ (Moderate <= 12.7ppm - Maintenance)
Camden County

Somerville, NJ (Not Classified - Maintenance)
Somerset County (P)
Borough of Somerville

PENNSYLVANIA (Region III)
Philadelphia-Camden Co, PA-NJ (Moderate <= 12.7ppm - Maintenance)
Philadelphia County (P)

Pittsburgh, PA (Not Classified - Maintenance)
Allegheny County (P)

TENNESSEE (Region IV)
Memphis, TN (Moderate <= 12.7ppm - Maintenance)
Shelby County

TEXAS (Region VI)
El Paso, TX (Moderate <= 12.7ppm - Maintenance)
El Paso County (P)
Portion of the City Limits of El Paso

UTAH (Region VIII)
Ogden, UT (Moderate <= 12.7ppm - Maintenance)
Weber County (P)
City of Ogden

Provo, UT (Moderate > 12.7ppm - Maintenance)
Utah County (P)
City of Provo

Salt Lake City, UT (Not Classified - Maintenance)
Salt Lake County (P)
Salt Lake City

VIRGINIA (Region III)
Washington, DC-MD-VA (Moderate <= 12.7ppm - Maintenance)
Alexandria city
Arlington County

WASHINGTON (Region X)
Seattle-Tacoma, WA (Moderate > 12.7ppm - Maintenance)
King County (P)
Pierce County (P)
Snohomish County (P)

Spokane, WA (Serious - Maintenance)
Spokane County (P)

Vancouver, WA (Moderate <= 12.7ppm - Maintenance)
Clark County (P)

Yakima, WA (Not Classified - Maintenance)
Yakima County (P)
Portion of the Central Business District

Toms River, NJ (Not Classified - Maintenance)
Ocean County (P)
City of Toms River

Trenton, NJ (Not Classified - Maintenance)
Mercer County (P)
City of Trenton

NEW MEXICO (Region VI)
Albuquerque, NM (Moderate <= 12.7ppm - Maintenance)
Bernalillo County

NEW YORK (Region II)
New York-N. New Jersey-Long Island, NY-NJ-CT (Moderate > 12.7ppm - Maintenance)
Bronx County
Kings County
Nassau County
New York County
Queens County
Richmond County
Westchester County

Syracuse, NY (Moderate <= 12.7ppm - Maintenance)
Onondaga County

NORTH CAROLINA (Region IV)
Charlotte, NC (Not Classified - Maintenance)
Mecklenburg County

Raleigh-Durham, NC (Moderate <= 12.7ppm - Maintenance)
Durham County
Wake County

Winston-Salem, NC (Moderate <= 12.7ppm - Maintenance)
Forsyth County

OHIO (Region V)
Cleveland, OH (Moderate <= 12.7ppm - Maintenance)
Cuyahoga County

OREGON (Region X)
Eugene-Springfield, OR (Not Classified - Maintenance)
Lane County (P)
Air Quality Maintenance Area

Grants Pass, OR (Moderate <= 12.7ppm - Maintenance)
Josephine County (P)
Central Business District

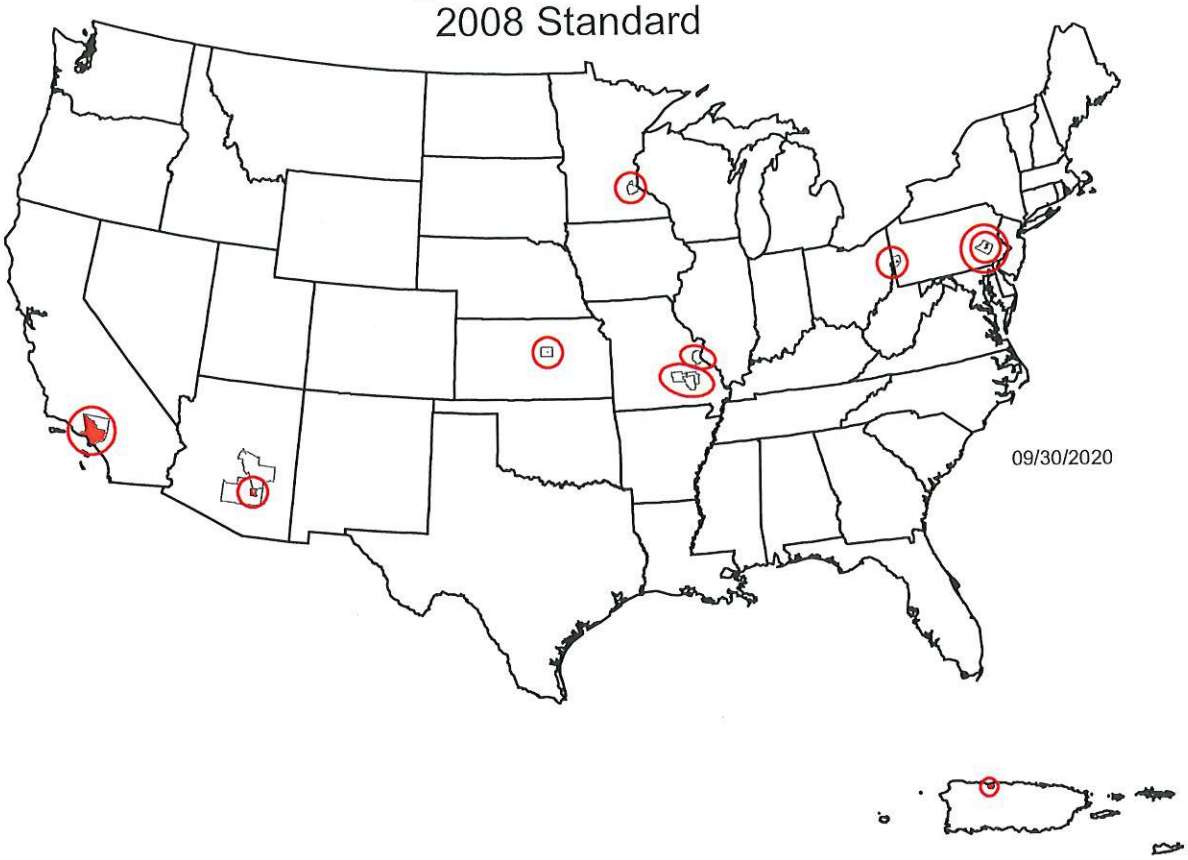
Klamath Falls, OR (Moderate <= 12.7ppm - Maintenance)
Klamath County (P)
Urban Growth Boundary

Medford, OR (Moderate <= 12.7ppm - Maintenance)
Jackson County (P)
Medford-Ashland Urban Growth Boundary

Portland, OR (Moderate <= 12.7ppm - Maintenance)
Clackamas County (P)
Portland Metro Service District Boundary
Multnomah County (P)
Portland Metro Service District Boundary
Washington County (P)
Portland Metro Service District Boundary

Salem, OR (Not Classified - Maintenance)
Marion County (P)
City of Salem
Polk County (P)
City of Salem

Counties Designated Nonattainment for Lead 2008 Standard



Nonattainment Areas (2008 Standard)

The portions of a county designated nonattainment are indicated by color on this national map. The counties with nonattainment areas are circled. The double circles indicate that there are two nonattainment areas within the same county. The State maps provide details of the smaller nonattainment areas within the county boundaries.

EPA United States Environmental Protection Agency

Green Book Nitrogen Dioxide (1971) Area Information

This section provides information about the nonattainment area for the Nitrogen Dioxide (1971) National Ambient Air Quality Standards (NAAQS). The area was designated November 15, 1990.

1. **Nonattainment Area Selections**

   On September 22, 1998 the only Nitrogen Dioxide (1971) nonattainment area was redesignated to maintenance.

2. **Maintenance Area Selections (Redesignated from Nonattainment)**
   a. Area/State Information
   b. Area Design Values
   c. State/Area and Design Value Information
   d. State/Area/County List

3. Designation and NAAQS Information Related to Nitrogen Dioxide (1971 Standard)

4. **Federal Register Notices Related to Nitrogen Dioxide (1971 Standard) Areas**
   a. Federal Register Notices Listed by Date

LAST UPDATED ON SEPTEMBER 21, 2016

EPA United States Environmental Protection Agency

Nitrogen Dioxide (1971) Maintenance Area (Redesignated from Nonattainment) State/Area/County Report

Data is current as of September 30, 2020

CALIFORNIA (Region IX)
Los Angeles-South Coast Air Basin, CA (Maintenance)
Los Angeles County (P)
Orange County
Riverside County (P)
San Bernardino County (P)

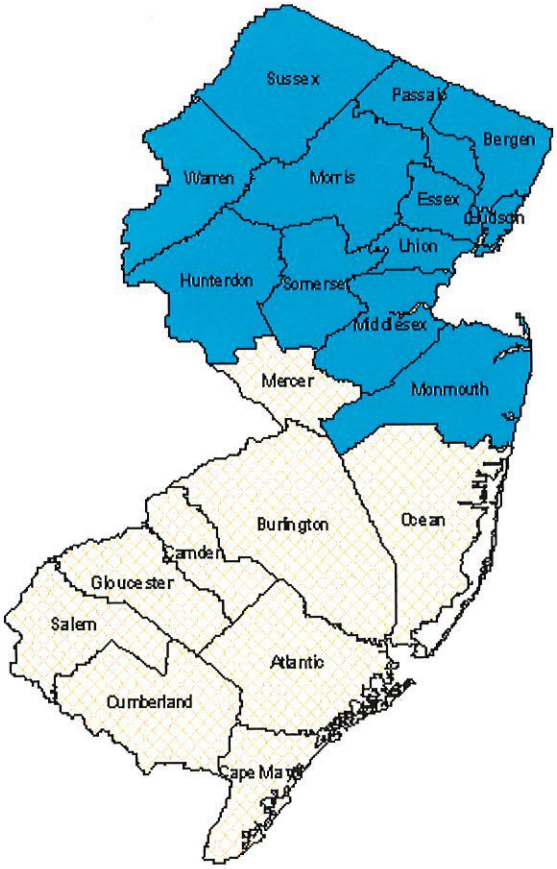
SO2 Nonattainment Areas (2010 Standard)

09/30/2020

SO2 Nonattainment Areas

Nonattainment areas are indicated by color.
When only a portion of a county is shown in color,
it indicates that only that part of the county is within
a nonattainment area boundary.

New Jersey 8-Hour Ozone Nonattainment Areas

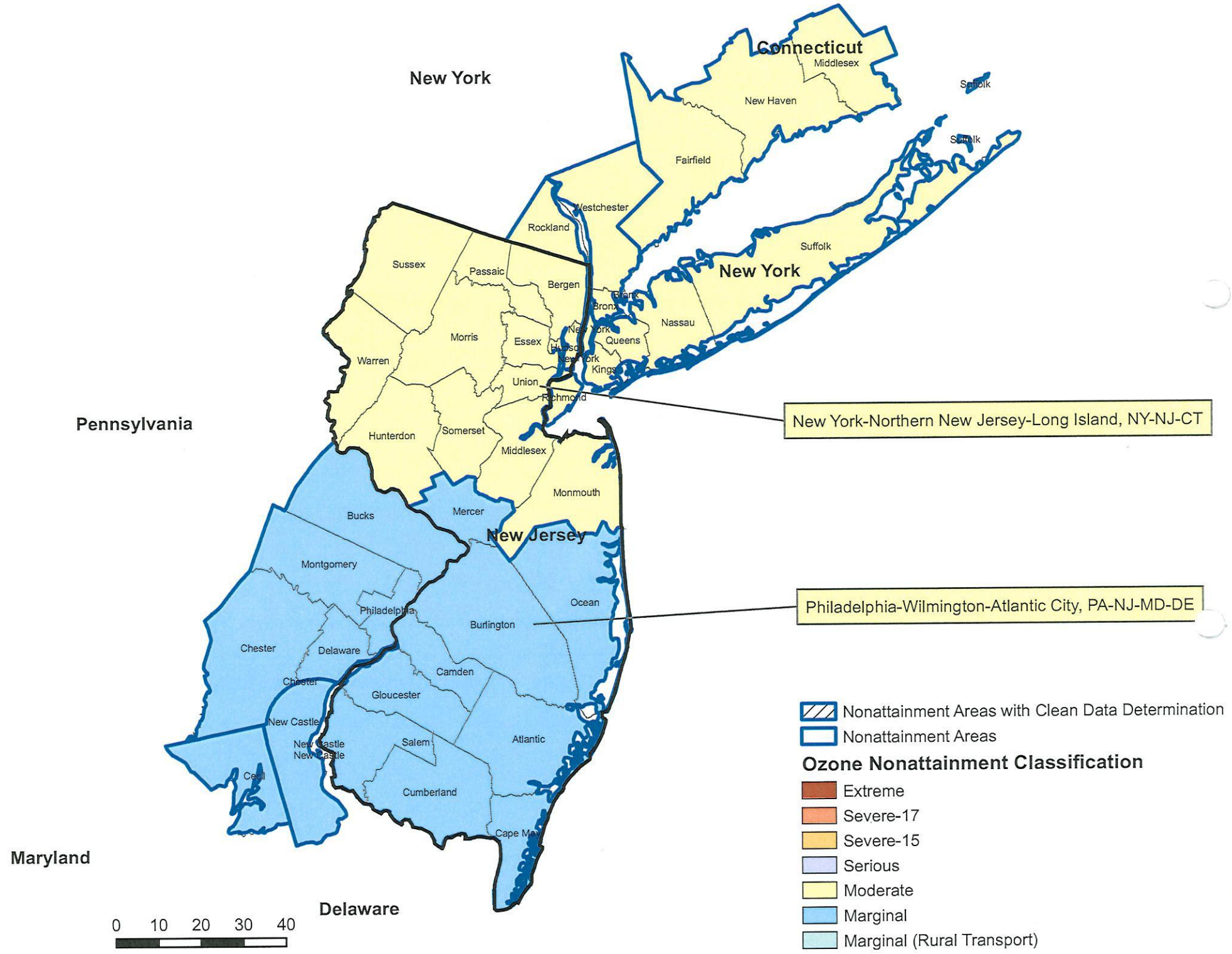


Designated 8-Hour Ozone Nonattainment Areas

- Northern New Jersey - New York- Conn. Area
- Southern New Jersey - Philadelphia - Delaware Area

New Jersey 8-hour Ozone Nonattainment Areas (2015 Standard)

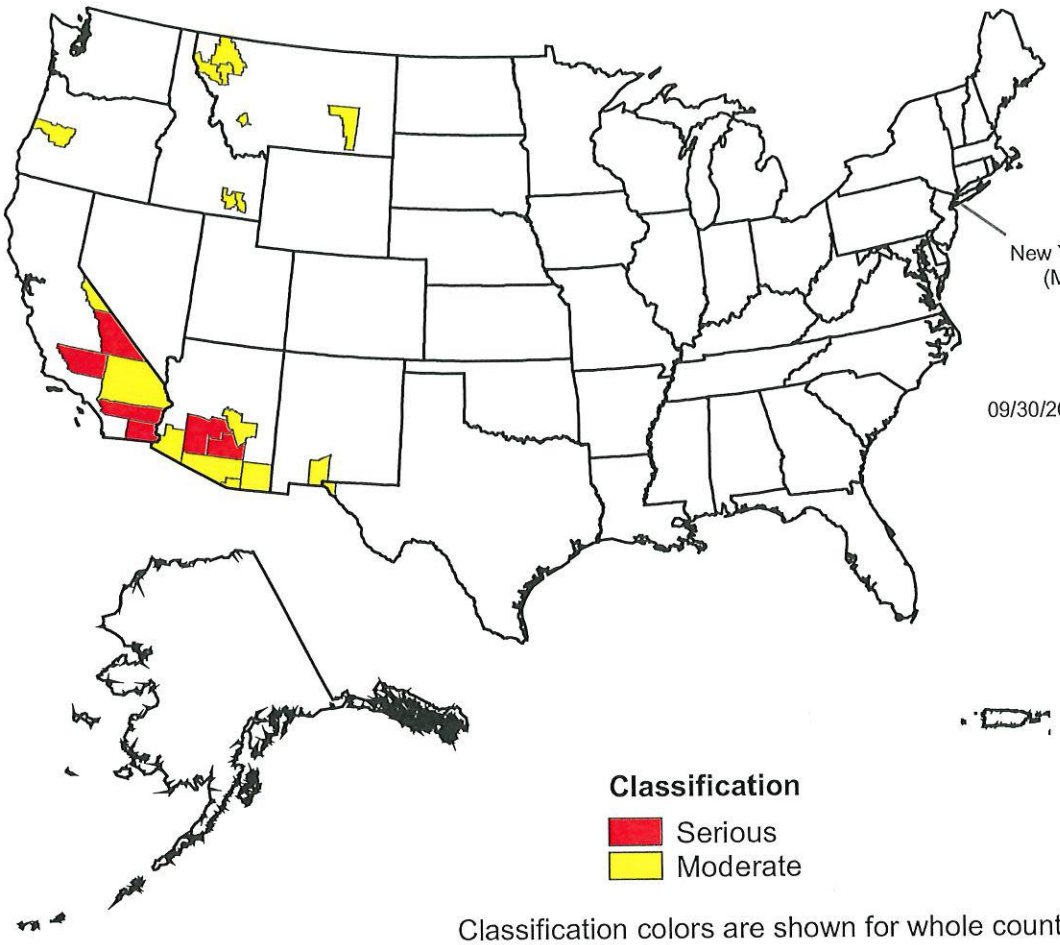
09/30/2020



PM-2.5 Nonattainment Areas (2012 Standard)

Nonattainment areas are indicated by color.
When only a portion of a county is shown in color,
it indicates that only that part of the county is within
a nonattainment area boundary.

Counties Designated Nonattainment for PM-10



Classification colors are shown for whole counties and denote the highest area classification that the county is in

CONSTRUCTION (NON-ROAD) EQUIPMENT PROJECTION
FOR 1-27 JASPER ST. PATERSON, NJ

Equipment	HP	Quantity	Job Phase	Duration		Period Operated	Total HP Hours	
				Weeks	Days/Wk or Total Days		Year 1	Year 2
Backhoes	107	1	Utilities	22	3	Year 1	42,372	
Excavator	146	2	Excavation & Trucking	6	5	Year 1	52,560	
Bobcats	49	1	Miscellaneous	45	3	Year 1	39,690	
Pump Truck	400	1	Footing / Foundation / Podium Pours		12	Year 1	28,800	
Crane	450	1	Roofing	1	5	Year 1	13,500	
Crane	450	1	Podium / Framing	30	3	Year 1	243,000	
Boom Lift	84	1	Windows/Siding	18	5	Year 1	45,360	
Lull Forklift	110	1	Entire Job	75	5	Year 1 (52w) / Year 2 (23w)	171,600	75,900
Road Miller	630	1	Mill & Pave		5	Year 2		18,900
Road Paver	225	1	Mill & Pave		5	Year2		6,750
Loader	73	1	Utilities; Mill & Pave	23	5	Year 12 (12w) / Year 2 (13w)	26,280	28,470
							663,162	130,020

Hours / Day 6

NAAQS Table

The Clean Air Act <https://epa.gov/clean-air-act-overview>, which was last amended in 1990, requires EPA to set National Ambient Air Quality Standards (40 CFR part 50) for six principal pollutants ("criteria" air pollutants <https://epa.gov/criteria-air-pollutants>) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. ***Primary standards*** provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. ***Secondary standards*** provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Periodically, the standards are reviewed and sometimes may be revised, establishing new standards. The most recently established standards are listed below. In some areas of the U.S., certain regulatory requirements may also remain for implementation of previously established standards <https://epa.gov/ground-level-ozone-pollution/ozone-implementation-regulatory-actions>.

Units of measure for the standards are parts per million (ppm) by volume, parts per billion (ppb) by volume, and micrograms per cubic meter of air ($\mu g/m^3$).

Pollutant [links to historical tables of NAAQS reviews]	**Primary/ Secondary**	**Averaging Time**	**Level**	**Form**
Carbon Monoxide (CO) <https://epa.gov/co-pollution/timeline-carbon-monoxide-co-national-ambient-air-quality-standards-naaqs>	primary	8 hours	9 ppm	Not to be exceeded more than once per year
		1 hour	35 ppm	

Pollutant [links to historical tables of NAAQS reviews]		Primary/ Secondary	Averaging Time	Level	Form
Lead (Pb) <https://epa.gov/lead-air-pollution/timeline-lead-pb-national-ambient-air-quality-standards-naaqs>		primary and secondary	Rolling 3 month average	0.15 µg/m^3 (1)	Not to be exceeded
Nitrogen Dioxide (NO_2) <https://epa.gov/no2-pollution/timeline-nitrogen-dioxide-no2-national-ambient-air-quality-standards-naaqs>		primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		primary and secondary	1 year	53 ppb (2)	Annual Mean
Ozone (O_3) <https://epa.gov/ground-level-ozone-pollution/timeline-ozone-national-ambient-air-quality-standards-naaqs>		primary and secondary	8 hours	0.070 ppm (3)	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution (PM) <https://epa.gov/pm-pollution/timeline-particulate-matter-pm-national-ambient-air-quality-standards-naaqs>	$PM_{2.5}$	primary	1 year	12.0 µg/m^3	annual mean, averaged over 3 years
		secondary	1 year	15.0 µg/m^3	annual mean, averaged over 3 years
		primary and secondary	24 hours	35 µg/m^3	98th percentile, averaged over 3 years

Pollutant [links to historical tables of NAAQS reviews]		Primary/ Secondary	Averaging Time	Level	Form
	PM_{10}	primary and secondary	24 hours	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO_2) <https://epa.gov/so2-pollution/timeline-sulfur-dioxide-national-ambient-air-quality-standards-naaqs>		primary	1 hour	75 ppb (4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m3 as a calendar quarter average) also remain in effect.

(2) The level of the annual NO_2 standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O_3 standards are not revoked and remain in effect for designated areas. Additionally, some areas may have certain continuing implementation obligations under the prior revoked 1-hour (1979) and 8-hour (1997) O_3 standards.

(4) The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2)any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or is not meeting the requirements of a SIP call under the previous SO_2 standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

Menu of Control Measures for NAAQS Implementation

The Menu of Control Measures (MCM) provides state, local and tribal air agencies with the existing emission reduction measures as well as relevant information concerning the efficiency and cost effectiveness of the measures. State, local and tribal agencies will be able to use this information in developing emission reduction strategies, plans and programs to assure they attain and maintain the National Ambient Air Quality Standards (NAAQS). The MCM is a living document that can be updated with newly available or more current data as it becomes available.

- Menu of Control Measures <https://epa.gov/criteria-air-pollutants/menu-control-measures-naaqs-implementation>

Contact Us <https://epa.gov/criteria-air-pollutants/forms/contact-us-about-criteria-air-pollutants> to ask a question, provide feedback, or report a problem.

General Conformity

CONTACT US <https://epa.gov/general-conformity/forms/contact-us-about-general-conformity>

De Minimis Tables

40 CFR 93.153(b)(1) - For purposes of paragraph (b) of this section the following rates apply in nonattainment areas (NAA's):	
	Tons/year
Ozone (VOC's or NOx):	
Serious NAA's	50
Severe NAA's	25
Extreme NAAs	10
Other ozone NAA's outside an ozone transport region:	100
Other ozone NAA's inside an ozone transport region:	
VOC	50
NOx	100
Carbon Monoxide: All maintenance areas	100
SO_2 or NO_2: All NAA's	100
PM_{10}:	
Moderate NAA's	100
Serious NAA's	70
$PM_{2.5}$ (direct emissions, SO_2, NOx, VOC, and Ammonia):	
Moderate NAA's	100
Serious NAA's	70
Pb: All NAA's	25

40 CFR 93.153(b)(2) - For purposes of paragraph (b) of this section the following rates apply in maintenance areas:	
	Tons/year
Ozone (NOx), SO_2 or NO_2:	
All maintenance areas	100
Ozone (VOC's)	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
Carbon monoxide: All maintenance areas	100
PM_{10}: All maintenance areas	100
$PM_{2.5}$ (direct emissions, SO2, NOx, VOC, and Ammonia)	100
All maintenance areas	100
Pb: All maintenance areas	25

General Conformity Home <https://epa.gov/general-conformity>

What is General Conformity? <https://epa.gov/general-conformity/what-general-conformity>

Basic Information About the Rule <https://epa.gov/general-conformity/basic-information-about-general-conformity-rule>

Regulatory Actions <https://epa.gov/general-conformity/general-conformity-regulatory-actions>

Training Modules I - IV <https://epa.gov/general-conformity/general-conformity-training-modules>

Contact Us <https://epa.gov/general-conformity/forms/contact-us-about-general-conformity> to ask a question, provide feedback, or report a problem.

Coastal Zone Management Act

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

Yes

✓ No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Screen Summary

Compliance Determination

This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act. (REFER TO CAFRA MAP NJ)

Supporting documentation

Map of NJ Coastal Zone Municipalties - PATERSON.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

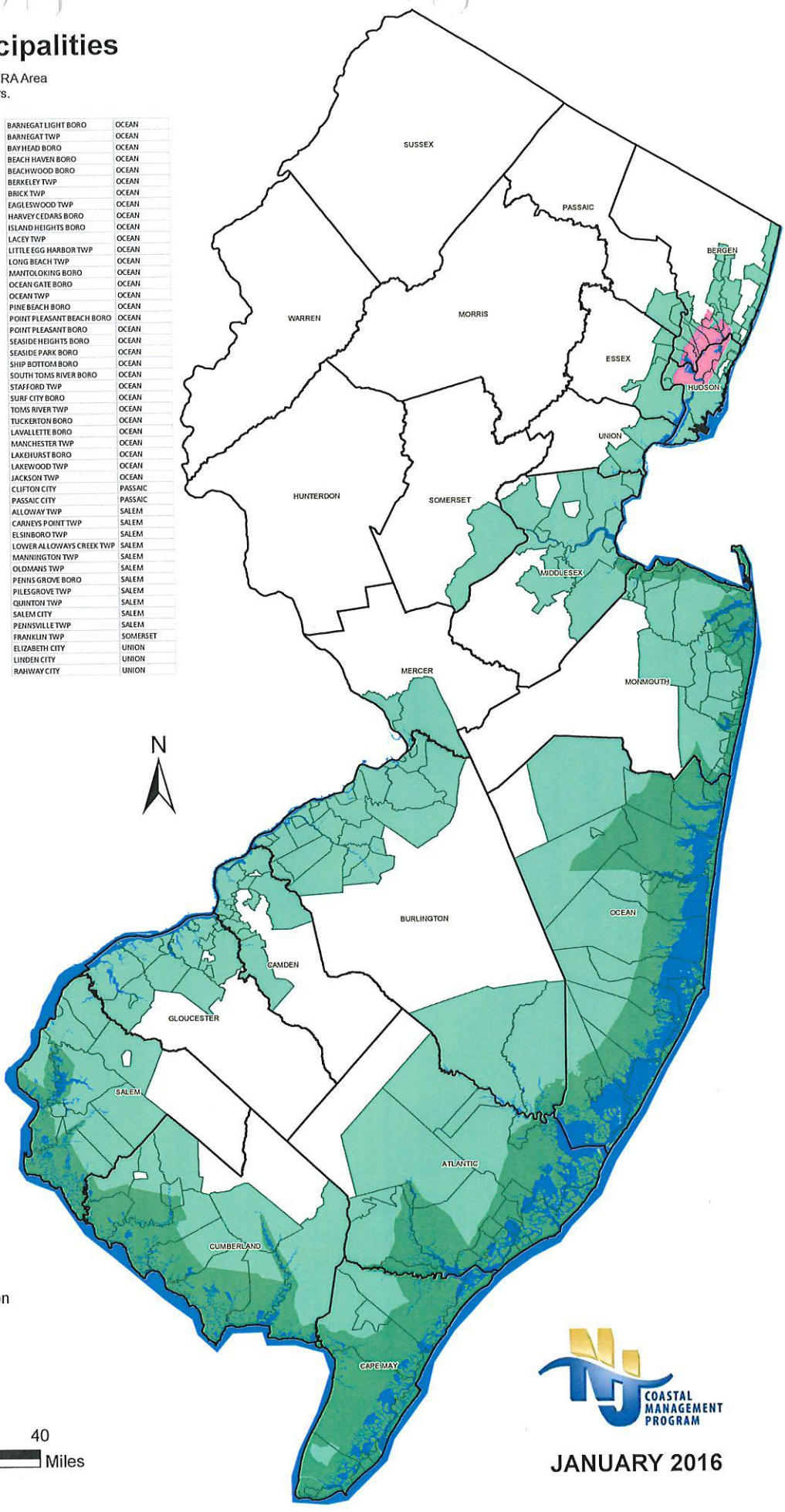
Map of NJ Coastal Municipalities

Municipalities listed includes those in the CAFRA Area and those with Tidally Influenced Waters.

ABSECON CITY	ATLANTIC
ATLANTIC CITY	ATLANTIC
BRIGANTINE CITY	ATLANTIC
CORBIN CITY	ATLANTIC
EGG HARBOR TWP	ATLANTIC
ESTELL MANOR CITY	ATLANTIC
GALLOWAY TWP	ATLANTIC
HAMILTON TWP	ATLANTIC
LINWOOD CITY	ATLANTIC
LONGPORT BORO	ATLANTIC
MARGATE CITY	ATLANTIC
MULLICA TWP	ATLANTIC
NORTHFIELD CITY	ATLANTIC
PLEASANTVILLE CITY	ATLANTIC
PORT REPUBLIC CITY	ATLANTIC
SOMERS POINT CITY	ATLANTIC
VENTNOR CITY	ATLANTIC
WEYMOUTH TWP	ATLANTIC
EGG HARBOR CITY	ATLANTIC
ALPINE BORO	BERGEN
BOGOTA BORO	BERGEN
CARLSTADT BORO	BERGEN
EAST RUTHERFORD BORO	BERGEN
EDGEWATER BORO	BERGEN
ENGLEWOOD CLIFFS BORO	BERGEN
FAIRVIEW BORO	BERGEN
FORT LEE BORO	BERGEN
GARFIELD CITY	BERGEN
HACKENSACK CITY	BERGEN
LITTLE FERRY BORO	BERGEN
LYNDHURST TWP	BERGEN
MOONACHIE BORO	BERGEN
NEW MILFORD BORO	BERGEN
NORTH ARLINGTON BORO	BERGEN
ORADELL BORO	BERGEN
RIDGEFIELD BORO	BERGEN
RIDGEFIELD PARK VILLAGE	BERGEN
RIVER EDGE BORO	BERGEN
RUTHERFORD BORO	BERGEN
TEANECK TWP	BERGEN
TENAFLY BORO	BERGEN
WALLINGTON BORO	BERGEN
SOUTH HACKENSACK TWP	BERGEN
BASS RIVER TWP	BURLINGTON
BEVERLY CITY	BURLINGTON
BORDENTOWN CITY	BURLINGTON
BORDENTOWN TWP	BURLINGTON
BURLINGTON CITY	BURLINGTON
BURLINGTON TWP	BURLINGTON
CHESTERFIELD TWP	BURLINGTON
CINNAMINSON TWP	BURLINGTON
DELANCO TWP	BURLINGTON
EDGEWATER PARK TWP	BURLINGTON
FIELDSBORO BORO	BURLINGTON
FLORENCE TWP	BURLINGTON
HAINESPORT TWP	BURLINGTON
LUMBERTON TWP	BURLINGTON
MANSFIELD TWP	BURLINGTON
MAPLE SHADE TWP	BURLINGTON
MOORESTOWN TWP	BURLINGTON
MOUNT HOLLY TWP	BURLINGTON
MOUNT LAUREL TWP	BURLINGTON
PALMYRA BORO	BURLINGTON
RIVERSIDE TWP	BURLINGTON
RIVERTON BORO	BURLINGTON
SPRINGFIELD TWP	BURLINGTON
WASHINGTON TWP	BURLINGTON
WESTAMPTON TWP	BURLINGTON
WILLINGBORO TWP	BURLINGTON
DELRAN TWP	BURLINGTON
BELLMAWR BORO	CAMDEN
BROOKLAWN BORO	CAMDEN
CAMDEN CITY	CAMDEN
CHERRY HILL TWP	CAMDEN
GLOUCESTER CITY	CAMDEN
GLOUCESTER TWP	CAMDEN
MOUNT EPHRAIM BORO	CAMDEN
PENNSAUKEN TWP	CAMDEN
RUNNEMEDE BORO	CAMDEN
WOODLYNNE BORO	CAMDEN
HADDON TWP	CAMDEN
AVALON BORO	CAPE MAY
CAPE MAY CITY	CAPE MAY
CAPE MAY POINT BORO	CAPE MAY
DENNIS TWP	CAPE MAY
LOWER TWP	CAPE MAY
MIDDLE TWP	CAPE MAY
NORTH WILDWOOD CITY	CAPE MAY
OCEAN CITY	CAPE MAY
SEA ISLE CITY	CAPE MAY
STONE HARBOR BORO	CAPE MAY
UPPER TWP	CAPE MAY
WEST CAPE MAY BORO	CAPE MAY
WEST WILDWOOD BORO	CAPE MAY
WILDWOOD CITY	CAPE MAY
WILDWOOD CREST BORO	CAPE MAY
WOODBINE BORO	CAPE MAY

BRIDGETON CITY	CUMBERLAND
COMMERCIAL TWP	CUMBERLAND
DOWNE TWP	CUMBERLAND
FAIRFIELD TWP	CUMBERLAND
GREENWICH TWP	CUMBERLAND
LAWRENCE TWP	CUMBERLAND
MAURICE RIVER TWP	CUMBERLAND
MILLVILLE CITY	CUMBERLAND
STOW CREEK TWP	CUMBERLAND
UPPER DEERFIELD TWP	CUMBERLAND
HOPEWELL TWP	CUMBERLAND
BELLEVILLE TWP	ESSEX
NEWARK CITY	ESSEX
NUTLEY TWP	ESSEX
DEPTFORD TWP	GLOUCESTER
EAST GREENWICH TWP	GLOUCESTER
GREENWICH TWP	GLOUCESTER
LOGAN TWP	GLOUCESTER
MANTUA TWP	GLOUCESTER
NATIONAL PARK BORO	GLOUCESTER
PAULSBORO BORO	GLOUCESTER
SWEDESBORO BORO	GLOUCESTER
WENONAH BORO	GLOUCESTER
WEST DEPTFORD TWP	GLOUCESTER
WOODBURY CITY	GLOUCESTER
WOOLWICH TWP	GLOUCESTER
WESTVILLE BORO	GLOUCESTER
BAYONNE CITY	HUDSON
EAST NEWARK BORO	HUDSON
GUTTENBERG TOWN	HUDSON
HARRISON TOWN	HUDSON
HOBOKEN CITY	HUDSON
JERSEY CITY	HUDSON
KEARNY TOWN	HUDSON
NORTH BERGEN TWP	HUDSON
SECAUCUS TOWN	HUDSON
WEEHAWKEN TWP	HUDSON
WEST NEW YORK TOWN	HUDSON
HAMILTON TWP	MERCER
TRENTON CITY	MERCER
CARTERET BORO	MIDDLESEX
EAST BRUNSWICK TWP	MIDDLESEX
EDISON TWP	MIDDLESEX
HIGHLAND PARK BORO	MIDDLESEX
OLD BRIDGE TWP	MIDDLESEX
PERTH AMBOY CITY	MIDDLESEX
SAYREVILLE BORO	MIDDLESEX
SOUTH AMBOY CITY	MIDDLESEX
SOUTH RIVER BORO	MIDDLESEX
WOODBRIDGE TWP	MIDDLESEX
NEW BRUNSWICK CITY	MIDDLESEX
PISCATAWAY TWP	MIDDLESEX
ABERDEEN TWP	MONMOUTH
ALLENHURST BORO	MONMOUTH
ASBURY PARK CITY	MONMOUTH
ATLANTIC HIGHLANDS BORO	MONMOUTH
AVON-BY-THE-SEA BORO	MONMOUTH
BELMAR BORO	MONMOUTH
BRADLEY BEACH BORO	MONMOUTH
BRIELLE BORO	MONMOUTH
DEAL BORO	MONMOUTH
EATONTOWN BORO	MONMOUTH
FAIR HAVEN BORO	MONMOUTH
HAZLET TWP	MONMOUTH
HIGHLANDS BORO	MONMOUTH
INTERLAKEN BORO	MONMOUTH
KEANSBURG BORO	MONMOUTH
KEYPORT BORO	MONMOUTH
LITTLE SILVER BORO	MONMOUTH
LOCH ARBOUR VILLAGE	MONMOUTH
LONG BRANCH CITY	MONMOUTH
MANASQUAN BORO	MONMOUTH
MATAWAN BORO	MONMOUTH
MIDDLETOWN TWP	MONMOUTH
MONMOUTH BEACH BORO	MONMOUTH
NEPTUNE CITY BORO	MONMOUTH
NEPTUNE TWP	MONMOUTH
OCEANPORT BORO	MONMOUTH
RED BANK BORO	MONMOUTH
RUMSON BORO	MONMOUTH
SEA BRIGHT BORO	MONMOUTH
SEA GIRT BORO	MONMOUTH
SHREWSBURY BORO	MONMOUTH
SPRING LAKE BORO	MONMOUTH
SPRING LAKE HEIGHTS BORO	MONMOUTH
TINTON FALLS BORO	MONMOUTH
UNION BEACH BORO	MONMOUTH
WALL TWP	MONMOUTH
WEST LONG BRANCH BORO	MONMOUTH
OCEAN TWP	MONMOUTH
HOLMDEL TWP	MONMOUTH
LAKE COMO BORO	MONMOUTH
COLTS NECK TWP	MONMOUTH

BARNEGAT LIGHT BORO	OCEAN
BARNEGAT TWP	OCEAN
BAY HEAD BORO	OCEAN
BEACH HAVEN BORO	OCEAN
BEACHWOOD BORO	OCEAN
BERKELEY TWP	OCEAN
BRICK TWP	OCEAN
EAGLESWOOD TWP	OCEAN
HARVEY CEDARS BORO	OCEAN
ISLAND HEIGHTS BORO	OCEAN
LACEY TWP	OCEAN
LITTLE EGG HARBOR TWP	OCEAN
LONG BEACH TWP	OCEAN
MANTOLOKING BORO	OCEAN
OCEAN GATE BORO	OCEAN
OCEAN TWP	OCEAN
PINE BEACH BORO	OCEAN
POINT PLEASANT BEACH BORO	OCEAN
POINT PLEASANT BORO	OCEAN
SEASIDE HEIGHTS BORO	OCEAN
SEASIDE PARK BORO	OCEAN
SHIP BOTTOM BORO	OCEAN
SOUTH TOMS RIVER BORO	OCEAN
STAFFORD TWP	OCEAN
SURF CITY BORO	OCEAN
TOMS RIVER TWP	OCEAN
TUCKERTON BORO	OCEAN
LAVALLETTE BORO	OCEAN
MANCHESTER TWP	OCEAN
LAKEHURST BORO	OCEAN
LAKEWOOD TWP	OCEAN
JACKSON TWP	OCEAN
CLIFTON CITY	PASSAIC
PASSAIC CITY	PASSAIC
ALLOWAY TWP	SALEM
CARNEYS POINT TWP	SALEM
ELSINBORO TWP	SALEM
LOWER ALLOWAYS CREEK TWP	SALEM
MANNINGTON TWP	SALEM
OLDMANS TWP	SALEM
PENNS GROVE BORO	SALEM
PILESGROVE TWP	SALEM
QUINTON TWP	SALEM
SALEM CITY	SALEM
PENNSVILLE TWP	SALEM
FRANKLIN TWP	SOMERSET
ELIZABETH CITY	UNION
LINDEN CITY	UNION
RAHWAY CITY	UNION



Tidally Influenced Municipalities

Hackensack Meadowlands Region

CAFRA Zone

New Jersey Tidal Waterways

0 10 20 40 Miles

1:471,215

NJ COASTAL MANAGEMENT PROGRAM

JANUARY 2016

Contamination and Toxic Substances

General requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)

1. How was site contamination evaluated? Select all that apply. Document and upload documentation and reports and evaluation explanation of site contamination below.

✓ American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment (ESA)
ASTM Phase II ESA
Remediation or clean-up plan
ASTM Vapor Encroachment Screening
None of the Above

2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

No

✓ Yes

3. Mitigation

Document and upload the mitigation needed according to the requirements of the appropriate federal, state, tribal, or local oversight agency. If the adverse environmental effects cannot be mitigated, then HUD assistance may not be used for the project at this site.

Can adverse environmental impacts be mitigated?

Adverse environmental impacts cannot feasibly be mitigated.

✓ Yes, adverse environmental impacts can be eliminated through mitigation. Document and upload all mitigation requirements below.

4. Describe how compliance was achieved in the text box below. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls, or use of institutional controls.

The only REC/area of concern that was mentioned was the presence of historic fill material. According to historical records and a review of Sanborn maps, a reservoir known as the Middle Reservoir occupied the Property from at least 1915 through the mid-1950s. The presence of the Middle Reservoir in itself is not an environmental concern; however, the water body was drained and filled to grade as indicated in the aerial photographs. Fill material was imported to fill the reservoir and raise the Property to grade. Historic fill generally constitutes a concern when it contains industrial waste, construction and demolition debris, coal ash, dredge spoils, or other potentially contaminated anthropogenic materials. The quality of the fill material used to fill the reservoir is unknown at this time and therefore historic fill material is considered a REC/AOC. No evaluation is required under NJDEP regulations at this time. However, should a triggering event occur at the Property such as a release to subsurface or construction/activities occur which involve the disturbance and/or disposal of the site soils, appropriate site investigation sampling may be necessary to determine the quality of the soil. The soil sampling test results came back with no detection. Radon According to the EPA, the radon zone level for the area is Zone 2, which has a predicted average indoor screening level between 2 pCi/L and 4 pCi/L, equal to or below the action level of 4 pCi/L set forth by the US EPA. While the subject property currently consists of vacant land, it is AEI's understanding that the subject property is planned for redevelopment with a multifamily residential building in connection with HUD HOME financing. As such, in accordance with the HUD MAP Guide, new construction should follow the ANSI/AARST CC-1000 (2018) Soil Gas System in New Construction of Buildings and post construction testing must be performed after construction is complete. Asbestos and Lead-based Paint The subject property is currently vacant land. EWMA's site reconnaissance noted the only structure on site was a plastic shed. Consequently, no building components likely to contain lead-based paints or suspect asbestos-containing materials were noted on site. With implementation of the recommended mitigation, the project will be in compliance with contamination and toxic substances requirements.

If a remediation plan or clean-up program was necessary, which standard does it follow?

Complete removal

✓ Risk-based corrective action (RBCA)

Screen Summary

Compliance Determination

Site contamination was evaluated as follows: ASTM Phase I ESA. On-site or nearby toxic, hazardous, or radioactive substances were found that could affect the health and safety of project occupants or conflict with the intended use of the property. The adverse environmental impacts can be mitigated. With mitigation, identified in the mitigation section of this review, the project will be in compliance with contamination and toxic substances requirements.

Supporting documentation

CONTAMINATION compliance determination detail.docx
Phase I Environmental Site Assessment.pdf
SITE CONTAMINATION CHECKLIST AND DOCS.pdf

Are formal compliance steps or mitigation required?

✓ Yes

No

1-27 JASPER ST, PATERSON, NJ

Contamination and Toxic Substances

24 CFR Part 50.3(i) & 58.5(i)(2)

Are formal compliance steps or mitigation required? Yes ☒

EWMA conducted a Phase I Environmental Site Assessment (ESA) in March 2021 for the subject property in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312).

Site contamination was evaluated as follows: ASTM Phase I ESA and ASTM Vapor Encroachment Screening. Based on review of the regulatory database report, the subject property (i) is not listed on an EPA Superfund National Priorities or CERCLA List, or equivalent State list; (ii) is not located within 3,000 feet of a toxic or solid waste landfill site; (iii) does not have an underground storage tank (which is not a residential fuel tank).

According to historical records and a review of Sanborn maps, a reservoir known as the Middle Reservoir occupied the Property from at least 1915 through the mid-1950s. The presence of the Middle Reservoir in itself is not an environmental concern; however, the water body was drained and filled to grade as indicated in the aerial photographs. Fill material was imported to fill the reservoir and raise the subject property to grade. Historic fill generally constitutes a concern when it contains industrial waste, construction and demolition debris, coal ash, dredge spoils, or other potentially contaminated anthropogenic materials. The quality of the fill material used to fill the reservoir was unknown at the time and therefore the historic fill material was identified as a recognized environmental concern (REC).

As construction activities are proposed which would involve the disturbance and disposal of on-site soils, A.T. Cameron, PG, conducted additional investigation of on-site and off-site soils in 2020 in the area of Hinchliffe Stadium and the subject property. Investigation of on-site soils (the area of a proposed six-story apartment building and four-story parking garage) included installation of 13 borings on July 24, 2020 with the collection of one soil sample from each boring. Two series of borings were installed: the F-series borings (7 borings) were installed adjacent to the Hinchliffe Stadium in the area where previous investigation work identified fill (i.e. on the subject property). The H-series borings (6 borings) were installed in the area where glacial deposits were identified at the surface on or in the immediate vicinity of the subject property. The F-series borings encountered fill in each boring that ranged from 2.5 to 6 feet in thickness. Fill was also present in borings H-4, H-5, and H-6 just off-site, but was not present in borings H-1, H-2, or H-3 on the subject property.

Each of the borings were installed to a depth of 10 feet below ground surface (bgs), continuously field screened, and analyzed for Target Compound List/Target Analyte List compounds, EPH, RCRA Characteristics, and hexavalent chromium.

Benzo(a)pyrene, mercury, lead, and chlordane (a pesticide) were detected above the default impact to groundwater soil cleanup standard (IGWSCS); however, none were detected above the

residential or non-residential contact standards. Aluminum and manganese were detected above their respective IGWSCS. However, the groundwater quality standard for aluminum and manganese are not based on health considerations; they are based on aesthetic considerations such as taste, odor, and appearance. Both are naturally occurring in the soil in New Jersey with concentrations commonly above the impact to ground water standard. NJDEP has determined that the impact to ground water pathway does not need to be addressed for these metals unless there is a reason to believe that their presence is due to a discharge. As there is no evidence that these exceedances are the result of a discharge at the site, evaluation of the impact to ground water pathway is not required for these compounds. Methylene chloride was also detected at a low level in some F-series samples; this compound was likely introduced at the laboratory.

Based on the analytical results from the subject property area soil boring samples, benzo(a)pyrene, mercury, lead, aluminum, manganese, and chlordane exceeded the IGWSCS. Further investigation of the impact to ground water pathway was suggested for those compounds that exceed the IGWSCS, with the exception of aluminum and manganese as noted above.

As a result, A.T. Cameron, PG conducted a limited environmental investigation of the migration to ground water pathway at the subject property. According to the report dated August 10, 2021, new standards were approved and became effective on May 17, 2021; the new standards are listed as the soil remediation standards for the migration to ground water pathway (MGWP) and soil leachate remediation standards for migration to ground water exposure pathway (LMGWP). Benzo(a)pyrene no longer has a MGWP standard; therefore, only chlordane, lead, and mercury, the other compounds previously detected above the old default impact to ground water soil cleanup standards, have current MGWP standards.

Additional borings were installed in the approximate locations of the original borings and samples collected in January 2021. Those borings where the original results indicated a potential impact to ground water based on the old standards had the following results:

- The sample from boring H1-A in the location of the original boring H-1 was non-detect for benzo(a)pyrene in the soil and leachate; therefore, it does not pose a groundwater concern.
- Samples from the new borings labeled F1-A, F2-A, F3-A, and F6-A and installed in approximately the same locations as the original borings were either non-detect for lead and/or mercury or, if detected, were below the current MGWP standard and the SPLP results were below the leachate standard. As such, lead and mercury do not pose a groundwater concern.
- Sampling from boring F7-A in the location of original boring F7, which had exceeded the old standard for Chlordane, came back non-detect for chlordane in both the soil and leachate samples. Based on the review of historical testing and current testing when compared to the MGWP, chlordane does not pose a concern for groundwater.
- Samples from the new borings labeled F1-A, F6-A, and F7-A and installed in approximately the same locations as the original borings were either non-detect for benzo(a)pyrene or, if detected, were below the current MGWP standard and the SPLP results were below the leachate standard for each sample. As such, benzo(a)pyrene does not pose a groundwater concern.

Based on the above results, there are no compounds that would pose a groundwater impact concern, and no further action is required.

Radon

According to the EPA, the radon zone level for the area is Zone 2, which has a predicted average indoor screening level between 2 pCi/L and 4 pCi/L, equal to or below the action level of 4 pCi/L set forth by the US EPA. While the subject property currently consists of vacant land, it is AEI's understanding that the subject property is planned for redevelopment with a multifamily residential building in connection with HUD HOME financing. As such, in accordance with the HUD MAP Guide, new construction should follow the ANSI/AARST CC-1000 (2018) Soil Gas System in New Construction of Buildings and post construction testing must be performed after construction is complete.

Asbestos and Lead-based Paint

The subject property is currently vacant land. EWMA's site reconnaissance noted the only structure on site was a plastic shed. Consequently, no building components likely to contain lead-based paints or suspect asbestos-containing materials were noted on site.

With implementation of the recommended mitigation, the project will be in compliance with contamination and toxic substances requirements.

SITE-SPECIFIC FIELD CONTAMINATION CHECKLIST

Completing the form requires a site visit by the preparer. The preparer should be sure to observe the property by walking through the property and the building(s) and other structures on the property to the extent possible and observing all adjoining* properties.

Date of Visit: 10/6/2020 Time: 9:30 AM Weather Sunny ~ 66°

Program Name: SENIOR HOUSING (HINCHLIFFE) + GARAGE

Project Location/Address: 1-27 JASPER ST. PATERSON, NJ 07522

Property Owner:

Attach the following, as appropriate:

☐ Photographs of site and surrounding areas ☒ Maps (street, topographic, aerial, site map,

QUESTION Is there evidence of any of the following?	OBSERVATION SUBJECT PROPERTY	OBSERVATION ADJOINING PROPERTIES
Is the property or any adjoining property currently used, or has evidence of prior use, as a ***gasoline station, motor vehicle repair facility, printing facility, dry cleaners, photo developing laboratory, junkyard, or as a waste treatment, storage, disposal, processing or recycling facility***?	YES (NO) UNKNOWN	YES (NO) UNKNOWN
Are there any damaged or discarded ***automobile(s), automotive or industrial batteries, pesticides, paints, or other chemicals*** in individual containers greater than 5 gal in volume or 50 gal in the aggregate, stored on or used at the property or adjoining properties?	YES (NO) UNKNOWN	YES (NO) UNKNOWN
Are there any industrial ***drums*** (typically 55 gal) or sacks of ***chemicals, herbicides or pesticides*** located on the property or adjoining properties?	YES (NO) UNKNOWN	YES (NO) UNKNOWN
Has ***fill dirt*** been brought onto the property or adjoining properties that originated from a suspicious site or that is of an unknown origin?	YES (NO) UNKNOWN	YES (NO) UNKNOWN
Are there any ***pits, ponds, or lagoons*** located on the property or adjoining properties in connection with waste treatment or waste disposal?	YES (NO) UNKNOWN	YES (NO) UNKNOWN
Is there any ***stained soil, distressed vegetation*** and/or ***discolored water*** on the property or adjoining properties?	YES (NO) UNKNOWN	YES (NO) UNKNOWN
Are there any ***storage tanks***, aboveground or underground (other than residential), located on the property or adjoining properties?	YES (NO) UNKNOWN	YES (NO) UNKNOWN

**Adjoining properties*: Any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them.

QUESTION Is there evidence of any of the following?	SUBJECT PROPERTY	ADJOINING PROPERTIES
Are there any ***vent pipes, fill pipes, or underground tank access ways*** visible on the property or adjoining properties?	YES ☐ NO UNKNOWN ☐	YES ☐ NO UNKNOWN
Are any flooring, drains, walls, ceilings, or grounds on the property or adjoining properties ***stained by substances*** (other than water) or emitting ***noxious or foul odors or odors of a chemical nature?***	YES ☐ NO UNKNOWN ☐	YES ☐ NO UNKNOWN
Is the property served by a ***private well or non-public water system***? (If yes, a follow-up investigation is required to determine if contaminants have been identified in the well or system that exceed guidelines applicable to the water system, or if the well has been designated contaminated by any government environmental/health agency.)	YES ☐ NO UNKNOWN ☐	YES ☐ NO UNKNOWN
Has the owner or occupant of the property been informed of the existence of past or current ***hazardous substances or petroleum products or environmental violations*** with respect to the property or adjoining properties?	YES ☐ NO UNKNOWN ☐	YES ☐ NO UNKNOWN
Do the property or adjoining properties ***discharge wastewater*** (not including sanitary waste or storm water) onto the property or adjoining properties and/or into a storm water system?	YES ☐ NO UNKNOWN ☐	YES ☐ NO UNKNOWN
Is there a ***transformer, capacitor, or any hydraulic equipment*** on the property or adjoining properties that are not marked as "non-PCB"?	YES ☐ NO UNKNOWN ☐	YES ☐ NO UNKNOWN

If answering "YES" or UNKNOWN" to any above items, describe the conditions:

Use photographs and maps to mark and identify conditions. Attach more information as needed.

Is further evaluation warranted? YES ☐ NO ☐ UNCERTAIN ☐

Preparer of this form must complete the following required information.

This inspection was completed by: Name: DIANA VAZQUEZ Title: INSPECTOR	Phone Number: 973-321-1212 Email: DVAZQUEZ@PATERSONNJ.GOV Agency: CITY OF PATERSON Comm. DEV.
Address: 125 ELLISON ST. 2ND FLR PATERSON, NJ 07505	

Preparer represents that to the best of his/her knowledge the above statements and facts are true and correct and to the best of his/her actual knowledge no material facts have been suppressed, omitted or misstated.

Signature: Diana Vazquez	Date: 1/8/2021