



Public Works Committee

Special Meeting

~ Minutes ~

60 Central Ave
Cortland, NY 13045
<https://www.cortlandcountyny.gov>

Thursday, May 22, 2025

4:00 PM

Room 302

Call to Order

The meeting was called to order at 4:09 PM by Committee Chair Paul Heider

Attendee Name	Organization	Title	Status	Arrived
Christopher Newell	Cortland County	Vice Chair	Excused	
Beau Harbin	Cortland County	Committee Member	Present	
Ronald J. Van Dee	Cortland County	Committee Member	Present	
Paul Heider	Cortland County	Committee Chair	Present	
Eugene Waldbauer	Cortland County	Committee Member	Present	
Dominick Mantella	Cortland County	Committee Member	Present	
Keith VanGorder	Cortland County	Committee Member	Present	
Savannah Hempstead	Cortland County	Clerk of the Legislature	Present	
Rob Corpora	Cortland County	County Administrator	Present	
Allen Pankhurst	Cortland County	Buildings & Grounds Superintendent	Present	
Charles Sudbrink	Cortland County	Highway Superintendent	Present	
Alan Ricottilli	Cortland County	Deputy Highway Superintendent	Present	
Brooke Kemak	Cortland County	County Clerk	Present	
William McGovern	Cortland County	Legislator	Present	
Kim Cameron	Cortland County	Resident	Present	
Ashley Millard	Cortland County	Deputy Clerk of the Legislature	Remote	
Jason DeRaiche	Cortland County	Safety Director	Remote	

Resolutions

AGENDA ITEM NO. 1 – Award Bid for Snow Removal Equipment (SRE) at Chase Field, Cortland County Airport - Highway Department

RESULT:	APPROVED [UNANIMOUS]
	Next: 5/22/2025 6:00 PM
MOVER:	Eugene Waldbauer, Committee Member
SECONDER:	Beau Harbin, Committee Member
AYES:	Harbin, Van Dee, Heider, Waldbauer, Mantella, VanGorder
EXCUSED:	Christopher Newell

ON MOTION OF HEIDER

RESOLUTION NO.

Award Bid for Snow Removal Equipment (SRE) at Chase Field, Cortland County Airport - Highway Department

WHEREAS, the Cortland County Highway Department advertised for bids for Snow Removal Equipment (SRE) to be used at Chase Field, the Cortland County Airport; AND

WHEREAS, the Cortland County Highway Department publicly opened the bids in accordance with County policy and received the following bids:

<u>BIDDERS</u>	<u>BID AMOUNT</u>
Boyles Motor Sales 2955 Strunk Rd. Jamestown, NY 14701	\$289,500.00

WHEREAS, based upon the results of the bid, the bid is to be awarded to the lowest responsible bidder; NOW THEREFORE BE IT

RESOLVED, that in accordance with the recommendations of the Public Works Committee, the Cortland County Legislature hereby awards the (SRE) Snow Removal Equipment to Boyles Motor Sales, of 2955 Strunk Rd., Jamestown, NY 14701 for the bid price listed above; AND BE IT FURTHER

RESOLVED, that the County Administrator or the Chair of the Legislature, upon review and approval by the County Attorney or designee and subject to appropriation of funding by the Legislature, is hereby authorized to sign an agreement with Boyles Motor Sales, of 2955 Strunk Rd., Jamestown, NY 14701 for an amount not to exceed \$289,500.00; AND BE IT FURTHER

RESOLVED, that the Cortland County Finance Director is hereby authorized and directed to make payment from Account A56105.52015 for the purchase of the snow removal equipment as approved.

AGENDA ITEM NO. 2 – Authorize Agreement with Trane for Replacement of HVAC and Controls at County Highway Department

RESULT:	APPROVED [UNANIMOUS]
	Next: 5/22/2025 6:00 PM
MOVER:	Eugene Waldbauer, Committee Member
SECONDER:	Ronald J. Van Dee, Committee Member
AYES:	Harbin, Van Dee, Heider, Waldbauer, Mantella, VanGorder
EXCUSED:	Christopher Newell

ON MOTION OF HEIDER

RESOLUTION NO.

Authorize Agreement with Trane for Replacement of HVAC and Controls at County Highway Department

WHEREAS, the heating, ventilation, and air conditioning ("HVAC") unit and controls at the Cortland County Highway Department Building has reached the end of life; AND

WHEREAS, the Public Works Committee of the Cortland County Legislature recommends replacing the unit and controls; AND

WHEREAS, Trane U.S. Inc. has submitted a proposal on OGS contract in the amount of \$66,686.59 per for the replacement of the HVAC unit and controls; NOW THEREFORE BE IT

RESOLVED, that the County Administrator and/or Chair of the Legislature, upon approval of the County Attorney or designee, is authorized to execute an agreement with Trane U.S. Inc., of 15 Technology Place, East Syracuse, NY 13057, for an amount not to exceed \$66,686.59.

AGENDA ITEM NO. 3 – Award Courthouse Dome Repair and Painting

RESULT: APPROVED [UNANIMOUS]

Next: 5/22/2025 6:00 PM

MOVER: Ronald J. Van Dee, Committee Member

SECONDER: Eugene Waldbauer, Committee Member

AYES: Harbin, Van Dee, Heider, Waldbauer, Mantella, VanGorder

EXCUSED: Christopher Newell

ON MOTION OF HEIDER

RESOLUTION NO.

Award Courthouse Dome Repair and Painting

WHEREAS, the Cortland County Highway Department advertised for proposals for the repair and painting of the Cortland County Courthouse Dome; AND

WHEREAS, sealed proposals were opened on April 17, 2025 at 2:00 p.m. at the Highway Administration Building; AND

WHEREAS, the bids received are as follows:

BIDDERS	BID AMOUNT
Larrabee Painting, LLC 4450 Kiwanis Road Cincinnati, NY 13040	\$307,500.00
Valley Restoration, LLC 254 South Lake Street Litchfield, CT 06759	\$309,000.00

; NOW THEREFORE BE IT

RESOLVED, that in accordance with the recommendations of the Public Works Committee, the Cortland County Legislature hereby awards the repair and painting of the Courthouse Dome Project to the lowest responsible bidder being; Valley Restorations, of 254 South Lake Street, Litchfield, CT 06759, for the bid price listed above; AND BE IT FURTHER

RESOLVED, that the County Administrator and/or the Chair of the Legislature, upon review and approval by the County Attorney or designee and subject to appropriation of funding by the Legislature, is hereby authorized to execute an agreement with Valley Restorations, of 254 South Lake Street, Litchfield, CT 06759, for an amount not to exceed \$309,000.00; AND BE IT FURTHER

RESOLVED, that the Cortland County Finance Director is hereby authorized and directed to make payment from account HH16205.52320.CHEXT for the repair and painting of the courthouse dome as designated above.

Adjournment

The meeting was closed at 4:22 PM



CORTLAND COUNTY DEPARTMENT OF HIGHWAYS

60 Central Avenue
Cortland, New York 13045
PHONE: 607) 753-9377

CHARLES SUDBRINK
Superintendent of Highways

ALAN RICOTTILLI
Deputy Superintendent of Highways

MICHELLE CHACE
Fiscal Office

REQUEST FOR PROPOSALS (RFP)

Cortland County Courthouse

Repair and Paint Courthouse Dome

Sealed proposals for the Repair and Painting of the Cortland County Courthouse Dome will be received at the County Highway Department Offices located at 4267 Traction Drive, Cortland, NY 13045, **on April 17, 2025 until 2:00 p.m. local time** at which time proposals will be opened and read aloud.

Provide cost proposal for the repair and painting of the Cortland County Courthouse Dome located at 46 Greenbush St. Cortland, NY.

Proposals shall be placed in a sealed envelope with the following clearly marked on the front of the envelope:

- Proposer's Name and Address
- "Request for Proposal, Repair and Painting Cortland County Courthouse Dome"
- Date and Time of bid opening

Proposals may be mailed using regular mail to the following address:

Cortland County Highway Department
60 Central Avenue
Cortland, NY 13045

Proposals may also be "overnight" or hand-delivered to the following address:

Cortland County Highway Department
4267 Traction Drive
Cortland, NY 13045

Proposals that are mailed using regular mail must be received in the regular Highway Department mail prior to the time of the bid opening. Proposals received after this time will not be opened and will be returned to the bidder. Such proposals shall not be considered.

Request for Proposals may be examined and downloaded at the following website:

<https://www.cortlandcountyny.gov/Bids.aspx>

"Request for Proposal: Repair and Painting Cortland County Courthouse Dome"

SPECIFICATIONS

Request for Proposal shall include repair and painting of the metal clad dome and statue only (Masonry repair excluded).

Contractor shall supply and apply (Rust-Oleum Modern Masters 3 coat system)

<https://www.modernmasters.com/-/media/8D09355A0C2A4E26A23A8B392D49F62E.ashx>

ADDITIONAL INFORMATION

Cortland County may provide 185' Man-lift up to 4 weeks (only if requested in proposal).

Courthouse Dome drawings and conditions report included.

Contractor shall conform to Section 220 of the New York State Prevailing Wage Rates for Cortland County.

Contractor shall complete project prior to September 30th 2025.

The Highway Committee reserves the right to accept or reject any or all proposals received and to make awards in the best interest of Cortland County.

If awarded the contract and prior to beginning any work, the Contractor shall be required to execute the County of Cortland's Standard Contract Agreement and provide the County of Cortland proof of insurance coverage as listed in the Standard Contract Agreement.

Repair and Paint Cortland County Courthouse Dome written NUMERICALLY in dollars and cents for the Lump Sum Price of:

\$ _____

Repair and Paint Cortland County Courthouse Dome written in WORDS in dollars and cents for the Lump Sum Price of:

\$ _____

Requesting 185' Man Lift

yes ____

no ____

Proposal Form**Repair and Painting Cortland County Courthouse Dome**

Contractor Name & Address:

Authorized Signature: _____

Name and Title _____

Date: _____

Contact Person: _____

Email: _____

Telephone Number: _____

Report Narrative



Cortland County Courthouse Cortland, NY Exterior Dome Inspection

Vertical Access LLC
PO Box 4135, Ithaca, NY 14852
Tel: 607 257 4049 / Fax: 607 257 2129

Vertical Access LLC (VA) was retained by Bell & Spina, P.C. to perform a hands-on and close visual inspection of the exterior of the sheet metal-clad dome and masonry drum of the Cortland County Courthouse in Cortland, NY. The purpose of the survey was to document existing conditions in order to assist the project team with preparation of repair recommendations. As part of the investigative work, VA documented representative and notable conditions with digital photographs and video files hyperlinked to annotated conditions drawings.

VA technicians Kristen Olson, Dan Gordeyeva, and Evan Kopelson were on-site July 31st and August 1st, 2019 to perform the visual inspection using industrial rope access and an unmanned aerial vehicle (UAV, or drone). Cortland County Buildings and Grounds staff were on-site during the investigation to assist with building access. Dennis Spina of Bell & Spina was on site August 1st for discussion of findings and to take possession of samples collected by Vertical Access during the investigation.

The exterior materials of the Cortland County Courthouse Dome are in fair condition. There is widespread failure of the paint coatings at the sheet copper and of the sealant in the joints between the sheet copper and stone masonry. The exterior sheet metal at the lantern and dome is generally intact but exhibits cracked solder joints, failed fasteners at seams, and tears, punctures and dents at some locations. The limestone masonry of the drum is generally in good condition. There are discrete locations of cracking, spalling and chipping of the stone and areas of failed mortar joints. The most notable condition observed at the masonry is displacement of some sections of the balustrade at the setbacks of the drum and of some cornice units. None of the areas of displacement were found to be loose.

This *Report Narrative* with supporting photographs, annotated AutoCAD elevation drawings, and spreadsheet of extracted survey conditions constitute VA's *Condition Survey Report* for the Cortland County Courthouse Dome. Vertical Access' *Guide to TPAS® Annotated Drawings* is included with the report. Digital copies of the compiled full report, *Report Narrative*, drawings in AutoCAD and PDF formats, photographs, extracted condition quantities, and *Guide to TPAS® Annotated Drawings* are provided on a USB flash drive. Video files collected with UAV access

and using a GoPro camera at the lantern are also provided on the flash drive.

Description of Deliverables

Report Narrative

This *Report Narrative* includes a description of the project deliverables, the scope of work and this narrative summarizing the conditions noted during the inspection. Conditions documented by Vertical Access and described in the *Report Narrative* use terminology based on VA's Conditions Glossary:

(<http://www.vertical-access.com/glossary.html>). Supporting photographs illustrating representative and notable conditions are cited in the *Report Narrative*. The last section of the *Report Narrative* includes conclusions and preliminary interpretations of the survey findings.

Guide to TPAS Annotated Drawings

A *Guide to TPAS Annotated Drawings* follows the *Report Narrative*. While printed photographs and drawings are presented as part of this report, the most efficient way to analyze the survey data is by using the features available in the digital drawing files. Readers are encouraged to refer to the *Guide to TPAS Annotated Drawings* before using the report to develop recommendations.

TPAS utilizes a library of previously drawn material condition symbols to annotate digital survey drawings in the field. The severity and amount of each condition are recorded within the annotations.

The *Guide* describes key TPAS features:

- Enabling hyperlinks and opening digital photographs directly from the AutoCAD drawing
- Viewing and editing survey data embedded within condition annotations
- Creating views within AutoCAD or within the PDF drawing to visually display information about specific conditions, by turning layers on and off
- Extracting numerical survey information contained in the AutoCAD drawing for export into a spreadsheet or database

Photographs

The *Photographs* section of the report includes images of representative and notable

conditions taken during the survey. Each photograph is hyperlinked to a condition code within the AutoCAD drawing so that it can be viewed easily as a digital file. Each photograph has a three-part name including the Cartesian (x-y) coordinates corresponding to the condition's location within the AutoCAD drawing, the type of material and condition documented, and the year in which the photograph was taken. The Cartesian grid used to name the photographs is shown on the drawings. For reference, the table below lists the x-coordinates of the elevation views:

X-Coordinate	Elevation View	Sheet and Drawing
90 to 130	North elevation	Sheet 1, Drawing 1.1
310 to 355	West elevation	Sheet 1, Drawing 1.2
570 to 620	South elevation	Sheet 1, Drawing 1.3
830 to 880	East elevation	Sheet 1, Drawing 1.4

Annotated Drawings

Full-size 24" by 36" and reduced-scale 11" by 17" drawings are provided in the *Annotated Drawings* section, the third section of VA's *Condition Survey Report*. The drawings document the condition of the exterior materials at the Cortland County Courthouse dome and drum. Bell & Spina provided a scan of the north elevation of the building, including the dome. Vertical Access copied the north elevation drawing to create elevation additional elevation views and inserted the four elevations into a single AutoCAD drawing with each exterior elevation view placed to have a unique set of x-y coordinates.

There are two drawing sheets included in the report. Sheet 1 contains the annotated elevations with the condition survey information. Sheet 2 has the locations of samples collected by Vertical Access for testing and analysis by others.

Spreadsheet of Survey Conditions

A *Spreadsheet of Extracted Survey Conditions* is included with this report. The spreadsheet contains three sheets:

- A Data Key shows the layer, condition, code, and unit of measurement for the quantities and severity of each condition;
- The Condition Totals provides overall counts and quantities for each type of condition;
- And the Extracted Survey Conditions sheet catalogs each individual condition identified during the 2012 and 2018 surveys, including location, photograph, quantity and severity data extracted from the annotated

AutoCAD drawings.

Digital Files

All of the documents composing this *Condition Survey Report* are provided in digital format on a USB flash drive. Digital files include a full *Condition Survey Report* in PDF format, the Report Narrative in PDF format, JPG image files of survey photographs, annotated elevation drawings in AutoCAD DWG and PDF formats, spreadsheet quantities in Microsoft Excel XLS and PDF formats, MOV format video files of the building exterior collected with a UAV, and MP4 files of the statue at the top of the lantern from a GoPro video camera.

The evaluations and recommendations in this report and its exhibits regarding the condition of building materials and the potential effect on the safety of persons and property are made in the opinion of the VA technical personnel who observed the materials on site and are based on their judgment, knowledge, and prior experience of similar conditions; however, VA makes no warranty or guarantee regarding the accuracy of these evaluations and recommendations.

Scope of Work

Vertical Access' scope of work for the Cortland County Courthouse was to perform a hands-on survey of the exterior materials of the dome and drum in order to assist the project team with the assessment of the existing conditions and plan for future repairs. The areas of VA's investigation included the sheet metal lantern and dome and the masonry drum. As part of the hands-on and close visual survey of the dome, Vertical Access documented representative and notable conditions observed on the exterior. VA documented conditions by means of still photographs hyperlinked to annotated AutoCAD drawings, with quantities provided for each condition noted. VA collected video footage of the statue at the top of the lantern using a GoPro camera mounted to an extendable pole. VA also used a UAV to obtain video footage of the overall building exterior and additional documentation of the statue.

Industrial rope access techniques were used to perform the investigation of the dome and drum of the Cortland County Courthouse. In general terms, technicians are suspended on one rope termed the "work positioning line" with a redundant "fall protection line" used as backup. Hands-off descent control and fall protection devices are integrated into site-specific rigging systems, along with industry-specific climbing and suspension harnesses. Vertical Access technicians are third-party

certified for industrial rope access work by SPRAT, the Society of Professional Rope Access Technicians.

At the request of Bell & Spina, Vertical Access took paint and sealant samples to be analyzed by others for hazardous materials. Vertical Access took samples of the yellow paint and of sealant from seams at the sheet copper, joints between sheet metal and masonry, and glazing at one of the skylights on the roof of the base of the building. The locations of the samples are shown in sheet 2 of the drawings included in this report.

Building Description

The Cortland County Courthouse was designed in the Beaux-Arts style by James Riely Gordon and built in 1924 by the A.E. Stephens Company. It has a three-story, limestone-clad base in a cruciform plan. At the center of the cruciform rises the drum and dome. The drum has several levels, including the eight-sided attic level where the drum meets the roofs of the adjoining wings of the base of the building. Above the attic is a setback with a balustrade level, then a peristyle level, and another setback with a balustrade. The sheet copper-clad dome has a lantern surmounted by a statue of Lady Justice. The sheet copper of the dome and lantern are painted yellow.



Figure 1: Cortland County Courthouse lantern and top of dome.

Findings

As part of the survey of the Cortland County Courthouse, VA noted and documented localized failed seams, tears, punctures, and dents and widespread paint failure at the sheet metal. At the masonry drum, displacement of sections of the balustrade and some cornice units as well as spalls, cracks, and failed mortar and sealant joints were documented. Overall the exterior of the dome and drum appears to be in fair condition, with the conditions relating to a lack of general maintenance resulting in systemic deterioration.

Each condition was assigned a priority rating as part of the survey. Priority 1 conditions are those representing immediate safety issues. No Priority 1 conditions were identified during VA's investigation, although a loose spall measuring approximately 15 square inches was removed from the stone cornice at the base of the dome. Priority 2 conditions are those conditions of deterioration such as displacement, spalls, and cracks in the masonry, and maintenance deficiencies, such as failed paint coatings and sealant, and failed seams at sheet metal. Priority 3 conditions are conditions that are primarily aesthetic, such as soiling, and conditions that are early in their deterioration trajectory, such as hairline cracks in the stone. The priority of each condition appears in the *Spreadsheet of Survey Conditions*, as an attribute that is exported from the condition blocks in the AutoCAD drawing.

For the purposes of this report, the following definitions are provided: *Excellent* condition refers to a system, material, or item that shows minimal to no deterioration and continues to serve its intended structural, waterproofing, or aesthetic function. *Good* condition is used for a system, material, or item that generally continues to serve its intended structural, waterproofing, or aesthetic function although patterns or specific instances of deterioration are present. *Fair* condition indicates that a system, material, or item has lost some of its structural, waterproofing, or aesthetic function due to deterioration or deferred maintenance. *Poor* condition refers to a system, material, or item that has lost most of its intended structural, waterproofing, or aesthetic function.

Sheet Metal Dome and Lantern

- The sheet copper cladding at the exterior of the dome and lantern is in fair to good condition. There are 24 facets of the sheet metal dome, consisting of sheet copper pans with the folded seams at the top and bottom seams of the pans and the sides turned up and covered by sheet copper rib covers. Sheet copper ornament at the dome and lantern includes brackets at the base of the dome, volutes at the base of the lantern, and eight columns with ionic capitals at the lantern. Measurements taken at several locations with digital calipers indicate that the copper is nominally between 0.031 and 0.040 inches thick, corresponding roughly to 24 oz. sheet copper. (See photographs 119-123,

119-124).



Figure 2: Dome photograph showing pans and rib covers.

- Two sheet metal ball finials are missing from the south side of the top of the lantern. There are holes approximately three inches in diameter into the top of the lantern where the ornament is missing. (See Lantern and Statue South video).
- A typical pattern of deterioration at the sheet metal dome is failed soldered seams (annotated “SldF” on the drawings) at the ribs covers where they meet the sheet copper lantern skirt near the top of the dome. The failed seams are typically three or four inches long. (See photographs 107-137, 595-136, 853-134).
- Some of the soldered seams at the base of the dome and the sheet metal covering over the stone cornices have also failed. (See photographs 592-122, 605-114).
- Nails popping out of the sheet copper frieze of the lantern were documented as a failed fastener seam (“FstF”). The failed fasteners were noted on the west side of the lantern. (See photographs 336-145).
- Several vertical folded seams at the base of dome were documented as failed (“FldF”). The seams exhibit minor separation between the sheet metal sections along the seam. (See photographs 329-122). The folded seams between the four pieces of sheet metal that make up the soffit of the lantern are also open and failed. (See photographs 593-143).
- Tears (“Trn”) in the sheet copper pans where they are turned up at the rib covers were noted at some locations. The tears are typically less than one inch long. Some pans are notched at the bend, reducing the likelihood of tearing. (See photographs 332-132, 598-127). The sheet copper counterflashing at the base of the outboard side of the upper balustrade is also torn. (See photographs 593-114).
- Punctures (“Pnc”) in the sheet metal were noted at a couple locations. One of the columns on the north side of the lantern has a puncture about one inch long where the open hatch cover hits the column. (See photographs 113-141). A puncture roughly 1/2 inch in diameter was also noted on the skyward-facing surface of one of the brackets on a northwest facet at the base of the dome. (See photographs 119-125).
- Dents (annotated “Dnt”) in the sheet metal were noted at several locations, particularly at the lantern. The sheet metal ornament at the cornice and base of the lantern exhibit typical denting. (See photographs 333-138, 852-138). Two columns on the north side of the lantern have dents where the open hatch cover hits the column. (See photographs 108-142, 112-143). The sheet metal panels at the soffit of the lantern also exhibits denting. (See photographs 590-144). Shallow dents on the north side of the dome were also noted, perhaps evidence of hail damage. (See photographs 112-129).

- Rust staining on the surface of the sheet copper at the dome is typical. The pattern of the rust staining in streaks along the rib covers and at the bottom edges of some of the pans indicate that the staining may be from corrosion of ferrous fasteners or structure under the sheet copper cladding. (See photographs 116-130, 853-125).
- All of the sheet copper has been painted with a yellow coating. The paint may cover some conditions that were not documented during the investigation. The yellow paint coating has failed, with weathering, chalking and loss of binder typical. Flaking and peeling of the paint from the copper substrate is less common. (See photographs 596-148, 599-133).

Masonry Drum

- Horizontal displacement (“Hor” on the annotated drawings) of sections of the stone balustrades at the upper setback level was noted on all sides of the building. The displacement measures up to 1/2 inch and is typically outward away from the building. At some locations the displaced units include the piers between the balustrade sections and at some locations just the balustrade sections with balusters are displaced. (See photographs 110-117, 592-117, 603-118, 862-116).
- There is one displaced stone unit at the cornice just below the base of the dome on the west side of the building and additional displaced units in the cornice below the upper balustrade on all sides. The displacement at these cornice units is typically both in a horizontal and vertical direction (annotated “HV”) and measures between 1/4 and 1/2 inch. (See photographs 344-122, 587-114, 861-114).
- Cracks between hairline and 1/16 inch in width were noted at cornice units directly below the base of the dome, below the upper balustrade level, and above the peristyle. The cracks typically run vertically or diagonally across the units and are in single units (annotated “C” on the drawings), rather than through multiple units. (See photographs 119-121, 602-116, 855-90).
- Hairline cracks were also documented at both balustrade levels. The cracks are between hairline and 1/16 inch in width. Some of the cracks extend into multiple units (“CU”) or through mortar joints (“CJ”). (See photographs 595-99, 842-92, 854-113).
- Several spalls were identified during the investigation. Spalls were designated with one of the following codes: “B” for bonded in position with either mortar or sealant, “I” for incipient spalls that have not fully formed, “M” if missing at the time of the survey, or “R” for spalls that were removed by Vertical Access during the survey. Most of the documented spalls measure between 5 and 10 square inches. (See photographs 339-99, 337-100,

587-89, 869-91). A spall removed from a cornice unit on the east side of the drum measures 15 square inches. (See photographs 852-114).

- Areas of chipped stone at the edges of units were noted at the lower balustrade level and frieze units at the upper part of the drum. The chipping is typically 1/4 to 1/2 inch in depth. (See photographs 103-99, 332-92, 596-111).
- All of the sealant at the masonry has failed. Sealant is found in reglet joints in the skyward-facing surfaces of the cornice units where the sheet metal cornice covers terminate. At least two types of sealant are found in the reglet joints, both of which appear to be urethane. (See photographs 339-92, 341-115).
- In general, the mortar at the drum is in good condition. Areas of failed mortar were documented at both balustrade levels, at the attic level, and at the entablature above the peristyle. At these areas, there is both sound and failed mortar. The failed mortar at the upper balustrade level exhibits erosion. (See photographs 339-117, 861-119). The failed mortar at the attic level, the lower balustrade level and the peristyle entablature is cracked and separated from the stone. (See photographs 125-92, 326-89, 591-112, 846-113).
- The coating at the deck of the peristyle level has failed in some areas. The coating is applied to the skyward-facing surfaces of the deck, including the column plinths. The coating at the deck drain at the southeast side of this level has torn allowing water ingress around the drain. (See photographs 606-101).
- Representative areas of soiling were documented at the masonry of the drum. Biological soiling is widespread, particularly at the skyward-facing surfaces of the balustrades and the bases of the peristyle columns. (See photographs 96-94, 114-97, 114-117). Black gypsum crusts are typical at the limestone surfaces below the cornices and at the rear sides of the peristyle column capitals where there is not direct water washing down the surface of the stone. (See photographs 333-90, 338-111, 584-110, 598-113).

Statue of Lady Justice

- The statue of Lady Justice was observed using video footage collected using a GoPro camera on an extendable pole operated from the top of the dome and a UAV flown from the northeast, southeast and southwest corners of the building. Based on the video footage, the statue appears to be sheet copper with soldered seams. Like the lantern and dome, the statue is painted yellow. Other than weathered paint coatings, the statue is generally in good condition. (See UAV and GoPro videos).

Conclusions and Preliminary Interpretations

Vertical Access performed a hands-on and close visual survey of the dome and drum of the Cortland County Courthouse to assist the project team with the assessment of the exterior materials. The areas surveyed by Vertical Access included the lantern, dome, and drum down to the roofs of the base of the building. VA noted and documented localized failed seams, tears, punctures, and dents and widespread paint failure at the sheet metal. At the masonry drum, displacement of sections of the balustrade and some cornice units as well as spalls, cracks, and failed mortar and sealant joints were documented. Overall the exterior of the dome and drum appears to be in fair condition, with the conditions relating to a lack of general maintenance resulting in systemic deterioration.

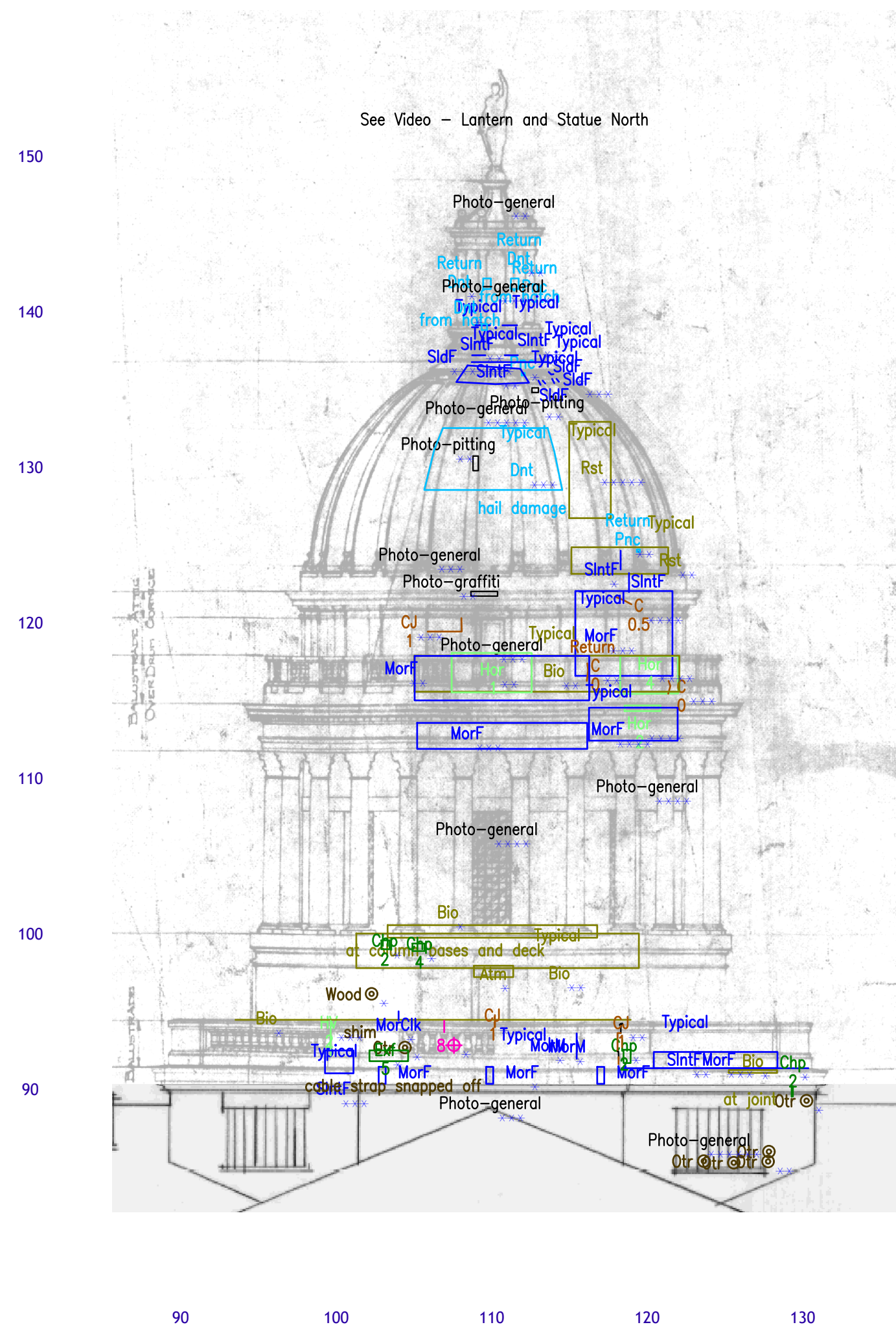
Vertical Access remains available to the project team to discuss our findings and demonstrate the functionality and utility of TPAS in developing repair schemes, cost estimates, and construction documents.

Respectfully submitted for Vertical Access LLC by:

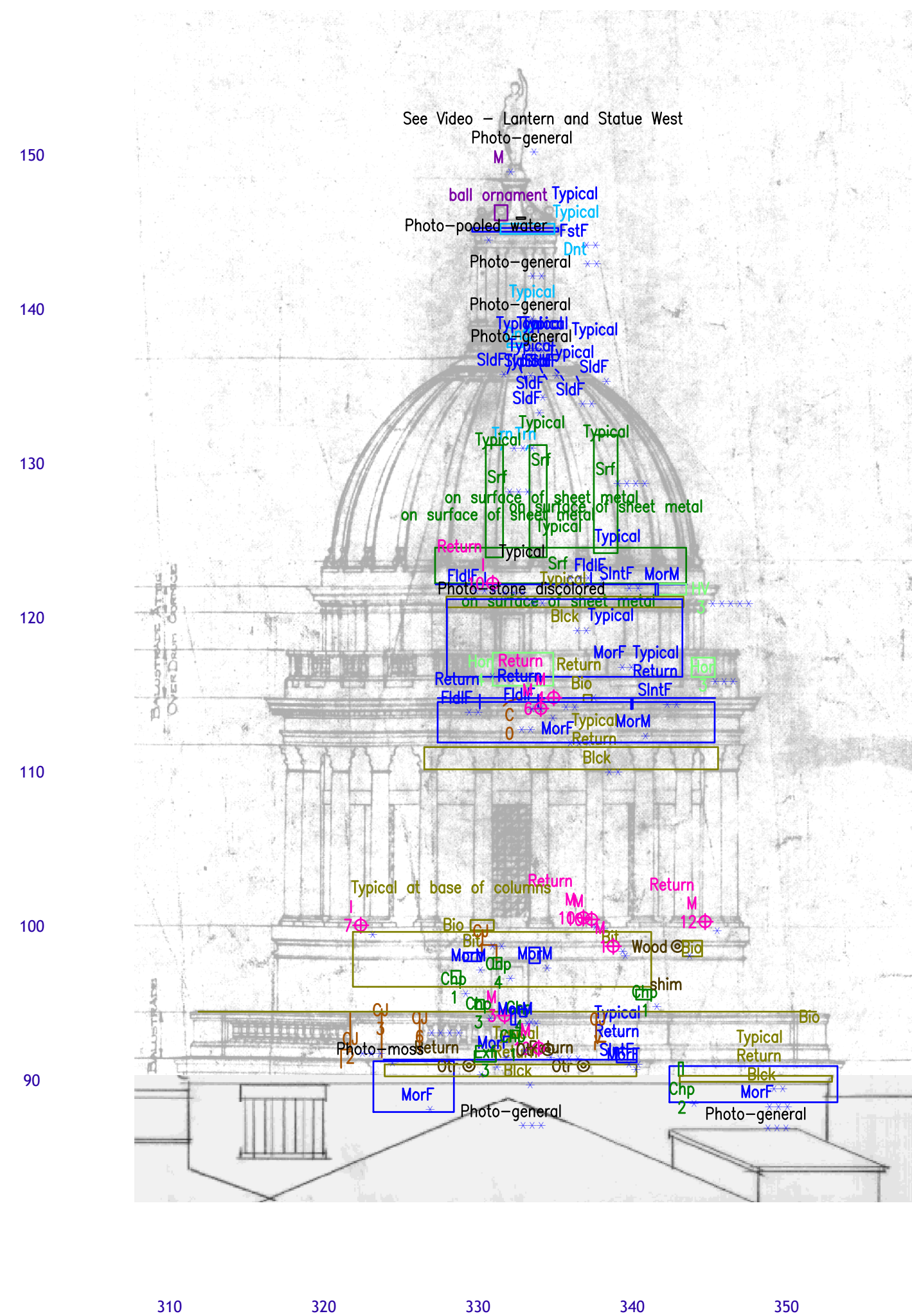


Evan Kopelson

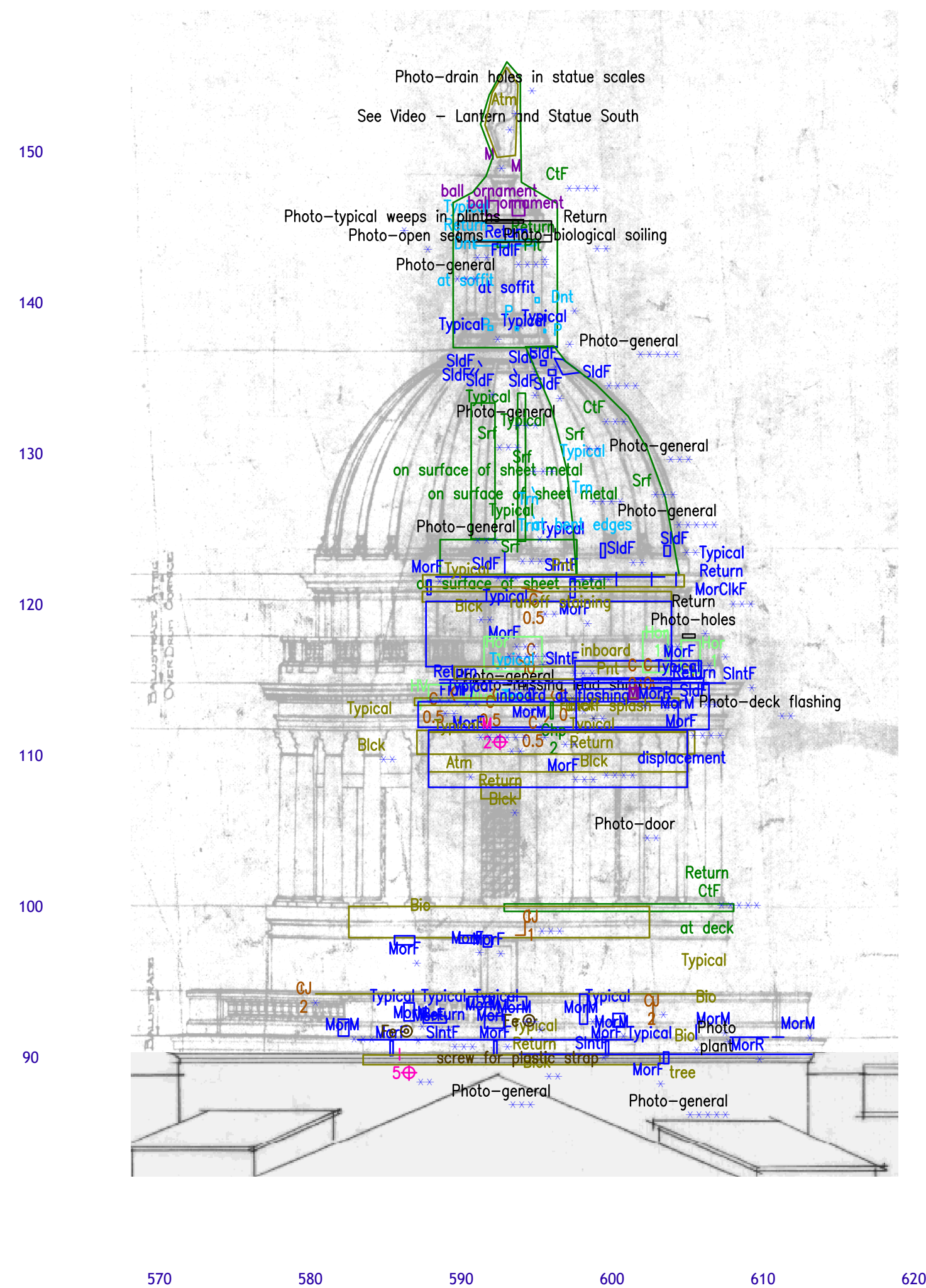
August 13, 2019



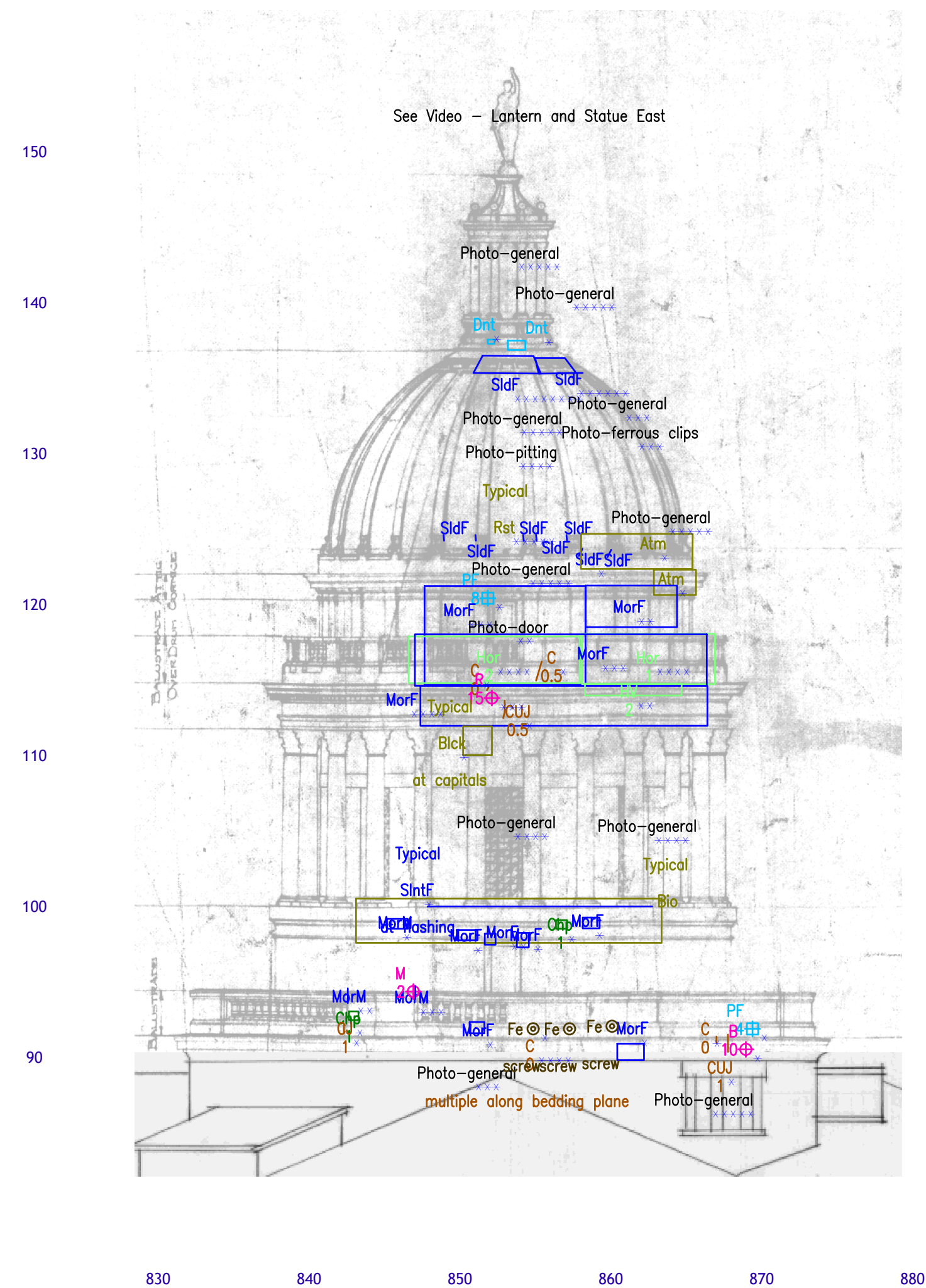
1.1 North



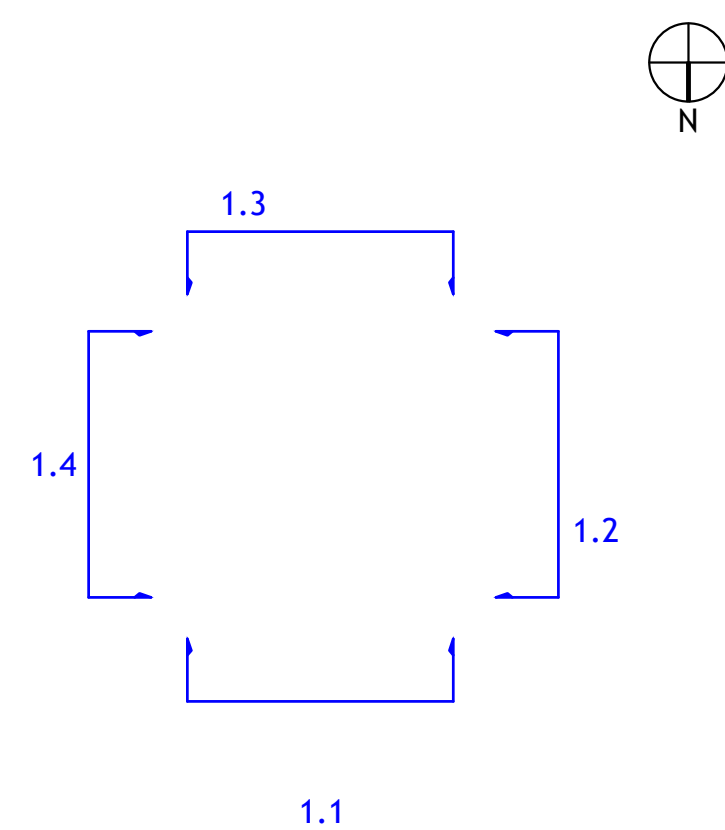
1.2 West



1.3 South



1.4 East



Key Plan

KEY TO SURVEY CODES: MASONRY					
Condition	Symbol	Fault Type		Severity	Amount
Coating		CtF	Coating Failed	Not applicable	Area in sq. ft.
Cracks		C CJ CUJ	Crack Crack system: Joints Crack sys.: Units & Joints	Width in 1/16" increments: 0 Hairline .5 Hairline to 1/32 inch 1 1/32 to 1/16 inch 2 1/16 to 1/8 inch	Length in lin.ft.
Displacement		Hor HV	Horizontal displacement Horiz. & Vert. disp.	Disp. in 1/8" increments 1 0 to 1/8 inch 2 1/8 to 1/4 inch	Number of units
Fe Element		Fe Wood Otr	Ferrous element Wood element Other element	Not applicable	Not applicable
Joints		MorCik MorCikF MorF MorM MorR SintF	Mortar Caulked Mortar Caulked Failed Mortar Failed Mortar Missing Mortar Removed Sealant Failed	Not Applicable Percentage Percentage Not Applicable Not Applicable Not Applicable	Length in lin. ft. Length in lin. ft. Area in sq. ft. Length in lin. ft. Length in lin. ft. Length in lin. ft.
Previous Repairs		PF	Patch Failed	Size of repair in square inches	Not applicable
Soiled/Stained		Atm Bio Bit Blk Pnt	Atmospheric Biological growth Bituminous Black Crusts Paint	Not applicable	Area in sq. ft.
Spalls		B I M R	Bonded Incipient Missing Removed	Size of spall in square inches	Not applicable
Surface Loss		Chp Exf	Chipped Exfoliated	Depth of loss in 1/8" increments: 1 0 to 1/8 inch 2 1/8 to 1/4 inch	Area in sq. ft.
Unsecured		M	Missing	Not applicable	Area in sq. ft.

KEY TO SURVEY CODES: METALS				
Condition	Symbol	Fault Type	Severity	Amount
Coating		CtF Coating Failed	Not applicable	Area in sq. ft.
Corroded		Srf Pitted	Not applicable	Area in sq. ft.
Damaged		Dnt Dent Pnc Punctured Trn Torn	Not applicable	Area in sq. ft.
Previous Repair		P Patch sound	Not applicable	Area in sq. in.
Seams		FstF Fastener Failed FldF Folded Seam Failed SlcF Solder Failed SlntF Sealant Failed	Not applicable	Count Length in lin. ft. Length in lin. ft. Length in lin. ft.
Soiled/Stained		Atm Atmospheric Rst Rust	Not applicable	Area in sq. ft.
Unsecured		M Missing	Not applicable	Area in sq. ft.

KEY TO SYMBOLS

Each TPAS annotation is comprised of a graphical symbol and text label.

Four types of graphical symbols are used:

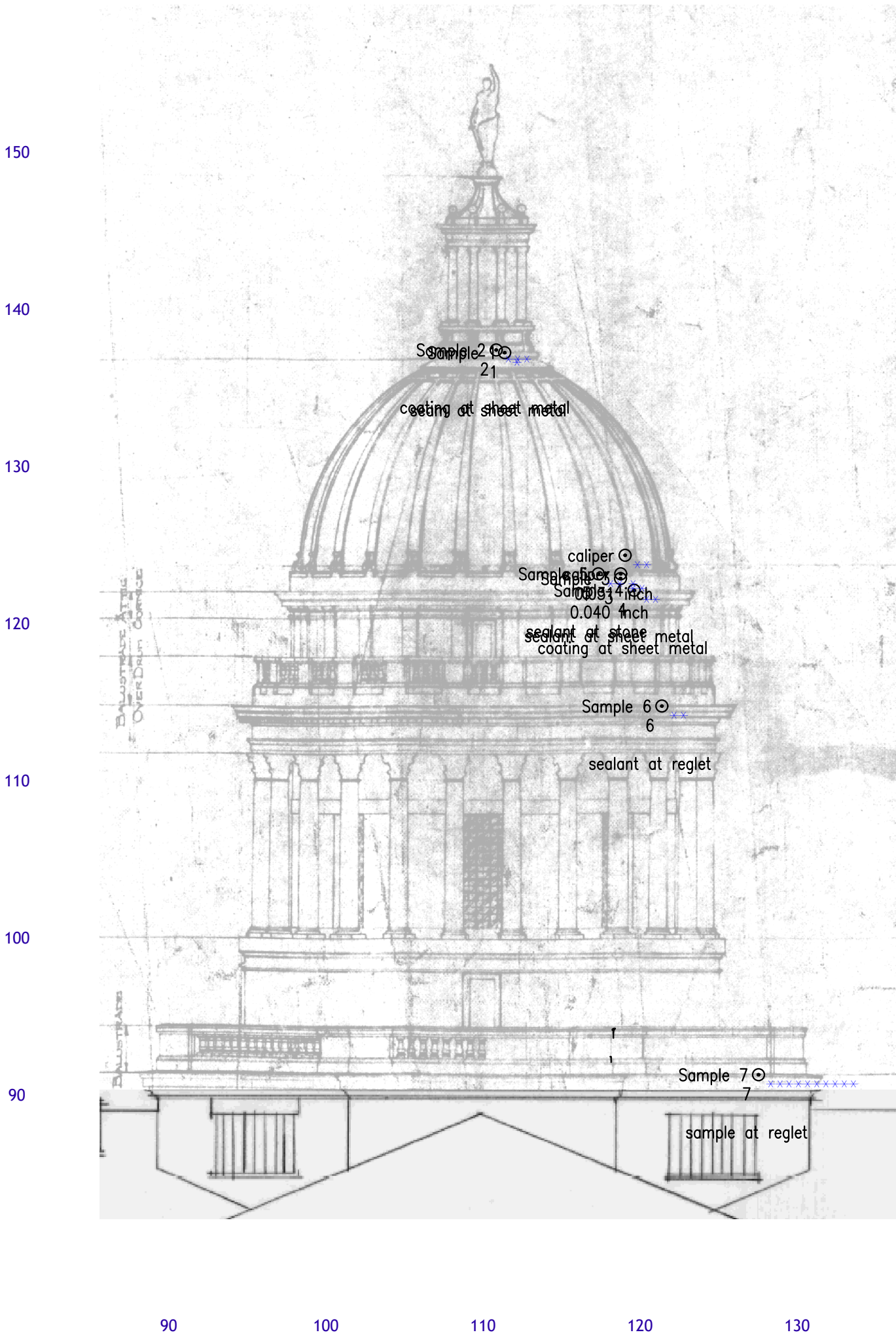
- Target symbols depict faults having discrete locations, such as spills or patch repairs.
- Box symbols are rectangular symbols delineating conditions that span an area too large to be effectively represented with target symbols.
- Polyline symbols depict cracks and specific joint conditions.
- Picture Link symbols indicate the location of survey photographs.

Text labels include a code describing the type of condition, and if applicable, a severity code and Picture Link.

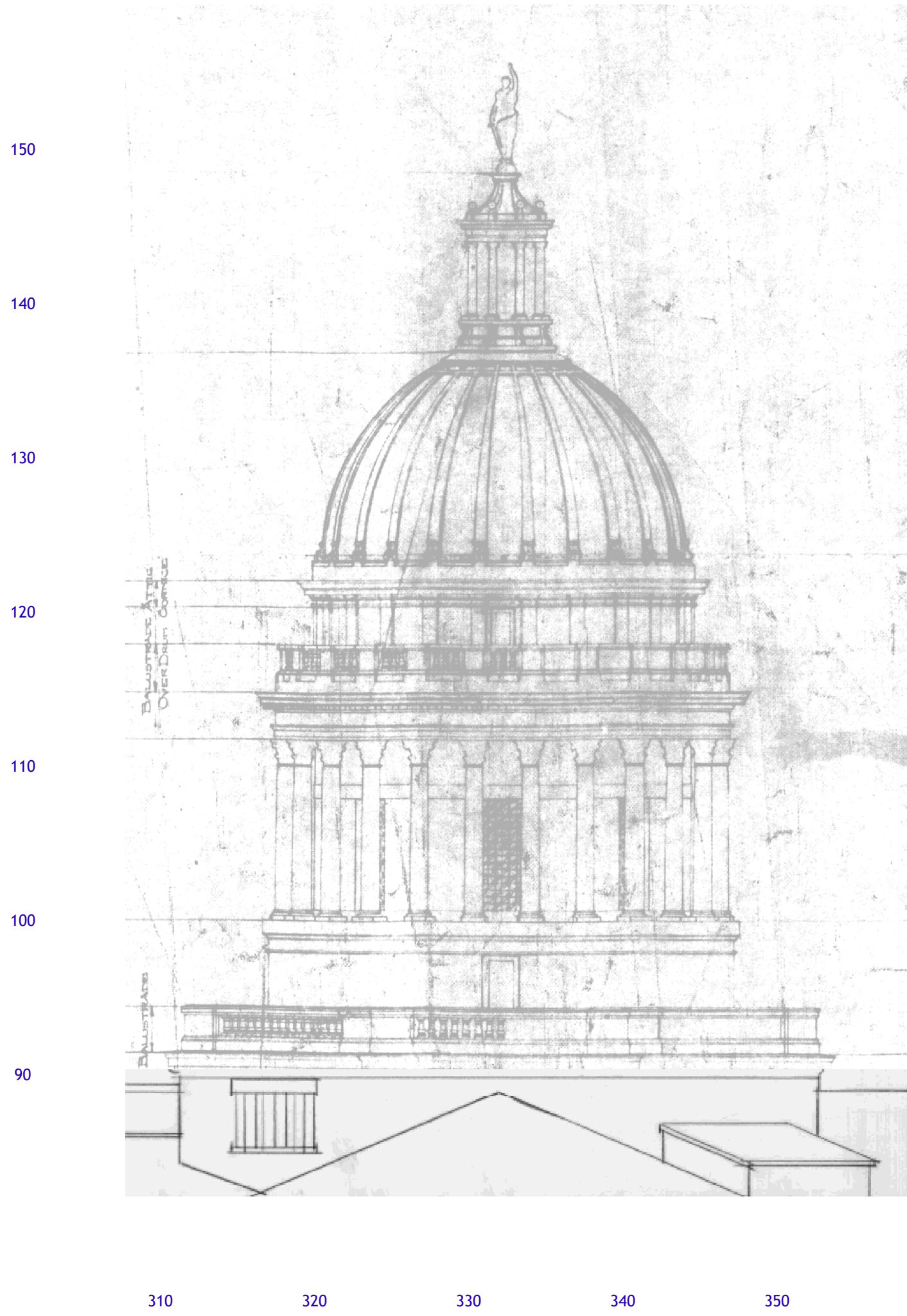
This target symbol indicates a 20 square inch spill, which was removed during the survey and photographed:

This box symbol indicates an area of biological soiling, which was not photographed:

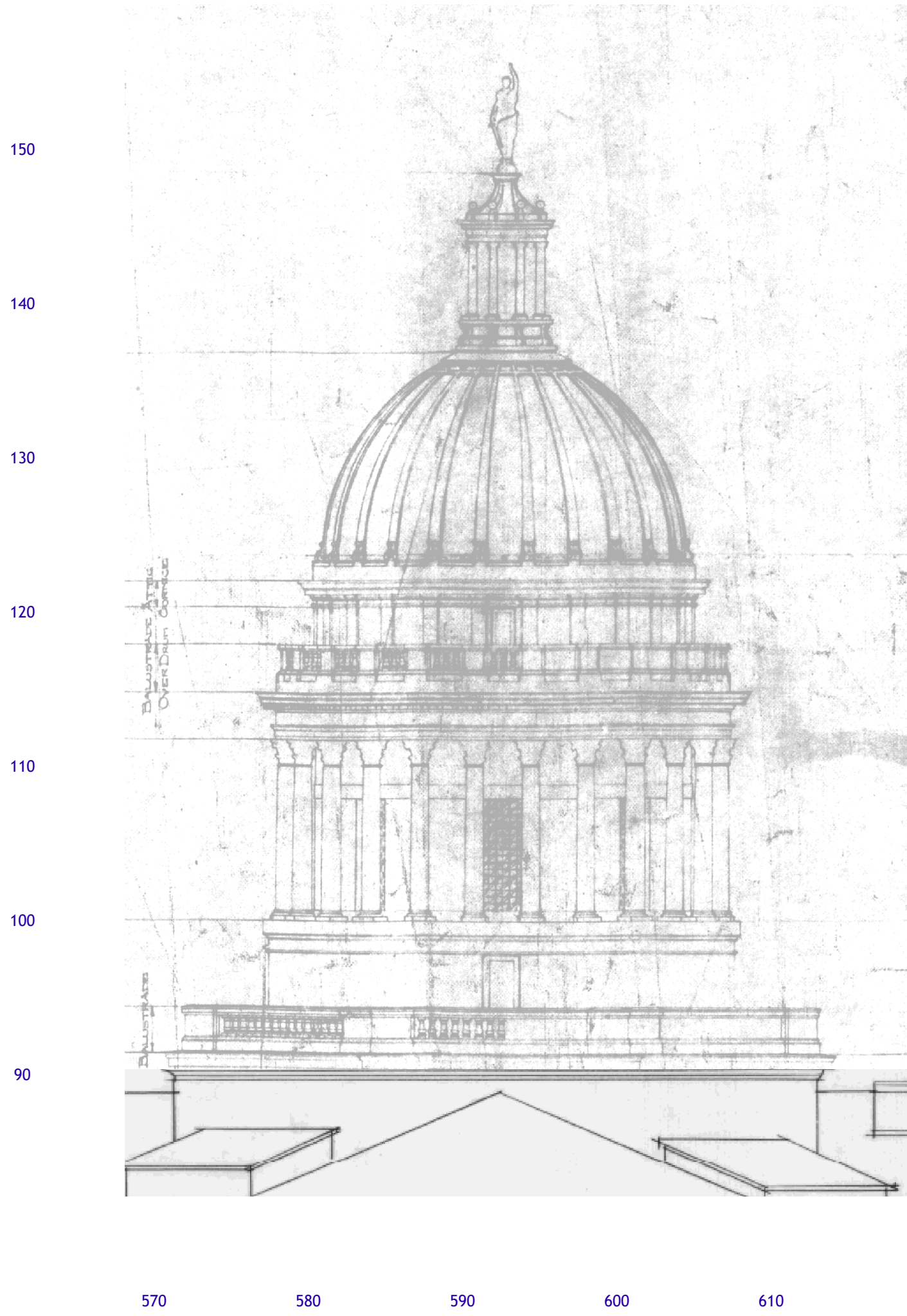
This polyline indicates a crack system following a joint path, 3/16 inch wide, which was photographed:



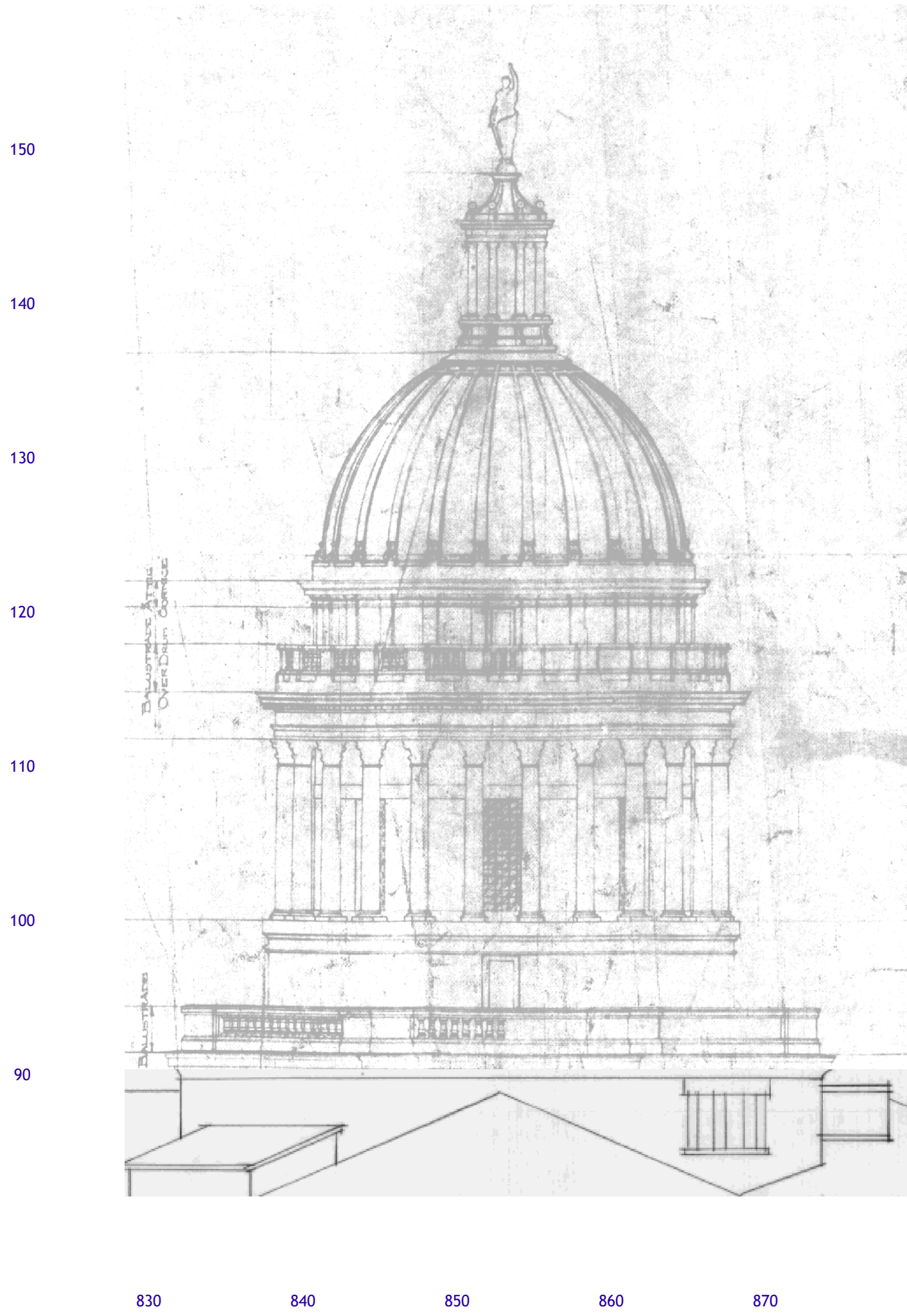
2.1 North



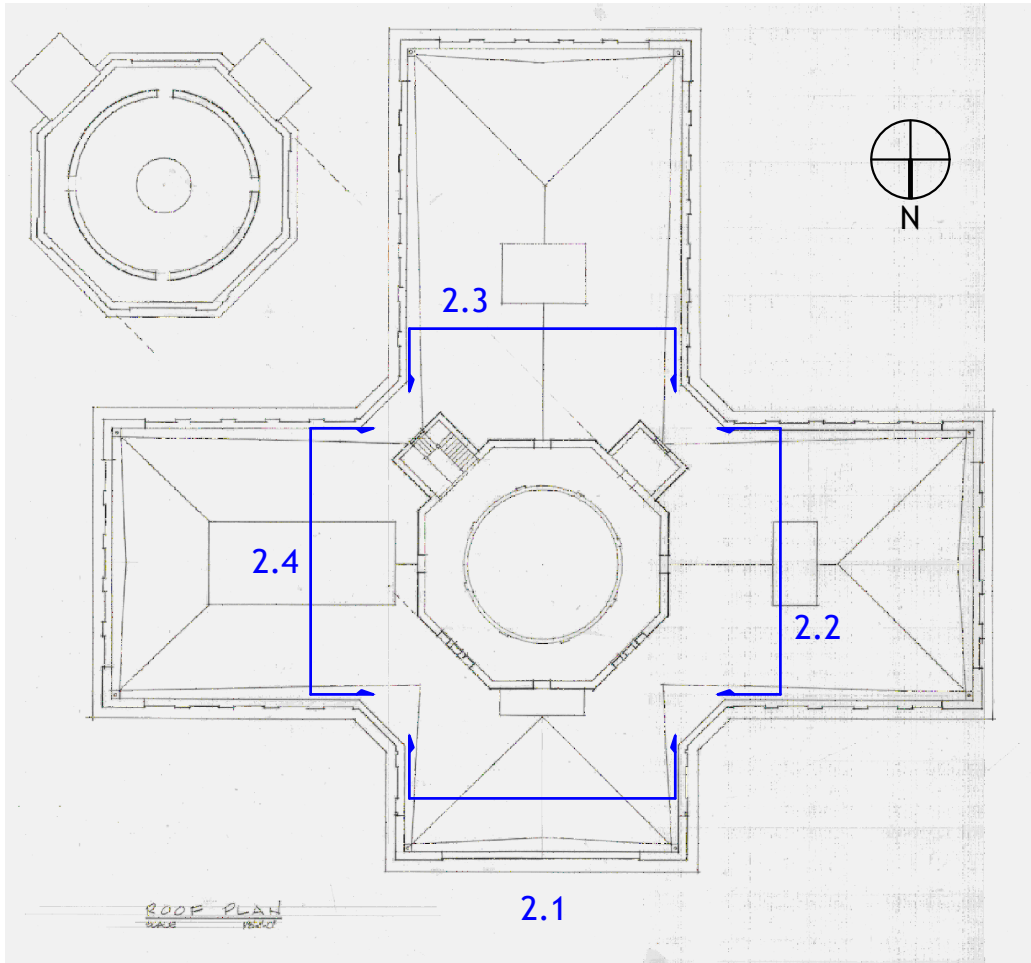
2.2 West



2.3 South



2.4 East



Key Plan

KEY TO SURVEY CODES: TEST LOCATION					
Condition	Symbol	Fault Type	Severity	Amount	
Test Location	⊙	Sample Caliper	Sample Location Caliper Reading	Not applicable	Not applicable

KEY TO SYMBOLS	
Each TPAS annotation is comprised of a graphical symbol and text label.	
Four types of graphical symbols are used:	
--Target symbols depict faults having discrete locations, such as spalls or patch repairs.	
--Box symbols are rectangular symbols delineating conditions that span an area too large to be effectively represented with target symbols.	
--Polyline symbols depict cracks and specific joint conditions.	
--Picture Link symbols indicate the location of survey photographs.	
Text labels include a code describing the type of condition, and if applicable, a severity code and Picture Link.	
This target symbol indicates a 20 square inch spall, which was removed during the survey and photographed:	Fault Code R 20 88 Target Symbol
This box symbol indicates an area of biological soiling, which was not photographed:	Bio Picture or Video Link
This polyline indicates a crack system following a joint path, 3/16 inch wide, which was photographed:	CJ 3 *