## UNIVERSITY OF PENNSYLVANIA SCHOOL OF DESIGN GRADUATE PROGRAM IN HISTORIC PRESERVATION



# STUDENT INTERNSHIPS SUMMER 2016



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#### Silvia Callegari

Preservation Alliance for Greater Philadelphia / T.E.I. School of Athens Philadelphia, USA / Crete, Greece, 2016



Formerly Penn Fruit (5147 Frankford Avenue). Now a Holiday Thriftway, this building was the focus of one of the stakeholder's meetings I attended. 2016.



My team partner, Anna and I, clearing weeds from one of the paved rooms at Pseira where we were conducting a Risk Assessment survey, 2016.

I began my summer doing an Advocacy Internship with the Preservation Alliance for Greater Philadelphia. Over the course of my five-week internship, my main goal was to immerse myself in better understanding of preservation in Philadelphia today. By the end, I was also gaining familiarity with how a non-profit organization must navigate the many preservation issues unique to Philadelphia. The Philadelphia Historical Commission is underfunded and understaffed; citywide, Philadelphia is seeing increased development and a moratorium on historic districts prevents protecting historic neighborhoods efficiently. Philadelphia was also designated a World Heritage City in 2015, so I wondered what role that played in Philadelphia's preservation scene.

I shadowed the Preservation Alliance's Advocacy Director, Patrick Grossi, and had the opportunity to attend meetings with stakeholders and Philadelphia Historical Commission meetings. In the office, I drafted short histories of historic sites in Delaware for the Preservation Alliance's upcoming issue of *Extant Magazine*. Additionally, I assisted at the Preservation Alliance's Annual Awards event and once a week joined the Easement's intern in the field to assess buildings that are part of the Preservation Alliance's Easement program. I also redrafted a Historic Resource Survey Form for the Kensington Methodist Church, which I had worked on previously for my group project during spring semester in the class "Research, Recording and Interpretation". Kensington Methodist Church had been deemed ineligible for a National Register nomination; however, the work our group had produced for "Research, Recording and Interpretation" should strengthen the case for the church's eligibility.

My second internship of the summer took form as a field school in Crete, Greece with the T.E.I. School of Athens. The first week of the program was spent in Athens where we visited the Acropolis, the Monastery at Delphi, Agios Vasileios, and the Architectural Conservation Lab at the T.E.I. School of

Athens – a "cousin" to our own ACL Lab here at UPENN. The following three weeks our time on Crete was spent divided between Mochlos and Pseira, two ancient Minoan settlements. The project was graciously funded for by the Global Heritage Fund and directed by Stefania Chlouveraki and Alexis Stefanis. We collaborated with four Greek students from the T.E.I. School of Athens to conduct a Risk Assessment of Pseira. Unlike Mochlos, which was inhabited during the Minoan phase, but also Hellenistic and Byzantine eras, Pseira was inhabited mainly during the Minoan and only for a short period during the Byzantine era. The architecture on Pseira was from these two periods but the Byzantine architecture remains mostly unexcavated. Except for a few small conservation campaigns, Pseira has been largely untouched since it was excavated in the early 20th century. Pseira's location makes it less accessible to visitors than Mochlos, which is merely 300 meters from the shore and can be reached by swimmers—we were able to enjoy a swim back from Mochlos at the end of the day! Climate change and visitor circulation were two of the larger topics we considered for both sites. At Mochlos we had the opportunity to assist the conservation team that is actively working there on wall repairs and has also built a retaining wall to protect the ancient walls from the waves, which can cause damage during winter storms. For their conservation work, the team uses a mortar that recycles soil from the soil dumps located around the site that remain from the original excavations of Mochlos. This system simultaneously considers site management and replaces the original mortar relatively in-kind. Overall my experiences this summer were more than I could have anticipated and gave me the opportunity to explore the many facets of the preservation field in both the ancient and current world.

#### Lillian Candela

Aphrodisias Archaeological Site Geyre, Aydin, Turkey, 2016





Surveying the South Agora with the Total Station, 2016.

The iconic Tetrapylon of Aphrodisias, 2016.

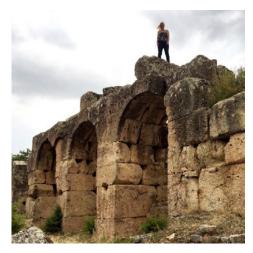
I had the pleasure of living and working at the Aphrodisias Archaeological Site in Turkey for their 2016 dig season this summer. Originally Greek and then a Roman city, it existed from the second century BCE through the sixth century CE. The city was renowned at its height for its namesake, the cult of Aphrodite, as well as its famed marble sculptors, with the city largely existing as an epicenter for arts and sculpting in Roman times. Its remarkably well crafted and preserved infrastructure made it a pleasure to work on and draw as a member of the architecture team on-site.

I joined a team of six architects who worked amongst the archaeologists to survey and document the site. The archaeological team was composed of students and professionals from New York University, Oxford University, and throughout Turkey. Our team of architects focused our efforts around the South Agora pool and gate where excavations are in their fourth and second to final year of work, with the hopes that the ancient pool becomes another highlight of the frequented tourist site. My specific task throughout the season was to survey, document, and create a publication-ready drawing of the East Gate of the South Agora. This gate was a combination of small petit appereil walls, large carved blocks, fluted columns, and a series of intricate inscriptions; all both in and out of situ. The gateway was used as an entrance to the South Agora pool off of the main avenue of the city, allowing citizens to enter the agora through two vaulted archways. In late Roman times the gateway was modified to include a large fountain, adding a second water feature to the agora.

The drawing and documentation process was completed in a series of regimented steps beginning with sketching the elevation and determining which points would need to be surveyed with the total station in order to make the drawing accurate. Through surveying the wall with the total station and then importing those points into Autocad, we could easily create points on our drawing board to measure and draw from, giving us increased accuracy and efficiency. After drafting these surveyed points onto my drawing board,

I worked in the field, hand drawing the elevation until completion. The hand drawing is then scanned and digitized in Autocad to create a digital document that can be used for research, publication, or on the tourist information boards on-site and in the museum.

The greatest pleasure of working with the Aphrodisias team was that it afforded me the opportunity to meet and learn from people who use architecture, archaeology, and historic preservation in so many different ways, truly opening my eyes to the expanse and intersection of these fields. I worked among field archaeologists who specialized in Greek, Roman, and Byzantine architecture. I learned from anastylosis architects who worked to reassemble the tetrapylon and sebasteion to their former glory. I shared meals with visitors including members of the UNESCO staff, as Aphrodisias is currently on the tentative list for world heritage status. The experience both enhanced my architectural skills and exposed me to the myriad of ways in which preservation and architecture interact and overlap.

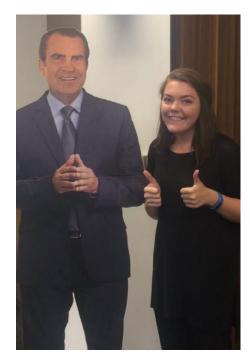


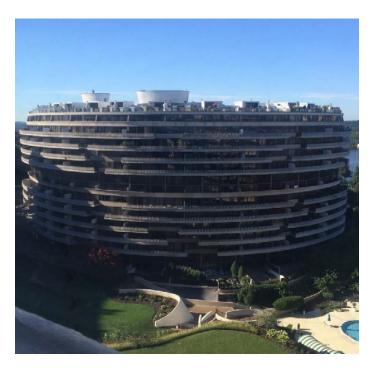
Standing atop the Hadrianic Baths, 2016.



View of a portion of the South Agora Gate that I drew and documented, 2016.

### Katlyn Cotton National Trust for Historic Preservation Washington, D.C., 2016





Hanging out with Nixon (left) at the Watergate Complex (right) 2016.

Over the summer, I had the opportunity to work in the Watergate Building (!) in Washington, D.C. for the National Trust for Historic Preservation. My official title was the African American National Treasures Intern, and my job was to conduct research about campus heritage planning at the 105 Historically Black Colleges and Universities (HBCUs) in support of the Trust's National Treasure campaign at Morgan State University. In 2016, the National Trust designated Howard University's Founders Library and Morgan State University's campus as National Treasures—a campaign that identifies nationally significant, threatened resources where there is a clear role for the National Trust to intervene in terms of advocacy, planning, marketing, etc. There are hundreds of historic structures—as many as 712 in 1998—on HBCU campuses that are in danger due to insufficient funding and years of deferred maintenance. In the summer of 2016, the National Trust was working with Morgan State University to support the funding and development of a campus heritage preservation plan that could guide decision making as the university redeveloped its campus with the hope that this plan could be replicated at other HBCUs.

The purpose of my research was to help the National Trust better understand the health of preservation at HBCUs and to inform future conversations with funders and HBCU administrators. My first task was to conduct a broad literature review to gain a sense of the issues facing HBCUs broadly and then HBCU preservation specifically. I then researched each HBCU individually to discover if a preservation ethic or culture existed on their campus, if their campus master plan included preservation, if they had a faculty member with a research interest in preservation, if they offered a preservation course, etc. I used this to

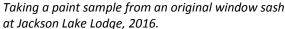
create a ranking system that indicated which schools had the greatest infrastructure for preservation and those that had the least systems in place for protecting their historic resources. To supplement this research, I created a survey to be sent out to HBCU Presidents and Facility Directors to learn their perception of preservation and their understanding of its benefits as a tool in campus planning.

The final product of my summer was a report that outlined the context of HBCUs in higher education, the challenges facing HBCU preservation, and the findings from my survey and ranking system. My report was enhanced through conversations with campus planners, preservation professionals, HBCU scholars, students, and faculty, as well as other National Trust employees. Hopefully my work from this summer will contribute to the National Trust's efforts to inspire greater care and consideration for HBCU campus heritage across the nation.

#### Nicole Mariel Declet

Architectural Conservation Laboratory Jackson, WY, 2016







Retrieving a paint sample from a wooden rafter at one of the outbuildings (cabins), 2016.

This past summer I worked as an intern for the Architectural Conservation Laboratory (ACL) at the University of Pennsylvania. The scope of our work took place at Jackson Lake Lodge in Jackson, Wyoming. We were tasked with the completion of Part 2 and the preparation of Part 3 of the Jackson Lake Lodge Historic Structures Report.

Jackson Lake Lodge in Grand Teton National Park is a mid-century modern structure designed by Gilbert Stanley Underwood in the 1950s. JLL exemplifies the changes that took place in American architecture after World War II. From its moment of completion, the building became a source of controversy for some could not fathom modern structures in the wilderness, where vernacular log buildings dominated the scene. However, Stanley's design reinterpreted traditional local elements with an overall modern aesthetic and it's known as "the last great rustic lodge and first modern park hotel".

Prior to traveling, I researched and investigated possible material conservation treatments in order to make future recommendations as Part 3 of the HSR. The research focused on concrete repairs, such as concrete cleaning and patching, wood repair, shingle corner repair and paint alternatives. The purpose for this is to aid the Grand Teton Lodge Company into making repairs that will take place in the following year. Once there, we reviewed the integrity and condition assessment presented on Part 2 of the HSR, studied the character defining elements, inspected the outbuildings roofs and took several paint samples in order to conduct finishes research for both the Central lodge and the 37 NHL contributing outbuildings (including guest cottages, employee dormitories, staff housing, service structure and corral).

Through this internship, I was able to reinforce topics learned in the past semesters and apply them through hands on work in the field. This internship also provided the opportunity to become familiarized

with fieldwork techniques and the behavior of materials in historic settings. In addition to the fieldwork, I gained experience with report preparation, conditions assessment and material analysis. Overall, this internship worked on a number of different aspects that provided exposure on the daily workings of the preservation field. Plus, it has been extremely gratifying to learn and work in such a beautiful surrounding.

#### Katharine George

WSA | Modern Ruins New York, 2016



Performing a window and lintel survey, 2016.



The deteriorating windows and brownstone lintels being documented in the survey, 2016.



St. Luke in the Fields Townhomes façade, 2016.

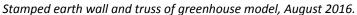
For eight weeks this summer I worked with WSA | Modern Ruins, an architecture firm specializing in the rehabilitation of historic structures in New York City. As an intern there I worked on a few different projects, including two rows of historic town homes in the West Village of New York City. These town homes on Hudson Street are owned by the parish of St. Luke in the Fields, who hired WSA to do a survey of conditions, sensitive rehabilitation, and a renovation plan for the apartments. On this project I did a full survey of the site and measurements, which I transferred into a set of existing conditions drawings in AutoCAD. I also worked on researching and compiling a history of the buildings and their alterations over time, which was used by the firm to approach the restoration of the facades. I preformed a full window and lintel survey of the exteriors. The brownstone lintels (shown above in the middle photograph) show significant spalling. The window survey showed that there were enough operable original wooden sash windows to justify their restoration as opposed to full replacement, a feature we felt integral to the buildings themselves.

An advantage of working for a small firm is that I was able to work on different aspects of the design and construction process. Existing condition documentation and drawings were the bulk of my work, but I also drafted the project manual for St. Luke's with specifications for the restoration of the windows, lintels, and repointing mortar. I put together construction bid documents and NYC Landmark Commission presentations and reports. Seeing the many components that go into working on a historic building was invaluable and I learned a lot by working on those parts first hand.

#### **Emily Gruendel**

Present Architecture New York, NY, 2016







Casting hydrocal, July 2016.

This past summer I embarked upon a model-building internship with Present Architecture, a boutique architecture firm located in the Tribeca area of Manhattan. Headed by two partners and one junior architect, Present Architecture is currently working on a number of projects including a greenhouse (see image above), a low income housing project, and an office design, to name a few. While small, this ambitious firm prioritizes the use of models as a tool to better understand the spaces that they create.

As the model making intern, I was tasked with the construction of a number of models, from projects past and present, that ranged in purpose from exploratory to presentation-quality objects. The vast majority of the models were constructed by hand without the use of laser-cutting equipment. The models were constructed using a variety of materials including foam core, paper, chipboard, and basswood, to name a few. Additionally, I was able to spend some time experimenting with casting materials such as concrete, plaster, and Rockite (see adjacent images). In the six weeks that I was employed by Present, I worked on four projects and constructed about ten models including over thirty-five test models.

Upon reflection, this internship was valuable in that it allowed me to see the inner-workings of a small firm. Being in charge of visually representing their designs in a three dimensional format was a challenging but rewarding experience and allowed me to develop more confidence as a designer. Additionally, getting to experience the fast-paced and sometimes hectic lifestyle of New York was an eye-opening experience. I truly appreciated this opportunity and can say that it was an extremely rewarding endeavor.



Testing casting materials, July 2016.



AMP Pavilions\_foamcore model, July 2016.



Cultural Center caste model. Auaust 2016.



Cochella Housing\_mixed media model, July 2016.

#### **Arielle Harris**

Philadelphia City Planning Commission Philadelphia, PA, 2016



Editing text and images for the Far Northeast development timeline, 2016.

*Philadelphia 2035* is the city's most recent comprehensive planning effort. Starting in 2011, the city of Philadelphia has released 11 district plans, and has six more to go. In my role as a historic preservation intern for the Philadelphia City Planning Commission, I have participated in different aspects of the *Philadelphia 2035* planning process.

My primary role has been to research and compile development timelines for those remaining districts to be published. These timelines highlight notable neighborhoods, people, events, institutions, industries, and infrastructure over the district's history. I have thus far completed timelines for the Far Northeast and North districts. The Far Northeast is particularly interesting from a historical perspective because the majority of development in the region occurred over the past 50 years. The post-World War II housing boom provided Planning Commission Executive Director Ed Bacon a blank slate on which to apply mid-century city planning ideas to an area formerly known for its small villages and farms. From this research, I was also able to write text for the district plan's special spread about the Far Northeast's as a "suburb in the city" and Ed Bacon's vision for the region. The North District covers a large swath of land from Lehigh Avenue to the Boulevard, known for its heavy industrial fabric (Tasty Baking Co., Atwater Kent) and miles of at-grade railroad networks. This region developed later in Philadelphia's narrative, with neighborhood growth occurring as late as the 1930s.

I have also been able to participate in land use surveying in the North District. Equipped with a parcel map and a car, a coworker and I drove along each street and codified each parcel according to its land use and vacancy status. This has been a great way to see the areas which I have been researching in person and to talk to residents about the work done here at the Planning Commission.

A number of interesting preservation questions have come up over the summer, including the Jeweler's Row Toll Brothers development. I also sit through the Historical Commission's monthly meetings and quarterly committee hearings (something I would have done for school/pleasure anyway!).

This summer has given me the opportunity to learn about areas of Philadelphia I had not previously been exposed to, whether in-person or through my studies. I was able to incorporate an early *Philadelphia 2035* district plan in my undergraduate thesis, and feel excited that I am able to contribute to this process as a graduate student. As I continue my internship through the academic year, I look forward to finishing development timelines for the remaining districts and gaining further exposure to the workings of the Planning and Historical Commissions.

#### Starr Herr-Cardillo

The Woodlands Philadelphia, PA, 2016





Tending my grave garden, 2016.

Victorian-inspired grave gardens, 2016.

My summer internship at The Woodlands, a National Historic Landmark site in Philadelphia, Pennsylvania, involved an interesting, somewhat unexpected, and really fun range of activities. The site itself is wonderfully layered, it includes an 18th Century mansion (the former estate of William Hamilton), which was then surrounded by a 19th century Victorian rural cemetery and now functions both as an active cemetery and public green space for the West Philadelphia and University City neighborhoods. Jessica Baumert is the Executive Director and is known within the Preservation community for doing really interesting and creative public programming.

I worked primarily with Jessica refining and implementing a new program called the Grave Gardeners, in which over seventy volunteer gardeners are planting Victorian era flower gardens in the site's historic cradle graves. The program reintroduces the practice of cemetery gardening, very common in the Victorian period, and allows visitors and participants to connect to the site's history in a new, and very intimate, way. My duties encompassed coordinating workshops, field trips, and planting days for participants, researching heirloom plant varieties for fall planting workshops, helping develop and produce marketing and related materials, managing social media pages, and writing blog posts and updates about the program. Over the course of the summer I also helped develop and market new events for the fall including the Grave Garden Fete, a day of botanically-themed workshops that will showcase the gardens planted by the Grave Gardeners and tie into the rich botanical and horticultural history of The Woodlands, and Jane Austen Night, an outdoor movie night that will take place in September that puts a fun spin on the underlying English architectural and landscape design principles that influenced William Hamilton's vision for the Woodlands.

With a full-time staff of only two people, working at The Woodlands was an invaluable introduction to just how flexible and adept at multi-tasking site managers must be. In addition to all of the public programming work, an extensive restoration of the exterior of the Hamilton Mansion and the Carriage House was in progress. Additionally, in mid-June, a team of archaeologists began surveying next to the

Mansion, beginning a fairly significant grant-funded archaeology project which turned out to be extremely successful and revealed an exceptionally high density of artifacts from three excavation pits. There was literally something new happening every day, and I saw first-hand how important it is that the staff be ready to accommodate and adapt accordingly.

I thoroughly enjoyed my experience at The Woodlands. I appreciated the variety in the day-to-day routine, which was sometimes hands-on including gardening, routine maintenance, and even a little bit of more technical preservation work (cradle grave repair!) and often creative. I had the chance to regularly put to use my skills in graphic design, photography and writing. The best part, to me, about being at a place like The Woodlands is that you are constantly *doing* things whether it's prepping cradle graves with compost for a gardening workshop, researching heirloom bulb varietals, trapping groundhogs, or trying to understand Pokemon Go (we had two Pokemon gyms on-site, apparently), very encouraging for someone who doesn't like to sit still!

#### Peter Hiller

Technological Educational Institute of Athens (TEI) Greece, 2016





Clearing vegetation and old mortar. Mochlos, 2016.

A freshly repointed wall of Ave. 2. Mochlos, 2016.

We spent four weeks in Greece. The first was in Athens and places nearby, going to museums and other sites, as well as special tours of archaeological sites and ruins, including the unbelievable opportunity of a private tour of the Acropolis with the head conservator there.

Once on the island of Crete, we took on the task of doing risk assessment on two ancient settlements on the islands of Mochlos and Psiera accessible only by boat or swimming. The mornings typically consisted of fieldwork, photographing and taking information on the stone walls that had been excavated within the last 10-20 years. In the afternoons, we took the handwritten/hand-drawn field notes and transferred the information to a digital format. Further fieldwork included cleaning and preparing historic fabric on site for consolidation and application of mortars, as well as mixing mortar, and repointing walls. There were lectures some evenings from professionals in archeology and conservation, and weekends were a time for other visits to Knossos, IESL-FORTH (a laser research institute), and ISTAP (Institute for Aegean Prehistory Study Center for East Crete), among others. The program culminated in a presentation of our work for the head of antiquities of the region.

#### **Austin Lukes**

Powers & Company Historic Preservation Services Philadelphia, Pennsylvania, 2016



Hiding from the rain while repointing stone, Mesa Verde National Park.

Over this summer I had the opportunity to intern at Powers & Company Historic Preservation Services, a small firm located in downtown Philadelphia that provides a wide range of services as consultants in historic preservation. Work ranged from applying for preservation tax credits to documenting historic fabric to performing analysis on finishes and fasteners. Through this internship, I was able to visit numerous and varied sites across Philadelphia that are in the process of rehabilitation.

The majority of my time was spent visiting sites ranging from former industrial spaces to a neglected armory that is currently in the process of changing use to athletic practice facilities. I was able to document the historic characteristics of the built fabric to ensure the work that was to be performed would uphold the historic features, either through rehabilitation or replication of the original material. The documentation is sent to the State Historic Preservation Office (SHPO) for approval. This ensures that the goals of preservation through the Department of the Interior and the goals of the tax credits

through the IRS and the Department of the Treasury are both satisfied, and that the property developer does what they need towards historic preservation.

I also was able to apply what I had learned in the Conservation Science track of Penn's program to finish analysis and treatment of various materials, such as the mosaic tiles in Philadelphia's Hale Building, which had been covered and abandoned for many years. The condition in which we found these tiles was rough at best, but through various cleaning treatments, the original color and vibrant patterns returned, ready to be reinstalled in the building by the developer.

During the end of the summer, I participated in the Conservation Science Praxis based just outside of Mancos, Colorado at Hadden Ranch. The group of us learned about brick, adobe, and wood material and traditional methods of practice in their construction and maintenance. After this, half of the group including myself performed stone and mortar stabilization at Coyote Village, located in Mesa Verde National Park, under the supervision of the National Park Service. The hands-on experience we received as a result will be invaluable as we enter our second year of the Penn program.

#### **Lucy Midelfort**

TEI of Athens/The Woodlands Mochlos, Crete & Philadelphia, PA, 2016



After resetting our first gravestone at The Woodlands, 2016.



Performing a condition assessment at Pseira, 2016.



Repointing walls at Mochlos, 2016.

For the first 5 weeks of this summer, I worked at The Woodlands, the home of William Hamilton and a large cemetery just southwest of Penn's campus, doing gravestone conservation. For the next 4 weeks, I worked with Stefania Chlouveraki, professor at the Technological Institute of Athens, doing condition assessments and conservation treatments at two archaeological sites on the islands of Lasithi, in eastern Crete.

While at the Woodlands, Danielle Pape and I reset close to 30 gravestones that had tipped over off their bases. Our days were spent documenting the stones before treatment, digging new foundations for the stones, getting the fallen stones up on wood blocking to keep the stones from lying directly in earth, drilling out corroded pins that hold the headstones to their bases, fitting new fiberglass pins and setting them with epoxy, and resetting the headstones onto their bases. The process was extremely rewarding because we got to continually see our progress, and working on small projects like gravestones allowed us to work on a variety of materials with a variety of problems, all within a short amount of time.

In Greece, three other Penn students and I got the opportunity to spend a month with 4 architectural conservation students from TEI of Athens and their professors, working on two Minoan archaeological sites that have been exposed by excavations for over 100 years. Given the long exposure time, the walls of the settlements (some of which are ~4,000 years old), which are constructed of rubble and earth, are in various stages of collapse. At Mochlos, a well-suited conservation mortar had already been formulated, and our team was able to take part in applying the conservation mortar to walls that have been determined to be of high priority for conservation. At Pseira, a site where close to no conservation has taken place, conditions are worse, and our task was to develop and complete a condition assessment for the site. We agreed on criteria for deterioration mechanisms that are present at the site, then split up into teams and performed the assessment, assigning a point value for each deterioration mechanism present and summing them to come up with an overall condition rating for each wall. Based on these summed values, conservators will be able to prioritize conservation of walls that are in a more threatened position, and gradually conserve the site and help keep it understandable to visitors.

My experience this summer truly was invaluable, getting hands on experience in two very different settings and getting to work with a variety of materials and treatments. It was also particularly enlightening to experience working with Greek conservators, and learn the sometimes conflicting goals that can exist between archaeologists and conservators. After this summer, I feel that my understanding of the conservation field has expanded exponentially, and I'm so grateful to have been able to be a part of it.

#### Joel Naiman

John Doyle Real Estate Advisors Philadelphia, PA, 2016





Report Writing, 2016.

Medical Arts Building, 2016.

During the summer of 2016 I had the opportunity to serve as an intern for John Doyle Real Estate Advisors and embrace numerous roles relating to the management of historic architecture and affordable housing. Based in Philadelphia, the firm has various functions regarding market studies, determining 'highest and best use' on rehabilitation properties, management of tax credit properties and rent studies on a variety of historic affordable housing complexes. These projects ranged throughout the United States, and involved economic analysis and valuation of numerous types. As an intern, I had the pleasure of working on a variety of these types of projects, practicing some of the methods and techniques learned in Preservation Economics to broaden my knowledge of these closely interrelated fields.

As Preservation Economics provided a background to understanding feasibility studies and devising rehabilitation plans, this experience allowed me to become a more robust thinker in these regards. Aiding in research to determine maximum productivity and financial feasibility to help determine an appropriate rehabilitation plan on properties proved a valuable experience. Moreover, this experience has allowed me to become a more robust thinker regarding my understanding of low income and affordable housing. Learning the practical considerations necessary for this type of housing will allow me to extend my own understanding of the preservation field looking forward.

#### **Evan Oxland**

Materials Conservation Collaborative LLC Philadelphia, Pennsylvania, 2016

After meeting Penn Preservation alumni John Carr, principal of *Materials Conservation Collaborative LLC* and a fellow Canadian raised only minutes from my own hometown in Ontario, he invited me to work with an incredible team of craftsmen/women, designers, artists, and conservators at *MCC*. Being a stonemason, with varied amounts of conservation and construction experience, I was afforded the pleasure and fortune to work on a wide array of fine institutional and residential contracting and consulting projects.

*MCC* is a hands on conservation firm that requires thoughtful and intelligent people that are able to both work with their hands and minds. Employees need to be plastic individuals who are equally capable of scoping, designing, documenting, performing, and reporting on conservation treatments. The team's educational and experiential backgrounds are roughly comprised of equal Fine Arts and Penn Preservation.

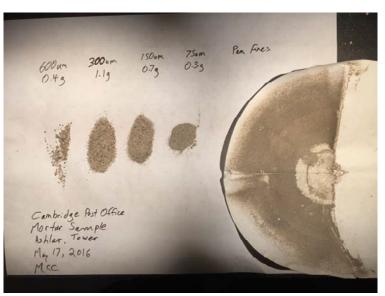
In addition to busy employment with *MCC*, I also volunteered with the *Stone Foundation* at *Opus 40* in Saugerties, New York, helping to restore a 20' high drystone wall that had collapsed.

#### **Planning/Consulting Projects:**

Adaptive Re-use/Finish Analysis at William Way Center - Philadelphia

Mortar Analysis & Architectural Drawings for Galt Post Office - Cambridge, Ontario





Figures 1 & 2: Acid Digested Mortar Sample; Galt Post Office Mortar Analysis: Cambridge, Ontario.

#### **Contracting Projects Worked On:**

Metal fence conservation – Rittenhouse Square, Philadelphia

Brick & Stone Conservation (Brick and Brownstone) – 2041 Delancey Street, Philadelphia





**Figures 3 & 4:** Prepared Samples of Composite Patches for Brown Stone & Building Archaeological Investigation of Mouldings at 2041 Delancey Street, Philadelphia.





Figures 5 & 6: Mock-up and testing cleaners for atmospheric pollutants. 2041 Delancey scaffold ready for work.

Stone conservation (Brownstone) – All Saints' Torresdale Episcopal Church, North East Philadelphia.



**Figure 7:** Brownstone composite patching at All Saints' Torresdale Episcopal Church (1855), Edison Coatings with mica aggregate amendments.

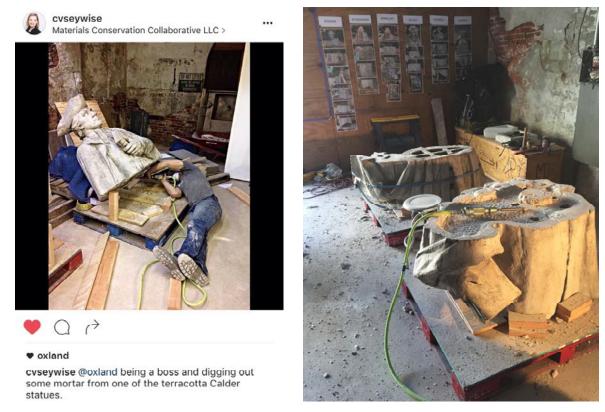
Stone conservation (Pennsylvania Blue Marble) – Headstones and Box Tablets at Christ Church Cemetery, Philadelphia.





Figures 8 & 9: Pennsylvania Blue Box Tablet and Headstone Conservation.

Sculpture conservation (Terracotta) – Alexander Stirling Calder, Presbyterian ministers.



**Figures 10 & 11:** Removal of cementitious mortar from Mr. Caldwell & others with pneumatic driven carbide tipped chisels.

Sculpture conservation (Slate) - Raoul Ubac Relief Panels, Yale University



**Figure 12:** Raoul Ubac's relief on the studio table being prepared for conservation.

New Design, Lettering (Indiana Limestone) – Date Marker for a John Milner designed house northwest of Philadelphia.



Figure 13: "Ohana Farm" Datestone.

New Design, Lettering (Brazilian Architectural Soapstone) – Memorialisation of 18<sup>th</sup> Century headstones at Abbots Creek, New Jersey





Figures 14 & 15: Brick Plinth and lettered soapstone tablet in-situ.

#### Stone Conservation - Opus 40 Saugerties, New York





Figures 16 & 17: Opus 40, wall restoration with the help of a gin-pole.

#### Danielle Pape

The Woodlands Philadelphia, PA, 2016



Summer interns Lucy Midelfort and Danielle Pape relaying new brick foundations for misaligned grave markers.



A marble headstone that had to have the coroded pins removed and reset.

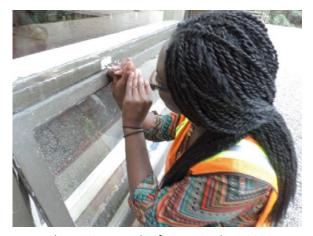
This summer, I interned at the Woodlands Cemetery in Philadelphia, PA mainly focusing on the conservation of grave markers. In the first week, I conducted a survey on two prominent areas within the grounds that had high visibility and had evidence of previous vandalism. The markers that had fallen or needed some sort of repair were identified by their lot card number, and a Grave Marker Evaluation Sheet was filled out with the conservation work needed, the stone type, and photographs. After I completed this preliminary survey, I placed the grave markers that were identified on wooden blocking to lift them away from the ground to minimized future moisture damage. If needed, corroded metal pins were removed from the stones and new fiberglass threaded rods were fitted in place. At the end of the process, fallen markers were righted and stabilized with either epoxy or replaced pins.

After the grave markers identified on the preliminary survey that could be lifted without the assistance of rigging were complete, I moved on to an additional survey of the cradle graves (a prominent form of grave marker at The Woodlands) that needed to be conserved. Currently, The Woodlands is running a Grave Gardeners program that involves returning the grounds to its Victorian aesthetic by planting certain types of plants in the cradle graves. I worked to reestablish the cradle graves that had become unattached or soil had accumulated around the base, along with pinning broken side-rails when needed. My last step for conserving the cradle grave markers was to fill the recess with compost so that the Grave Gardeners program could be extended.

Because The Woodlands is also a community space, as well as a functioning cemetery, part of my internship was to assist with the numerous events hosted at the site; which included Nature Nights and

#### Araba Prah

University of Pennsylvania: Architectural Conservation Laboratory Moran, WY, 2016





Taking paint samples from a window, 2016

Guest Cabins at Jackson Lake Lodge, 2016

Over the summer, I was an intern at the University of Pennsylvania's Architectural Conservation Laboratory as an Architectural Conservator. The focus of the internship was to contribute to the Historic Structures Report for Jackson Lake Lodge- a fusion of modernist and rustic architecture which offers breathtaking views of the Teton Mountain Range. Once despised for what many believed to be a lack of harmony with the landscape, Jackson Lake Lodge has come to represent an important era in the development of the architecture for the National Park Service. Our work focused on 38 buildings on the site. These comprised of the guest cabins, the main lodge (aka the Central Lodge), and supporting infrastructure.

The first part of the internship took place in Philadelphia performing prep for site work in Wyoming. I was tasked with modifying the elevation drawings of the guest cabins, researching remediation techniques for asbestos shingles and strategies to improve energy efficiency of the Central Lodge. In addition to these activities, I assisted in another ACL project, the George Nakashima Arts Building and Cloister located in New Hope, PA. For this project I accompanied the project conservator (César Bargues) to New Hope and used a total station to survey the plywood hyperbolic paraboloid roof of the Arts Building. I also took samples from the chimney and performed a gravimetric analysis and acid digestion of mortar to determine the correct type of sand to use for repairs.

The second part of the internship involved three-weeks of fieldwork at Jackson Lake Lodge. During the fieldwork session, I along with two members of the project team updated the condition assessment produced last summer, performed a new condition assessment of 37 roofs, took paint samples from doors and windows, photographed interior and exterior character defining elements, and observed a demonstration on paint removal off of textured concrete walls using a vapor-blast machine.

Additionally, I had the opportunity to meet and speak to managers and employees of the Grand Teton Lodge Company and National Park Service.

#### Mikayla Raymond

The Cultural Landscape Foundation Washington DC, 2016



The office overlooking Dupont Circle, 2016.



Favorite office perk- proximity to not one but TWO Starbucks locations, 2016.

My summer was spent with the Cultural Landscape Foundation as a Sally Boasberg Fellow. TCLF is a preservation advocacy non-profit for historic, designed landscapes. Most of their work falls under three projects: What's out there, a database of historic landscapes including designers, images, and essays for each; Pioneers, a similar database for landscape architects and designers; and Landslide which serves to highlight and raise awareness for historic landscapes deemed 'at risk.'

The fellowship lasted for eight weeks full-time and included housing and \$15/hour pay. TCLF is a small organization with nine employees, I was able to be involved in several different projects and work with different people within the organization. My primary project was writing a Cultural Landscape Guide to New York City, which we will publish with partnership with the National Park Service. I wrote more than 60 short essays on a variety of landscapes across the five boroughs, which will be condensed into an emagazine which is expected to come out this fall. Each essay combined historical research with analysis of the designed elements, and was written with Landscape Architects as the primary audience. This was a new type of language for me, and I benefitted from learning how to better relate the stuff I really love (the history) to landscape architects and designers in a way that made sense and was useful.

#### Ty Richardson

University of Pennsylvania ACL Philadelphia, PA & Watrous, NM (Fort Union National Monument), 2016



The team conducting moisture meter testing on the adobe walls. 2016.



View inside the Mechanics Corral, 2016.

The start of my internship took place in Philadelphia while working in the ACL (Architectural Conservation Lab). Before the initial visit to Fort Union preparatory work was conducted by myself and Shuang Wu. This work consisted of organizing all of the files on the server under the Fort Union folder in coordination with the ACL guidelines for file organization. Once this was accomplished I began organizing a binder with historic photographs of the mechanics corral taken by archaeologist Rex L. Wilson in the late 50's and early 60's. These consisted of photographs "before" and "after" stabilization of certain wall segments within the mechanics corral. The binder was organized with the photos on the right and metadata on the left. This binder was essential in comparing previous and existing conditions of the wall segments. Before leaving for Fort Union, various instruments to be used in the field were shipped to New Mexico ahead of time. These consisted of a portable moisture meter, the binder containing the Wilson photos, one can of calcium carbide, and an electronic moisture meter.

While in New Mexico, the team stayed at the Pritzlaff Ranch located near Las Vegas, NM. However, we were also given access to one of the government houses to set up a work station and headquarters at Fort Union. Over two weeks the team and I conducted various tasks and research in the mechanics corral, a portion of the depot that bordered the mechanics corral, and two of quartermaster's offices. To begin we conducted surveys of each wall segment within the mechanics corral using a survey form specifically designed for Fort Union. Once this was complete everyone mostly worked alone or in teams on other tasks. One of my main tasks for the first week was to use the binder I had created and rephotograph each "after" stabilization photo as accurately as possible. While doing this I also used markers to draw on the plastic sheet protectors showing any changes that had occurred on each wall segment that was photographed. After this was accomplished I was then given the task of shooting orthographic photographs of seven wall segments in the mechanics corral, depot, and quartermaster's offices that were designated as "Monitor Walls". This photography was done using a special kit that was

created for Fort Union and originally used on the Native American Wooden Structures project. The kit contained various instruments that were vital for orthographic photography, though not every instrument was used in this particular case. Only scale cards, directional arrows, and a grey card were used for orthographic photography at Fort Union. Two days before completing our work, four of the team members and myself chose to stay at the government house at Fort Union in order to do some thermal image photography in the evening and mark the seven monitor walls with flags for the next days work. On the last day of work at Fort Union, we conducted moisture meter testing on the seven monitor walls. These seven walls will be the source of future monitoring and research being done at Fort Union.

After returning from Fort Union, my tasks for the last week of my internship involved transferring the data collected from the hard drive onto the server and re-organizing the files and making a new binder with the Wilson photographs and the new ones I had re-photographed side by side for comparison. This binder will be very useful in seeing the change over time for the wall segments. Fort Union will require more work to be done by myself and others when the fall semester starts.

#### Evan Schueckler

Richard M. Cole & Associates, Architects Philadelphia, 2016





My workspace at Richard M. Cole and Associates, 2016.

I spent my summer working for a small architecture firm in Philly called Richard M. Cole & Associates. I was brought on to help with a large contract with AT&T to remodel all of their stores in the Northeast. I spent the vast majority of my time at a desk (pictured above) working in AutoCAD. I often started by developing space plans for the stores, which had to go through a process of corporate review, and receiving approval from several different departments, with revisions happening along the way. Once approved, I had to create Design Intent or Construction Document drawing sets depending on the scope of the project, its location, and what information was required for permitting. Most sets consisted of four to five plans and a handful of boilerplate specification sheets. The more complicated sets required the same as well as interior elevations, reflected ceiling plans, and electrical backgrounds which were sent to engineers for approval and formatting. Thesis drawings were all produced in conjunction with survey photos, to ensure that no elements were missing from the plans and that all electrical and fire safety equipment would go unobstructed after the renovation or would be specified for relocation if necessary. Once a draft set was completed, it would be passed off to one of the senior architects for redlining. Once edits were specified, corrections were made and the drawings submitted to AT&T, material vendors, contractors, and for permitting.

While the majority of my job was in the office, I did also get out for site surveys. These were fairly simple since the firm had existing drawings for the vast majority of the stores. I was mostly looking for elements missing from the plans, the electrical capacity of the site, to catalogue the existing store fixtures, and to photograph the stores for future reference.

While not exactly working on preservation projects, the experience of working at RMC&A was incredibly valuable in terms of better understanding the day-to-day of an architect's office. Interesting as well was

working in a fairly corporate environment, despite the small size of the office. Designing for such a large company necessitated a certain work flow and dynamic. Some of the most important lessons were really quite simple ones in terms of working as part of an office and adhering to graphic standards, paying close attention to the information already provided in drawings and photographs, and the importance of careful and observant work. While Design Intent and Construction Document drawing may not be the most exciting aspects of design, they're extremely important and even small mistake can lead to expensive set-backs and corrections during construction.

#### Shaghayegh Torkzaban

University of Pennsylvania, Museum of Archaeology and Anthropology Turkey, Yassihöyük, Gordion Archaeological Site, 2016



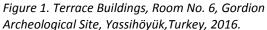




Figure 2. Documenting the western wall of Room No. 6, 2016.

In mid-June and early July 2016, the documentation and condition survey of the western wall in room No. 6, Terrace buildings, was defined as a continuing process of the documentation, condition survey, and treatments of the walls in the eight rooms of the Terrace Buildings. The overall project for this year included the three sides (inner, outer, and the top side) of the outer wall of room No. 6 with roughly 14 meters length on the outer side, 12 meter length on the inner side of the wall, and the 130-180 cm width. The schedule was for 20 workdays for one intern.

Although the general goal was the documentation of the wall based on the guidelines and standards defined by the ACL (Architectural Conservation Laboratory) at the School of Design, University of Pennsylvania, I had a chance to examine other methods of documentation besides the customary method. This ulterior method included examining the capacity of the quadcopter to be used for the photogrammetry of the entire wall. During the total 20 days working on site and in the office, I finished the documentation of the three sides of western wall in room No.6, doing conditions survey for the wall, studying the structural behaviors of the wall in the primary phase, and examining the quadcopter capacities for the orthorectified photography in documentation of the existing condition of historic construction.

This year all the measurements for the Gordion Archaeological Site occurred through an individual project using a single total station, so the measurements for this wall were done with the same group. I did this project with help of several people in Gordion. The project was defined and lead by Elisa Del Bono, the supervisor of the conservation and restoration works in Gordion. The surveyor team, Brian Norris and Braden Cordivari, did all the measurements with total station, and Lucas Stephens did the quadcopter photography for this project and the entire Gordion Archaeology Project.

#### Carolyn Zemanian

New Jersey Department of Environmental Protection - Historic Preservation Office Trenton, New Jersey, 2016





Reviewing land use plans, 2016.

501 E State Street, home of the NJHPO, 2016.

This summer, I commuted from West Philadelphia to Trenton, New Jersey, to assist with aboveground reviews at the New Jersey Historic Preservation Office. The SHPO operates under the New Jersey Department of Environmental Protection. I primarily assisted with Section 106 consultation and Land Use reviews.

Section 106 of the National Historic Preservation Act (1966) requires that for any federal undertaking that affects historic properties either on or eligible for the National Register of Historic Places (NRHP), the federal government must "take into account" any effects that their actions have on those properties. If the proposed activity has a negative or "adverse" effect on a historic property, then the applicant must enter into consultation with the historic preservation office and other interested parties to consider if there are ways they can mitigate this negative impact (36 CFR 800). New Jersey's Freshwater Wetlands Protection Act and Coastal Zone Management regulations also include language protective of historic resources. The first act requires that projects seeking freshwater wetlands permits "avoid or minimize impacts [to historic properties] to the maximum extent practicable" (NJAC 7:7A-4.3(b)(5)). The Coastal Zone Management rules "discourage...development that detracts from encroaches upon, damages, or destroys the value of historic and archaeological resources." (NJAC 7:7-9.34(b))

As a member of the aboveground review staff, my job was to review Section 106 and Land Use project documentation to determine whether the proposed activities would affect historic properties and, in the case of Section 106 projects, whether the intended actions constituted an adverse effect. I used GIS and reviewed architectural surveys and cultural resources reports contained within the office's archives to gauge the National Register-eligibility of affected properties. When it was unclear, from lack of information, whether or not properties affected by the project would be eligible for the New Jersey or National Registers of Historic Places, I had the ability to call for survey. When asked to survey affected

resources, the applicant must provide additional information on relevant potentially historic properties, so that the SHPO can make an accurate determination of eligibility. Surveys allow the NJ HPO to identify historic properties, leading to greater future protections for significant buildings and sites.

As part of this internship, I also had the opportunity to research a potential industrial historic district in Hoboken, New Jersey, and I wrote the SHPO opinion that declared the Delaware Memorial Bridge eligible for the NRHP under Criteria A and C. The position provided real, hands-on experience—each response I provided dictated the terms of the treatment of a New Jersey property.