

Detailed Submission to NYS Historic Preservation Office SHPO ID:

Design #:D022292 LLW#: 136055 Description: Clock Tower Repair, Permanent Fix.



Arthur D. Phillips School (Staten Island)

Building ID: R829 School District: 31

Report Prepared by: CPL Architecture Engineering Planning. SCA Design Manager: Ashraf Elias P.E Date:11/29/2023

SHPO Detailed Report

Latest Revision Date: 12/13/2023

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A. BUILDING DESCRIPTION, HISTORY & PROJECT STATUS

School Name: R829 - Arthur D. Phillips School S.I.

Building ID: R829

Borough: Staten Island

Address: 98 Grant Street, Staten Island, NY 10301

Tax Lot and Block: Lot 81, Block 506

Project Status: The project is in the Design Phase.

Introduction:

- School Name and Facility Code (Building ID) Number: Arthur D. Phillips School S.I. – R829
- List of School Organizations housed in the Building: New School @ R829 Old 15, P.S. 65 - Staten Island, R373 Sped - Staten Island, S.I. Area Office (Old 15), Regional Suspension Center - S.I.
- Student and Staff Population and Grade Levels Served (current and projected population and grade levels for each School Organization): The building houses approximately 381 students in grades Pre=K to 5th, with a staff population of 85.
- Year of Original Building Completion & Architect Name: 1897- Edward A. Sargent.
- Year of Completion of Addition(s) & Architect Name(s): 2000- Medhat Salem Associates.

Description of the Existing Building:

- Number of Floors: 3+B+PH
- Gross Building Area: 45,500
- Accessibility: Main entrance is located on an accessible route. Upper floors are accessible by elevator.
- List of Public Assembly Spaces and Locations: Cafeteria Basement, Gym/Library – Third Floor.
- Number of Classrooms: 20
- Building Structural System (typical framing, floor and roof construction): Original building is constructed of wood framing, concrete floor and roof slabs. Addition is constructed of steel framing, concrete floor and roof slabs.
- Exterior Wall System(s): Exterior is solid masonry wall. The brick consists of burnt red face brick and common brick.
- Window/Glazing Systems (window type(s) and glazing): Aluminum replacement windows.

• Roofing System(s): Mansard roof with projecting eaves and simple molded cornice, with synthetic slate shingles. Hipped roofs over the pavilions intersect the main roof. The flat portion of the roof is multi-ply protected membrane roofing.

Description of Site:

- Key Site Features: The site is gently sloping and occupies the corner lot on Grant Street to the north and St. Paul's Avenue to the west.
- Surrounding Streets: The main entrance of the building faces north onto Grant Street.
- Site Accessibility: The site is accessible from Grant Street to the north and St. Paul's Avenue to the west. It is bounded by public streets to the north and west and private lots to the south and east.
- Site Utilization (playgrounds, athletic fields, parking, etc.): A paved play yard containing a basketball court and playground is located on the south side of the site. The play yard is entirely fenced off from the street by a metal fence.
- Landscaping: Grass yards are located between the building and metal fence on the north and west facades.
- Site Paving: The south side of the site is paved and accommodates the play yard located there.

Building Overview:

R829 Arthur D. Phillips S.I., located at 98 Grant Street, in the corner of St. Paul's Avenue and Grant Street in Staten Island, New York, is a 3-story (plus basement), primary school, approximately 45,500 SF in total floor and completed in 1897. The school building, commissioned as a district school by the Middletown Township, was completed just as Staten Island became a part of New York City and it is nearly 127 years old.

The picturesque building is an outstanding example of late nineteenth century Late Victorian, Queen Anne inspired institutional architecture style, designed by Staten Island's most talented late nineteenth century architect, Edward A. Sargent, who also designed many local residences. Characteristic features of the Queen Anne style shown by R829 include the steeply pitched roof, asymmetrical form, and decorative use of brick and stone.

The school's main entrance faces North on Grant Street, with St. Paul's Ave to the West. Privately-owned two-story residential buildings surround the school at its South (where the play yard is located) and East sides of the school. The building's superstructure is a combination of wood framing at the original building and steel framing at its addition, both areas with concrete floors and roof slabs, with exterior bearing walls with burnt red face brick and common brick.

Arthur D. Phillips S.I., is currently designated as an SHPO-eligible building. The school possesses historical significance for its association with the growth of this Staten Island neighborhood. R829 is located in the northeast part of Staten Island. The school was built in response to the growing school-age population as the area became more developed thanks to the establishment of ferry terminal Saint George and the opening of the Staten Island Rapid Transit's rail lines in the mid-1880s.

A real-estate boom took place here in the late 1880s and 1890s as a large number of middle-class families moved here. The building is a prominent landmark of the surrounding residential neighborhood. It retains high degree of integrity setting, location, feeling, association, design, materials, and craftsmanship.

Year of Actual Constr. Completion*	In SCA CIP Database	In SCA Alchemy Files	Year of Document Completion**	Project Description	SCA Design/LLW# (if applicable)
					D002107
1996	Х	Х	1997	Wood Tower Repairs	LLW# 010630
					D004979;
2000	Х	Х	2002	Chimney	LLW# 020240
					D004979;
2000	Х	Х	2002	Exterior Masonry	LLW# 020241
					D042480
2008	Х	х	2006	New Addition	LLW#

List of Previous Renovation Projects

* Year of "Actual Construction Completion" as listed in the SCA CIP Database

** Year of Construction Documents found in SCA Archives or other source

List of In-Progress and Planned Renovation Projects:

- FY24 Reso A Cafeteria Upgrade, LLW No. 136537
- RTU Compressor Replacement, LLW No. 135930
- School Entry Locking And Emergency Notification Solution, LLW No. 135142
- FY23 Reso A Technology Upgrade, LLW No. 133109
- IPDVS Full Camera Upgrade, LLW No. 130006
- FY22 Reso A Technology Upgrade, LLW No. 129524
- DEP/DOE Water Conservation Fixture Retrofit Program, LLW No. 127790
- Exterior Stairs, LLW No. 126711
- FY21 Reso A Technology Upgrade, LLW No. 124949
- LBP Common Spaces Student Bathrooms, LLW No. 123860
- LBP Common Spaces Gymnasium, LLW No. 123860

B. SUMMARY OF MODIFICATIONS AFFECTING HISTORIC CHARACTER

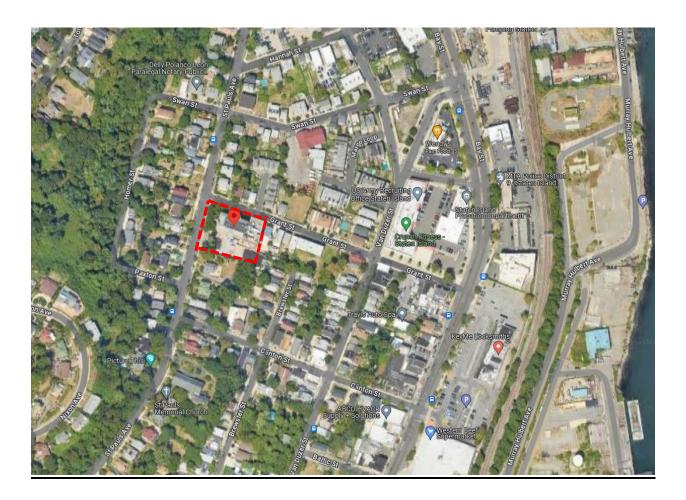
Overview

Arthur D. Phillips' original building was constructed in 1897, with a new wing added in 2008. The school's 1897 original building and the 2008 new addition are connected, in an "L" shaped configuration. A three-story structure set on a high basement, topped with a prominent clock tower. The building has two pavilions with chamfered corners on the front and one on each side, as well as a rear rectangular section. The main entrance faces St. Paul's Avenue, while each side has a secondary entrance (that facing Grant Street has a tower above). The building has been repointed several times through the years. The school also underwent a major interior renovation, including an auditorium update in 2015.

- General & Site: The 20,000 SF addition was built in 2006. The addition was conceived as a simplified and more contemporary design to reflect the existing building's character. The school was built with a prominent clock tower placed on the Grant Street side of the building. The latest documented repair work to the clock tower was made in 1996. The building is located within a residential area.
- Exterior Walls: Faced in rough-textured burnt red brick, the walls are ornamented with terra-cotta band courses and trim, as well as channeled brick on the third-story pilasters, with stone water table and stone sills and lintels on the basement level. The materials utilized on the exterior of addition are red brick in color with a texture harmonious with the original building's brick and cast stone sills and lintels. The latest Exterior Renovation was performed in 2002.
- Parapets: No work has been found that has affected the historic character of the building.
- Windows: Historic photographs indicate that all original windows had double-hung wood sash, most with multiple panes of the Queen Anne style, with segmental transoms. The windows were replaced with aluminum to match the original design in 1994. The latest replacement was made during the 2000 Exterior Renovation.
- Exterior Doors: The latest replacement was during the 2000 Exterior Renovation.
- Roofing: The existing built-up roofing was last replaced in 2010.
- Below Grade: No work done has affected the historic character.

C. LOCATION MAP

The building is located in the corner of Grant Street to the north and St. Paul's Ave to the west, in the northern area of Staten Island. The property is flanked by buildings on the southeast and south side. See Block Plan in the following section.



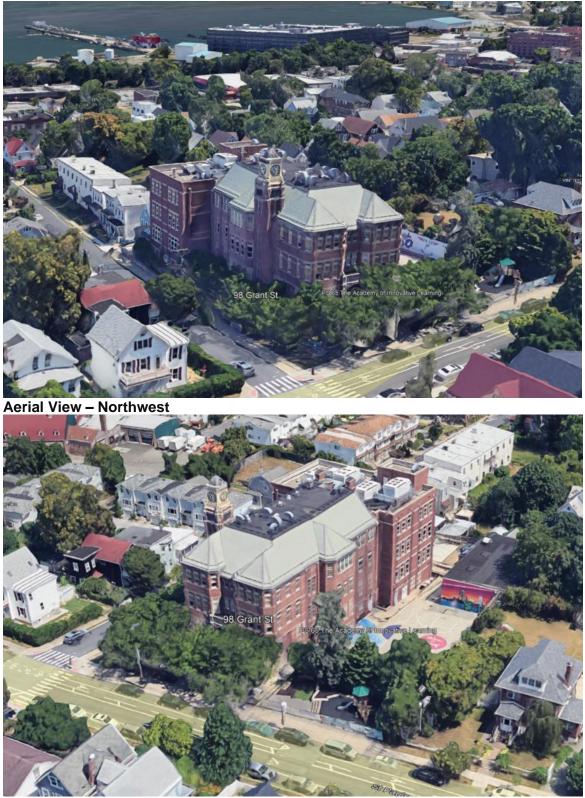
D. BLOCK PLAN/CONTEXT PHOTOS



Aerial View – South



Aerial View – North



Aerial View – Southwest



Aerial View – Clock Tower

E. SITE PLAN/BUILDING PHOTO KEY PLAN

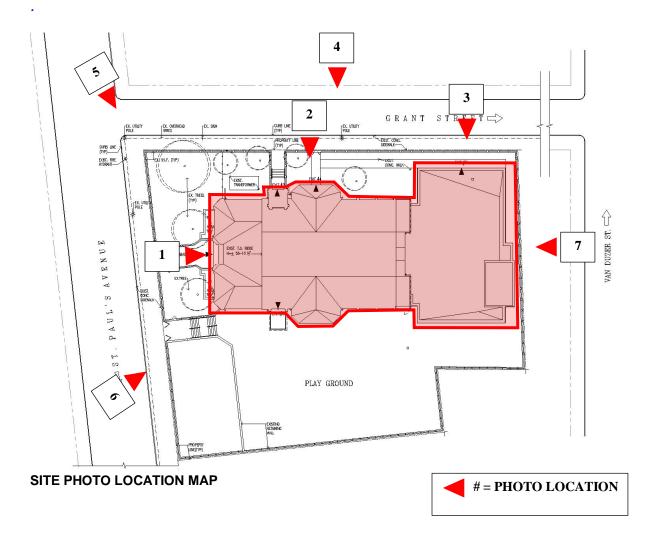




Photo 1 – West elevation, main access at St. Paul's Ave.



Photo 2 – North elevation, original building at Grant St.



Photo 3 – North elevation, addition at Grant St.



Photo 4 – North elevation, addition and original building at Grant St.



Photo 5 – St. Paul's Ave and Grant St corner.



Photo 6 – South elevation and playground at St. Paul's Ave.



Photo 7 – East elevation.

G. PHOTOS OF EXISTING BUILDING

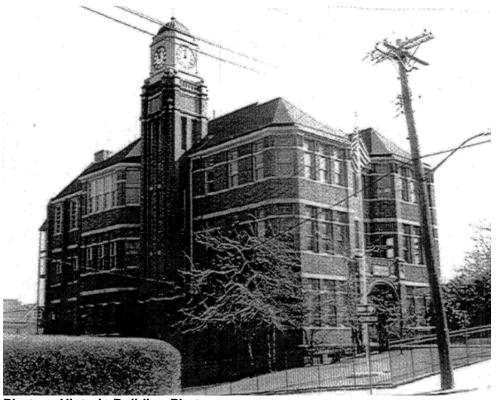


Photo – Historic Building Photo



Photo – Present day building

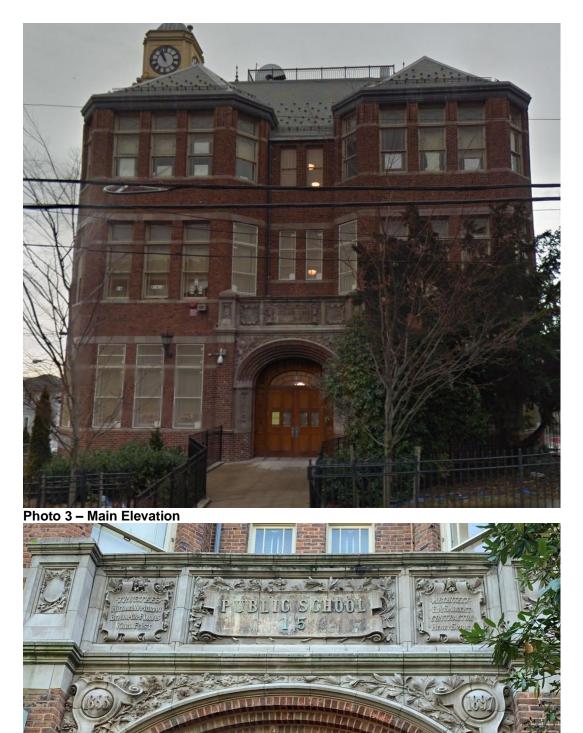


Photo 4 – Dedication Plaque



Photo 5 – Main Access at St. Paul's Avenue



Photo 6 – Lateral access at Grant St.



Photo 8 – School's plaque at St. Paul's Ave and Grant St corner.



Photo 9 – Lateral service door at Grant St.



Photo 12 – Clock Tower and Roof view from Grant St.



Photo 11 – Clock Tower view from St. Paul's Ave.

H. PLANS AND ELEVATIONS OF EXISTING BUILDING

Clock Tower Restoration Drawings - 1997

- No. Dwg. No. Drawing Title
- R01 T-1 Title Sheet
- R02 A-1 Clock Tower Plans, Sections & Details
- R03 A-2 Clock Tower Elevations, Sections & Details



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THE FOLLOWING NOTES SHALL APPLY THROUGHOUT. 7. THE TERM "FINISH FLOOR" SHALL MEAN THE NORMAL EXCEPTIONS ARE SPECIFICALLY NOTED ON EACH DRAWING. FINISHED SURFACE OF THE FLOOR LEVEL. 1. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS OF THE SITE AND/OR BUILDING. 2 THE CONTRACTOR SHALL, UNLESS OTHERWISE PROVIDED IN THE CONTRACT DOCUMENTS, SECURE AND PAY FOR THE REQUIRED CONSTRUCTION PERMIT(S), FEES, LICENCES AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION OF THE WORK. APPLICATION FOR CONSTRUCTION PERMITS SHALL BE PROCESSED THRU THE FACILITIES INSPECTION DIVISION OF THE AUTHORITY. 3. COORDINATION OF ALL WORK UNDER THIS CONTRACT SHALL BE MAINTAINED TO ENSURE THE QUALITY AND TIMELY COMPLETION OF THE WORK/PROJECT. 4 THE CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE WORK OR TO MAKE ITS PARTS FIT TOGETHER PROPERLY WITHOUT COMPROMISING THE QUALITY OF THE WORK. 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTIONS, AND OFF ALIGNMENTS ACCORDING TO CODES AND STANDARDS OF GOOD PRACTICE.

6. ELEVATION LEVELS INDICATED ON THE DRAWINGS ARE BASED ON THE HIGHWAY DATUM FOR THE BOROUGH IN WHICH THIS CONTRACT IS BEING EXECUTED.

ALL ELEVATIONS GIVEN FOR EXISTING BUILDINGS ARE TO FINISHED FLOOR. THE CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS FOR EXISTING STRUCTURES PRIOR TO THE COMMENCMENT OF WORK. 8. THE CONTRACTOR SHALL CORRECT ANY VARIATIONS IN FLOOR ELEVATIONS CREATED BY THE REMOVAL OF PARTITIONS AND/OR FOR THE INSTALLATION OF NEW DOOR OPENINGS.

9. ALL UNSUPPORTED LINTELS GREATER THAN 4'-O SHALL BE FIREPROOFED AS PER BUILDING CODE. 10.. UNLESS OTHERWISE NOTED EXTERIOR BRICK W. SHALL BE INSTALLED IN A RUNNING BOND. 11 WHERE MANUFACTURES' NAMES AND PRODUCT ARE INDICATED ON THE DRAWINGS IT SHALL BE CONSTRUED TO MEAN THE ESTABLISHING OF QUALITY AND PERFORMANCE STANDARDS OF SUCH ITEMS. ALL OTHER PRODUCTS MUST BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE THEY SHALL BE DEEMED EQUAL.

12. SIZE OF MASONRY UNITS AND WOOD MEMBE BUILDING ELEVATIONS AND SECTIONS ARE SHOWN AS NOMINAL SIZE. 13. ADDITIONAL NOTES WHICH ARE APPLICABLE T MAY BE FOUND THROUGHOUT THE CONTRACT DRAWINGS.

BUILDING DEPARTMENT NOTES:

1. WORK SHALL BE EXECUTED IN FULL COMPLIANCE WITH THE APPLICABLE PROVISIONS OF ALL LAWS, BY-LAWS, STATUTES, ORDINANCES, CODES, RULES, REGULATIONS AND LAWFUL ORDERS OF PUBLIC AUTHORITIES BEARING ON THE PERFORMANCE AND EXECUTION OF THE WORK. O) THEY SHALL CONFORM WITH ALS.G. "FIRE OCENERATIVE DATED 1005 (00) THE CONTRACTOR SHALL PROMPTLY NOTIFY THE AUTHORITY OF ANY PORTIONS OF THE WORK, IN THE CONTRACT DOCUMENTS THAT ARE AT VARIANCE WITH THE ABOVE.

2.. ALL MATERIALS, ASSEMBLIES, FORMS METHODS OF CONSTRUCTION AND SERVICE EQUIPMENT SHALL MEET THE FOLLOWING REQUIREMENTS: a). THEY SHALL HAVE BEEN ACCEPTABLE PROR TO THE EFFECTIVE DATE OF THE CODE BY THE BOARD OF STANDARDS AND APPEALS.

- b). THEY SHALL HAVE BEEN ACCEPTED FOR THE USE UNDER THE PRESCRIBED TEST METHODS BY THE COMMISSINER (OR)
- c). APPROVED BY THE BOARD OF STANDARDS AND APPEALS (106.2).

CONTROLLED INSPECTIONS: CONTROLLED INSPECTIONS REQUIRED IN ACCORDANCE WITH SECTION 27-132 AND THE APPLICABLE SECTIONS OF THE BUILDING CODE ARE LISTED IN THE FOLLOWING TABLES:

THE CONTRACTOR MUST NOTIFY THE ARCHITECT OR ENGINEER FOR CONTROLLED INSPECTIONS AT LEAST 72 HOURS BEFORE THE SPECIFIC WORK COMMENCES. RS 10-3 3.2 MASONRY UNITS

THE "CONTRACTOR" SHALL BE RESPONSIBLE FOR THE FOLLOWING CONTROLLED INSPECTIONS: R & REG 6/11/83 27-724 27-1010 STRUCTURAL STABILITY

REQUIRED INSPECTIONS AND TESTS OF MATERIALS DESIGNATED FOR "CONTROLLED INSPECTION" BY THE CONTRACTOR SHALL BE MADE UNDER THE DIRECT SUPERVISION OF A LICENSED ARCHITECT OR ENGINEER RETAINED BY OR ON THE BEHALF OF THE CONTRACTOR WHO SHALL BE ACCEPTABLE TO THE ARCHITECT OR ENGINEER WHO SUPERVISED THE PREPERATION OF THE PLANE.

THEY SHALL CONFORM WITH A.I.S.G. "FIRE RESISTANCE RATING", DATED 1985 (OR)

THEY SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ASTM E119, STANDARD METHODS OF FIRE TESTS OF BUILDING CONSTRUCTION AND MATERIALS AND ACCEPTED BY THE COMMISSIONER (OR) c). THEY SHALL HAVE BEEN ACCEPTABLE PRIOR TO THE EFFECTIVE DATE OF THE CODE. 4. ALL MASONRY UNITS SHALL CONFORM E BUILDING CODE WITH BOARD OF STANDARDS AND APPEALS APPROVAL. MASONRY WALLS AND CONSTRUCTION SHALL CONFORM TO RS 10-1 OF THE BUILDING CODE.

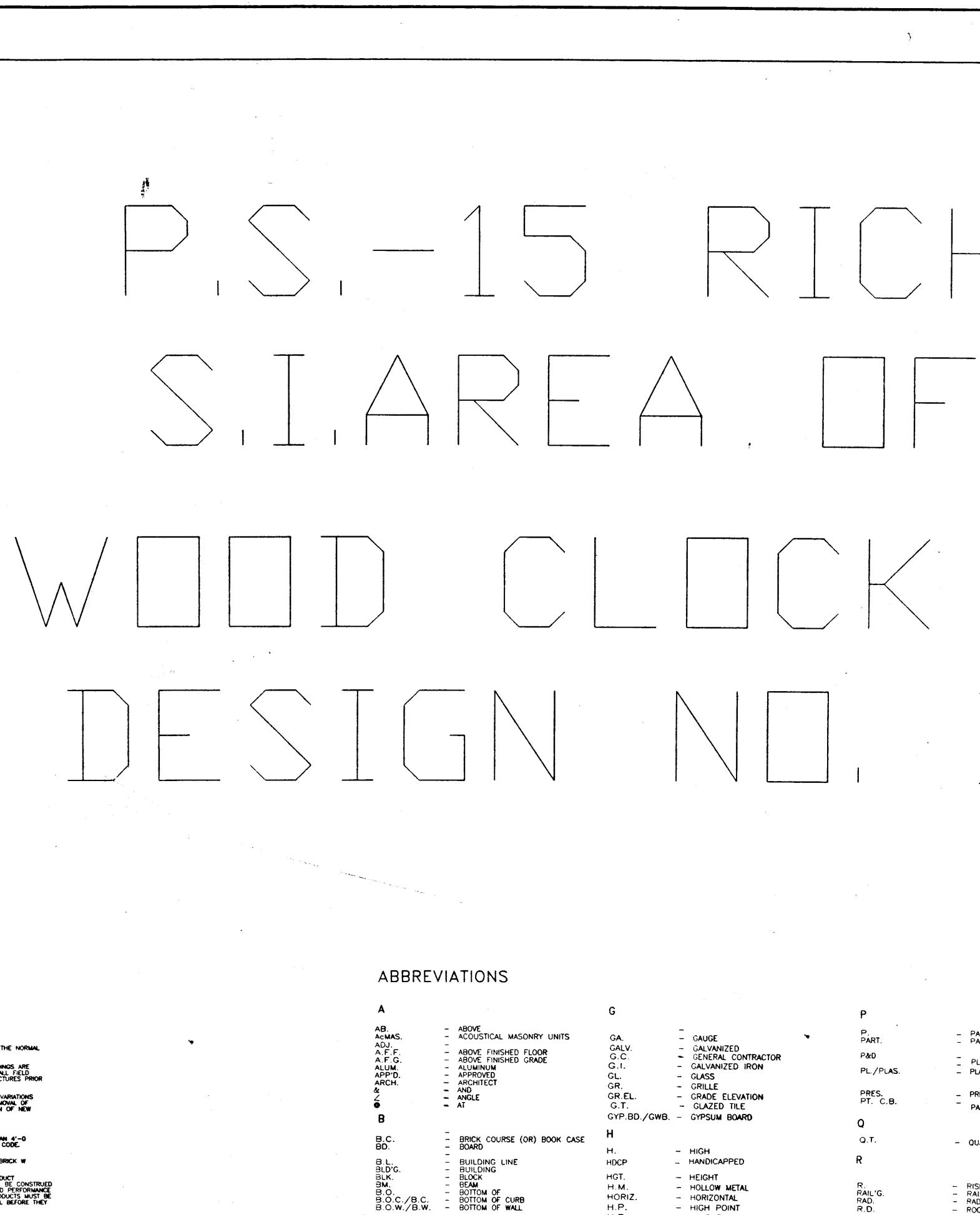
6. THE CONSTRUCTION CLASSIFICATION OF THE BUILDING IS CONSTRUCTION GROUP, NON-COMBUSTIBLE CLASS 1-8 AS PER ARTICLE 14. THE CONSTRUCTION ELEMENTS SHALL BE OF THE REQUIRED MINIMUM FIRE RESISTANCE RATINGS AS OUTLINED IN TABLE 3-4 AND DEFINED IN SUB-CHAPTER 5 OF THE BUILDING CODE. 6. A FINAL SURVEY BY A DULY LICENSED SUROR () CONTAINING INFORMATION REQUIRED BY SECT.27-219 WILL BE FILED AS AN AMENDMENT BEFORE THE COMPLETION OF THE PROJECT.

7 THE FOLLOWING SHALL BE MADE UNDER SEPERAT APPLICATION: SIDEWALK SHEDS CONSTRUCTION FENCES CHUTES

8. THE CONTRACTOR SHALL OBTAIN EOURPMENT USE PERMITS REQUIRED IN ACCORDANCE WITH THE BUILDING CODE. 9. THESE DRAWINGS HAVE BEEN PREPARED BY OR AT THE DIRECTION OF THE UND[®]PSIGNED AND TO THE BEST OF THE UNDERSIGNED'S KNOWLEDGE, INFORMATION AND BELIEF MEET THE REQUIREMENTS OF THE BUILDING CODE. 10. ALL NEW INTERIOR FINISHES SHALL BE CONSTRUCTED OF MATERIALS MEETING SECTION 27-529 FOR FLAME SPREAD RATINGS. 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOI FILING WITH, OBTAINING APPROVAL FROM, AND OBTAINING PERMITS FROM THE DEPARTMENT OF BUILDINGS FOR ALL PUBLIC PROTECTIVES AS

PER SECTION 27-1021.

27-977



B.L. BLD'G. BLK. 3M. B.O. B.O.C./B.C. B.O.W./B.W. BOT.

8.5. 8.5.**č(A**. CEM'T. C.I. CL'G / CEIL'G. Col. CONT./CONTIN. CONC.

- CUBIC FEET

- Dou**ble** - Depressed - Detail

- DIAMETER - DIAMETER - DIMENSION

ENCLOSURE ENTRANCE

EQUAL EQUIPMENT EXPANSION

EXISTING

– FIXED

FINI**SH** FLOOR

FRAME

- Flush tread - Footing

FLASHING

FIREPROOFING

F.D. / FL.DR. - FLOOR DRAIN F.E.R. -

- EXTERIOR WIRE MESH GUARD EXPANSION JOINT

EXPANDED METAL GUARD

- DOWN

DR. – DOOR DRW./DRAW'G. – DRAWING

C.R.P.

CU.FT.

D.H. DIA. DIM.

D.M.P. DN.

EG. E.J./EXP.

EQ. EQUIP. EXP. EXIST./EXIST'G.

FIN, FL./FLR, FLASH'G, F.M.S.

F.P. F.P.S.C.

FR.

F.T. FT'G.

· . = .

ELEC. EMG. ENCL. ENT.

	-	BUILDING LINE
	+	BUILDING
		BLOCK
	-	BEAM
	-	BOTTOM OF
	-	BOTTOM OF CURB
	-	BOTTOM OF WALL
	-	
	-	BLOCK BEAM BOTTOM OF BOTTOM OF CURB BOTTOM OF WALL BOT.
	-	
	-	BLUE STONE (OR) BRONZE SADDLE
		BOARD OF STANDARDS AND APPEAL
	-	OF NENT
	. —	CEMENT CENTER LINE CAST IRON CEILING COLUMN
	-	CENIER LINE
	-	CAST IRON
	-	
	-	CEILING
	-	ÇOLUMN
١.	-	
	-	CONCRETE
	-	
	-	
	-	CONCRETE RUBBED AND PAINTED
	-	

H.M. HORIZ H.P. H.R. HR. SADDLE 1.D. INSTR. INSUL. J.S.C. K. CEM. KINDER. KP. LOCK L.P. L.W.C.B. - DEMOUNTABLE METAL PARTITION

MECH. **M.H**. MIN. м.о. N.D. N.I.C. NO. NOM. N.T.S.

M./MA./MTL. - METAL

0 0.**A.I.** 0.**C.** 0.D. 0P'G./0PEN'G.

- HOLLOW METAL HORIZONTAL - HIGH POINT HAND RAIL HOUR - INSIDE DIAMETER

- INSTRUCTOR (OR) INSTUMENT INSULATION

- JANITOR'S SINK CLOSET - KEENE'S CEMENT

- KINDERGARTEN - KICKPLATE

- LEADER - LAVATORY

- LOCKER - LOW POINT – LIGHT - LIGHTWEIGHT CONCRETE BLOCK

- METAL ACCESS DOOR

MARBLE MAXIMUM

MECHANICAL MANHOLE MINIMUM MASONRY OPENING

- NOMINAL DIAMETER - NOT IN CONTRACT - NUMBER - NOMINAL - NOT TO SCALE

TYP. U.V. / UNIT VENT U.O.N. VERT. W/ WO.

W.P.

REINF.

SECT. SIM.

SPEC. SQ.FT. / S.F.

STRUCT./STRL. STD.DET.

T.C. / T.O.C.

T.D. / T.O.D.

STL. ST.PL.

STY.

T.A.O.

T.B.O.

T.Y.**R**.

T.O.S

TR.

T&B

RM.

R.O.

- OUTSIDE AIR INTAKE - ON CENTER - OUTSIDE DIAMETER - OPENING

	2107
	LIST OF DRAWINGS 1. TITLE SHEET
	2 CLOCK TOWER PLANS, SECTIO
·	3. CLOCK TOWER ELEVATIONS, SE
- PAINT - PARTITION	
_ PLUMBING AND DRAINAGE - PLASTER - PRESENT	REFERENCE SYMBOLS:
- QUARRY TILE	DETAIL NUMBER
	DETAILS
- RISER - RAILING - RADIATOR - ROOF DRAIN	B SECTION NUMBER
- REINFORCING - ROOM - ROUGH OPENING	A-203 SHEET NUMBER
- SECTION - SIMILIAR	SECTIONS
- SPECIFICATION - SQUARE FEET - STEEL - STEEL PLATE	DRAWING REVISIONS
- STRUCTURAL - STANDARD DETAIL	
- STORY	DRAFTING SYMBOLS:

TOILET - TYPE "A" OPENING - TYPE "B" OPENING

- TOP AND BOTTOM - TOP OF CURB TYPICAL CLASSROOM

- TOP OF DRAIN

- TOP OF SLAB - TREAD

- TYPICAL

- UNFINISHED - UNIT VENTILATOR - UNLESS OTHERWISE NOTED

- VERTICAL

- WITH

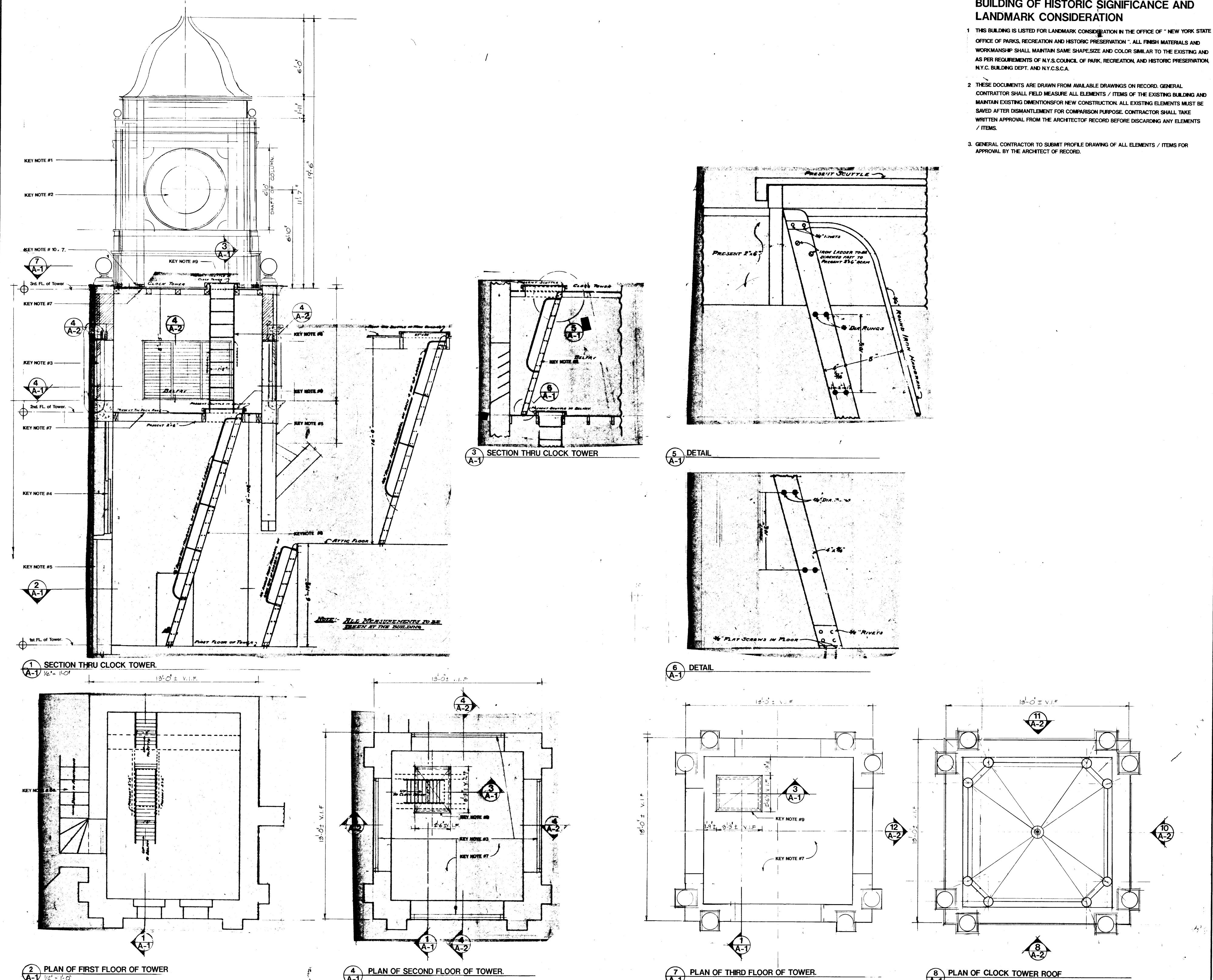
- WOOD

•

- WATERPROOFING - WEIGHT

> ×.

	Project: P.S. 15 RICHMOND CLOCK TOWER RENOVATION
	NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
	Barry E. Light, President & CEO Board of Trustees Donald Zucker, Chairman Paul Atanasio, Member Rudolph F. Crew, Ed.D., Member
	Rudolph F. Crew, Ed.D., Member Architecture & Engineering Ralph Steinglass F.A.I.A., Vice President Studio 3 Jerry L. Pessah P.E., Design Director
	Preliminary Not For Construction
LIST OF DRAWINGS	
TITLE SHEET	
CLOCK TOWER PLANS, SECTIONS, AND DETAILS CLOCK TOWER ELEVATIONS, SECTIONS, AND DETA	
REFERENCE SYMBOLS:	
DETAIL NUMBER SHEET NUMBER DETAILS	
B A-205 SHEET NUMBER	
SECTIONS	
DRAFTING SYMBOLS: NOTE: ALL SYMBOLS LABELED (AND) (OR) SHOULD BE NOTED ACCORDINGLY IN THE DRAWINGS SO TO PROPERLY INDICATE THE INTENDED MATERIAL.	No. Date Revision Key Plan:
BRICK L.W.C.B. (OR) Ac. MASONRY L.W.C.B.	
CONCRETE BLOCK BLOCK STONE STONE CERAMIC TILE AND GLAZED BLOCK STEEL STONE STEEL STONE	
STONE CONCRETE STEEL WOOD BLOCKING GRANITE ALUMINUM	
AND LIMESTONE B.O.S.	Block # Lot # Design Manager: S.DAHIR. Project Architect/Engineer: KASHI N. RAY.
	Designer: Drawn by: Checked by: Design No.: D-002107 3/ 29 /96
	Project: WOOD CLOCK TOWER RENOVATION PS15 RICHMOND Address: 98 GRANT STREET, S.I. ,N.Y.10301. Drawing Title:
	TITLE SHEET Drawing No.:
	T-1 R01



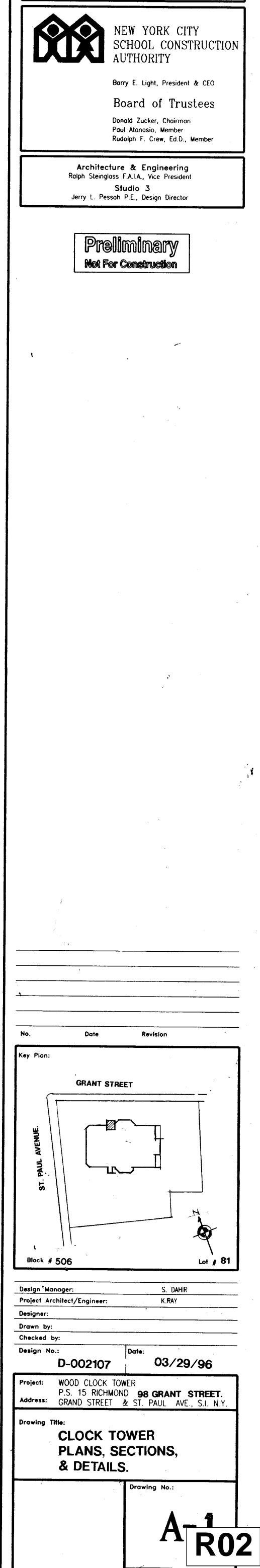
BUILDING OF HISTORIC SIGNIFICANCE AND

Project:

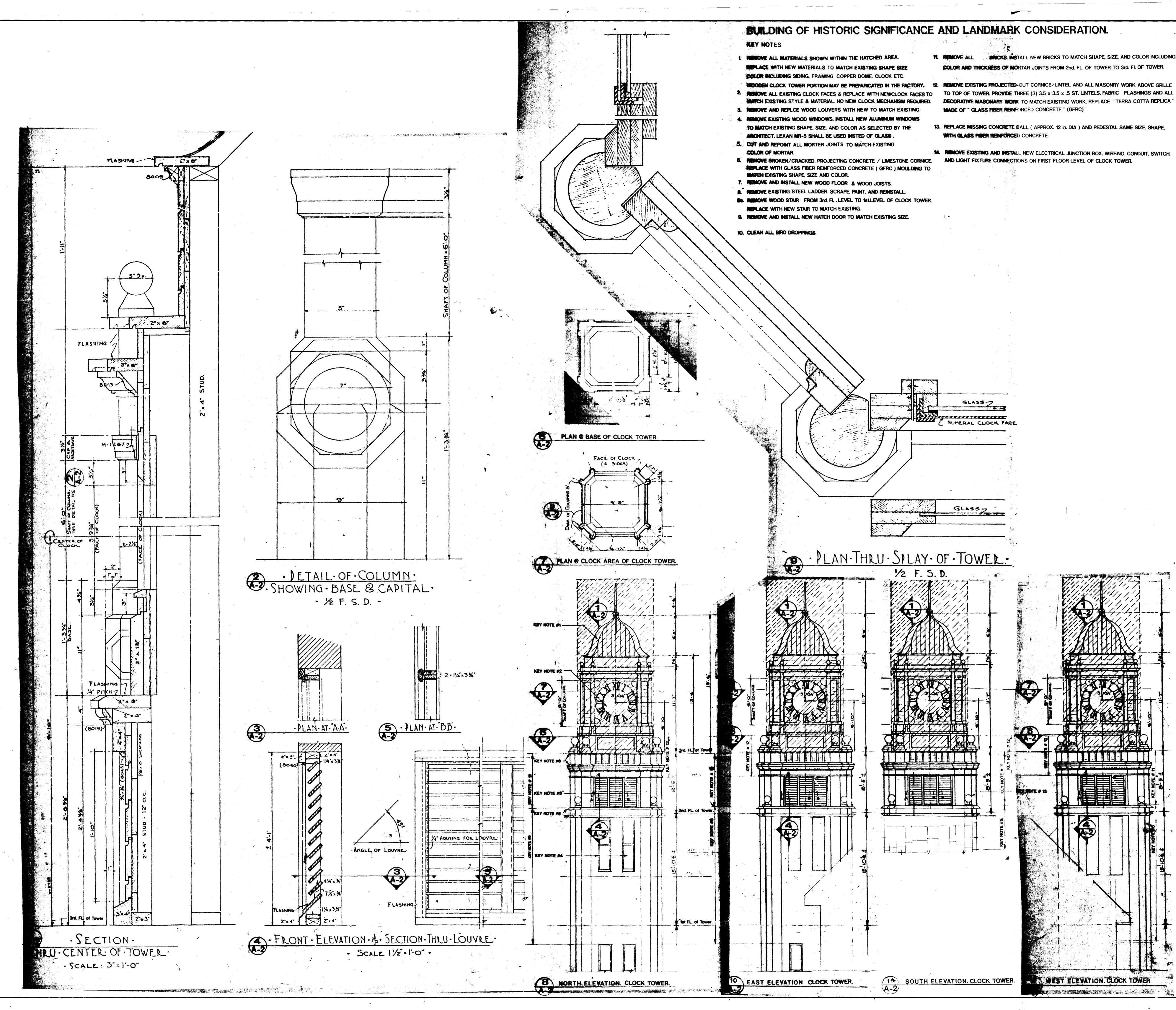
P.S. 15 RICHMOND

WOOD CLOCK TOWER

98 GRANT STREET.



A.S.



11. FISHOVE ALL BRICKS. INSTALL NEW BRICKS TO MATCH SHAPE, SIZE, AND COLOR INCLUDING COLOR AND THICKNESS OF MORTAR JOINTS FROM 2nd. FL. OF TOWER TO 3rd. FI. OF TOWER.

Project:

P.S. 15 RICHMOND

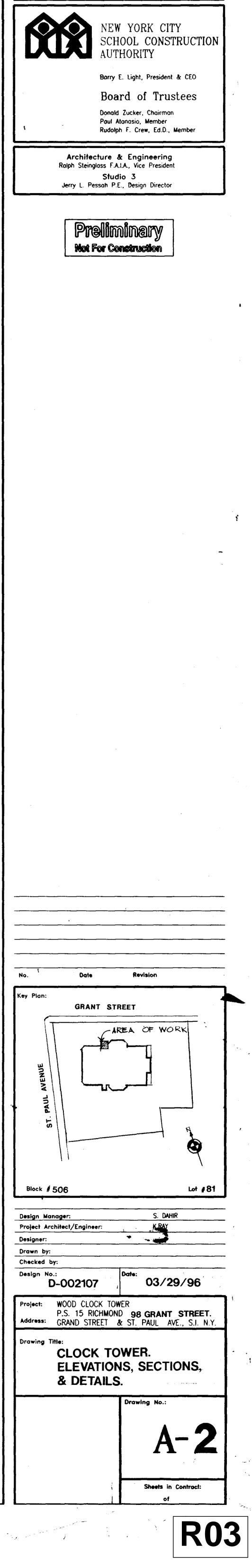
WOOD CLOCK TOWER

98 GRANT STREET.

TO TOP OF TOWER. PROVIDE THREE (3) 3.5 x 3.5 x .5 ST. LINTELS, FABRIC FLASHINGS AND ALL DECORATIVE MASONARY WORK TO MATCH EXISTING WORK. REPLACE "TERRA COTTA REPLICA"

13. REPLACE MISSING CONCRETE BALL (APPROX. 12 in. DIA) AND PEDESTAL SAME SIZE, SHAPE,

14. REMOVE EXISTING AND INSTALL NEW ELECTRICAL JUNCTION BOX, WIREING, CONDUIT, SWITCH,



WEST ELEVATION. CLOCK TOWER

I. SCOPE OF INVESTIGATION, FINDINGS & CONCLUSIONS

Scope of Investigation for Current Project:

The current project, D022292, was initiated on August 1st, 2023, when the SCA tasked CPL Architecture Engineering Planning (CPL) with an emergency project to investigate rotted wood elements on the clock tower cupola.

A masonry tower supports the wooden cupola above. The last restoration project, related to the clock tower, found in Alchemy, which also included work for exterior masonry, was project #D004979 in 2000. No records of more recent work or maintenance could be found.

In order to determine the condition of the Clock Tower's facades, windows, and roofs, and to determine the cause of the failures that precipitated this emergency the following investigations were made:

- 1. Research of available original documents for this building.
- 2. Observation and mapping of current damage at the exterior and interior of the building. (See Appendix #2).

Investigation Findings:

1. Description of Existing Building Construction:

The wooden cupola sits atop the masonry clock tower. There is currently active water infiltration in the cupola and deteriorating wood sheathing and trim. The last restoration project found in Alchemy for the cupola was project #D0022107 in 1997. No records of more recent work or maintenance could be found.

The clock tower is comprised of a brick base and a wooden cupola. The cupola copper roof was installed in 1997 in project #D0022107. No damage was observed to the copper roof of the cupola. No water stains were observed on the framing or cladding below the roof indicating no water infiltration from the roof. The roof + flashing was observed to be in good condition.

Cupola/Spires/Towers:

- Siding All exterior elevations Damage was observed to exterior clapboard siding at base of wood framed cupola, wood trim and plywood panel around clock face, damage to header, soffit and flashing above all four clock faces was observed. Clapboard siding is rotted and has rusting fasteners.
- 2. Trim Wood trim is rotted and is discolored from water penetration. Staining from rusted fastener heads bleeding through paint finish is visible with some sections rotted away. Flat plywood panels and trim surrounding the clock faces around these openings have significant rot.

- 3. Paint All wood trim has chipped or peeling paint.
- 4. Flashing- Water penetration was observed to be coming from two ledges located above the clock faces on all four sides of the cupola. Water staining and rotted wood was found behind the exterior ledges and on the secondary "infill" framing below them.
- 5. Custodian requested that any materials used to reconstruct the cupola be nonmaintenance items. The use of PVC or synthetic trim was requested to eliminate the need to repaint the cupola in the future.

Interior Damage:

Structural framing was observed from the interior of the cupola. There are two sets of framing for the cupola- one to support the upper roof, and one outboard of that framing, that supports the exterior walls and clockfaces. Framing for the lower exterior walls sits outboard of the roof framing by 9- 1/2".

- 1. Wood framing for the upper roof is in good condition with no deterioration or rot noted. All posts are bolted to structural members with fasteners and hardware in good condition. No rust.
- 2. Blocking has been added to support the flat plywood infill and trim in the corners around the round clock faces. This non-structural secondary framing and the plywood infill are severely deteriorated.
- 3. The floor of the 3rd Floor level of the clock tower is ³/₄" plywood sheathing on 2x6 wood framing. The plywood was observed to be wet with areas of rot at the seams. Framing for the cupola floor was observed from below. The 2x8 framing was observed to be in good condition with no deterioration observed. Framing was painted and had some areas of flaking paint.
- 4. The interior framing and supports of the cupola are painted and in fair to good condition. Some staining and flaking paint was observed at the areas of water infiltration from the defective flashing areas.

Cupola Clock:

There are four translucent clock faces on the cupola- one on each side. The hands are controlled by one mechanism in the center of the cupola and connected with rods. The clock faces are installed into window framed openings with headers, jack studs and sills. There is no framing or sheathing behind the clock faces. The clock faces are essentially windows that are intended to be backlight during the evening.

- 1. Clock mechanism is not working.
- 2. The white translucent film material on the translucent clock faces was observed to be in poor condition. Cracking, splitting, and missing sections were observed.
- 3. The clock dial and numbers are made of an aluminum grill fastened to the exterior of the cupola walls. The finish of the dial and clock hands is in fair to poor condition and has some areas of fading and pitting observed.

- 4. One clock mechanism in the cupola operates all four clock faces. Clock control mechanism is wired for power. At the time of inspection, the clocks were not operating.
- 5. Ceiling hung light in the cupola was not operating. The fixture had been wrapped during prep for a previous paint job and never unwrapped.
- 2. <u>Test Findings</u>: No tests nor probes were needed in this project due to the visible damage shown at the building.

Investigation Conclusions:

The wooden cupola at Arthur D. Phillips S.I has suffered weathering and deterioration since its renovation in 1997. The lack of regular painting and maintenance has allowed the wood siding and trim to fail and permit water penetration.

Damage to wood exterior trim and siding was observed on all faces of the cupola. The wooden trim and cladding elements are water damaged and rotted and require replacement. This will require exterior sidewalk bridging to protect the sidewalks and entrances below.

The Division and School Facilities noted that the indicated work was beyond the scope of maintenance. Based upon our investigation, we concur that the severe deterioration of the trim elements on the exterior raises the possibility of falling debris from the cupola during high winds. However, there is no apparent damage to the structure of the cupola and no danger of collapse.

Removal and replacement of damaged trim and siding should be undertaken to determine to bring the cupola into good, watertight condition. In addition to repairing the cupola wood, replacement of the clock mechanisms is recommended.

J. RECOMMENDED WORK

The recommendations of this report are to replace the rotted wood siding and trim of the cupola. While there is no apparent damage to the structure of the cupola, and no danger of collapse, the severe deterioration of the trim elements on the exterior raises the possibility of falling debris from the cupola during high winds.

Because original distinctive features have been removed, or altered, replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence. In accordance with SOTI Standard for Rehabilitation #6, the new features shall match the old in design, color, texture, and other visual qualities and, where possible, materials.

The damaged exterior siding, trim and flashings should be removed from the underside of the roof down to the start of the masonry tower. The exterior sheathing should be replaced, and a new weatherproof membrane installed on the sheathing. New copper flashings should be installed to cap all ledges and protrusions. All wood trim being replaced will match existing in size, shape, and construction. Siding will be clear cedar clapboard to match existing exposure dimension and all trim elements will be fabricated from cedar or clear poplar depending on profile and dimension.

All fasteners holes will be plugged and all joints are to be sealed. All wood surfaces will be primed and painted with two coats of exterior paint to match existing color.

The existing clock mechanism is not working and should be repaired or replaced. Clock face, numerals, hands and mechanism will match existing. The existing light fixture and illuminated clock faces should be brought back into service.

The copper roof of the cupola was in good condition no repairs are required. Masonry of the clocktower to be protected during all work on the wood cupola above. No work is required.

Repair cupola, spires and towers including:

- 1. Removing the damaged siding, trim and flashings from the underside of the roof down to the start of the masonry tower.
- 2. Replacing the exterior sheathing and installation of a new waterproof membrane.
- 3. Removal and replacement of the crown and trim moldings with new to match existing size and profile.
- 4. Repainting entire exterior of cupola wooden elements.
- 5. Providing all ledges with copper caps as well as flashing extending vertically up behind the siding. New copper flashings should be installed to cap all ledges and protrusions, all joints will be soldered.
- 6. Repainting exterior walls of clock tower and cupola wooden elements upon completion of repairs.

7. Replacing roof access door and painting existing steel ship ladder.

Repair interior damage including:

- 1. Replacing blocking at the openings surrounding the clock faces on all sides.
- 2. Removing and replacing clock tower's plywood floor, install epoxy resin coating on the subfloor to provide durable weatherproof surface.
- 3. Prepping, priming and repainting joists and framing at the floor.
- 4. Repainting of entire interior of cupola, and ceiling upon completion of repairs.

Cupola Clock:

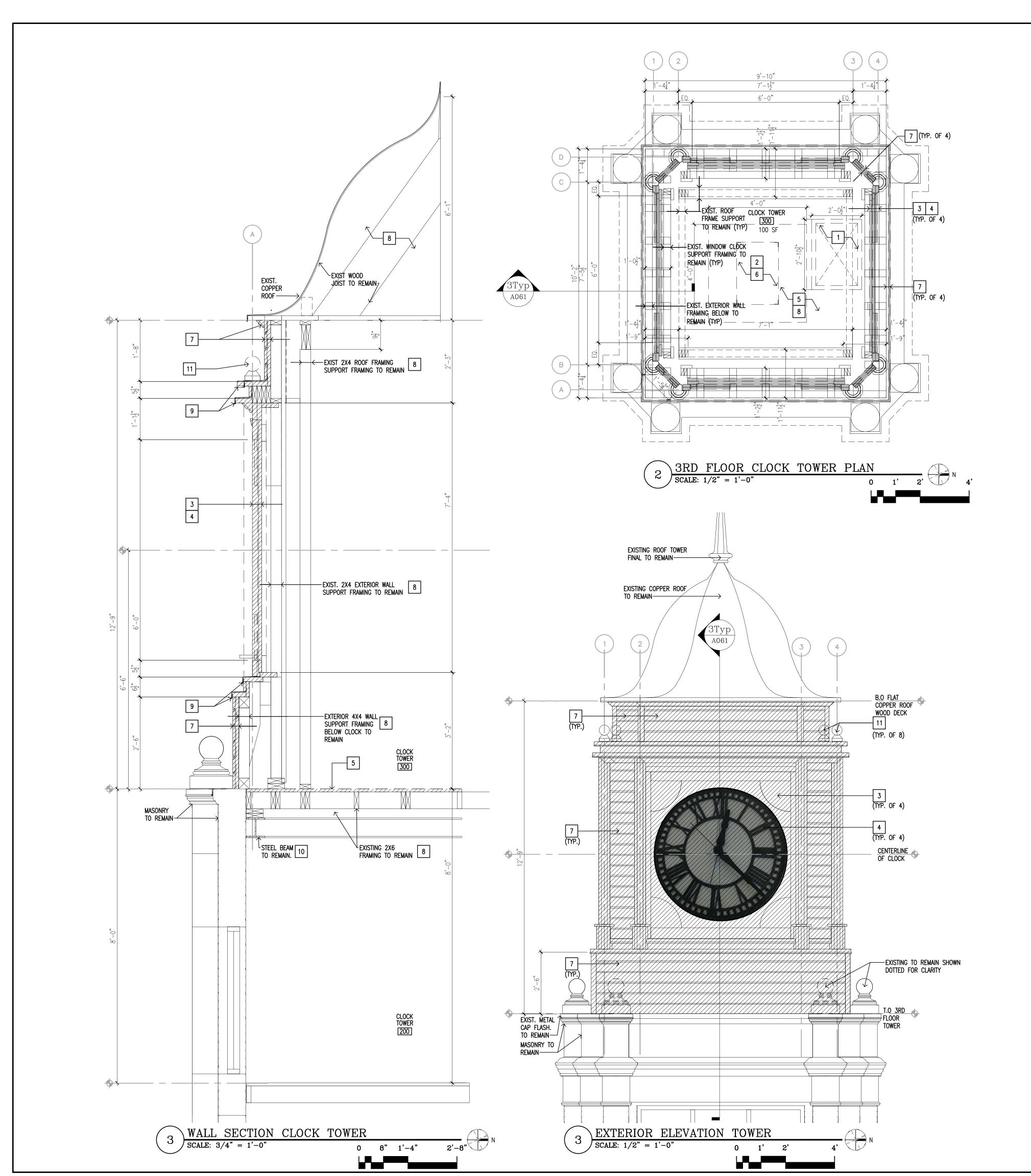
- 1. It is recommended to provide a full restoration to the existing clocks and mechanisms. The cast iron clock face numerals and hands require full refinish treatment and restoration. The work will include provision of a new motor, gears, clock hands, white acrylic infill, and a fully automatic GPS clock controller and repair of the translucent clock faces. LUMICHRON, a commercial clock company based in Michigan, has quoted:
 - a. Removal of the cast iron clock face pieces, boarding up openings, and using aluminum oxide blast, powder coat w/zinc oxide primer and architectural jet black each clock face piece with any necessary metal repairs and install new acrylic in-fill. Then they will replace the cast iron pieces on-site with the new clock parts after all the tower millwork has been finished.
- 2. Repairing or replacing clock mechanism and bringing illuminated clock faces back to service: The existing clock mechanism should be replaced. Vendor provide equipment and make connections to existing power.
- 3. Replacing broken light fixture at the top of the clock tower and bringing it back to service: To backlight the clock faces, the manufacturer is recommending the use of one LED panel at each clock face. The existing ceiling light fixture can remain to provide lighting for maintenance workers in the cupola, but 4 additional outlets will be required to provide power for the LED panels. The quote for the backlighting for the clock faces can be found in Appendix H7. This work will require primary circuit control installed by an electrician.

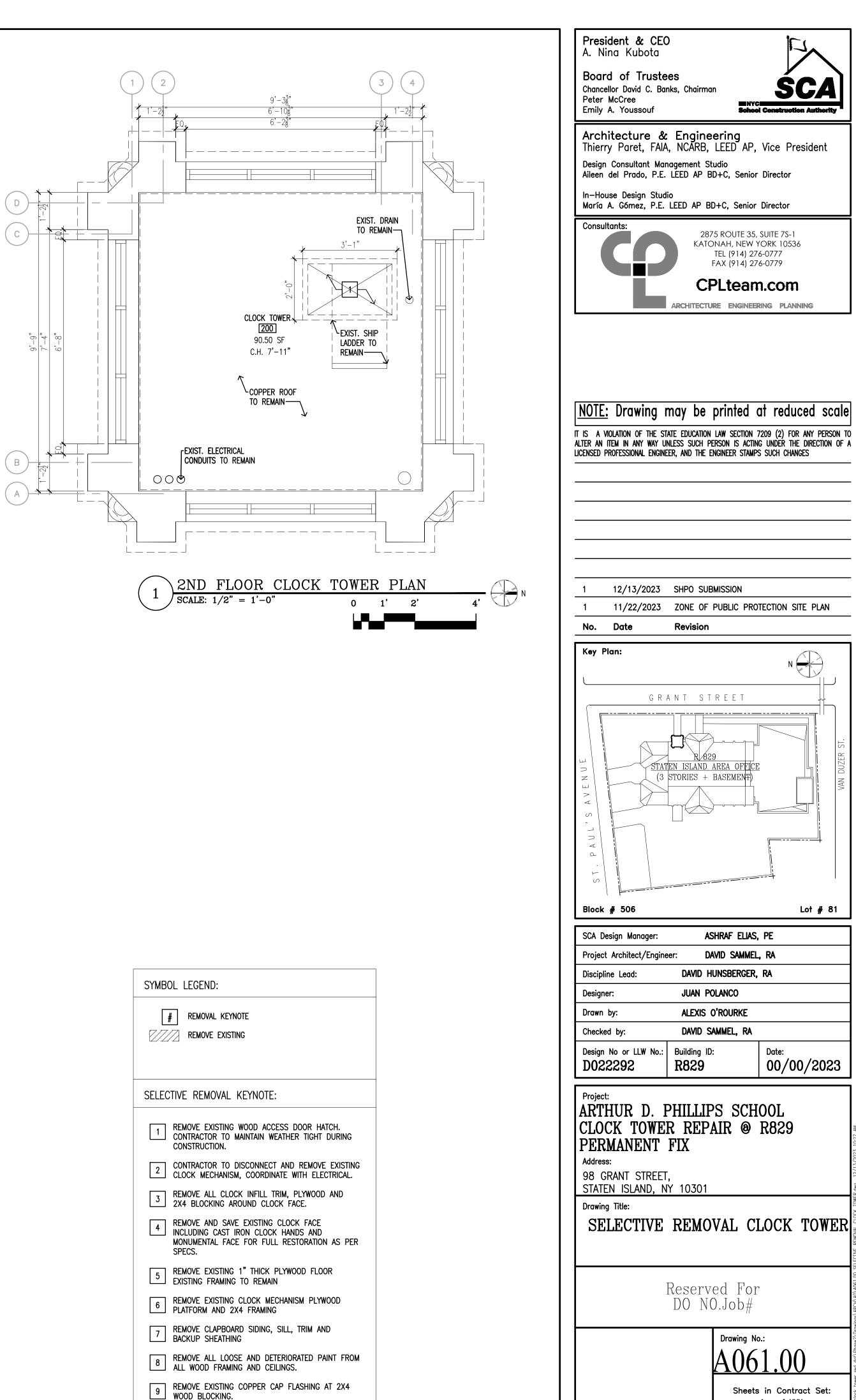
K. REHABILITATION DRAWINGS

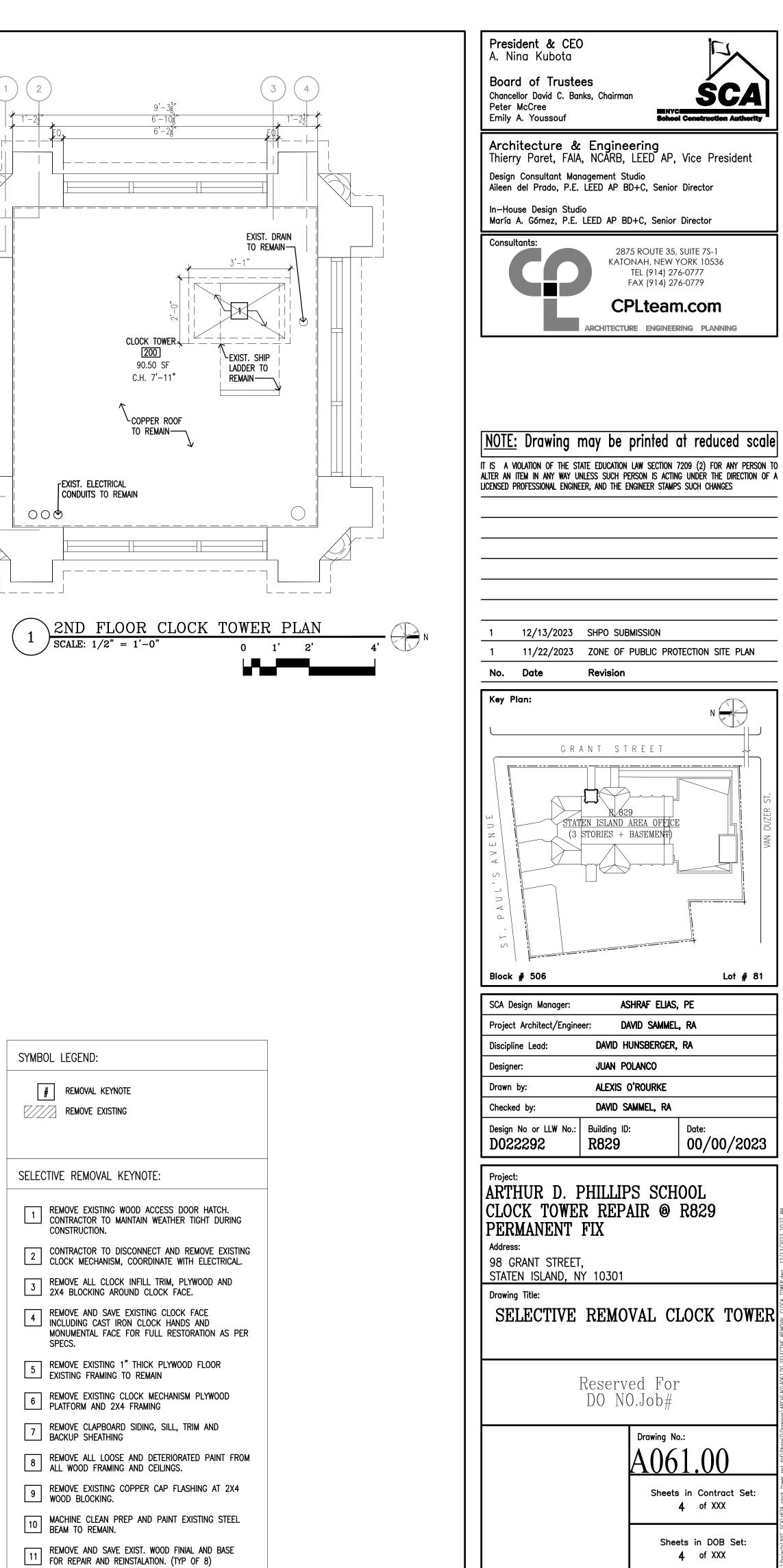
Partial List of Construction Documents: Building Envelope - Related Drawings

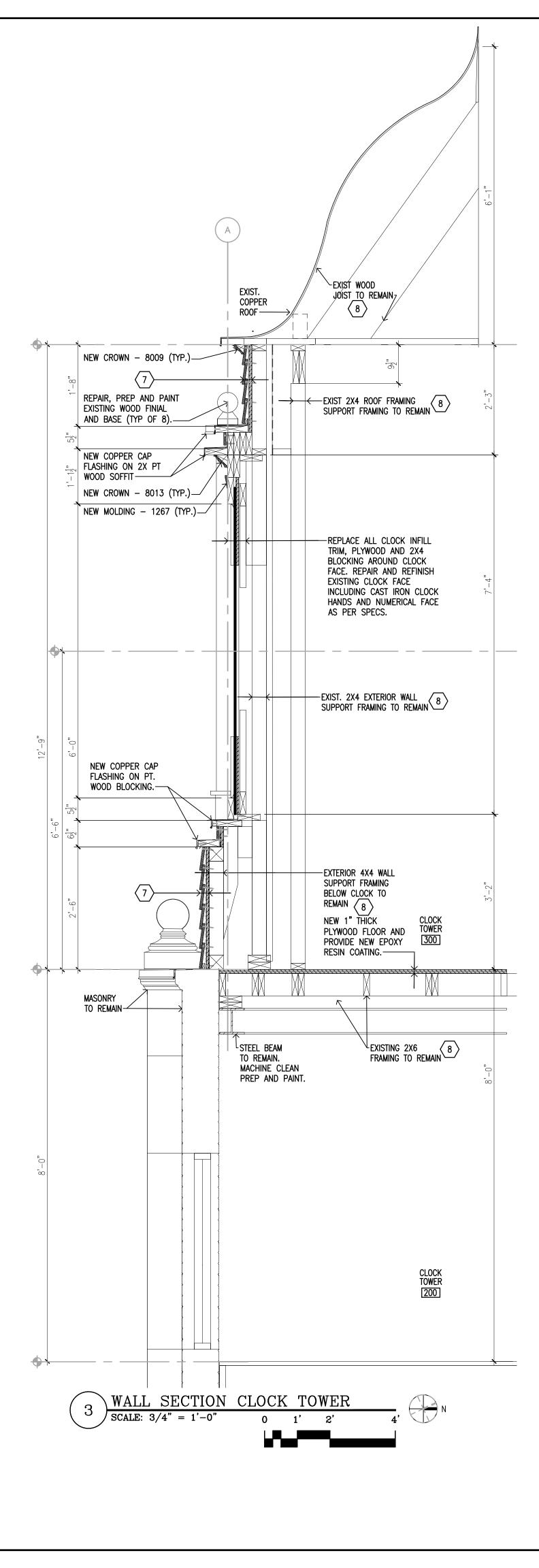
Proposed Construction Drawings

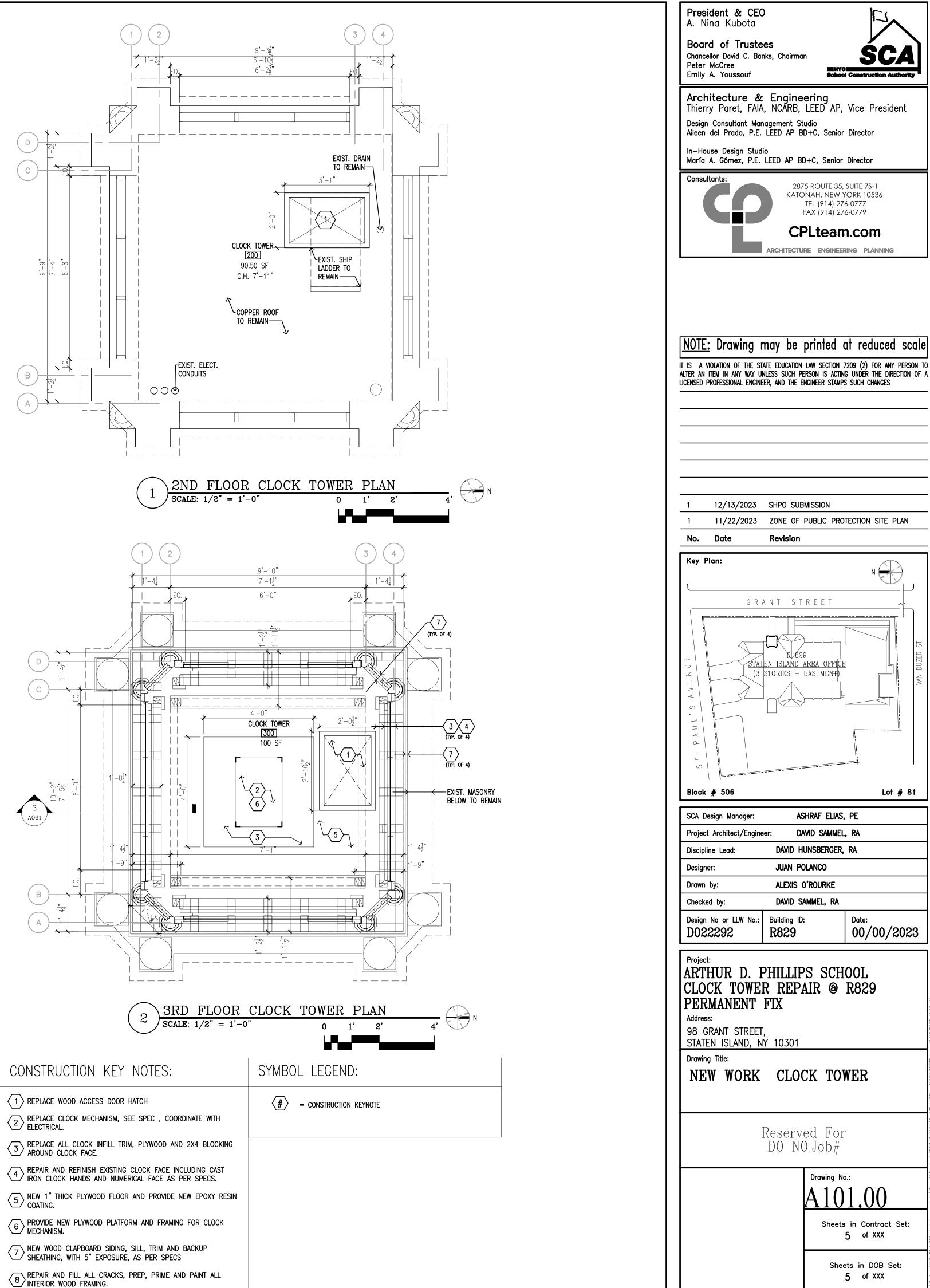
- A061.00 Selective Removal Clock Tower
- A101.00 New Work Clock Tower
- A201.00 Elevations



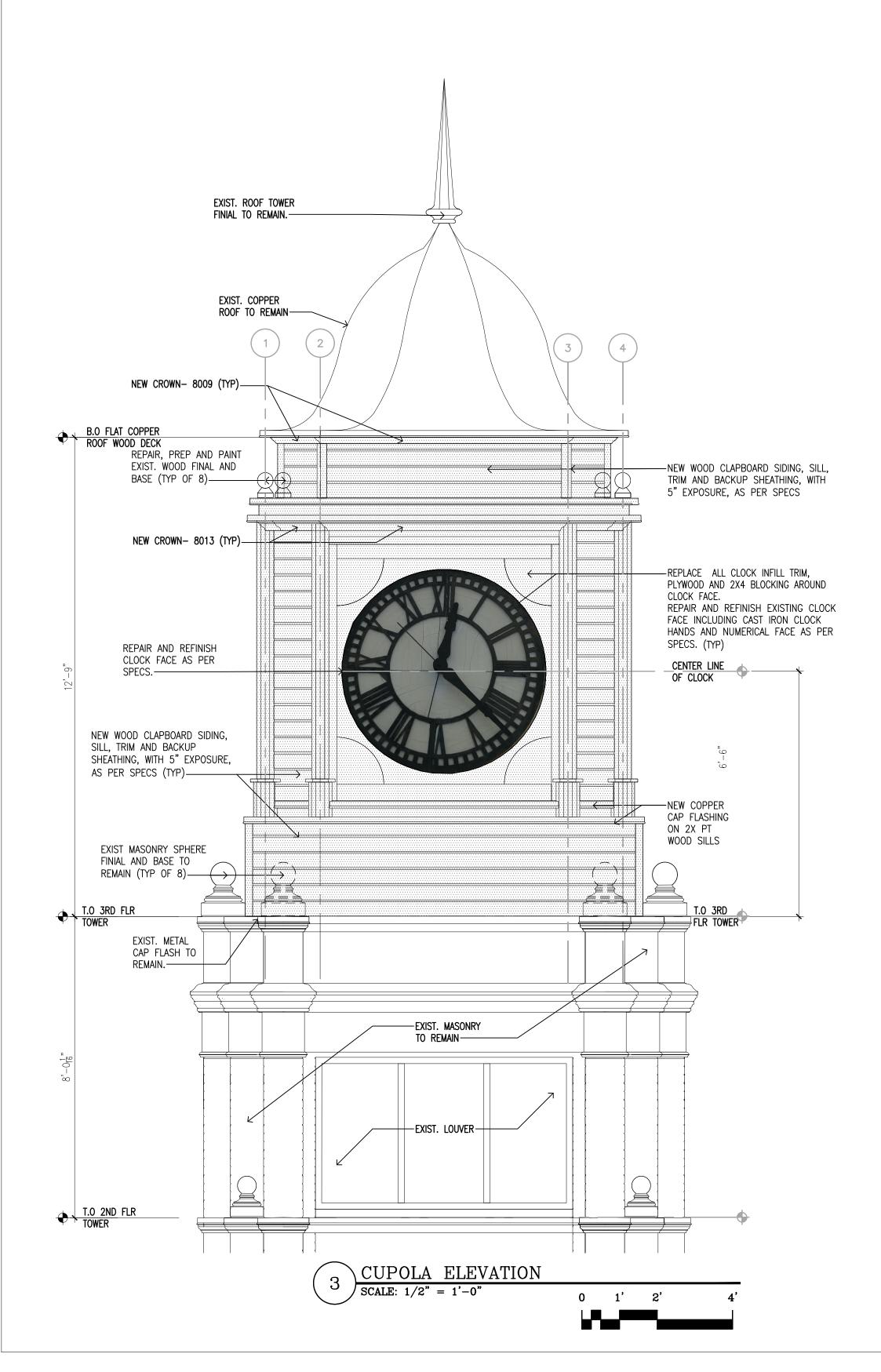


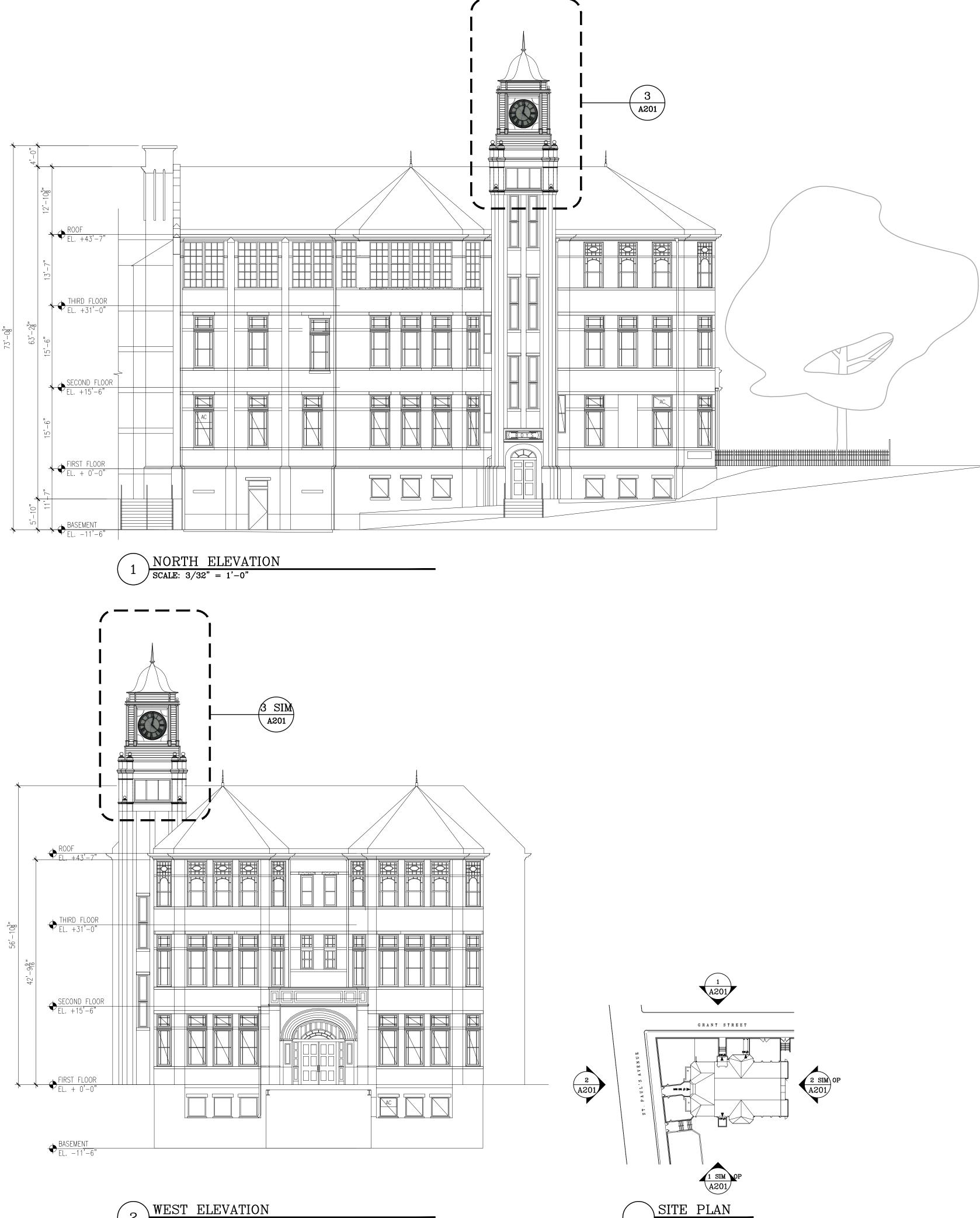




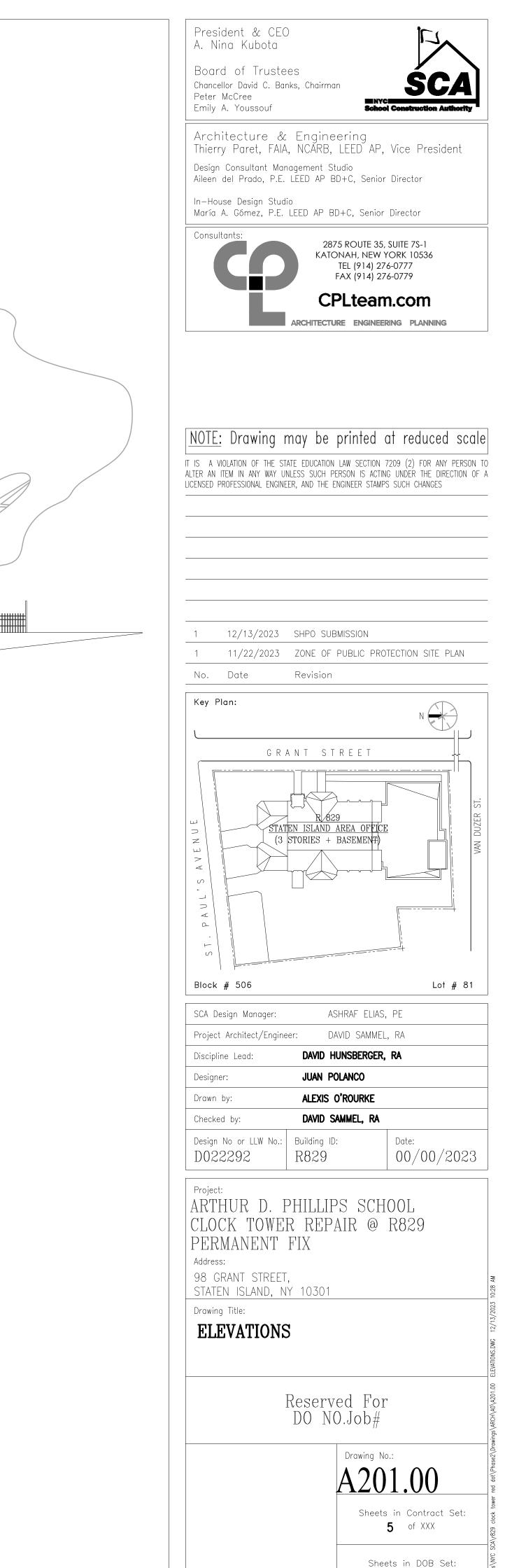


5 of XXX





WEST ELEVATION 2 $\sqrt{\text{SCALE: } 3/32^{"} = 1'-0"}$



5 of XXX

L. SPECIFICATIONS

Partial List of Relevant Specifications for SHPO Review

- 06100 Rough Carpentry
- 06200 Finish Carpentry
- 06210 Wood Siding
- 09900 Painting

M. APPENDIX

- **1. Photos of Existing Conditions**
- 2. Damage Mapping Drawings

APPENDIX #1

PHOTOS OF EXISTING CONDITIONS

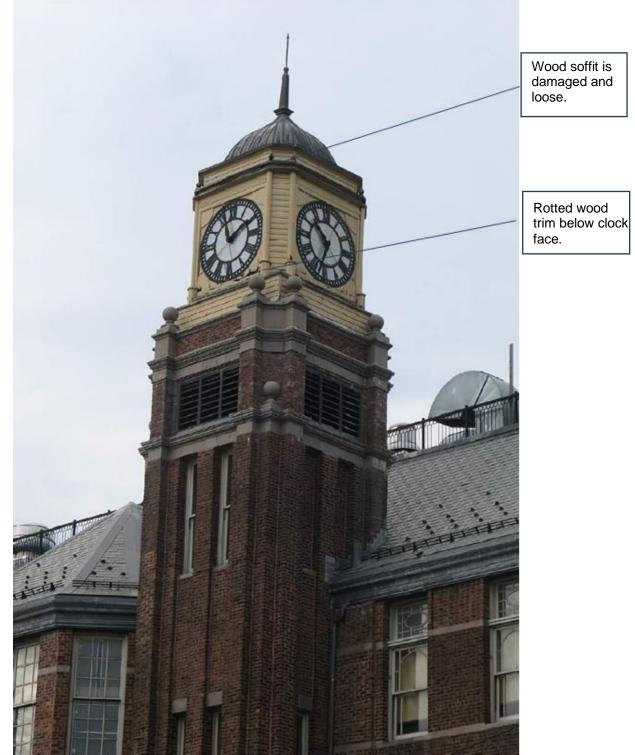


Photo 1 – North Elevation. Damage to cupola and wood trim and siding. Masonry tower in good condition.

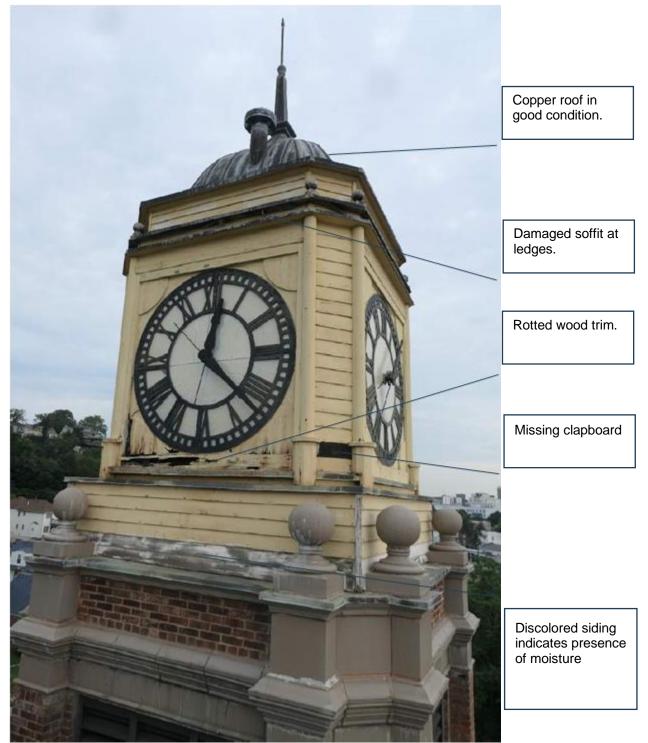


Photo 2 –South elevation. Wood trim is rotted and in poor condition. Masonry is in good condition.

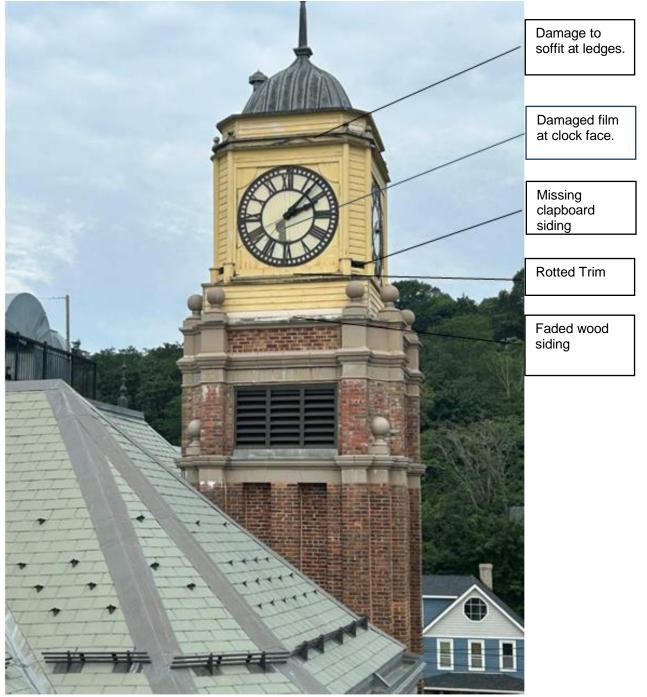


Photo 3 – East elevation.

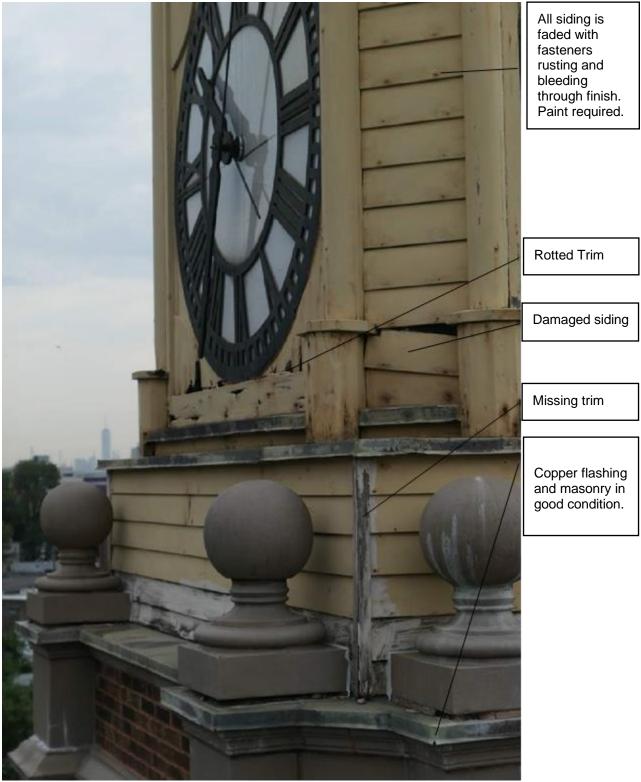


Photo 4 – West elevation of cupola



Photo 5 – Masonry, flashing and roofing below cupola in good condition.



Photo 6 – Upper roof framing seen from the interior. No water staining or areas of rotted wood observed. No leaks from copper roofing. Light fixture is wrapped in plastic.

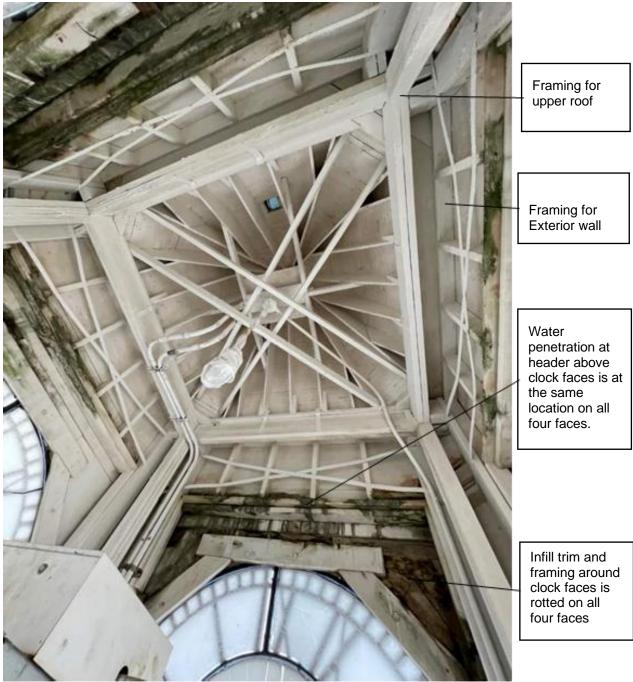


Photo 7 – View of interior framing and water penetration locations.



Photo 8 – Source of water penetration is two exterior ledges. This is consistent on all four faces. Trim and panel infill around clock faces is severely rotted.



Photo 9 – Exterior view of ledges and flashing. Source of water penetration.



Photo 10 – Plywood flooring of cupola is rotted.



Photo 11 – View of framing and underside of plywood cupola flooring. Water staining and areas of rotted wood observed. This is consistent on all four faces. Trim and panel infill around clock faces is severely rotted.



Photo 12 – Central clock mechanism controls hands on all four faces. Clocks are not working.



Photo 13 – Damaged clock face translucent film.



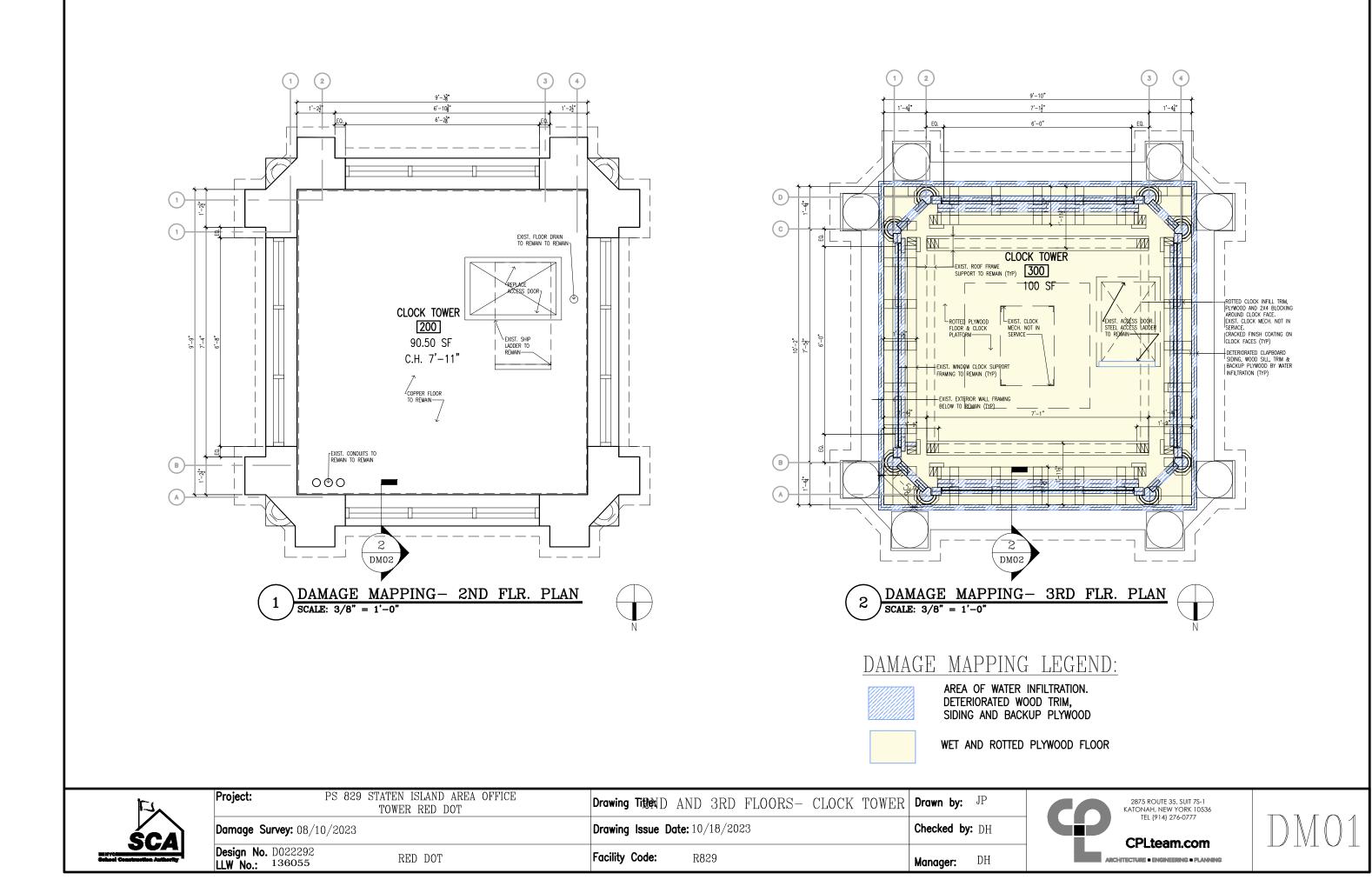
Photo 14 – Exterior metal dial, numerals and clock hands have a faded finish with some pitting noted. Refinish.

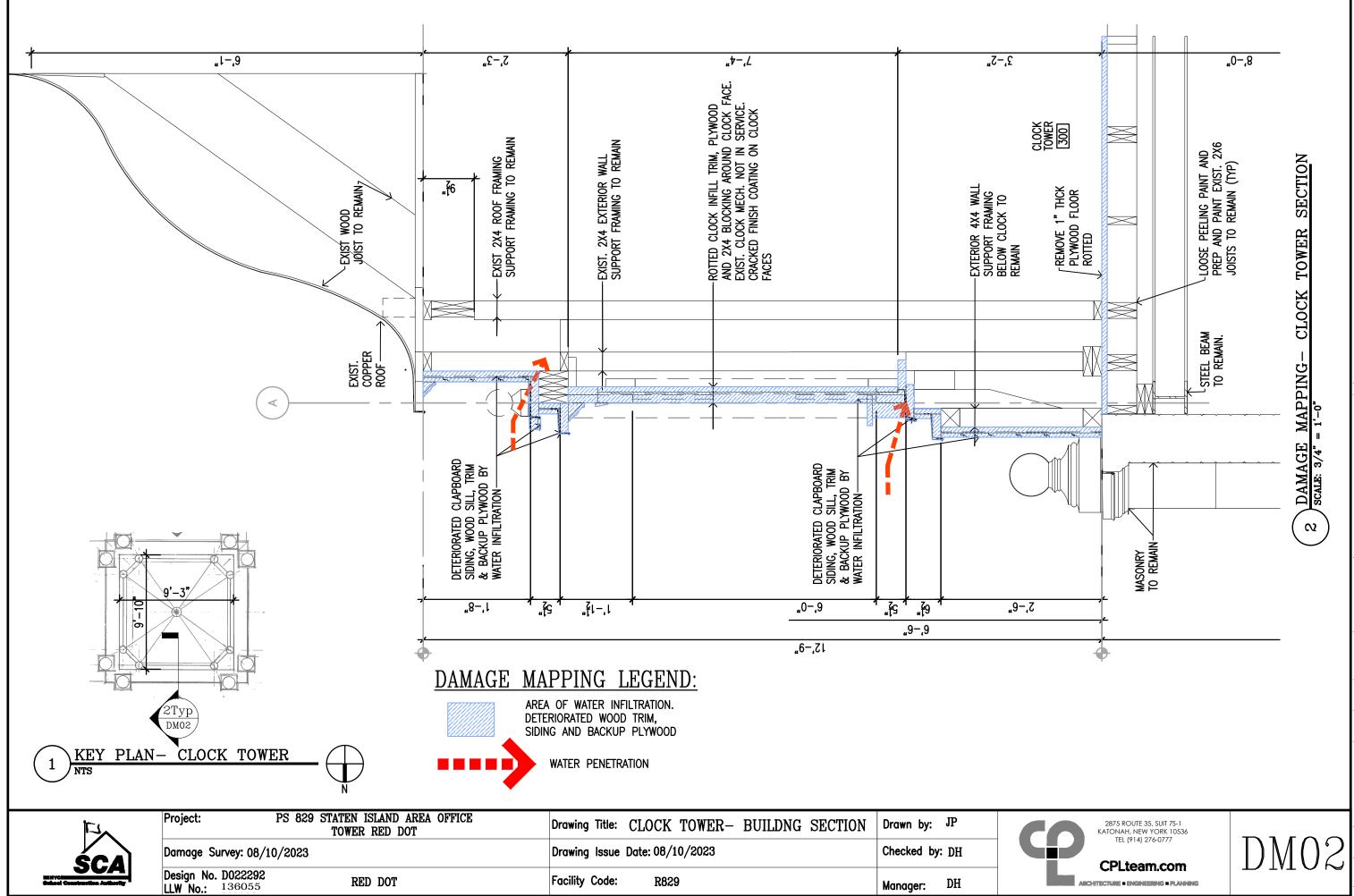


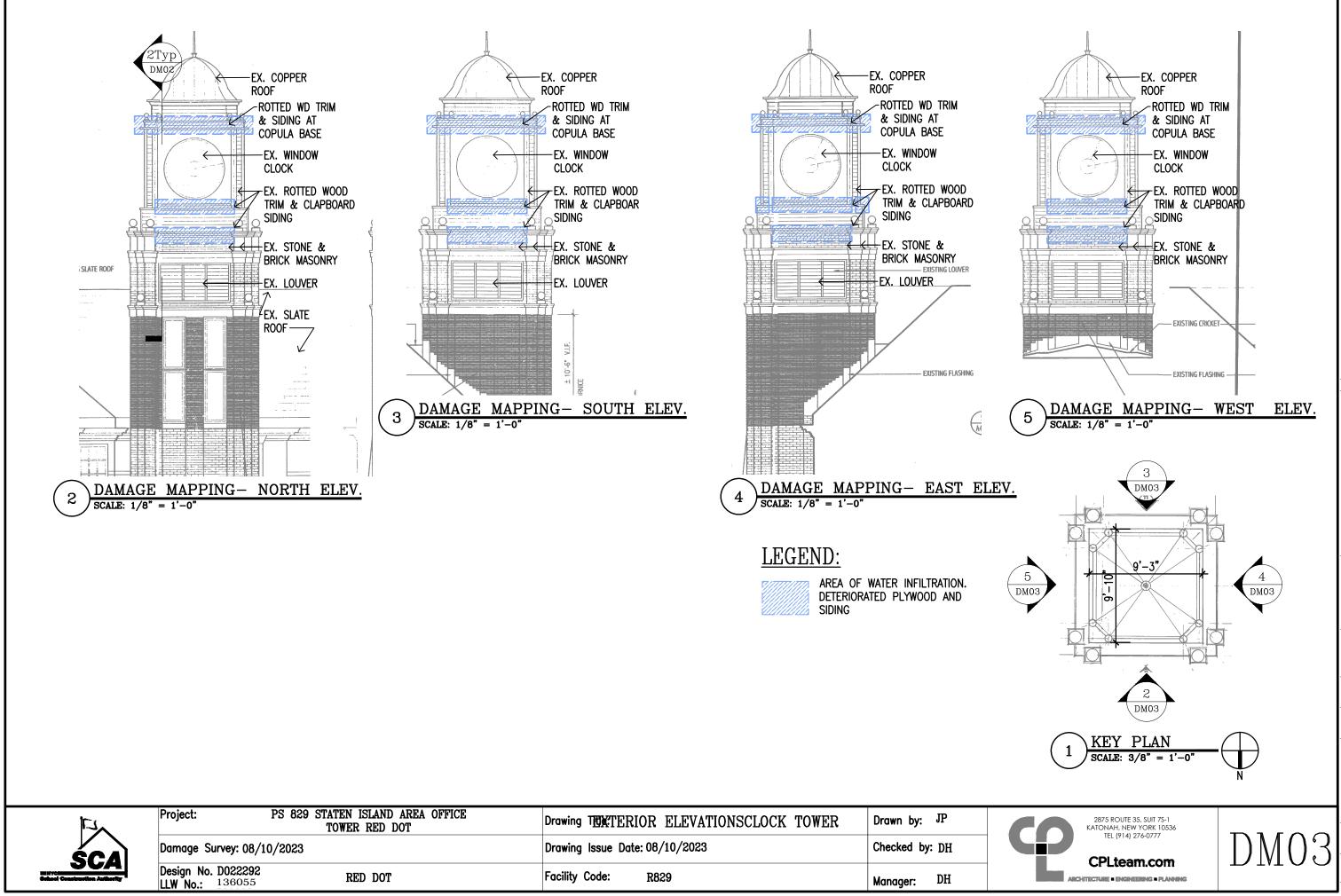
Photo 15 – Faded clock dial and rotted trim on south elev.

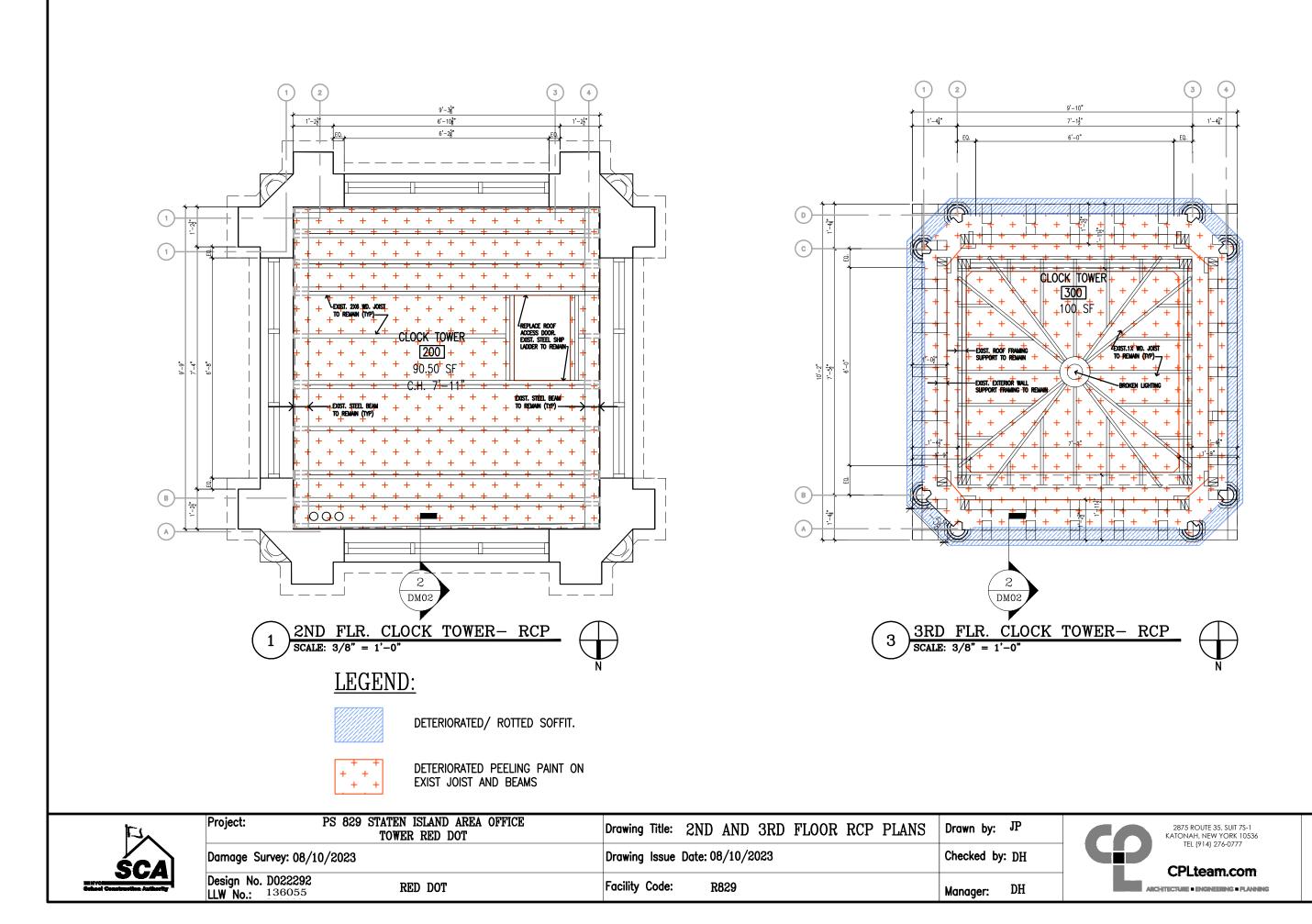
APPENDIX #2

DAMAGE MAPPING DRAWINGS

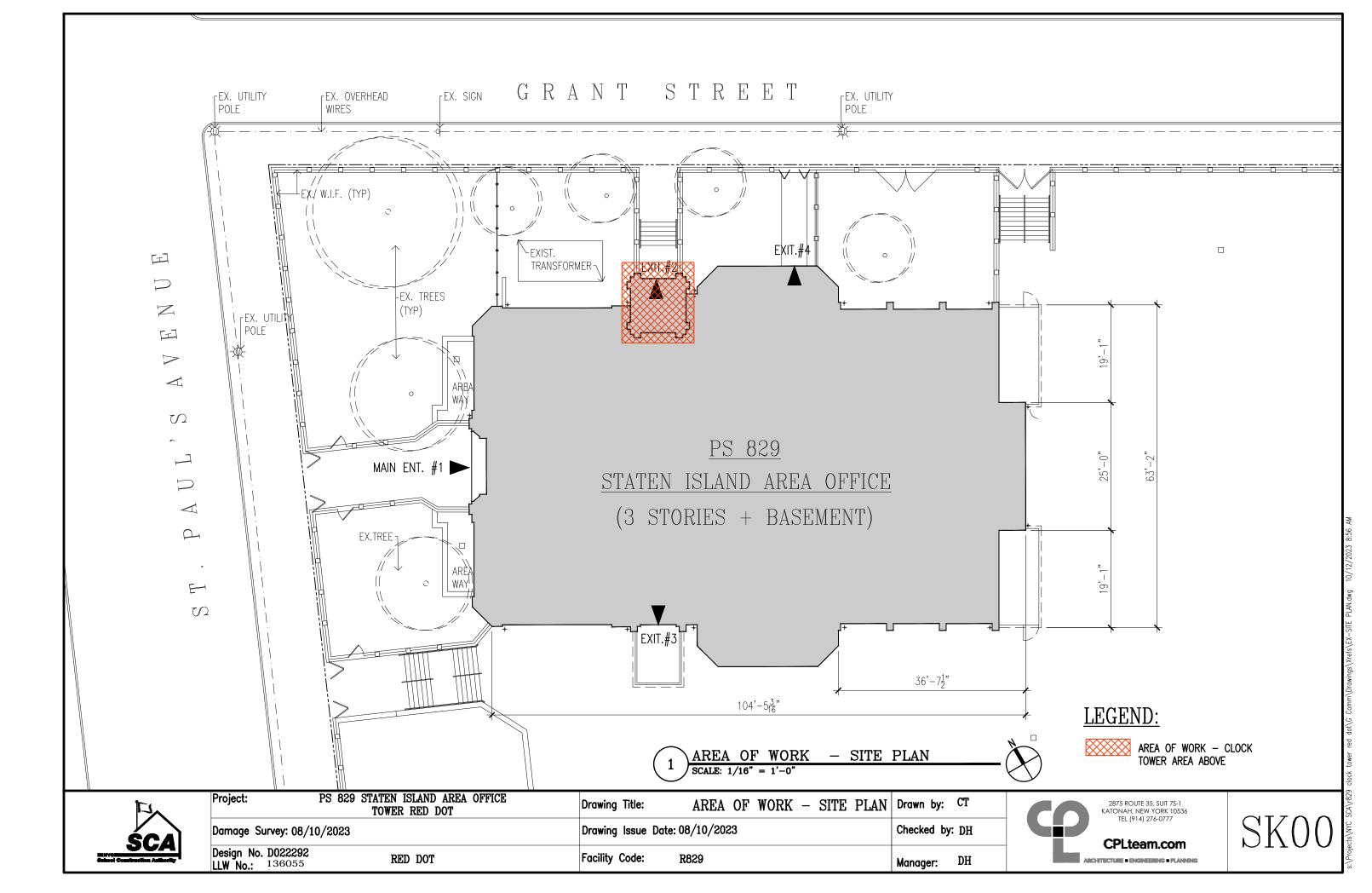


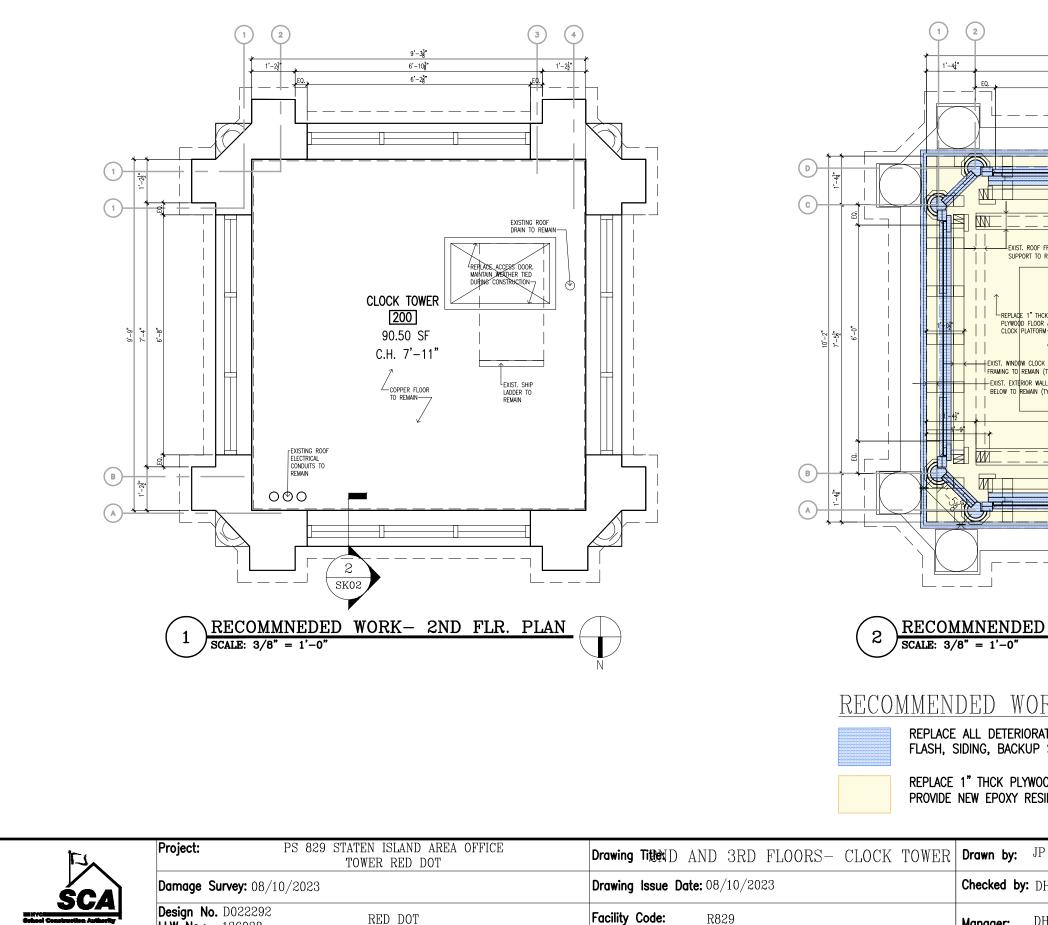




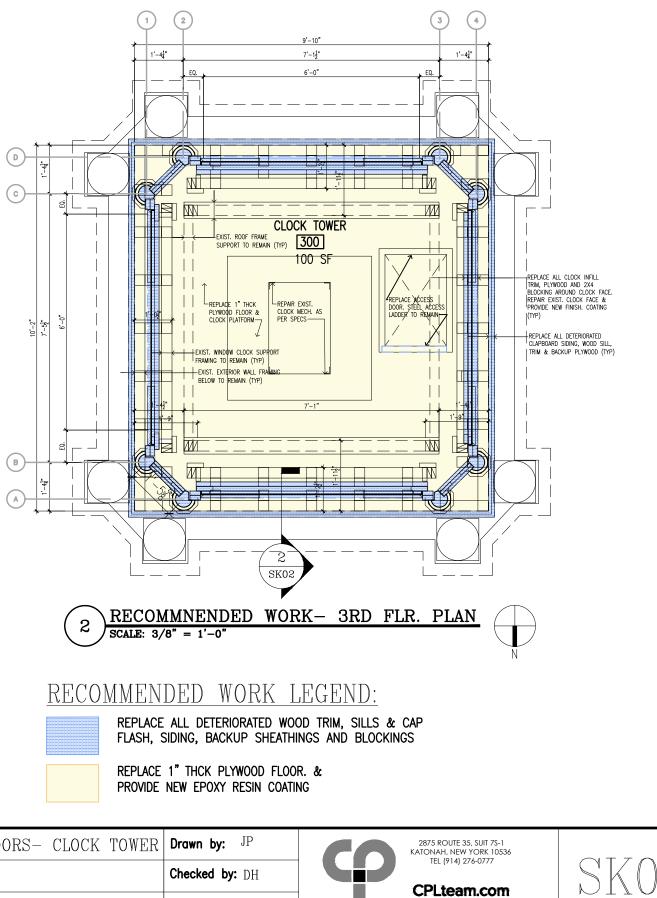








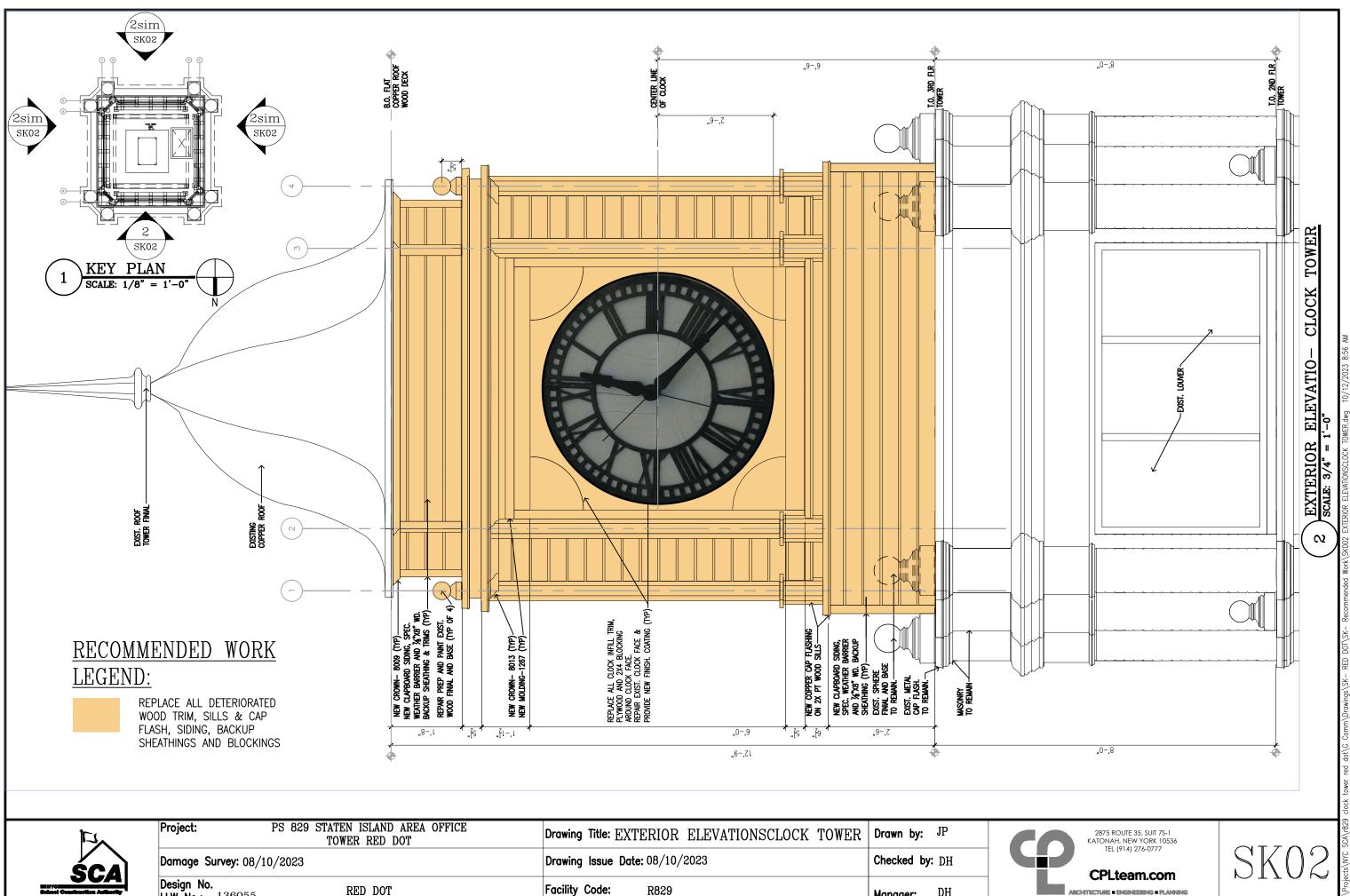
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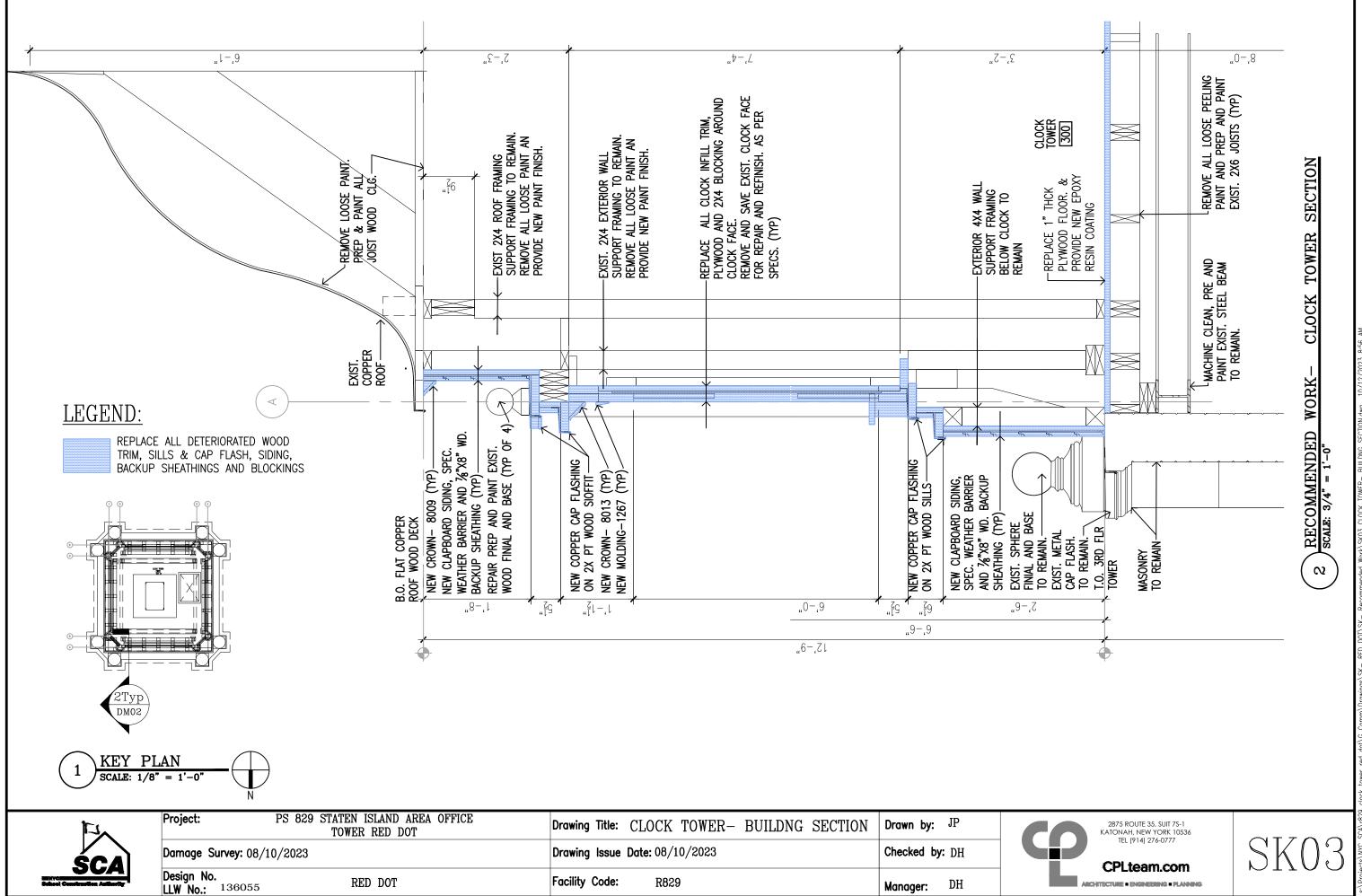
Manager:

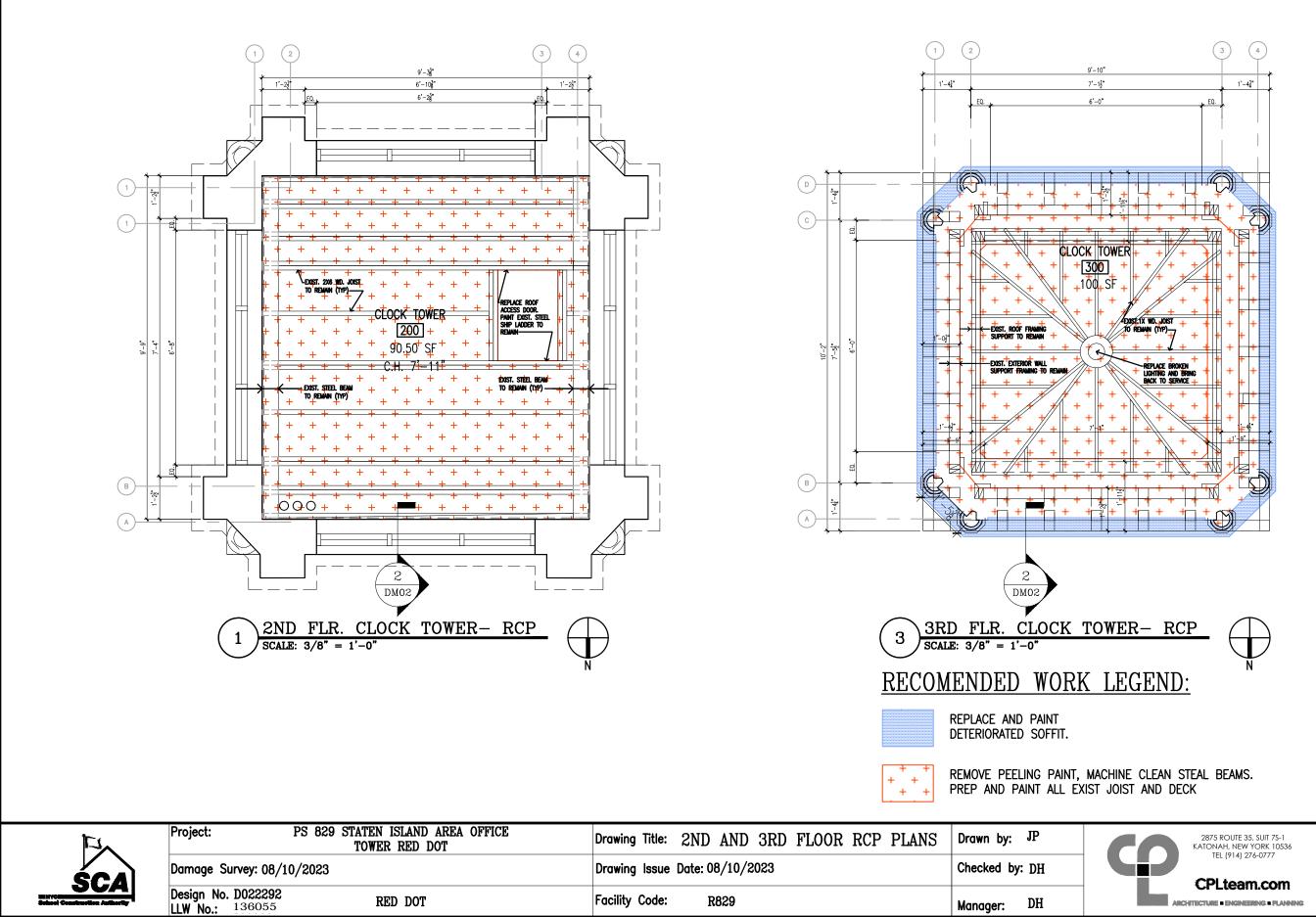
DH

ARCHITECTURE = ENGINEERING = PLANNING



	TOWER RED DOT		Didwing inter EXTERIOR ELEVATIONSCLOCK TOWER			
	Damage Survey: 08/10/2023		Drawing Issue Date: 08/10/2023		Checked by: DH	
	Design No. LLW No.: ¹³⁶⁰⁵⁵	RED DOT	Facility Code:	R829	Manager:	DH





SK04