Phase IB Archaeological Monitoring as part of the Reconstruction of Peck Slip, Between Water Street and South Street, Manhattan, New York County, New York (Contract No. M167-119M).



Prepared for JCC Construction Corp

Prepared by Alyssa Loorya, Ph.D., R.P.A. Elissa Rutigliano Chrysalis Archaeological Consultants

*Edited by* Lisa Geiger, MA, R.P.A. Chrysalis Archaeological Consultants

August 2020

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## **I. INTRODUCTION**

Chrysalis Archaeological Consultants, Inc. (Chrysalis) was retained by JCC Construction Corp (JCC) to undertake Phase IB Archaeological Monitoring as part of the Reconstruction of Peck Slip, Between Water Street and South Street, Manhattan, New York County, New York (Contract No. M167-119M).

The Area of Potential Affect (APE) for this project is located within Peck Slip in Lower Manhattan, New York (Map 01). The triangular shaped, .33-acre area is an open plaza with a mix of Belgian block cobblestone and asphalt paving. This plaza lies upon a filled former boat slip that includes Block 107, Lot 60 within the South Street Seaport Historic District, a New York City Historic District also listed on the State and National Registers of Historic Places. The APE is bound by the northern side of the Peck Slip roadway to the northeast, South Street to the southeast, the south side of the Peck Slip roadway to the southwest, and Water Street to the northwest (Map 02). Project work is limited to the paved plaza area and the Front Street roadway that runs through the center of the plaza. Work is not planned to extend into the Peck Slip or Water Street cobblestone-paved roadways or the asphalt-paved South Street roadway.

The APE is considered an area of high historical archaeological sensitivity based upon its location within the South Street Seaport Historic District and the results of previous Phase IA and Phase IB studies within and adjacent to Peck Slip (see Section II). As per the approved Archaeological Work Plan (AWP)<sup>1</sup>, Chrysalis undertook Archaeological Monitoring of excavation across the APE at depths exceeding previous documented impacts to assess sensitivity for seventeenth through nineteenth century landfill, landfill-retaining structures, early City utilities, or other potential archaeologically significant materials (AKRF 2018). The Phase IB investigations summarized in this report were designed to determine the presence/absence of archaeological resources within the project area and to assess whether they would be adversely affected by project construction plans.

Chrysalis oversaw excavation of twelve excavation trenches of varying size and depth from February 3, 2020 to March 12, 2020. No significant archaeological features or materials were documented during Archaeological Monitoring. All soils exposed showed evidence of previous excavation and disturbance. While the potential for historical archaeological materials remains in the general area, Archaeological Monitoring has overseen the full depth of project impacts in the APE. No additional archaeological work is recommended for this project.

Alyssa Loorya, Ph.D., R.P.A. served as Principal Investigator for this project and authored this report with Elissa Rutigliano. Elissa Rutigliano served as Field Director for this project. Lisa Geiger, MA, R.P.A. served as report editor.

<sup>&</sup>lt;sup>1</sup> The approved Archaeological Work Plan (AWP) for the Reconstruction of Peck Slip was submitted by AKRF, Inc. in September 2018. Archaeological Monitoring of the project was awarded to Chrysalis on December 27, 2019

#### **PROJECT DESCRIPTION**

The Lower Manhattan Development Corporation (LMDC) is developing Peck Slip as part of the East River Access Project in order to improve pedestrian access to the East River and provide upgrades to local community spaces. The project APE covers the full footprint of the plaza at Peck Slip, located within Block 107, Lot 60 southeast of Front Street and lacking Block/Lot designations at its smaller section northwest of Front Street (Map 02). The APE is bound by the northern side of the Peck Slip roadway to the northeast, South Street to the southeast, the south side of the Peck Slip roadway to the southwest, and Water Street to the northwest. The existing plaza area is paved and features planters and boulders lining its perimeter as well as a Citibike station at its northwestern extent, but it is generally undeveloped.

This project is subject to review under Section 106 of the National Historic Preservation Act (NHPA), which requires consideration of project effects on archaeological resources meeting the eligibility requirements of the National Register of Historic Places (NR). In addition to the South Street Seaport Historic District's listing on local, State, and Federal Registers of Historic Places, previous investigations have found portions of the APE and the surrounding area to be sensitive for seventeenth- through nineteenth-century historic archaeological materials. Documented features previously identified in the general project area and immediately surrounding blocks include landfill and landfill retaining structures, portions of the Peck Slip waterway boundaries and bulkheads, early nineteenth century wooden water pipes, eighteenth and nineteenth century architectural structures and outbuildings, and commercial and private residential refuse deposits (PSI 1982; Pickman 1999; AKRF 2007; HPI 2014; Chrysalis 2011, 2018; among others).

Archaeological Monitoring of the Reconstruction of Peck Slip monitored the planned and executed below ground impacts of the project, which included: stripping the pavement and curbs from the central Peck Slip plaza to 12" below ground surface (bgs), construction of planters to 24" bgs at the western portion of the APE, construction of seatwalls to 30" bgs across the north half of the APE, excavation to 48" bgs for a new drain along the south APE perimeter, and excavation to 84" bgs for a water meter vault at the north central portion of the APE (see Map 03 for project design and Map 07 for field results). These planned improvements guided the location and depth of pavement stripping and trench excavation carried out during monitored 2020 project work. The purpose of the work is to transition the current Belgian block cobblestone-paved portion of Front Street that runs through the center portion of Peck Slip from an active roadway into a paved segment incorporated into the larger pedestrian plaza.





Map 02: Project Area on OASIS City Map (OASISnyc 2020, LPC 2019).



Figure 2

Map 03: Planned project impact depths from AWP (AKRF 2018).

#### **PROJECT INFORMATION**

Project Name	Phase IB Archaeological Monitoring for the		
	Reconstruction of Peck Slip, Between Water Street		
	and South Street, Manhattan, New York County,		
	New York (Contract No. M167-119M).		
Street Address	Peck Slip, New York, New Yrk		
Borough/Block/Lot	Manhattan/Block 107/Lot 60		
LPC PUID (If Yet Assigned)			
Applicant Name			
Lead Agency (Contact Person)			
Secondary Agencies (Contact Person)			
Principal Investigator	Alyssa Loorya, Ph.D., R.P.A.		
Field Director	Elissa Rutigliano		

## **II. SYNTHESIS OF PREVIOUS WORK**

The APE lies within the South Street Seaport Historic District at the southeast side of Lower Manhattan, one of the earliest centers of shipping and commerce in New York City due to easy access to the East River from the early City center. The South Street Seaport Historic District is bound by Dover Street to the north, Pearl Street to the west before turning down Front Street at Fulton Street, Maiden Lane at South Street to the south, and Piers 16-17 and South Street to the east (Map 02).

A 2007 Phase IA Documentary Study of the Seaport's north side by AKRF highlighted Peck Slip's usage for shipping and commerce as the surrounding area was gradually landfilled and developed (AKRF 2007). The Peck Slip area was used as a wharf by the early eighteenth century when the natural East River water line lay east of Pearl Street (then Queen Street). The slip began to form by 1728 when the mooring place was left as an inlet while intentional landfilling created Water Street around it (AKRF 2007). The slip appeared to be lined on each side with wooden docks in the mid eighteenth century, and it extended with newly built land east to Front Street by 1797. In the early nineteenth century the slip remained while surrounding land extended east to South Street. By 1836, Colton's map indicated Peck Slip was infilled to create solid land to South Street (AKRF 2007, Chrysalis 2018).

Extensive excavations for utility and streetscape upgrades to the north side of the South Street Seaport Historic District from 2011-2013 revealed evidence of historic features in and around Peck Slip, recorded in Chrysalis's Phase IB Archaeological Monitoring for the South Street South Reconstruction from Old Slip to Fulton Street (Chrysalis 2018). Wooden landfill-retaining cribbing was documented in the Peck Slip streetbeds and plaza beginning around 6.5' bgs. Dendrochronology testing dated samples from two of these features within the plaza footprint to 1738-1740. Two artifact deposits dense with early to mid nineteenth century ceramics were uncovered beginning at 5.7' bgs to the northwest and southeast of Front Street's intersection with Peck Slip. This testing also confirmed the location of a combined brick sewer running toward

South Street through the Peck Slip plaza; this sewer was likely one of two sewers depicted in 1867 maps running through the area. It appeared to remain active, with additional screens and cement added to its interior likely as part of ongoing maintenance (Chrysalis 2018:6.70). A combined sewer transports both household/commercial wastewater and street runoff water. While these Phase IB excavations focused on the streetbeds surrounding Peck Slip rather than the paved plaza, they helped established general areas of previous disturbance and testing that were utilized in the creation of this project's AWP (AKRF 2018, Chrysalis 2018).

## **III. CONTEXT AND RESEARCH DESIGN**

The project APE lies within an area covered by the 2007 AKRF Phase IA Documentary Study for the north side of the South Street Seaport Historic District. As the New York City, State, and Federally listed Historic District was found to be sensitive for historic archaeological materials in the Peck Slip area, any excavation exceeding existing utility disturbance depth required further archaeological analysis (AKRF 2007). This recommendation was the basis for a 2009 Programmatic Agreement between NY SHPO, LMDC, and the City of New York Department of Parks and Recreation (NYC Parks) to prepare an Archaeological Monitoring Plan if it was determined the East River Access project would impact sensitive areas (AKRF 2018).

The AWP for this project primarily compared the 2007 Phase IA Documentary Study and Chrysalis's 2018 Phase IB report to create a map of previous disturbances around the APE from former utility installations and recent monitored street bed excavations (Map 04). Archaeological monitoring is called for when project activities extend below the depths displayed in this sensitivity map.

Archaeological monitoring is defined as "the observation of construction excavation activities by an archaeologist in order to identify, recover, protect, and/or document archaeological information or materials" (NYAC 2002). Archaeological Monitoring of the Reconstruction of Peck Slip project was designed to determine the presence or absence of archaeological materials within the APE and to identify and document any observed archaeological resources that may be impacted by project activities.



Map 04: Limits of Peck Slip disturbance based on previous archaeological study and investigations (AKRF 2018).

#### **IV. PROJECT METHODS**

Chrysalis monitored stripping of the plaza surface pavement and the subsequent excavation of targeted work areas (Map 04 and Map 07). Excavation trenches were assigned consecutive numbers by the archaeological monitor. Trench 5 and Trench 11 represented amorphously shaped areas where paving was stripped, but excavation did not continue beyond .1' into the underlying soil.

For ease of reference, the APE was divided into four segments, organized by points A-D on the 'Scope of Work' excavation plan put forth by Quennell Rothschild & Partners, LLP (Map 05): Section 1 was the northwestern-most 100' between points A and B, Section 2 the next 100' segment east between points B and C, Section 3 the next 100' segment between points C and D, and Section 4 the 68' remainder of the APE from point D to South Street. A Parks Department-defined baseline ("E-W baseline") runs northwest to southeast down the center of the APE/Peck Slip median.

All soils exposed during Archaeological Monitoring were recorded and described using the Munsell color system and standard texture classifications. Project methods called for any artifacts recovered during excavation to be bagged according to their unique provenience and transported to the laboratory for processing and analysis. An artifact catalog recording the provenance of each recovered artifact was to be utilized. Bulk materials, such as concrete rubble, brick, large metal objects, ash coal, cinders, and slag, were recorded but not saved. Modern refuse was noted but not retained. Soil profiles and archaeological features were described, photographed in digital format, and illustrated by measured drawings in Imperial scale in plan and vertical perspective, as appropriate.

No significant cultural resources were encountered during Archaeological Monitoring of the Reconstruction of Peck Slip. The Project Area was previously disturbed from work activity relating to installation of utilities and extensive landscaping of the area. Any exposed artifacts were highly fragmented, not *in situ*, redeposited materials from disturbed and mixed contexts, and these non-significant materials were not retained. Excavation did not occur to a significant depth that could recover potential earlier resources.

Archaeological Monitoring was performed in accordance with the National Historic Preservation Act of 1966, as amended, the Advisory Council on Historic Preservation's "Protection of Historic and Cultural Properties" (36 CFR 800.4), the NY SHPO's Guidelines for Archaeological Projects, the New York Archaeological Council's (NYAC) 2004 Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State, and the revised 2018 Landmarks Preservation Commission's (NYC LPC) "Guidelines for Archaeological Work in New York City."



Map 05: 'Scope of Work' site plan provided by Quennell Rothschild & Partners, LLP, with arbitrary Project Area section division Points A-D designated.



Map 06: Site plan of 'Peck Slip, DEP Access Corridor' showing location of the active nineteenth-century 4'x5' combined sewer within the APE

## V. FIELD RESULTS

Chrysalis monitored stripping of the paved plaza surface and excavation of twelve trenches of varying size and depth based on the associated construction activity.

Excavated trenches were primarily oriented north-south (Map 07). Although the project central baseline and Peck Slip's plaza are oriented slightly northwest-southeast from USGS map north, the Field Results section uses "north" to refer to the Peck Slip plaza's intersection with Water Street and "south" to refer to where the plaza abuts South Street. USGS map north is indicated on all Field Results maps.

Trench 1 and Trench 2 were opened in Section 1 between 'Point A' and 'Point B.'<sup>2</sup> Trench 3 and Trench 4 were located in Section 2 between 'Point B' and 'Point C.' Trench 5 represents the remainder of the project area in Sections 1 and 2 between 'Point A' to 'Point C'. Trenches 6 - 11 were opened in Section 3 between 'Point C' and 'Point D.' Trench 12 was located partially within Section 3 and across the entire area of Section 4 (Map 07).

Trenches were excavated both mechanically and by hand. Numerous subsurface utilities – including electrical lines, telecommunication lines, water pipes, and steam pipes – run underneath the project area and were encountered during excavation.

Excavation that occurred northeast of the central baseline reached an average maximum depth of 1.6' bgs. Excavation that occurred southwest of the central baseline was primarily concerned with exposing the existing, active 4' by 5' combined brick sewer that runs north-south throughout the entirety of the project area (Map 06). This sewer was identified as dating at least as early as 1867 during previous area excavations (Chrysalis 2018:6.70). Excavation that exposed the sewer spanned Sections 1-4 and was mostly within the mapped area of previous disturbance based on the presence of the sewer, an area for which the AWP did not call for Archaeological Monitoring (Map 07). As the trenches that incorporated the sewer often extended over areas not previously known to have been disturbed, this portion of the project had a monitor overseeing excavation. Excavation of the sewer and its immediate surrounding area generally ranged from 8' – 11' wide and reached a maximum depth of 4' bgs<sup>3</sup>.

Excavation around the sewer exposed disarticulated bricks and oyster shells, likely fill associated with earlier installation work as well as landfill practices. The soil surrounding the sewer was fill that included early- to mid-twentieth century bottle glass. All artifacts encountered were highly fragmented and isolated, with no corresponding or matching material within their vicinity. These materials encountered from the excavation of the sewer represented redeposited materials with no intact historic context, and in keeping with the Project Methods, were not retained.

<sup>&</sup>lt;sup>2</sup> On the central baseline according to USGS map north, Point A is at the northernwestern perimeter of the project area, aligned to the Water Street southeast curb-line, Point B is 73' northwest of the Front Street northern curb-line, Point C aligned to the Front Street southeast curb-line, and Point D is 68' northwest of South Street.

<sup>&</sup>lt;sup>3</sup> Below ground surface depths are commonly used throughout the discussion as this was utilized in the field by the construction crew. NAVD 88 depths are provided in stratigraphic tables.



Map 07: Peck Slip Phase IB Archaeological Monitoring overall field results.

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#### **SECTION 1**

Section 1 was the northern-most 100' between points A and B and included Trenches 1, 2, and 5 (Map 07, Trench 5 covered in Section 2). No archaeological materials or intact soil strata were encountered in Section 1.



Map 08: Section 1 field results plan view.

# Trench 1

Trench 1 was excavated in the Peck Slip plaza immediately south of Water Street, in Section 1 between 'Point A' and 'Point B' (Map 08). The trench measured 9' east-west and 74' north-south, with its north wall situated 12' south of the Water Street south curb-line and its west wall located 8' east of the concrete slab that borders the western property line. The trench was opened to expose the active nineteenth-century 4' by 5' combined sewer that runs north-south throughout the entirety

of the project area (Map 06). This sewer was encountered within the trench beginning at 3.4' bgs. Disarticulated brick and oyster shell likely disturbed and redeposited during the original installation of the sewer were present throughout the trench. Excavation reached a max depth of 4' bgs (Image 01) (Table 01).

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	5.51' - 5.01' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	5.01' - 4.01' (.5' - 1.5' bgs)	N/A	N/A	Roadbase (cement)
III.	4.01' – 3.11' (1.5' – 2.4' bgs)	7.5YR 4/3	M-F LoSa	Disarticulated brick; pebbles, cobbles
IV.	3.11' – 1.51' (2.4' – 4' bgs)	7.5YR 4/2	M-F LoSa	Disarticulated brick, oyster shell; pebbles, cobbles

Table 01: Stratigraphic Profile – Trench 1



Image 01: Trench 1 with active nineteenth-century sewer in plan view, facing northwest.

Trench 2 was excavated along Peck Slip, south of Water Street, in the eastern half of Section 1 (Map 08). The trench measured 10' east-west and 8' north-south. Its north wall abutted an east-west-oriented concrete encasement for a 24" steam utility, its west wall abutted the active nineteenth-century 4' by 5' combined brick sewer that runs north-south throughout the entirety of the project site (Map 06), and its east wall abutted the concrete slab that bordered the eastern property line. Two sets of north-south-oriented electric ducts were encountered in the western half of the trench at 2.5' bgs. A north-south-oriented 16" diameter high pressure water or other utility (HPW) line was encountered in the eastern half of the trench at 2.5' bgs. An orth-south of 3.24' bgs. The southern half of the trench was excavated to a max depth of 3.24' bgs. The southern half of the trench was excavated to a max depth of 1.4' bgs. All soils exposed were fills surrounding utilities, and no intact historic soils or archaeological materials were uncovered in Trench 2 (Image 02) (Table 02).

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	5.86' - 5.36' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	5.36' - 4.36' (.5' - 1.5' bgs)	N/A	N/A	Roadbase (cement)
III.	4.36' - 2.62' (1.5' - 3.24' bgs)	10YR 4/2 and 10YR 4/3	M-F LoSa	Concrete rubble, cement, gravel inclusions



Image 02: Trench 2, general view of trench and utilities, facing north.

## SECTION 2

Section 2 was the 100' segment east of Section 1 between points B and C and included Trenches 3, 4, and 5 (Map 09). No archaeological materials or intact soil strata were encountered in Section 2.



Map 09: Section 2 field results plan view.

Trench 3 was excavated along the Peck Slip plaza in the western half of Section 2 (Map 09). This trench was aligned with Trench 1 and measured 10' east-west and 87' north-south, with its west wall located 8' east of the concrete slab that borders the western property line. The trench was opened to expose the active nineteenth-century 4' by 5' combined sewer that runs north-south throughout the entirety of the project area (Map 06) and was encountered within the trench at 3' bgs. Disarticulated brick and oyster shell redeposited during the original installation of the sewer were present throughout the trench. Excavation reached a max depth of 4' bgs (Image 03) (Table 03).

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	5.15' - 4.65' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	4.65' - 3.65' (.5 - 1.5' bgs)	N/A	N/A	Roadbase (cement)
III.	3.65' - 2.95' (1.5' - 2.2' bgs)	7.5YR 4/3 and 10YR 4/2	M-F LoSa	Disarticulated brick, oyster shell; some concrete rubble inclusions
IV.	2.95' - 1.15' (2.2' - 4' bgs)	7.5YR 4/3 and 5YR 5/3	M-F LoSa	Disarticulated brick, oyster shell; some gravel inclusions

Table 03: Stratigraphic Profile – Trench 3, Eastern half (4' by 5' combined sewer)



Image 03: Trench 3, plan view of trench and active nineteenth-century 4' by 5' sewer with manhole, facing north.

Trench 4 was excavated in the eastern half of Section 2 (Map 09). The trench measured 3.3' eastwest and 91' north-south, ending with its south wall located 9' north of the Front Street southern curb-line and its east wall located 18' west of the eastern property line. Two east-west-oriented PVC telecom ducts were encountered in the northern half of the trench at 2' bgs. Two east-westoriented metal pipes were encountered in the southern half of the trench at 2.5' bgs. These pipes' function could not be determined based on their level of expose, and they did not reappear in subsequent excavation trenches further south. Map 06 suggests they represent electric lines, likely also exposed in Trench 02 (Map 06). The trench was excavated to a maximum depth of 4.5' bgs (Images 04-05) (Table 04). Trace amounts of disarticulated brick were seen throughout the west profile. No cultural material or intact stratigraphy was encountered.

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	5.29' - 4.79' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	4.79' - 3.79' (.5 - 1.5' bgs)	N/A	N/A	Roadbase (cement)
III.	3.79' - 3.29' (1.5' - 2' bgs)	7.5YR 4/3 and 10YR 4/2	M-F LoSa	Disarticulated brick; some concrete rubble, gravel inclusions
IV.	3.29' - 0.79' (2' - 4.5' bgs)	7.5YR 4/3 and 5YR 5/3	M-F LoSa	Disarticulated brick; some gravel inclusions

Table 04: Stratigraphic Profile – Trench 4



Image 04: Trench 4, plan view of trench and utilities, overview facing north.



Image 05: Trench 4, plan view of the northern half of the trench, facing north.

Trench 5 represented the remaining project area between 'Point A' to 'Point C' in Sections 1-2 (Map 09) lying outside the bounds of Trenches 1 through 4. Trench 5 was stripped to a max depth of 1.6' bgs (Image 06) (Table 05). No cultural material or intact stratigraphy was encountered.

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	5.2' - 4.7' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	4.7' - 3.7' (.5' - 1.5' bgs)	N/A	N/A	Roadbase (cement)
II.	3.7' - 3.6' (1.5' - 1.6' bgs)	10YR 4/2 and 10YR 4/3 mottled with 10YR 6/1	M-F LoSa	Concrete rubble, cement, gravel inclusions

Table 05: Stratigraphic Profile – Trench 5



Image 06: View of the project area from 'Point A' to 'Point C,' facing north.

#### SECTION 3

Section 3 was the 100' segment east of Section 2 between Points C and D and included Trenches 6-11 (Map 10). No archaeological materials or intact soil strata were encountered in Section 3.



Map 10: Section 3 field results plan view.

# TRENCH 6

Trench 6 was excavated immediately south of Front Street, in the western half of the project area. The trench measured 19' east-west and 43' north-south, with its west wall abutting the concrete slab bordering the western property line and its north wall aligning to the Front Street southern curb-line, or 'Point C' (Map 10). The trench was opened to expose the active nineteenth-century 4' by 5' combined sewer that runs north-south throughout the entirety of the project area (Map 06). The combined sewer was encountered within the eastern half of the trench at 1.96' bgs. An 11.4' east-west section of the trench surrounding the sewer utility was excavated to a maximum depth of 2.6' bgs. Several disarticulated bricks and oyster shells redeposited from the original sewer installation or its maintenance were present throughout this section (Image 07) (Table 06).

The remaining 7.6' comprising the western half of the trench was excavated to a max depth of 1.36' bgs. Excavation exposed numerous east-west-oriented utilities in the northern half of the trench (partially overlapping with the Front Street intersection, which was not monitored). These utilities included PVC, concrete-encased, and metal electric and telephone ducts encountered between 1.36' and 1.48' bgs as well as a concrete-encased metal 16" diameter HPW utility, encountered at 1' bgs (Table 07).

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.79' – 4.29' (0' – .5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	4.29' - 3.49' (.5' - 1.3' bgs)	N/A	N/A	Roadbase (cement)
III.	3.49' – 3.43' (1.3' – 1.36')	10YR 4/2 and 10YR 4/3 mottled with 10YR 6/1	M-F LoSa	Concrete rubble, cement, gravel inclusions

Table 06: Stratigraphic Profile – Trench 6, Western half

Table 07: Stratigraphic Profile -	- Trench 6. Eastern half	(4' by 5'	combined sewer)
		( - ) -	

STRAT	NAVD 88 DEPTH	MUNSELL	SOIL TYPE	COMMENTS
	(BGS)			
I.	4.65' - 4.15'	N/A	N/A	Roadbed (cobblestone)
	(0'5' bgs)			
II.	4.15' – 3.35'	N/A	N/A	Roadbase (cement)
	(.5' – 1.3' bgs)			
III.	3.35' - 2.65'	7.5YR 4/3 with	M-F LoSa	Disarticulated brick, oyster
	(1.3' - 2'  bgs)	2.5YR 5/3, and		shell; some concrete rubble
		traces of 10YR 4/2		inclusions
IV.	2.65' - 2.05'	7.5YR 4/3 with	M-F LoSa	Disarticulated brick, oyster
	(2' – 2.6' bgs)	2.5YR 5/3		shell



Image 07: Trench 6, plan view of trench and utilities, facing north.

Trench 7 was excavated immediately south of Front Street, in the eastern half of the project area. The trench measured 3.36' east-west and 16.2' north-south, with its east wall abutting the eastern property line and its north wall aligning to the Front Street southern curb-line, or 'Point C' (Map 10). The trench was opened to expose three east-west-oriented PVC and concrete-encased telephone and electric ducts seen in the northern half of Trench 6. Each of the three ducts were 9.6" wide and spaced 7" apart from each other. Two were encountered within the trench at 2' bgs, and the third was encountered within the trench at 2.36' bgs. The northern half of the trench, comprising the northernmost 7', was excavated to a max depth of 2.96' bgs. The southern half of the trench, comprising the remaining 9.24', was excavated to a max depth of 1.6' bgs (Images 08-09) (Table 08). No cultural material or intact stratigraphy was encountered.

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.5' - 4' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	4' - 3' (.5' - 1.5' bgs)	N/A	N/A	Roadbase (cement)
III.	3' - 1.54' (1.5' - 2.96' bgs)	10YR 4/2 and 10YR 4/3, mottled with 10YR 6/1 and 2.5Y 6/6 sand fill	M-F LoSa	Concrete rubble, cement, gravel inclusions

Table 08: Stratigraphic Profile – Trench 7



Image 08: Trench 7, plan view of trench and utilities, overview facing south.



Image 09: Trench 7, plan view, overview facing north.

Trench 8 was excavated immediately south of Front Street. It was an east-west-oriented trench that ran between Trench 6 and Trench 7. The trench measured 36.4' east-west and 7.6' north-south, with its west wall abutting Trench 6, its east wall abutting Trench 7, and its north wall aligning to the Front Street southern curb-line, or 'Point C' (Map 10). The trench was opened to expose three east-west-oriented electric and telephone ducts seen in the northern half of both Trench 6 and Trench 7. Excavation reached a max depth of 1' bgs (Image 10) (Table 09). No cultural material or intact stratigraphy was encountered.

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.64' - 4.14' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	4.14' - 3.14' (.5' - 1.5' bgs)	N/A	N/A	Roadbase (cement)
III.	3.14' – 2.64' (1.5' – 2' bgs)	10YR 4/2 and 10YR 4/3, with 2.5Y 6/6 sand fill	M-F LoSa	Concrete rubble, cement, gravel inclusions

Table 09: Stratigraphic Profile – Trench 8



Image 10: Trench 8, Excavation in progress, facing west.

Trench 9 was excavated in the eastern half of Section 4 (Map 10). The L-shaped trench measured 23' north-south, with its north wall located 8' south of the Front Street southern curb-line. The northern portion of the trench measured 4.3' east-west, with its east wall located 15.5' west of the eastern property line. The southern portion of the trench measured 11' east-west, with its east wall located 5.5' west of the eastern property line. A north-south-oriented 12" diameter HPW utility was encountered in the southern portion of the trench at 3.8' bgs. The trench was excavated to a maximum depth of 4.9' bgs (Images 11-14) (Table 10). Oyster shell was found within the trench, and disarticulated brick was seen throughout the west profile (Table 11). Both occurred in disturbed, mixed fill soils. No cultural material or intact stratigraphy was encountered.

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.51' - 4.01' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	4.01' - 3.01' (.5 - 1.5' bgs)	N/A	N/A	Roadbase (cement)
III.	3.01' - 1.51' (1.5' - 3' bgs)	7.5YR 4/3 and 10YR 4/2	M-F LoSa	Disarticulated brick, oyster shell; some concrete rubble inclusions
IV.	1.51' – 0.61' (3' – 3.9' bgs)	5YR 4/3	M-F LoSa	Disarticulated brick; some concrete rubble inclusions
V.	0.61' - 0.31' (3.9' - 4.2' bgs)	7.5YR 5/6	M-F LoSa	
VI.	0.31' - (-)0.39' (4.2' - 4.9' bgs)	5YR 4/3 and 7.5YR 4/3	M-F LoSa	

Table 10: Stratigraphic Profile – Trench 9

Table 11.	Stratigraphic	Profile _	Trench 9	East r	vrofile only
	Suaugraphic	riome –	TICHCH 9,	Lasi	Joine only

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.5' - 4' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	4' - 1.5' (.5 - 3' bgs)	N/A	M-F LoSa	Roadbase (cement)
III.	1.5' - (-)0.4' (3' - 4.9' bgs)	7.5YR 4/3 and 10YR 4/2	M-F LoSa	Oyster shell; some concrete rubble, gravel inclusions



Image 11: Trench 9, plan view, facing south.



Image 12: Trench 9, 12" diameter HPW utility first encountered in trench, facing northwest.



Image 13: Trench 9, Plan view and 12" diameter HPW utility within trench, facing north.



Image 14: Trench 9, Profile view of west wall, facing west.

Trench 10 was excavated in the eastern half of Section 3 (Map 10). The L-shaped trench was opened south of and connecting to Trench 9 (Image 15). It measured 40' north-south, with its west wall aligned to the west wall of Trench 9. The northern portion of the trench measured 4' east-west, with the east wall located 12.3' west of the eastern property line. The southern portion of the trench measured 13.2' east-west, with the east wall located 3.3' west of the eastern property line. The north-south-oriented 12" diameter HPW utility, previously seen in Trench 9, was encountered within the trench at 3.7' bgs. The trench was excavated to a maximum depth of 5' bgs (Image 16). Disarticulated brick was seen distributed throughout the strata visible in the west profile, and the top of a stratum with increased disarticulated, crushed brick fragments was seen in the west profile at 5' bgs (Tables 12-13). No intact or articulated bricks were evident across the trench.

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.29' - 3.79' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	3.79' – 2.79' (.5 – 1.5' bgs)	N/A	N/A	Roadbase (cement)
III.	2.79' – 1.99' (1.5' – 2.3' bgs)	7.5YR 4/3 and 10YR 4/2	M-F LoSa	Disarticulated brick; some concrete rubble inclusions
IV.	1.99' – 0.99' (2.3' – 3.3' bgs)	5YR 4/3	M-F LoSa	Disarticulated brick; some concrete rubble inclusions
V.	0.99' - 0.49' (3.3' - 3.8' bgs)	7.5YR 3/1	M-F ClLoSa	Appears black
VI.	0.49' - 0.29' (3.8' - 4' bgs)	7.5YR 5/6	M-F LoSa	
VII.	0.29' - (-)0.21' (4' - 4.5' bgs)	5YR 4/3 and 7.5YR 4/3	M-F LoSa	Disarticulated brick
VIII.	(-)0.21' - (-)0.71' (4.5' - 5' bgs)	N/A	N/A	Increased density of disarticulated brick from

Table 13: Stratigraphic Profile -	- Trench 10, Southern	portion – North and East r	orofile only
- 81	- )	1 1	2

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.34' - 3.84' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	3.84' - 1.84' (.5 - 2.5' bgs)	10YR 4/2	M-F LoSa	Overlying Roadbase (cement)
III.	1.84' – 1.34' (2.5' – 3' bgs)	10YR 3/1	M-F LoSa	Overlying Roadbase (cement)
IV.	1.34' – 0.74' (3' – 3.6' bgs)	5YR 4/3	M-F LoSa	

V.	0.74' - 0.54' (3.6' - 3.8' bgs)	2.5YR 5/3	M-F LoSa	Appears as 2.5YR 6/3 'light reddish brown'
VI.	0.54' - 0.14' (3.8' - 4.2' bgs)	7.5YR 3/1	M-F ClLoSa	Appears black
VII.	0.14' - (-)0.06' (4.2' - 4.4' bgs)	7.5YR 5/6	M-F LoSa	
VIII.	(-)0.06' - (-)0.66' (4.4' - 5' bgs)	7.5YR 4/3 and 10YR 4/2	M-F LoSa	



Image 15: Trench 10, plan view, overview facing northwest.



Image 16: Trench 10, profile view of west wall, facing west.

Trench 11 represented the remaining project area in Section 3 lying outside the bounds of Trenches 6 through 10 (Map 10). Trench 11 was stripped to a max depth of 1.6' bgs in anticipation of laying a gravel foundation at a later date. No cultural material or intact stratigraphy was encountered (Image 17) (Table 14).

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.53' - 4.03' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	4.03' - 3.03' (.5' - 1.5' bgs)	N/A	N/A	Roadbase (cement)
III.	3.03' – 2.93' (1.5' – 1.6' bgs)	10YR 3/2 and 10YR 4/2	M-F LoSa	Concrete rubble, cement, gravel inclusions



Image 17: Trench 11, overview of Section 3, facing west.

#### **SECTION 4**

Section 4 was the 68' segment east of Section 3 between point D and South Street and included Trench 12 across its entire area (Map 11). No archaeological materials or intact soil strata were encountered in Section 4.



Map 11: Section 4 field results plan view.

# TRENCH 12

Trench 12 was excavated between Front Street and South Street. The trench had a north-south measurement of 124.5', encompassing a portion of Section 3 and all of Section 4 (Map 11). The southern wall of the trench abutted the property line at South Street. The east-west measurement of the trench encompassed the entire width of the project area, with the east and west walls abutting the concrete slabs that bordered the eastern and western property lines (Image 18) (Table 15). The

westernmost 8' east-west of the trench was excavated to a max depth of 2' bgs to expose the active nineteenth-century 4' by 5' combined sewer that runs north-south throughout the entirety of the project site (Map 06) (Image 19) (Table 16). The remaining trench portion was stripped to a max depth of 1.6' bgs in anticipation of laying a gravel foundation at a later date. No cultural material or intact stratigraphy was encountered.

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.11' - 3.61' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	3.61' - 2.61' (.5' - 1.5' bgs)	N/A	N/A	Roadbase (cement)
II.	2.61' – 2.51' (1.5' – 1.6' bgs)	10YR 4/2 and 10YR 6/1, with 2.5Y 6/6 sand fill	M-F LoSa	Concrete rubble, cement, gravel inclusions

Table 15: Stratigraphic Profile – Trench 12

STRAT	NAVD 88 DEPTH (BGS)	MUNSELL	SOIL TYPE	COMMENTS
I.	4.25' - 3.75' (0'5' bgs)	N/A	N/A	Roadbed (cobblestone)
II.	3.75' - 2.95' (.5' - 1.3' bgs)	N/A	N/A	Roadbase (cement)
III.	2.95' - 2.25' (1.3' - 2' bgs)	10YR 4/2 and 10YR 4/3	M-F LoSa	Disarticulated brick, oyster shell; some concrete rubble inclusions



Image 18: Trench 12, plan view of trench, facing west.



Image 19: Trench 12, active nineteenth-century 4' by 5' combined sewer, facing southwest.

#### VI. LABORATORY RESULTS

No in situ or archaeologically significant features, deposits, or materials were encountered during Phase 1B Archaeological Monitoring of the Reconstruction of Peck Slip. Exposed materials encountered during Archaeological Monitoring were twentieth or twenty first century refuse; bulk materials such as concrete rubble, brick, large metal objects, ash coal, cinders, and slag; or extremely small, fragmented and unidentifiable/undiagnostic ceramic, glass, or shell remnants distributed through fills along with modern refuse. These non-significant materials were not retained. Consequently, no laboratory analysis was necessary for this project.

#### **VII. CONCLUSIONS**

Twelve excavation trenches were monitored for the Reconstruction of Peck Slip that covered the entire surface of the paved Peck Slip plaza. Most of the excavated area was exposed to 2' bgs or less (Trenches 5, 6, 8, 11, 12). Most of this excavation only exposed a small amount of fill soil with modern material inclusions below the roadbase that underlay the plaza surface to 1.3' to 1.5' bgs. A previously documented active nineteenth-century 4' by 5' combined sewer, a sewer transporting both household/commercial wastewater and street runoff water, ran north-south through the APE (Map 06). Excavation around this sewer exposed redeposited fills with oyster shell and brick fragments as deep as 4' bgs, likely initially disturbed during sewer installation or maintenance (Trenches 1, 3, 6, 12). Trenches 9 and 10 excavated around a 12" diameter HPW utility found at 3.8' bgs exposed more distinct layers of accumulated, disturbed fill soils to 5' bgs but did not expose any intact features or deposits. The remaining project trenches similarly exposed existing utilities and associated redeposited fill soils with brick fragments and gravel inclusions to depths as deep as 4.5' bgs.

No archaeologically significant features, deposits, or materials were identified during Archaeological Monitoring of the Reconstruction of Peck Slip. No artifacts were retained for examination, and all contexts exposed represented fill soils or disturbed and redeposited materials surrounding existing utilities.

#### VIII. RECOMMENDATIONS

Archaeological Monitoring of the Reconstruction of Peck Slip exposed only disturbed and redeposited fill soils surrounding existing utilities to depths ranging from 1.36' to 5' bgs. While historical archaeological features have been extensively documented throughout the area as shallow as 5.7' bgs, no additional archaeological materials were identified during this project. Project plans do not call for any additional excavation beyond the monitored areas. As such, Chrysalis recommends no further archaeological testing for the project.

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