

Project:

VILLA VICTORIA CENTER FOR THE ARTS  
85 WEST NEWTON STREET, BOSTON, MA

**PHASE 1A**  
**CONSTRUCTION DOCUMENTS**  
9/22/2017

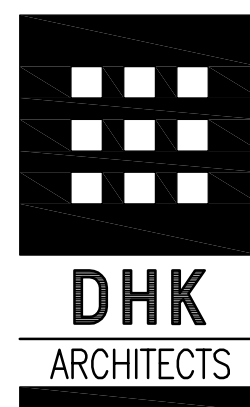
Prepared For:

**INQUILINOS BORICUAS EN ACCION**

405 Shawmut Ave, Boston, MA 02118



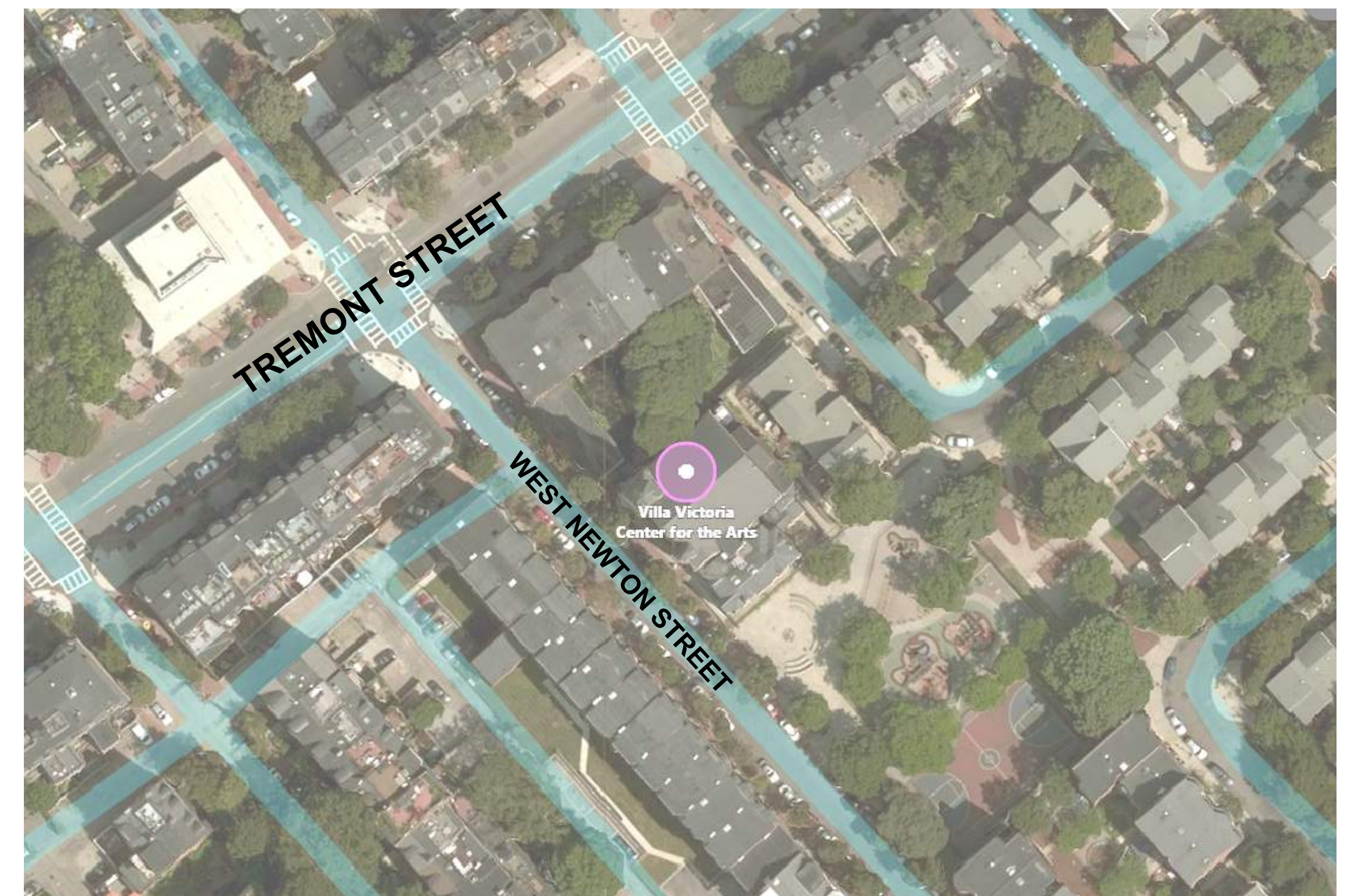
Prepared By:



**DHK, Inc. - Architecture**  
54 Canal Street, Boston, MA 02114  
617 267 6408 fax. 617 267 1990



**Gale Associates, Inc. - Structural Engineer**  
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# ABBREVIATION

#	POUND OR NUMBER
&	AND
@	AT
Ø	DIAMETER
ACT	ACOUSTIC CEILING FLOOR
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
ALUM	ALUMINUM
ANOD	ANODIZED
BSMT	BASEMENT
BYND	BEYOND
BOT	BOTTOM
CIP	CAST IN PLACE
CHNL	CHANNEL
CJ	CONTROL JOINT
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMPR	COMPRESSIBLE
CONC	CONCRETE
CONT	CONTINUOUS
CPT	CARPET
CT	CERAMIC TILE
CTYD	COURTYARD
DBL	DOUBLE
DEMO	DEMOLISH OR DEMOLISHION
DIA	DIAMETER
DIM	DIMENSION
DIMS	DIMENSIONS
DN	DOWN
DR	DOOR
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EPDM	ETHYLENE PROPYLENE DIENE M-CLASS
EQ	EQUAL
EXIST	EXISTING
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
FD	FLOOR DRAIN
FEC	FIRE EXTINGUISHER CABINET
FIXT	FIXTURE
FLR	FLOOR
FM	FILLED METAL
FO	FACE OF
FND	FOUNDATION
GA	GAUGE
GALV	GALVANIZED
GWB	GYPSUM WALL BOARD
HC	HOLLOW CORE

HI	HIGH
HM	HOLLOW METAL
HP	HIGH POINT
HR	HOUR
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
ILO	IN LIEU OF
INSUL	INSULATED OR INSULATION
INT	INTERIOR
LO	LOW
MAX	MAXIMUM
MO	MASONRY OPEING
MECH	MECHANICAL
MEMBR	MEMBRANE
MIN	MINIMUM
MRGWB	MOISTURE-RESISTANT GYPSUM WALL BOARD
MTL	METAL
NIC	NOT IN CONTACT
NO	NUMBER
NOM	NOMINAL
OC	ON CENTER
OH	OPPOSITE HAND
OZ	OUNCE
PCC	PRE-CAST CONCRETE
PLUMB	PLUMBING
PLYD	PLYWOOD
PT	PRESSURE TREATED
PNT	PAINT OR PAINTED
PVC	POLYVINIL CHLORIDE
RBR	RUBBER
RCP	REFLECTED CEILING PLAN
PD	ROOF DRAIN
REQD	REQUIRED
SAMF	SELF ADHERED MEMBRANE FLASHING
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
SPK	SPRINKLER
SST	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STL	STEEL
STRUCT	STRUCTURE
T&G	TONGUE AND GROOVE
TELE	TELEPHONE
TLT	TOILET
TO	TOP OF
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TPD	TOILET PAPER DISPENSER
T/D	TELEPHONE/DATA
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
VIF	VERIFY IN FIELD
VP	VISION PANEL
W/	WITH
WD	WOOD

# LEGEND / SYMBOLS

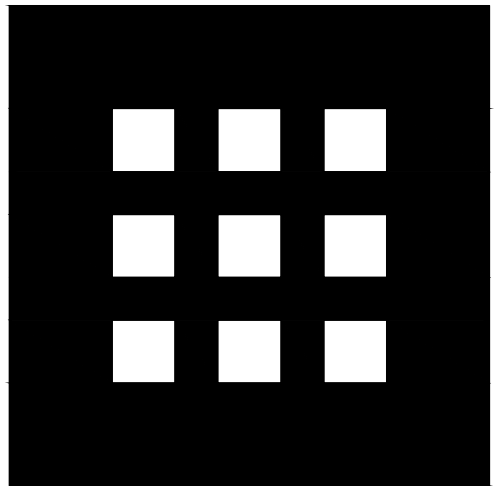
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	ELEVATION KEY-EXTERIOR
	ELEVATION DATUM
	DETAIL SECTION/PLAN BUBBLE
	ROOM DESIGNATION
	DOOR IDENTIFICATION TAG
	WINDOW IDENTIFICATION TAG
	VIEW TITLE

# PHASING PLAN

- Phase 1A**
- Masonry restoration at front façade from the northeast end of the belfry tower and around to the front of the building up to but not including the parish house.
  - Replacement of the main spire
  - Reconstruction of the main tower masonry belfry as necessary.
  - Repairs to the smaller tower as necessary.
  - Roofing for the two spires.
  - Flashing, roofing etc. necessary at the intersections of the spires with the main roof.
  - Front main stairs.
  - Railings at main stairs
  - Windows on the walls outlined above under item 1.
  - Louvers at belfry.
  - Main doors and surrounds.
- Phase 1B**
- Masonry restoration at remaining walls around the buildings.
  - Remaining roofing, flashings etc.
  - Windows along the remaining walls.
  - Some selective exterior doors around the periphery of the building.
  - Exterior lighting including architectural lighting.
  - Additional exterior power.
  - Exterior signage

# DRAWING LIST

Sheet #	Title
G000	Cover Page
G001	Abbreviations, Legends, Overview of Scope and Drawing List
EX-A-201	Existing Conditions and Demolition Exterior Elevations
EX-A-202	Existing Conditions and Demolition Exterior Elevations
EX-A-203	Existing Conditions and Demolition Exterior Elevations
A-101	NEW WORK AND EXISTING CONDITION STAIR PLANS AND DETAILS
A-200	New Work Exterior Elevations
A-201	New Work Exterior Elevations
A-202	New Work Exterior Elevations
A-500	Enlarged Elevations and Details
A-501	Enlarged Elevations and Details
A-502	Enlarged Elevations and Details
A-600	Phase 1 Window and Door Schedule
EG001	General Information
EG002	Overall Building Elevations
EG003	Overall Building Elevations (cont.)
EA101	Floor Plans
EA201	South Elevation
EA202	West Elevation
EA203	North Elevation
EA204	East Elevation
EA301	Stone and terra Cotta Shape Types
EA511	Small Spire Roof and Cornice Details
EA512	Roof Details
EA513	Typical Synthetic Slate Roof Details
EA521	Typical Building Repair Details
EA531	Masonry Details
EA532	Masonry Details
S-100	Elevation
S-200	Plans
S-201	Plans
S-202	Plans
S-203	Plans
S-300	Sections
S-400	Details
S-401	Details
S-402	Details
S-403	Details
S-404	Details
S600	Steeple Design Criteria
S710	Proposed Demolition & Existing Stair Section
S720	New Stair Plans & Sections
S750	Typical Stair Details
S851	Pilaster Grout Injection Section and Details
S852	Pilaster Strengthening & Rebuilt



**DHK**  
ARCHITECTS

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Fax 617-267-1990

No.	Date	Revision

Project:  
**Villa Victoria**  
**Center for the Arts**  
85 WEST NEWTON STREET  
BOSTON, MA

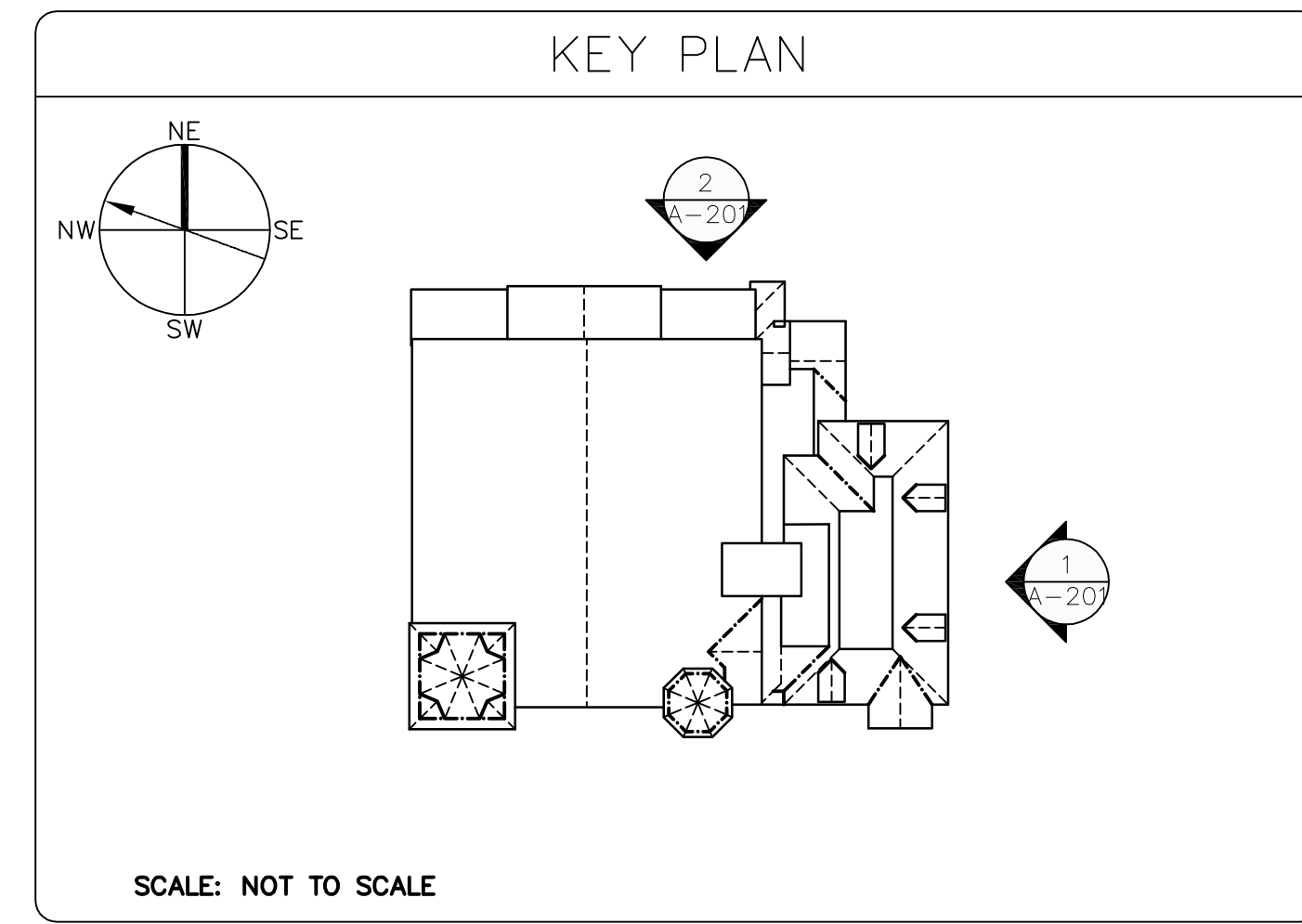
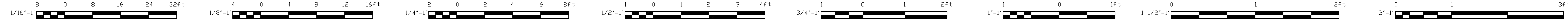
PHASE 1A  
CONSTRUCTION DOCUMENTS

Title:  
ABBREVIATIONS, LEGENDS,  
AND DRAWING LIST

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Checked By	FD
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Date	9/22/17
Drawing No.	<b>G001</b>



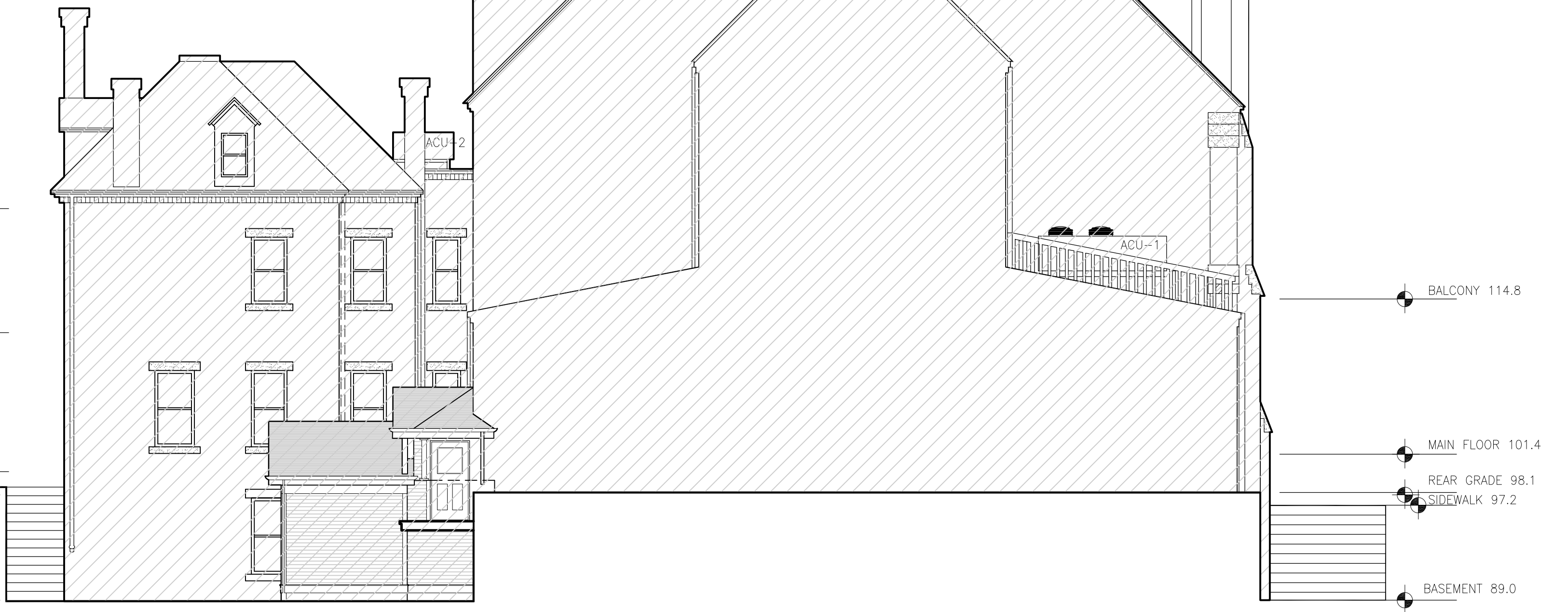




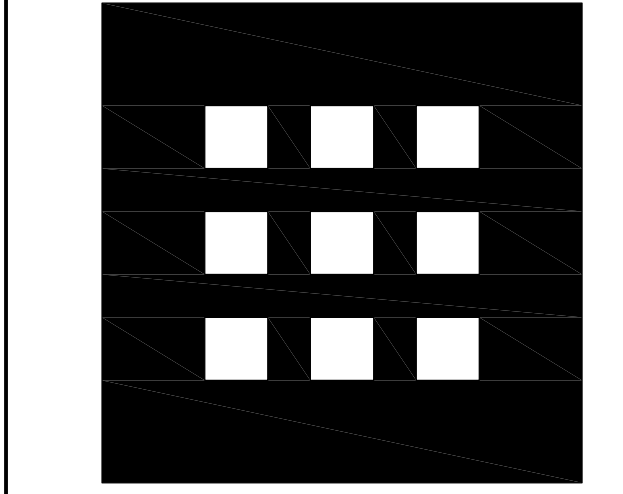
**LEGEND**



**1** EXIST SOUTH-EAST ELEVATION  
SCALE: 1/8"=1'-0"



**2** EXIST NORTH-EAST ELEVATION  
SCALE: 1/8"=1'-0"



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**EXISTING CONDITIONS,**  
**EXTERIOR ELEVATIONS**

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Drawn By	ND
Checked By	FD
Job No.	3704
Date	9/22/17
Drawing No.	<b>EX-A-201</b>



0 8 16 24 32ft  
1/16"=1'

0 4 8 12 16ft  
1/8"=1'

0 2 4 6 8ft  
1/4"=1'

0 1 2 3 4ft  
1/2"=1'

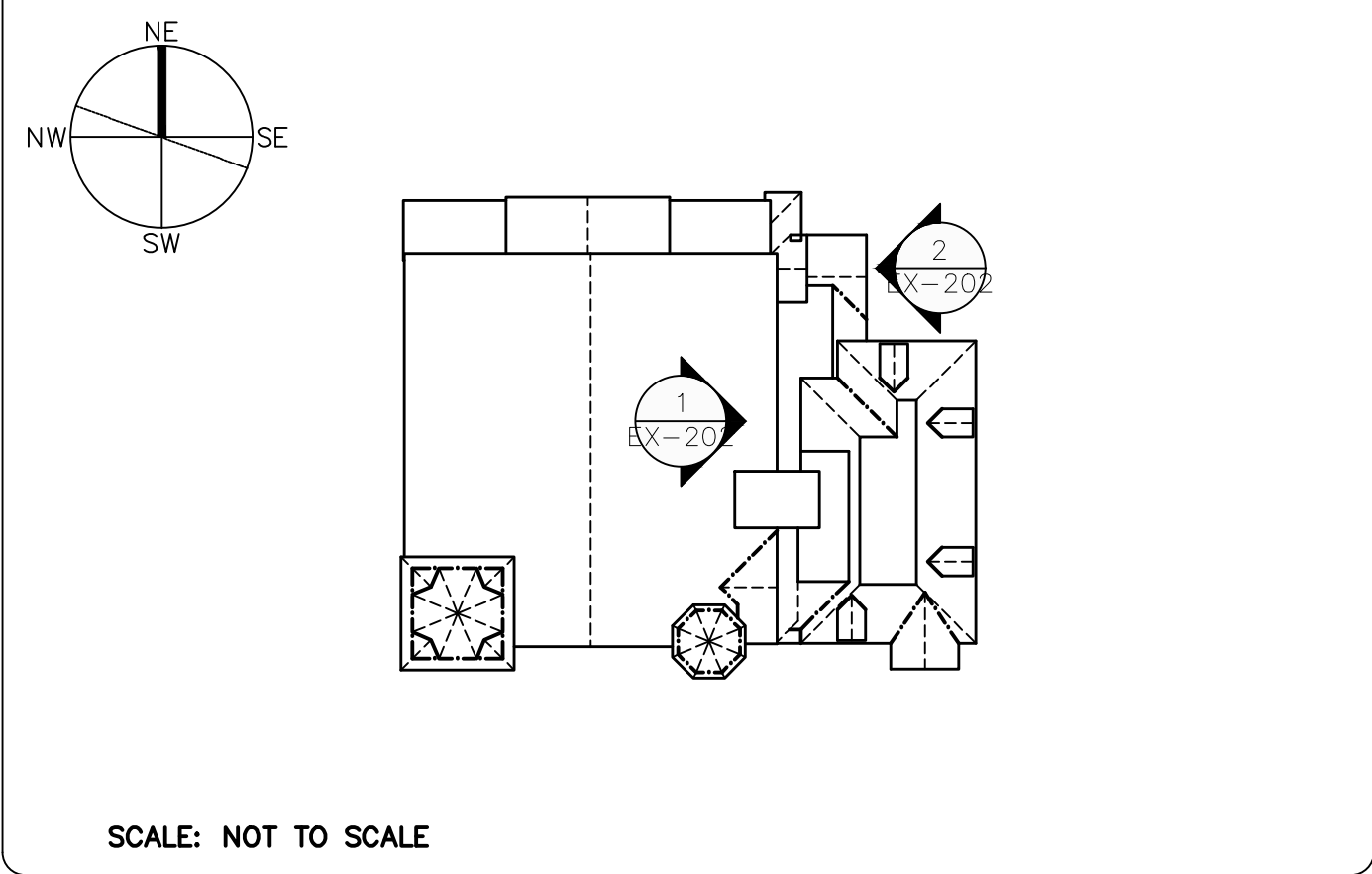
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3/4"=1'

0 1ft  
1"=1'

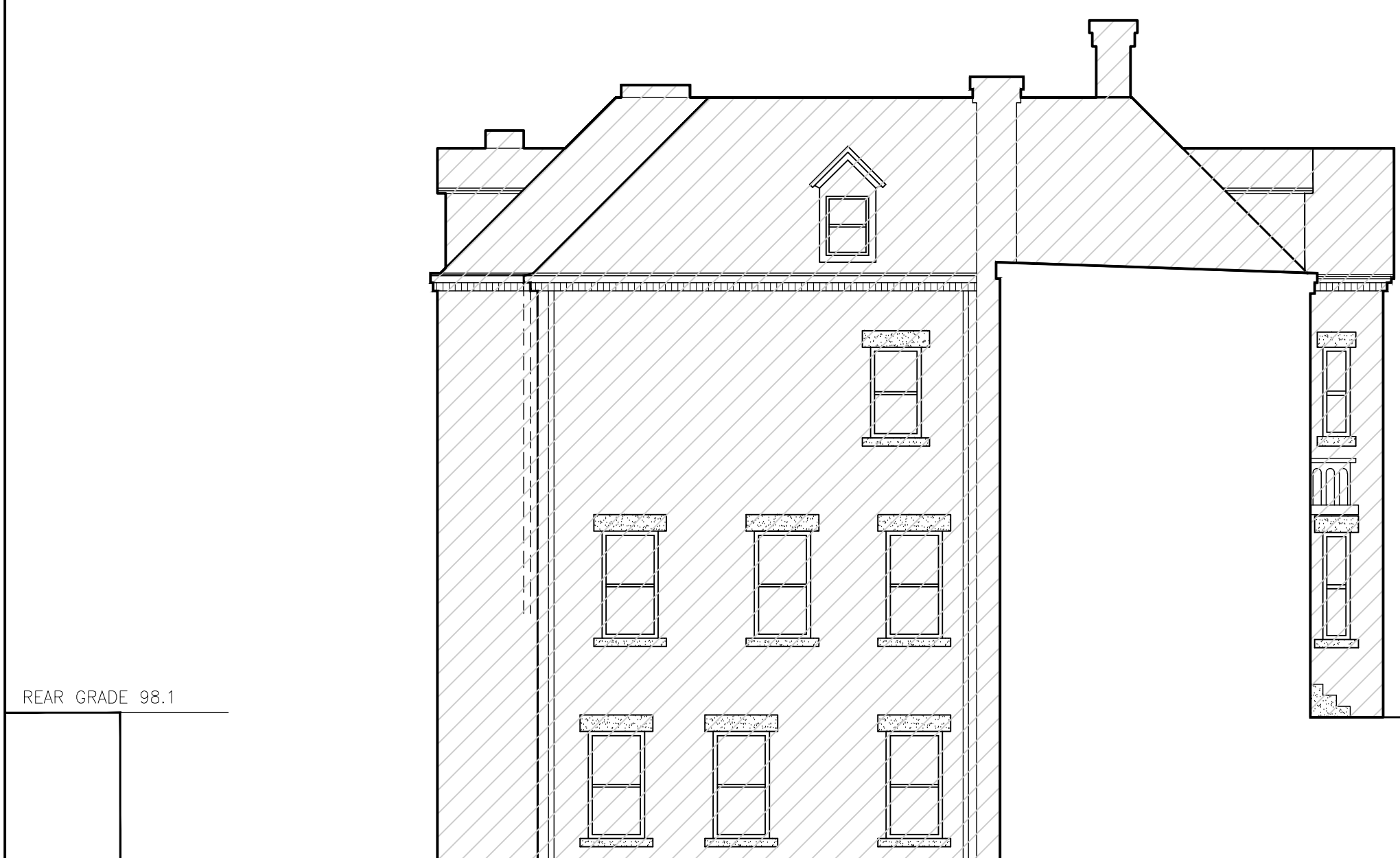
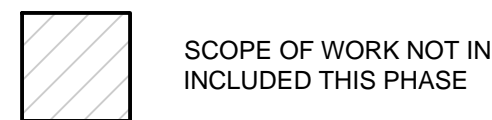
0 1 2ft  
1 1/2"=1'

0 1 3ft  
3"=1'

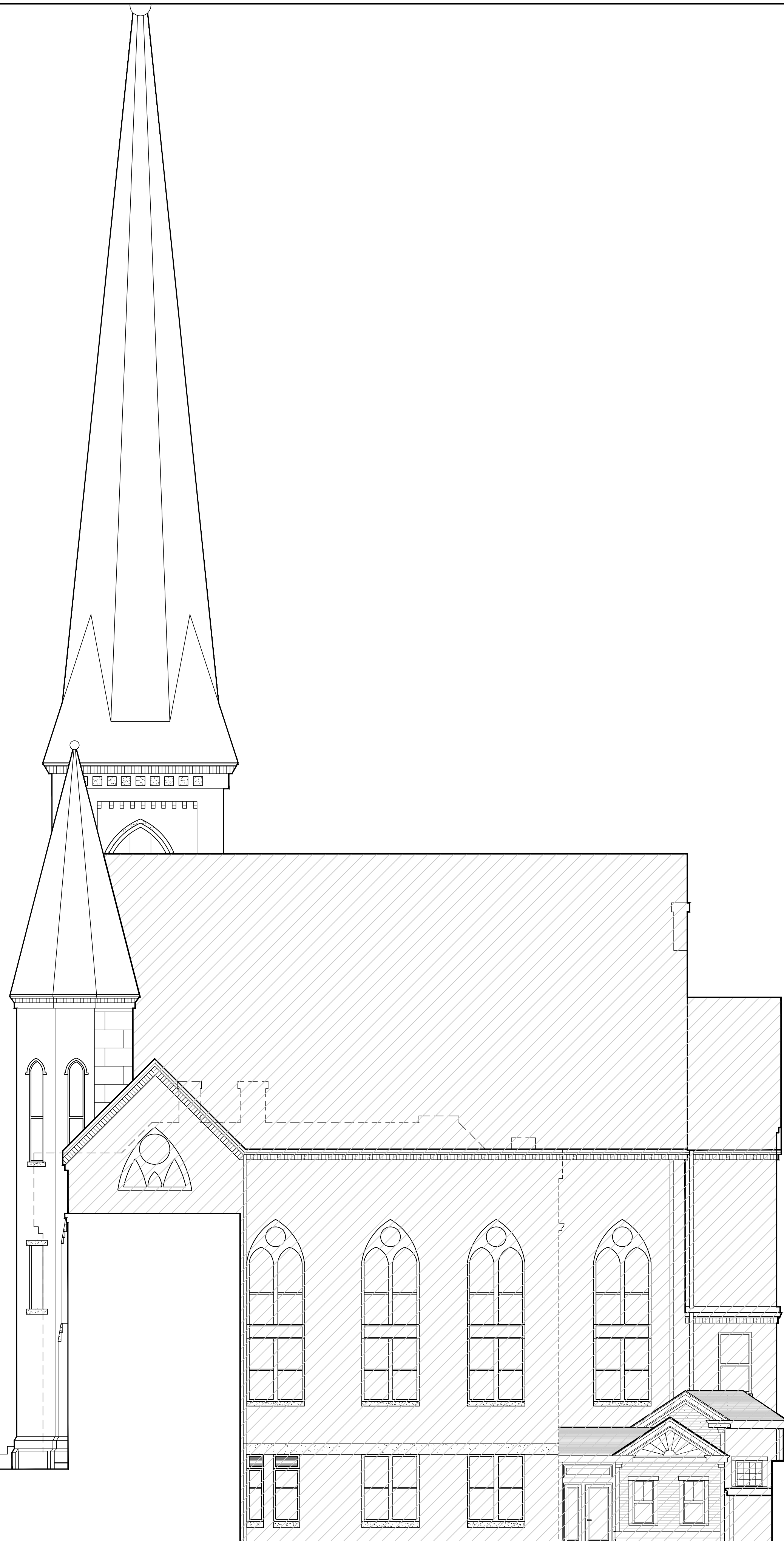
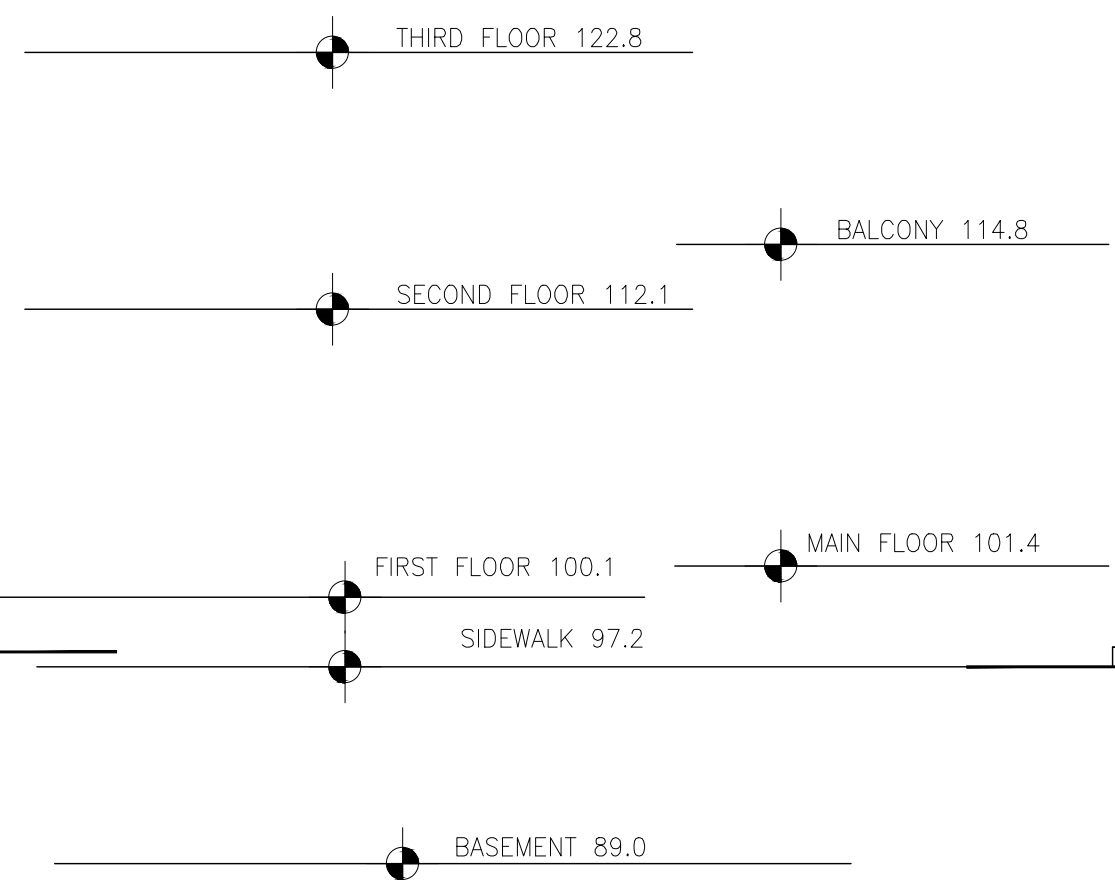
KEY PLAN



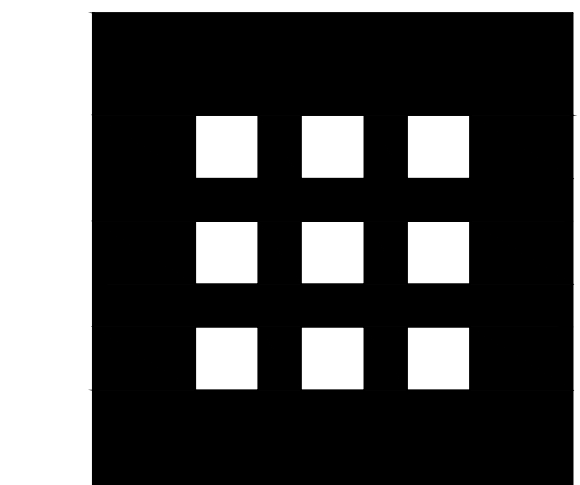
LEGEND



1 EXIST NORTH-WEST ELEVATION  
SCALE: 1/8"=1'-0"



2 EXIST SOUTH-EAST ELEVATION  
SCALE: 1/8"=1'-0"



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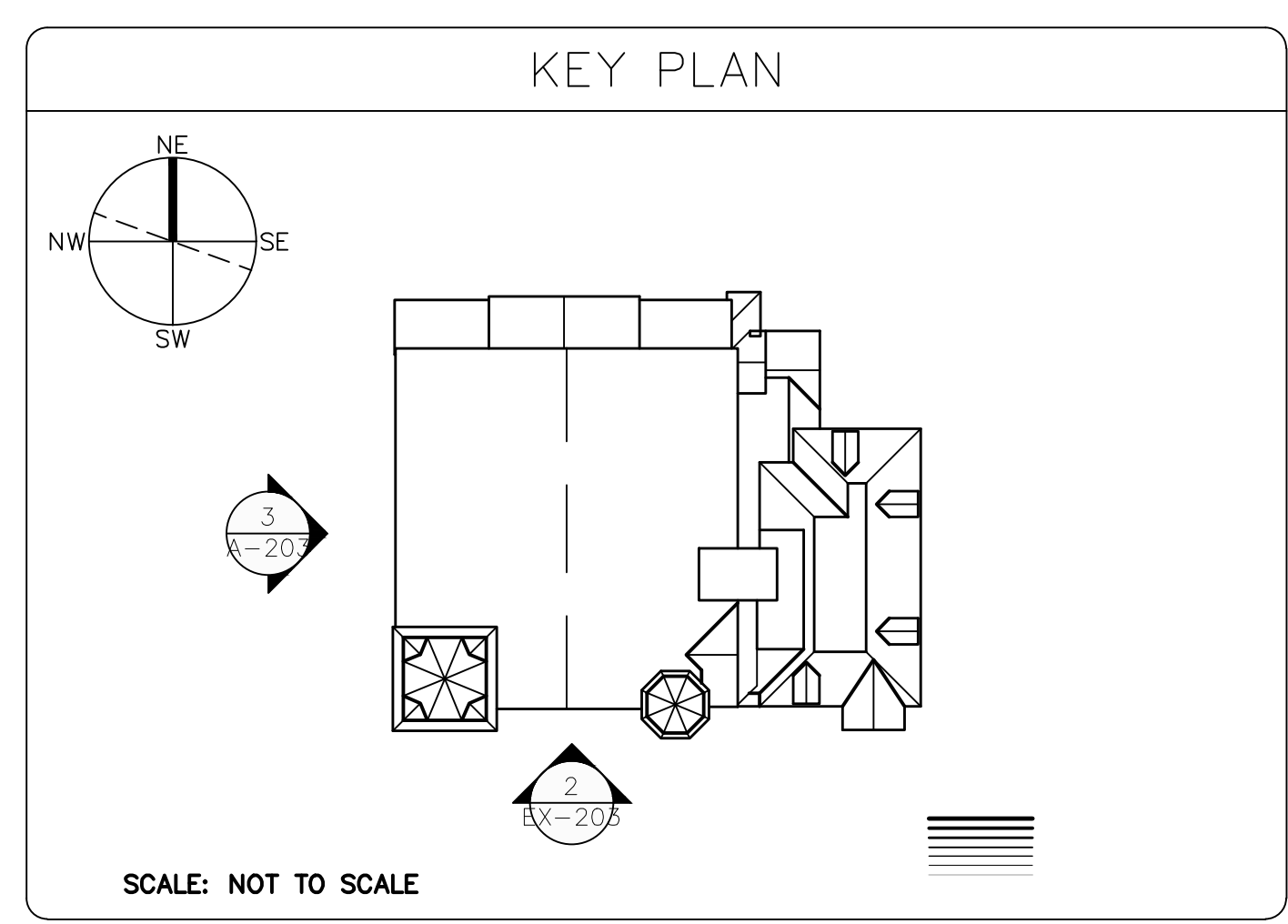
EXISTING CONDITIONS,  
EXTERIOR ELEVATIONS

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Job No.: 3704  
Date: 9/22/17

EX-A-202



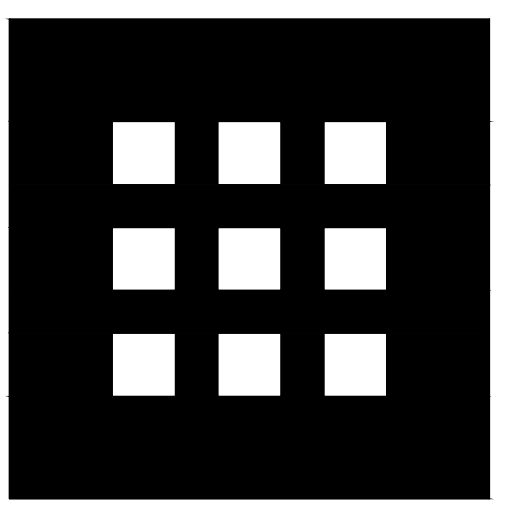


**LEGEND**

 SCOPE OF WORK NOT INCLUDED IN THIS PHASE

**1** EXIST NORTH-WEST ELEVATION  
SCALE: 1/8"=1'-0"

**2** EXIST SOUTH-WEST ELEVATION  
SCALE: 1/8"=1'-0"



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EXTERIOR ELEVATIONS

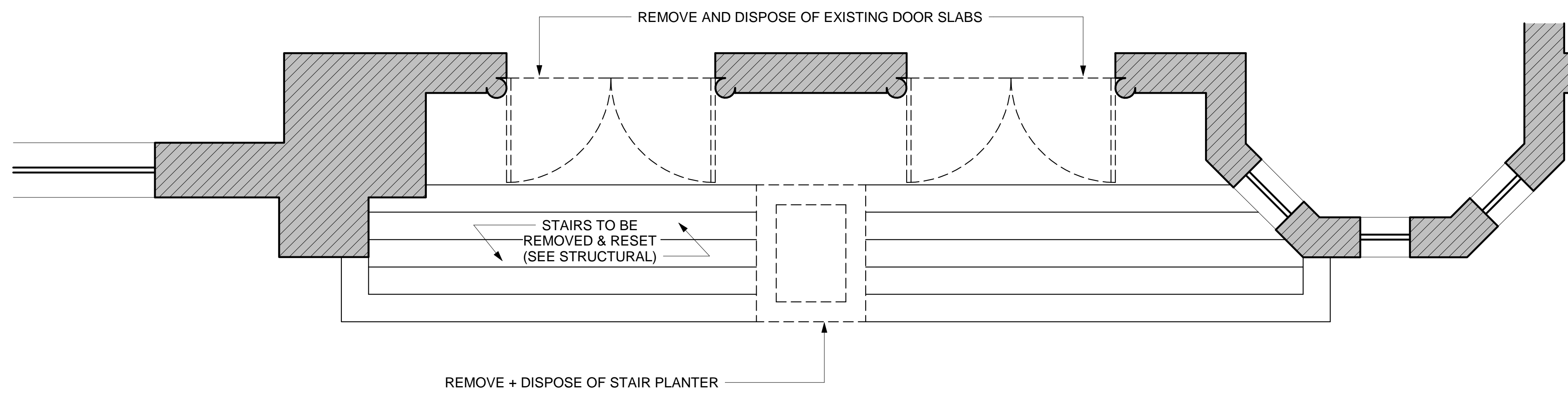
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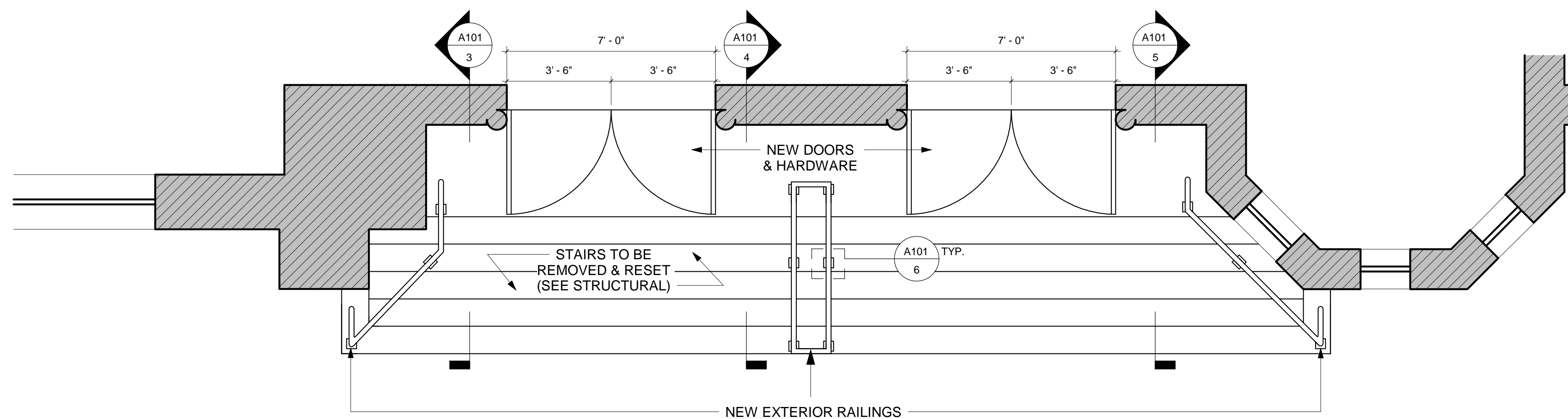


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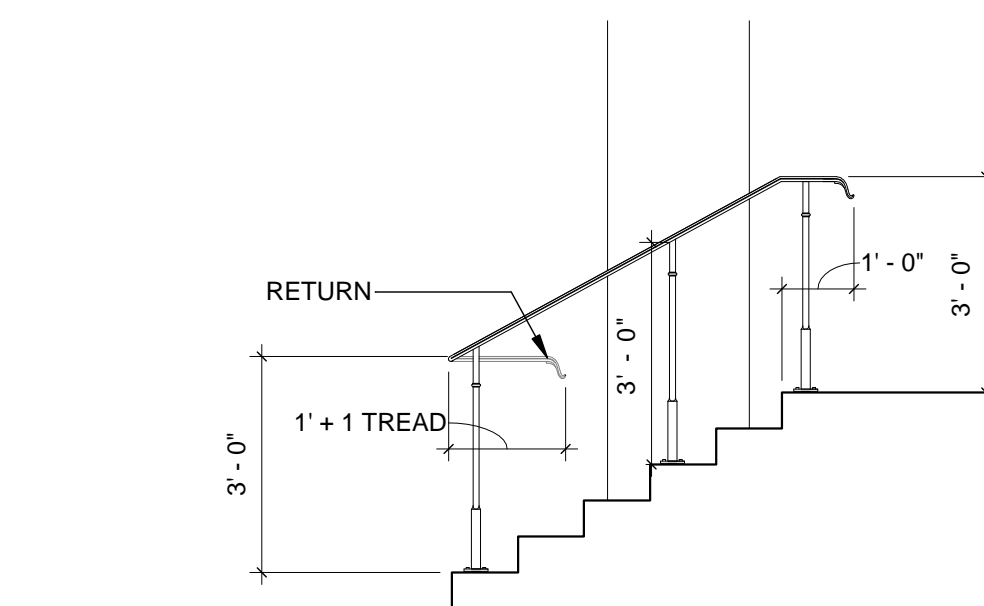




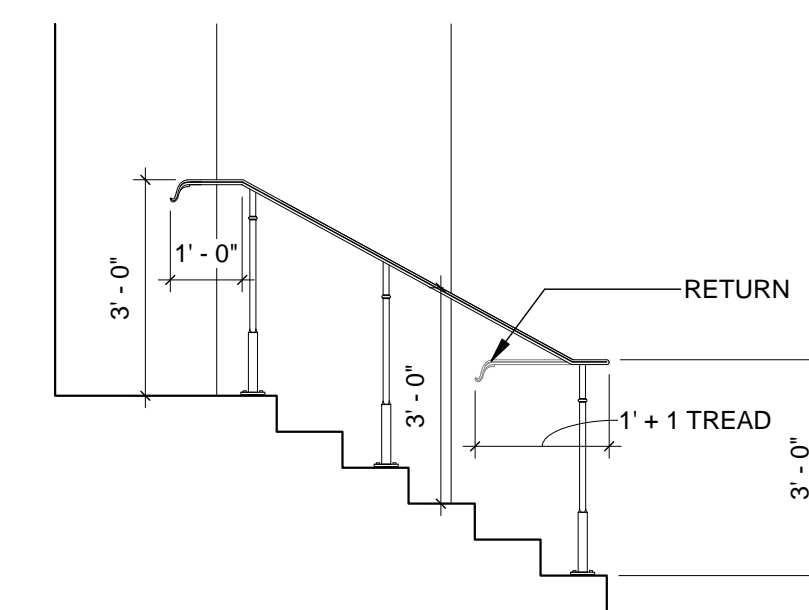
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(EXISTING CONDITIONS & DEMO PLAN)  
3/8" = 1'-0"



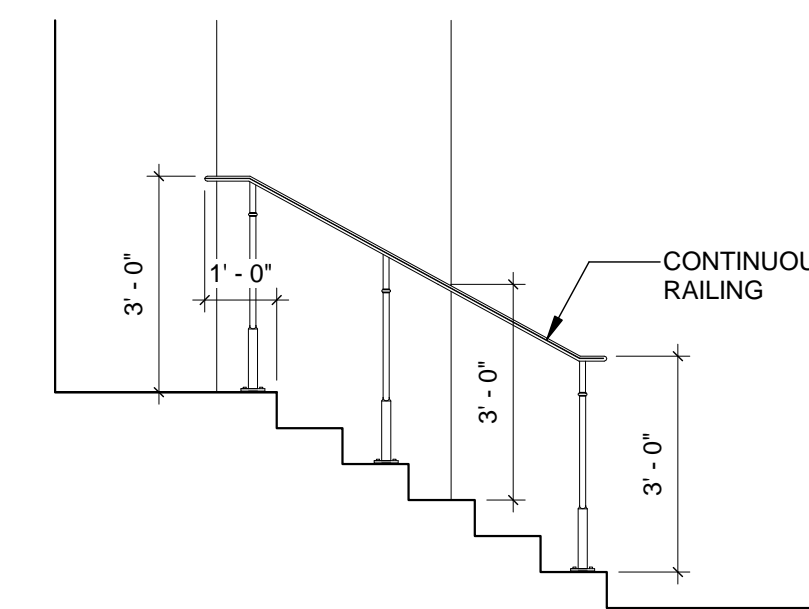
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(NEW WORK PLAN)  
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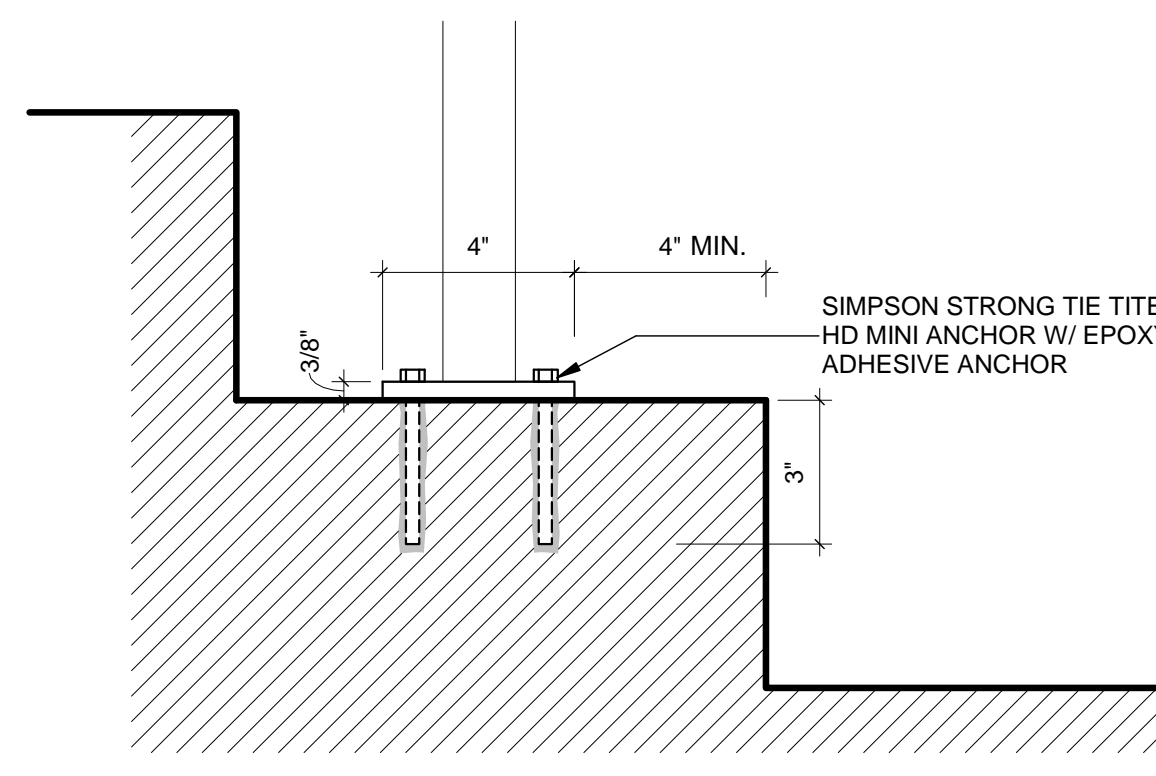
③ RAILING 1  
3/8" = 1'-0"



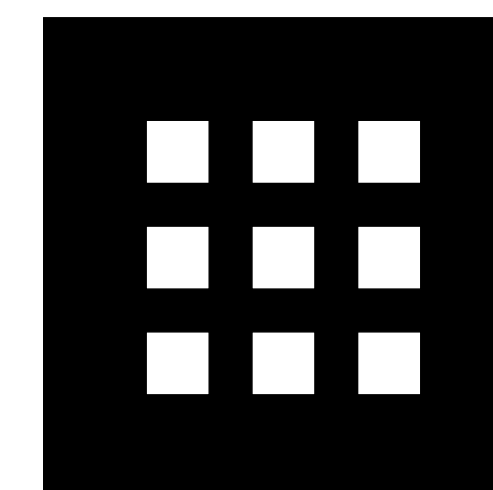
④ RAILING 2  
3/8" = 1'-0"



⑤ RAILING 3  
3/8" = 1'-0"



⑥ RAILING ANCHORAGE (TYP.)  
3" = 1'-0"



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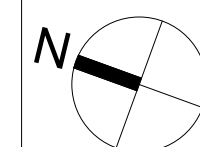
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PHASE 1A  
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Title:  
**ENTRANCE STAIR PLANS  
& DETAILS**

Scale:  
1/4" = 1'-0"



File Name:

Drawn By: RH

Checked By: FD

Job No.: 3704

Date: 09/22/17

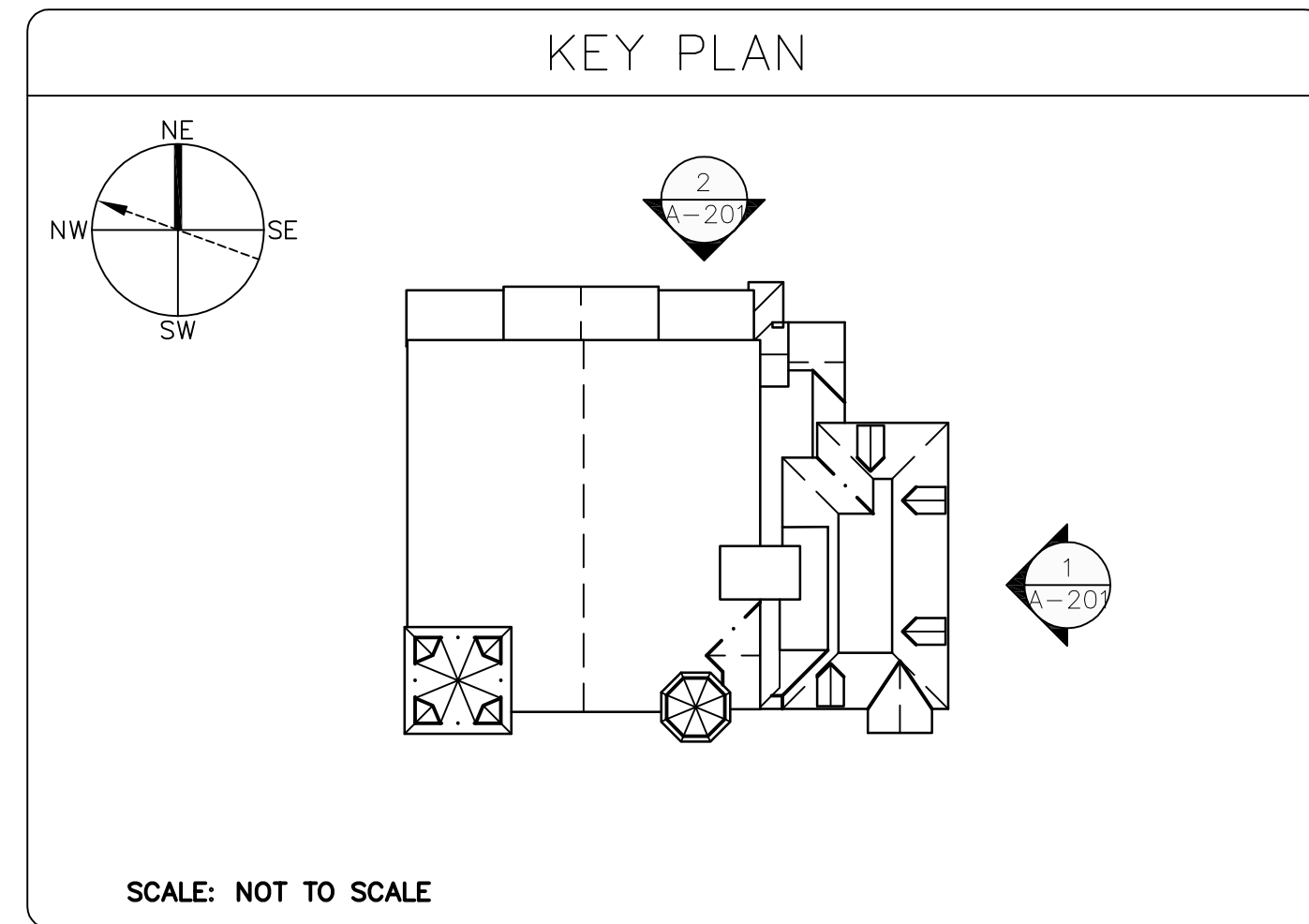
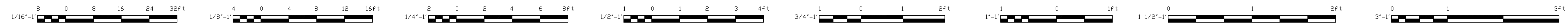


Drawing No.:

**A-101**

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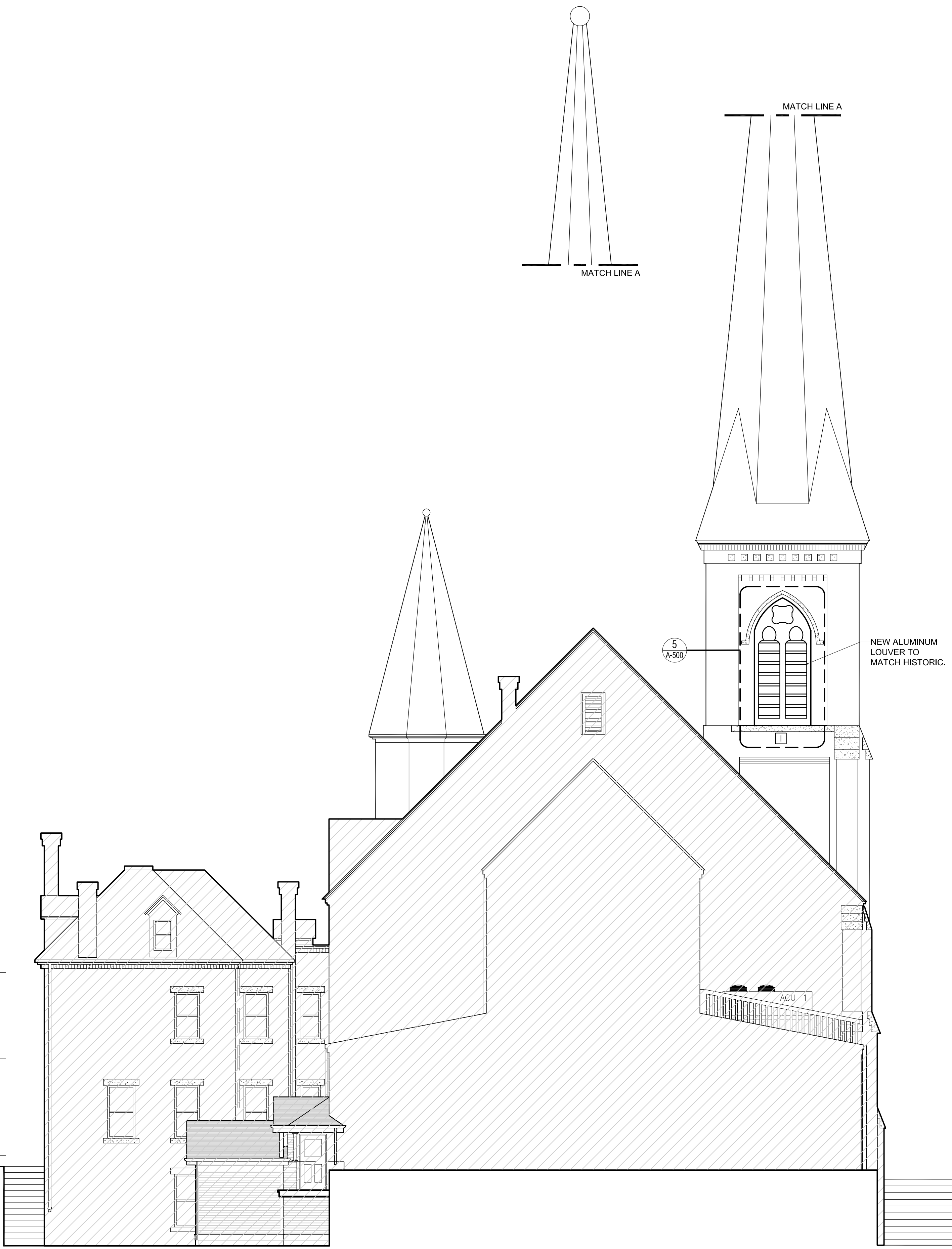
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**GENERAL NOTES**

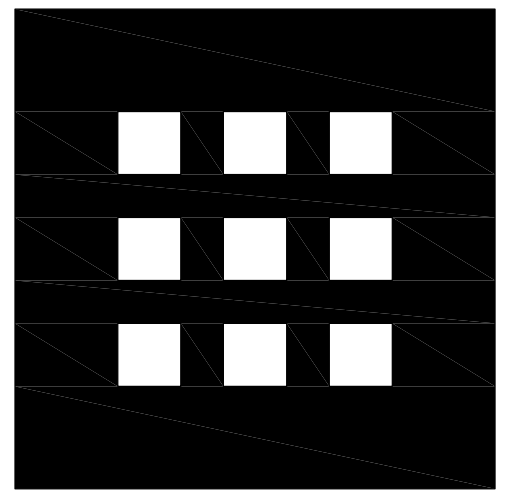
1. REFER TO STRUCTURAL DRAWINGS FOR SCOPE RELATING TO MASONRY, STONE, STAIR AND SPIRE REPAIR/REBUILD.
2. VERIFY SIZE AND LOCATION OF EXISTING OPENINGS POST DEMOLITION
3. PATCH, REPAIR AND RESTORE EXISTING FINISHES AND SURFACES TO "AS NEW CONDITION" AS REQUIRED TO MATCH EXISTING.



**1** EXIST SOUTH-EAST ELEVATION  
SCALE: 1/8"=1'-0"



**2** EXIST NORTH-EAST ELEVATION  
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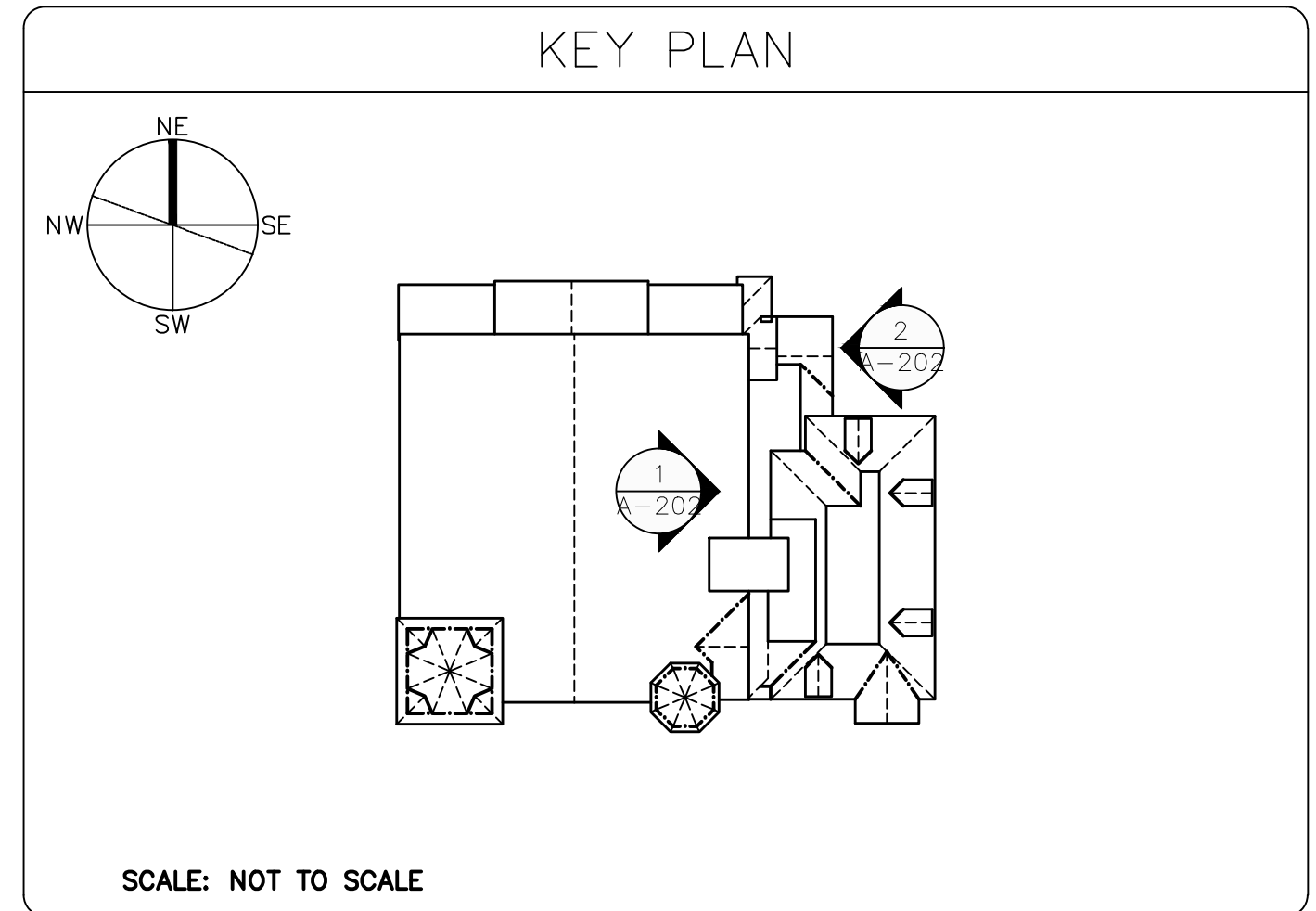
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NEW WORK  
EXTERIOR ELEVATIONS

Scale: 1/8"=1'-0"

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Drawing No.		<b>A-201</b>



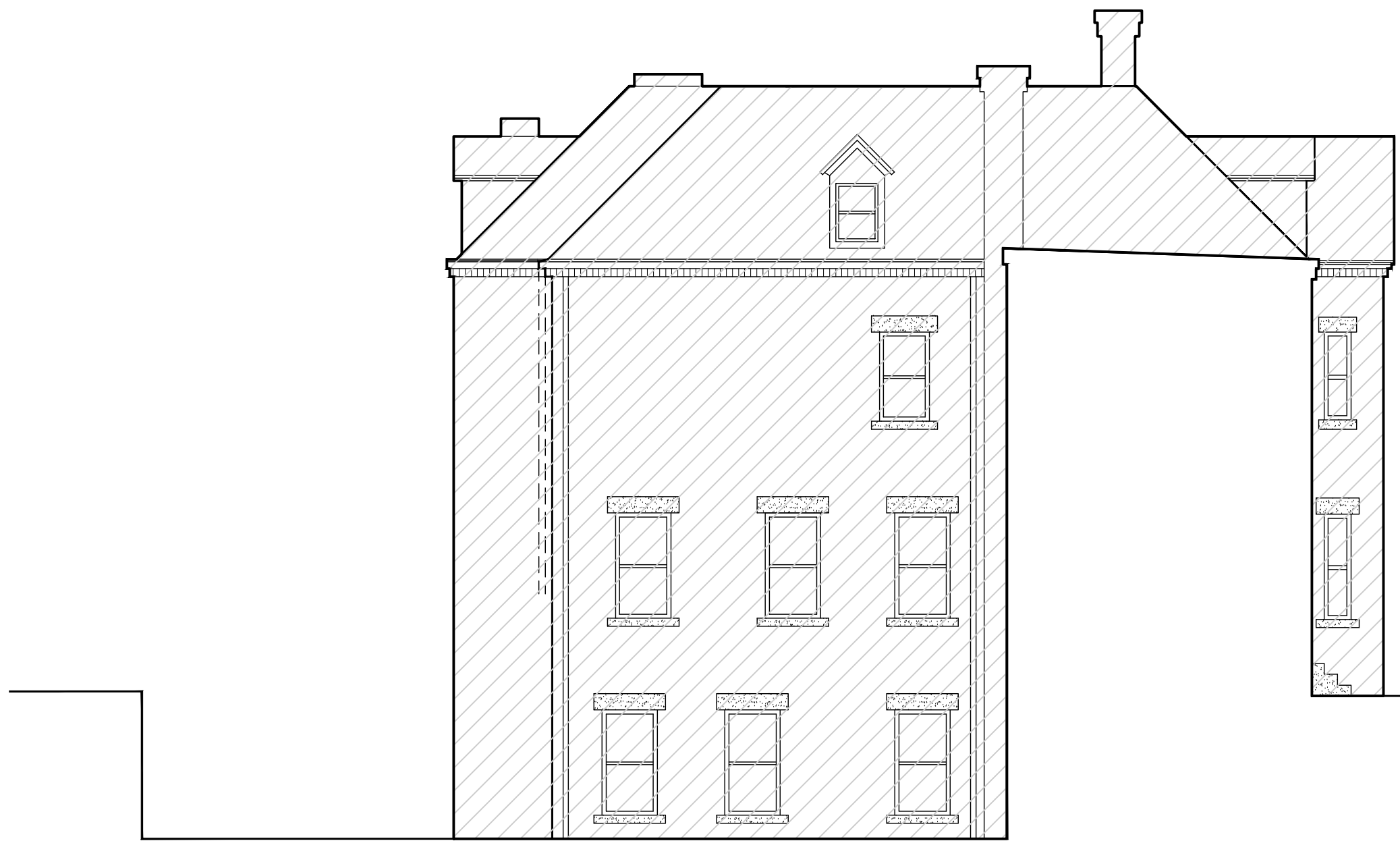
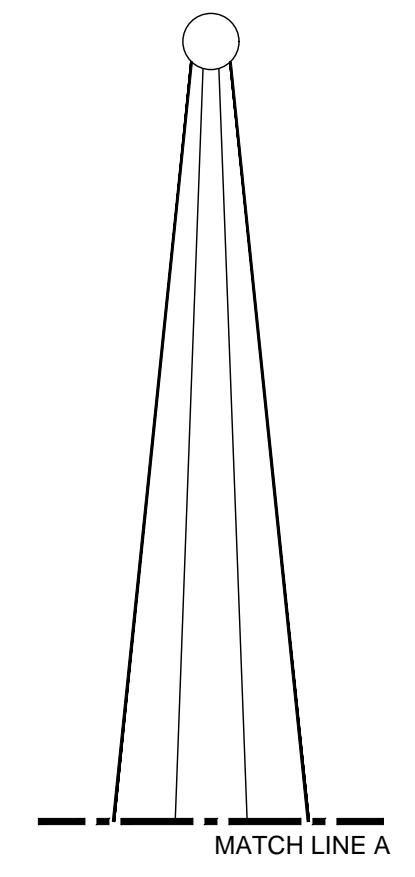


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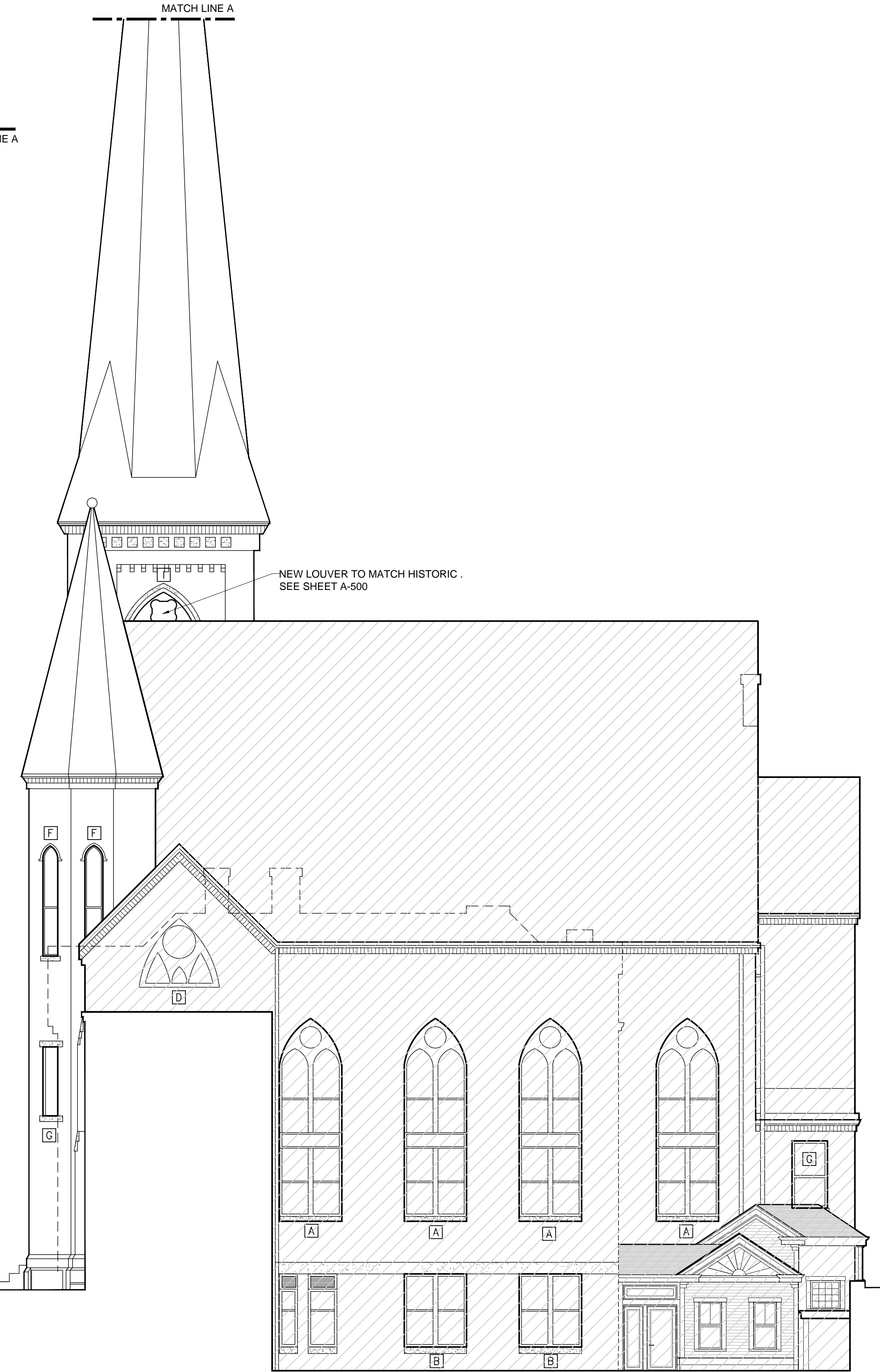
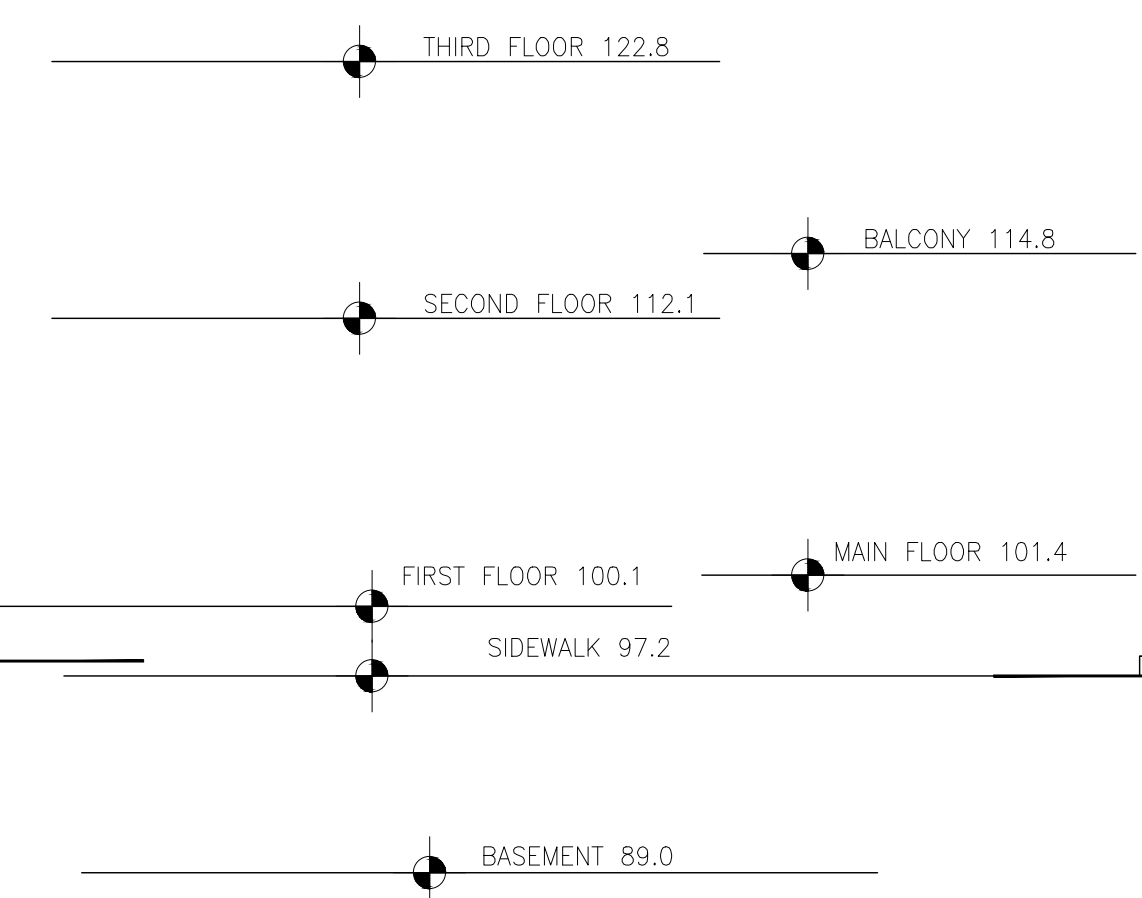
SCOPE OF WORK NOT INCLUDED THIS PHASE

**GENERAL NOTES**

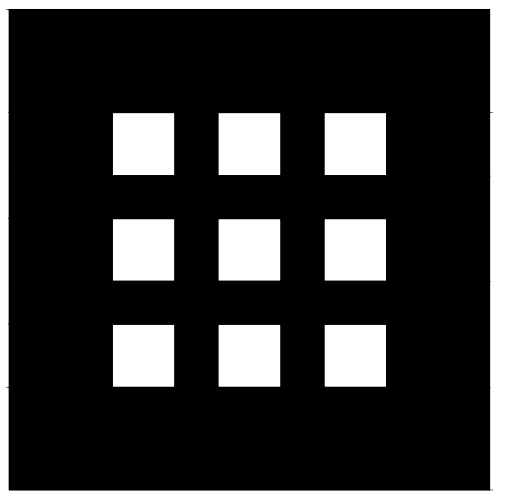
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**1 NORTH-WEST ELEVATION**  
SCALE: 1/8"=1'-0"



**2 SOUTH-EAST ELEVATION**  
SCALE: 1/8"=1'-0"



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Scale: 1/8"=1'-0"

File Name: \_\_\_\_\_

Drawn By: ND

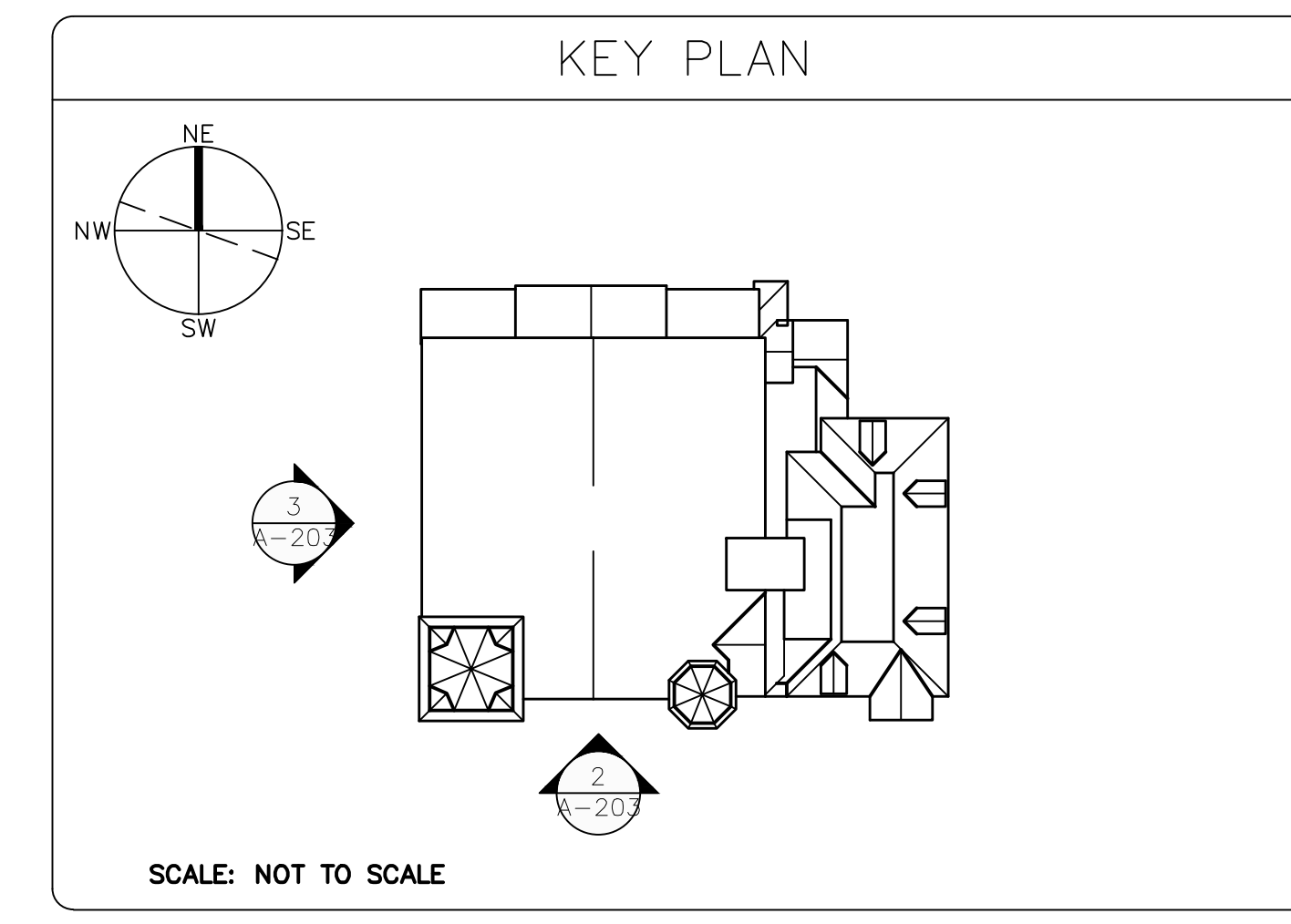
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Job No.: 3704

Date: 9/22/17

Drawing No.: **A-202**



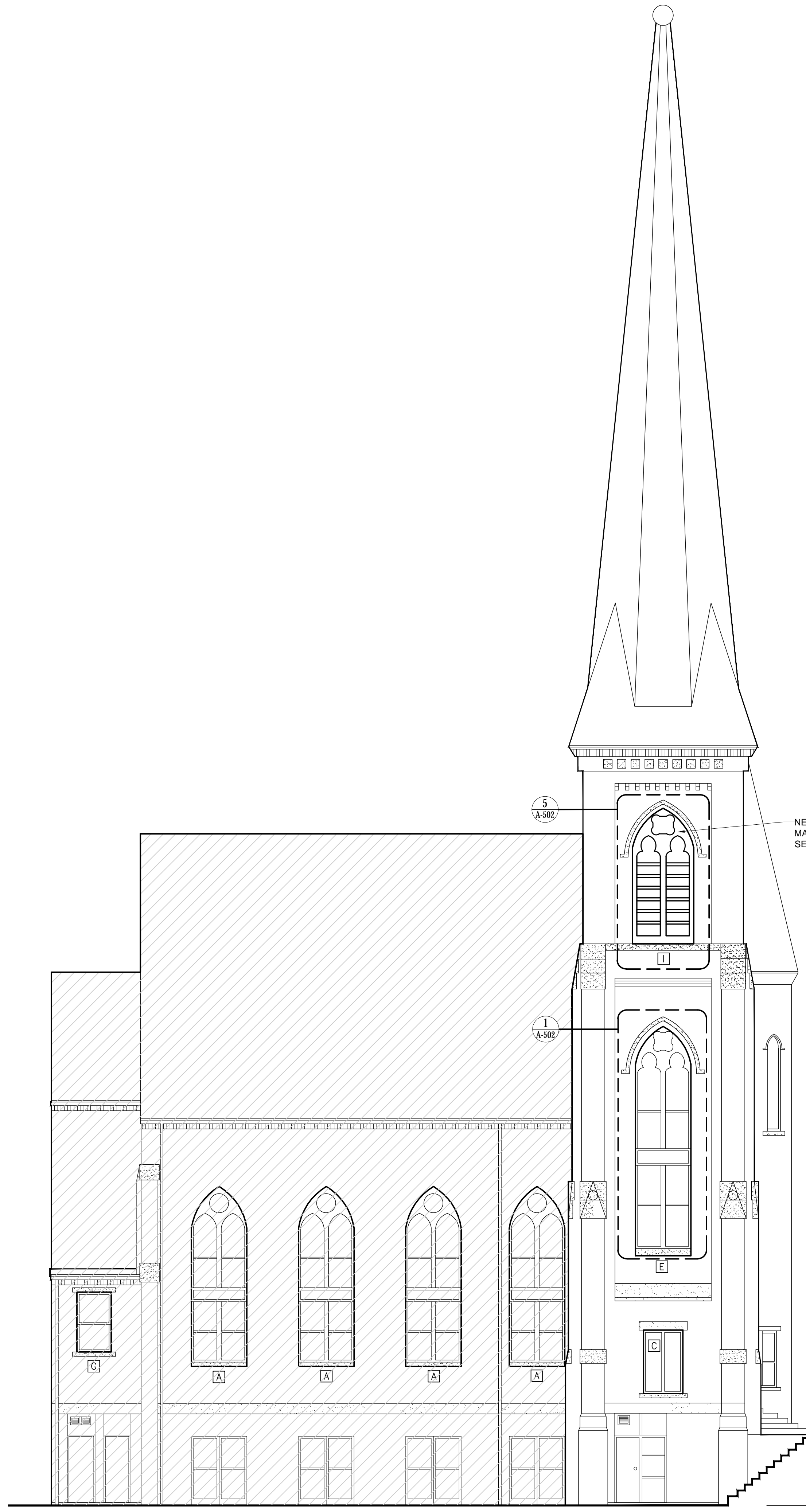


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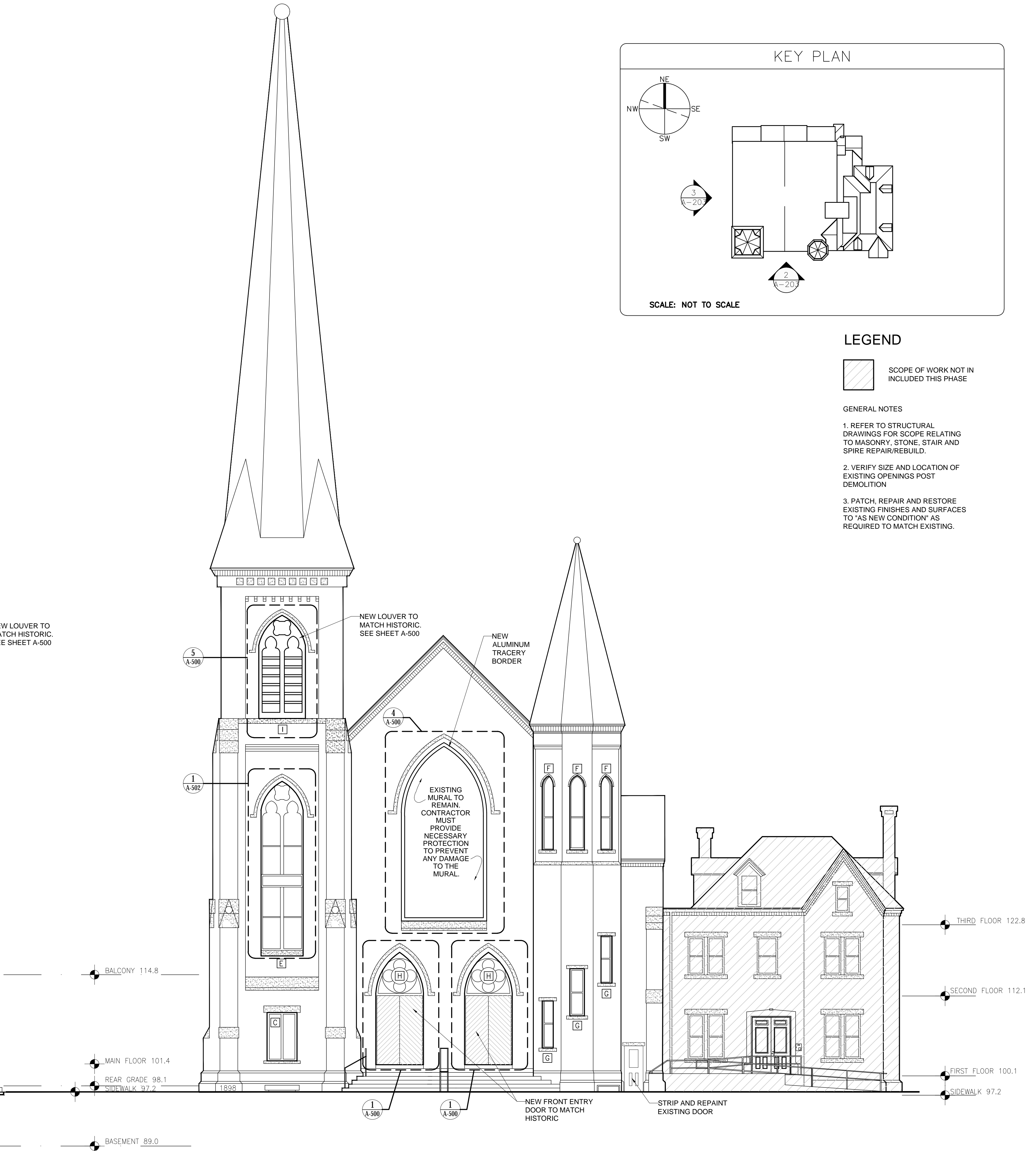
SCOPE OF WORK NOT INCLUDED THIS PHASE

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**1 NORTH-WEST ELEVATION**  
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Title:  
**NEW WORK  
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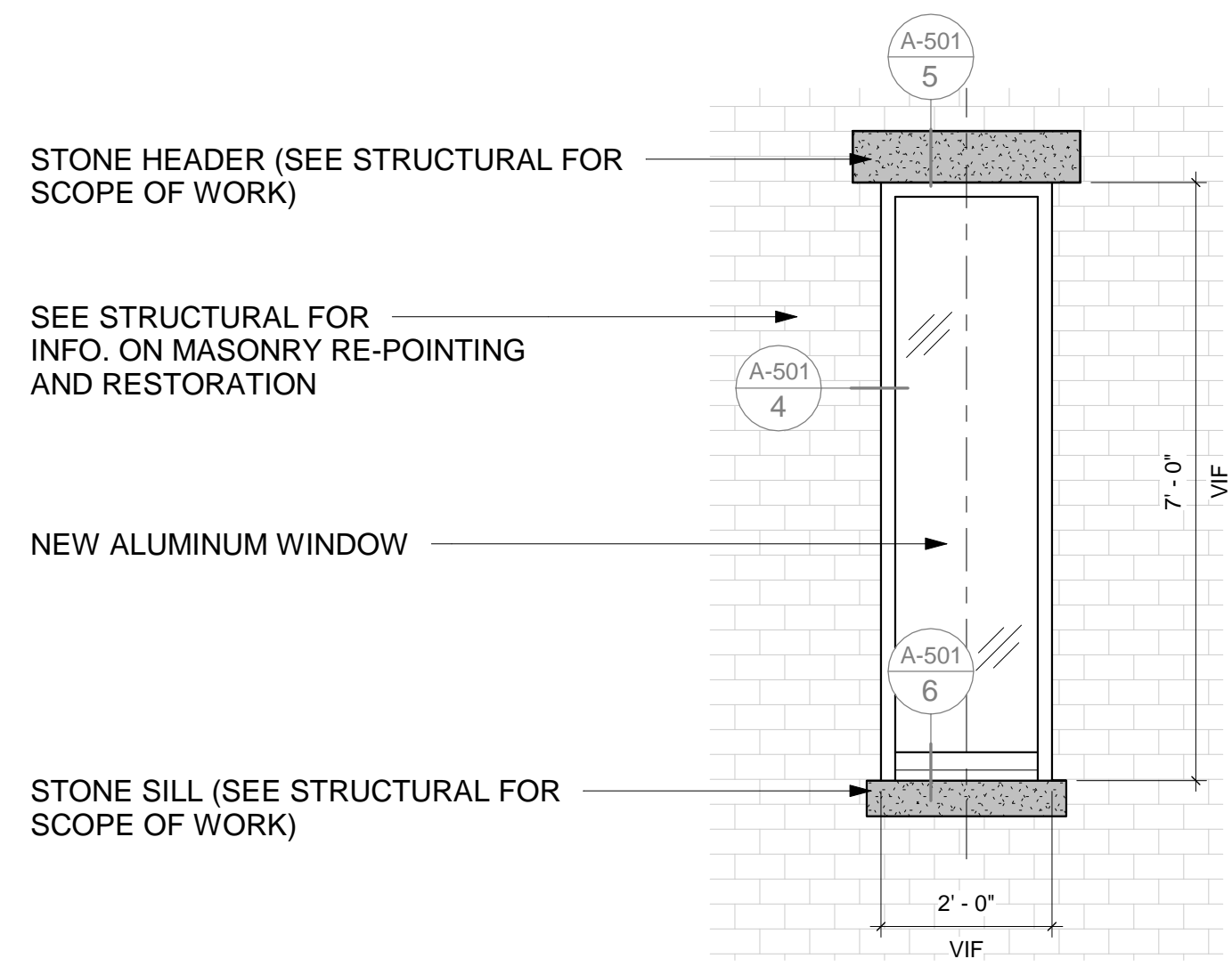
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Drawing No.: **A-203**

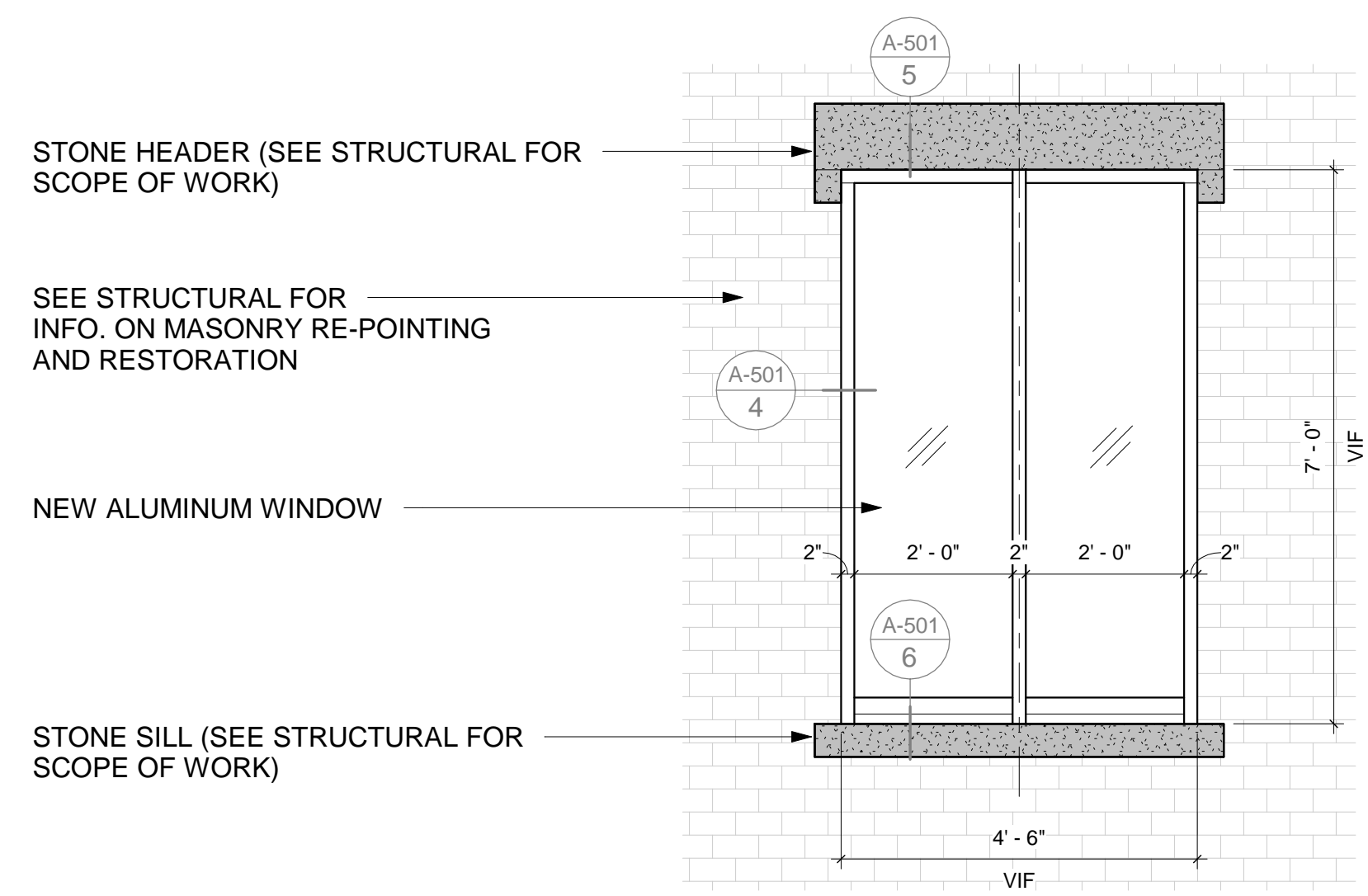




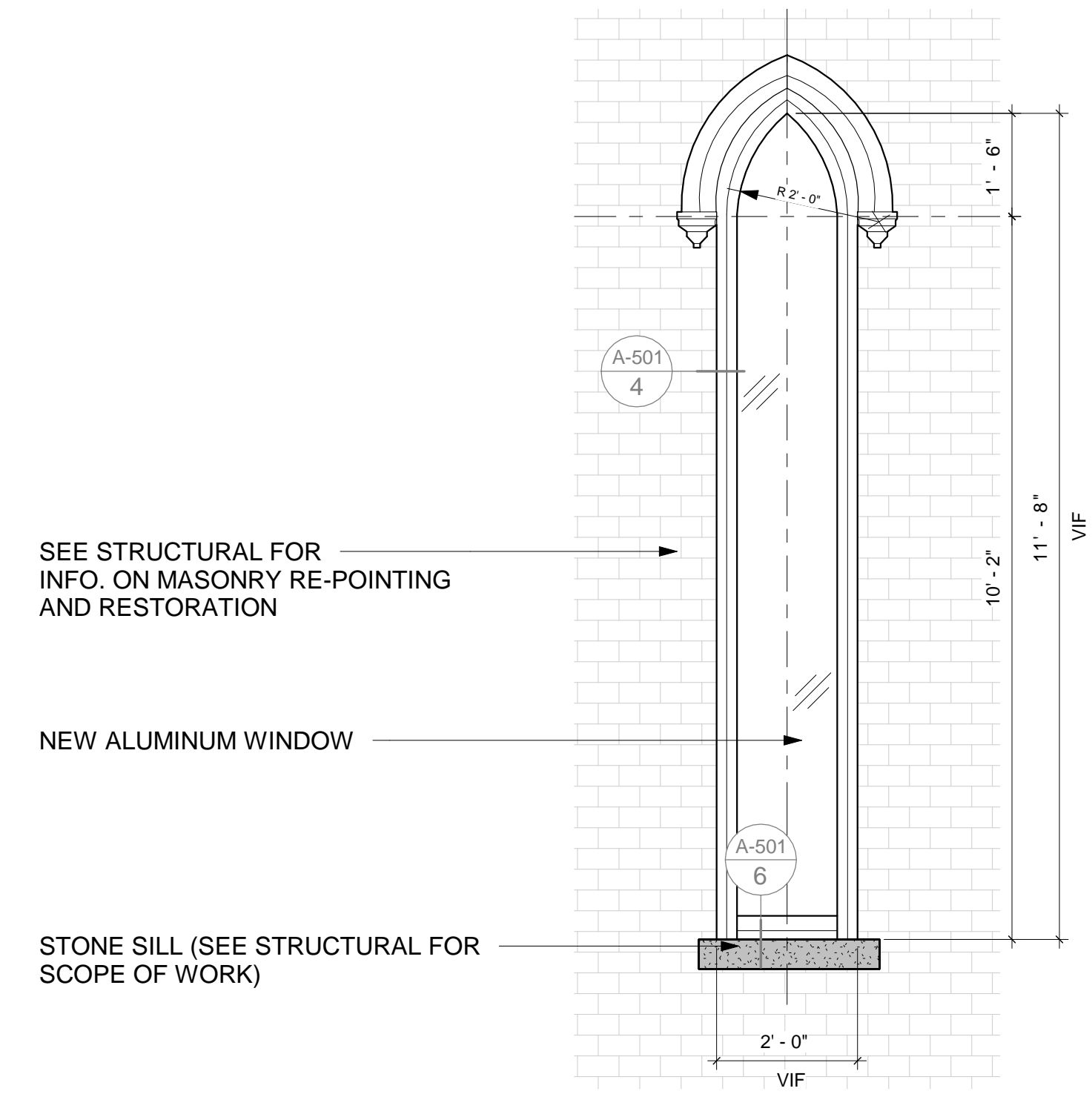




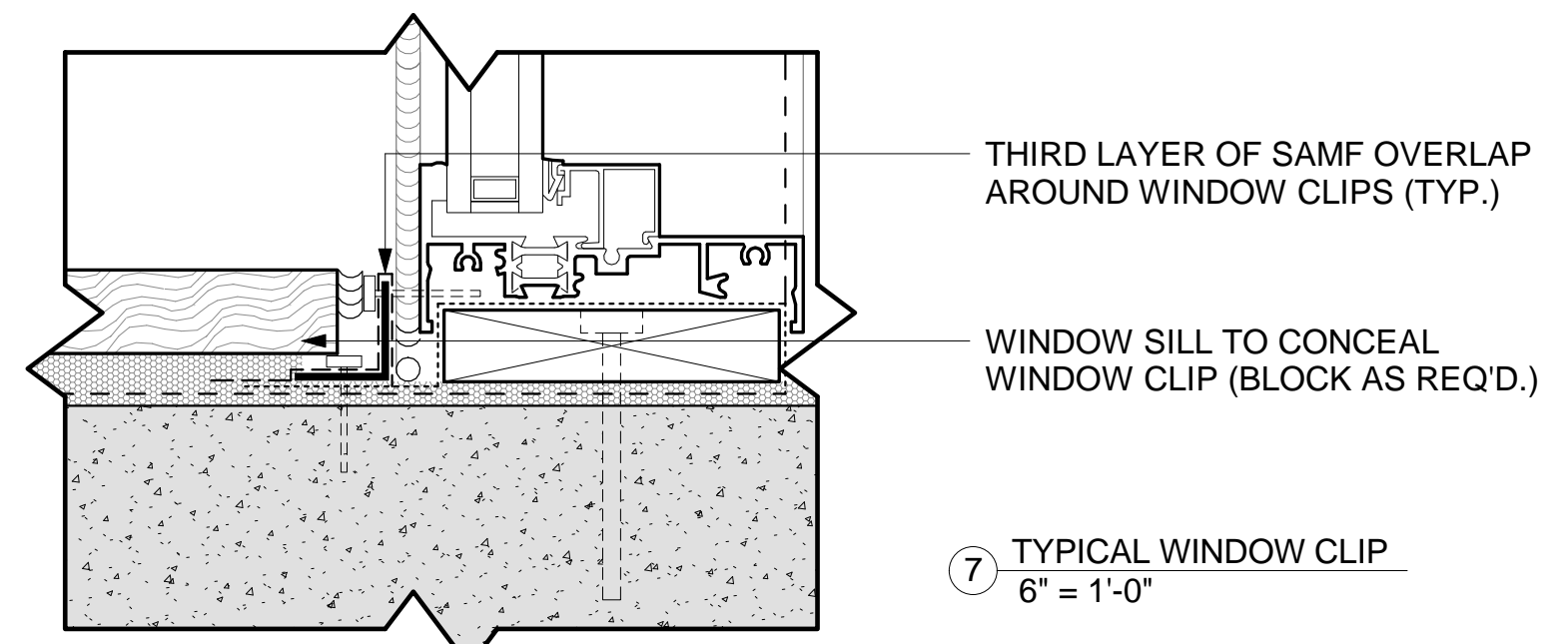
3 WINDOW "G" ELEVATION  
1/2" = 1'-0"



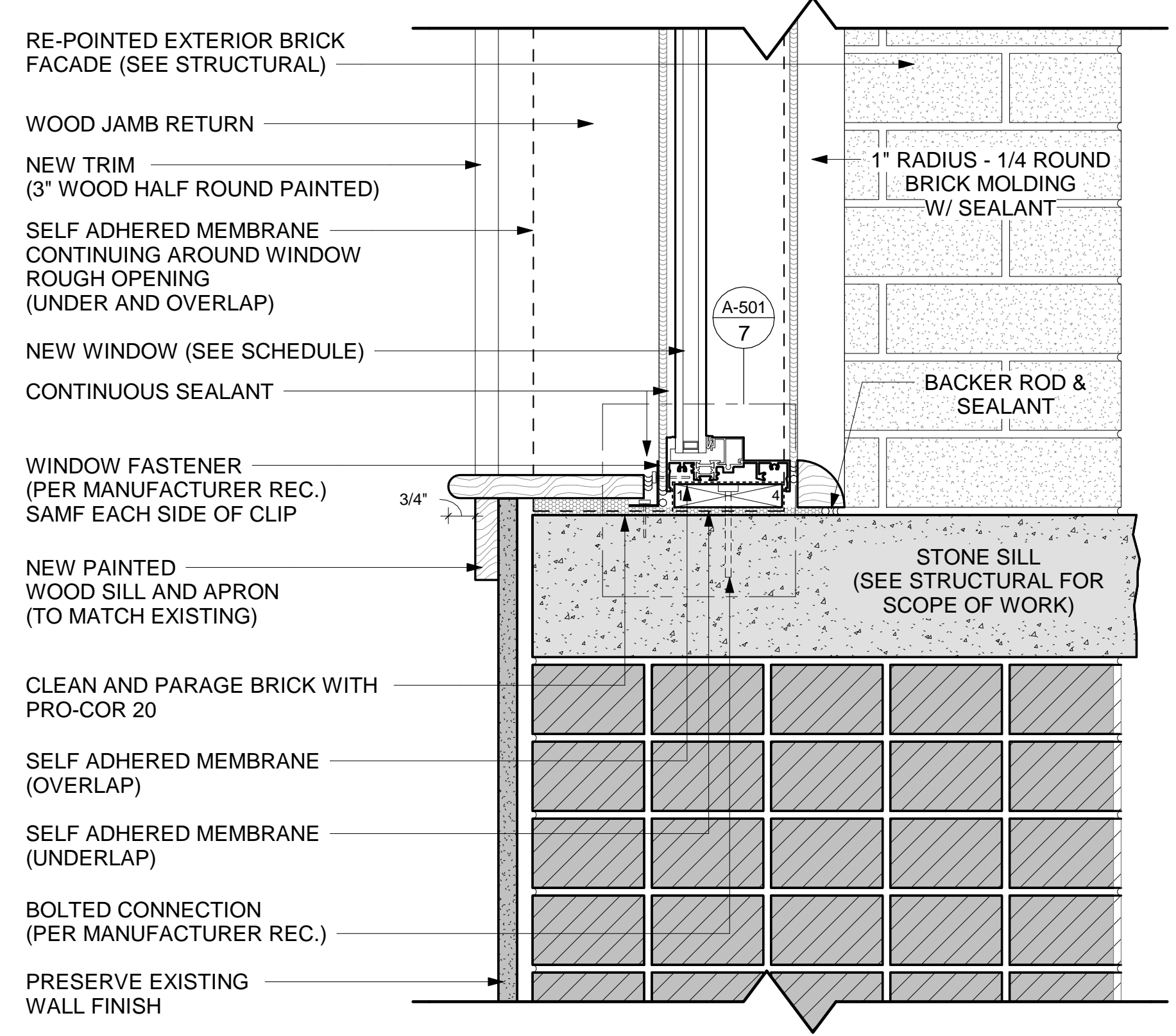
2 WINDOW "C" ELEVATION  
1/2" = 1'-0"



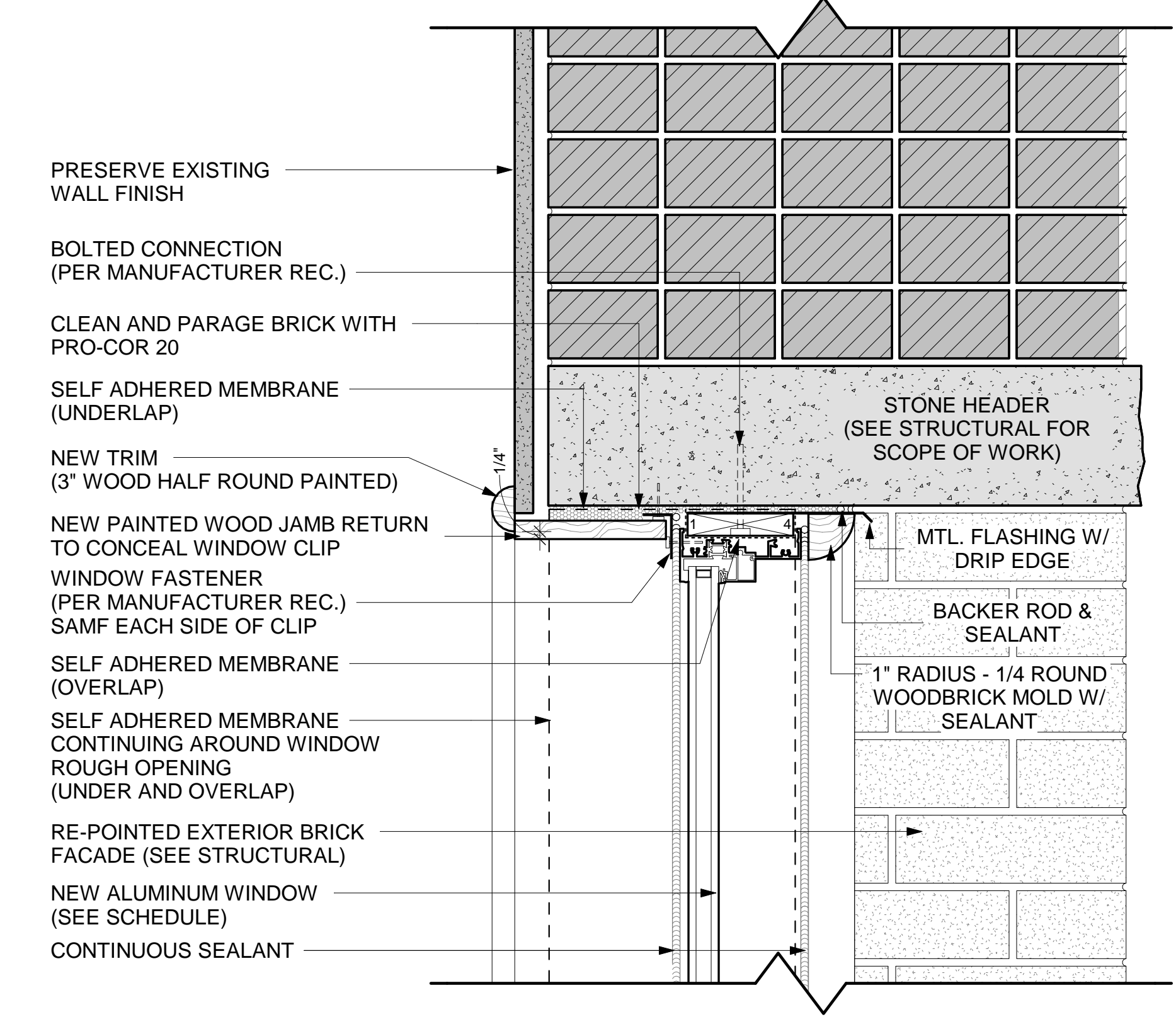
1 WINDOW "F" ELEVATION  
1/2" = 1'-0"



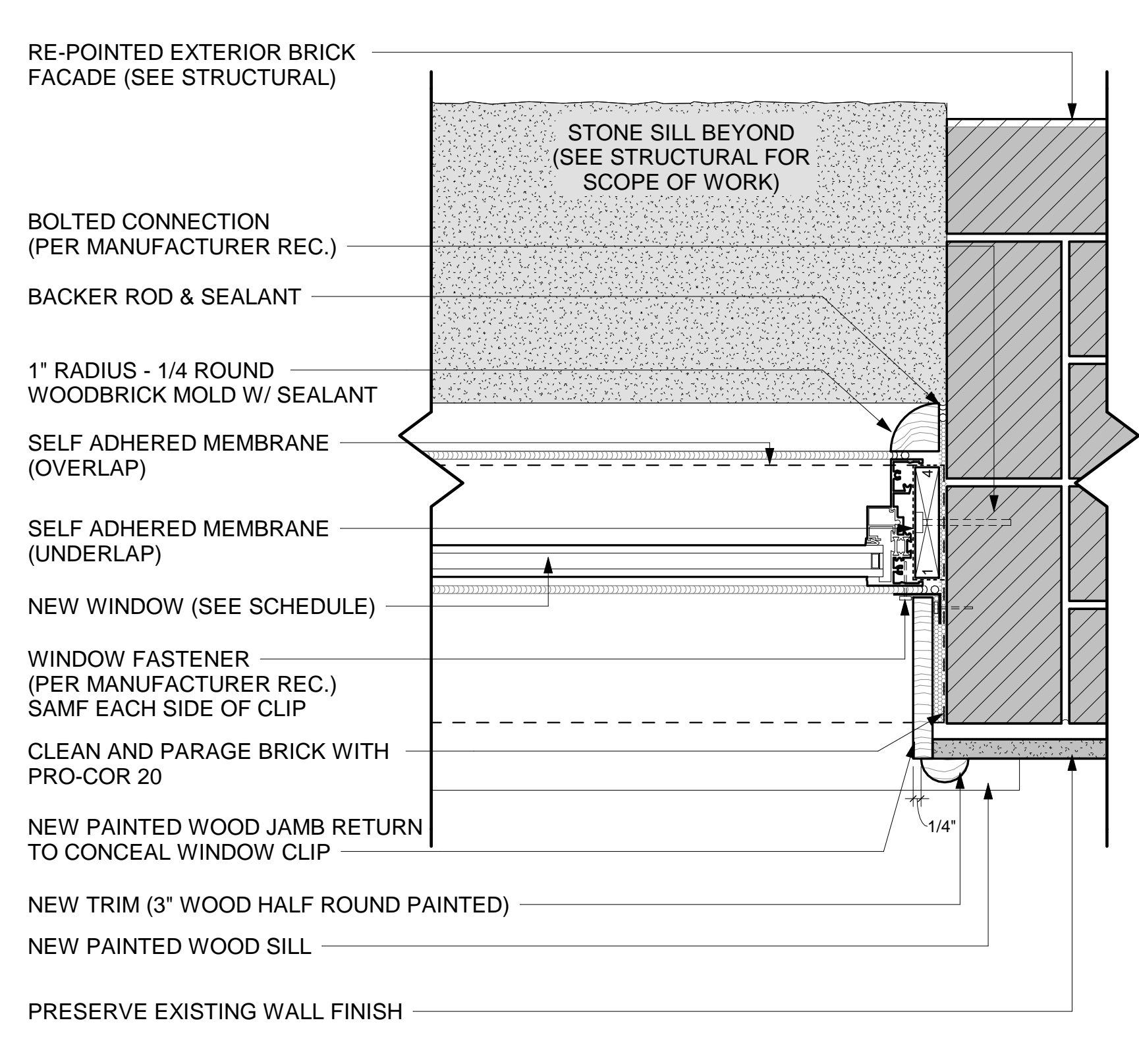
7 TYPICAL WINDOW CLIP  
6\"/>



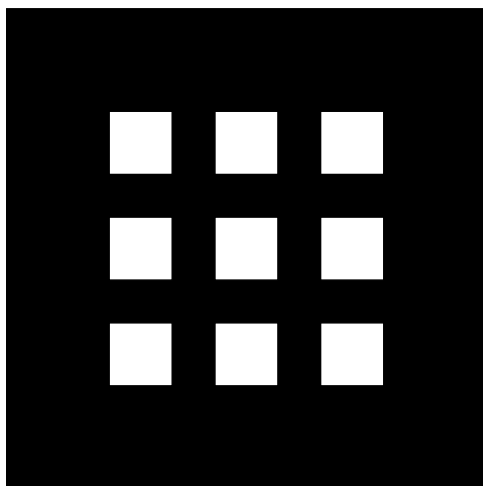
6 TYPICAL WINDOW SILL DETAIL  
3\"/>



5 TYPICAL WINDOW HEAD DETAIL  
3\"/>



4 TYPICAL WINDOW JAMB DETAIL  
3\"/>



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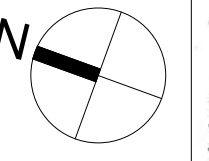
No.	Date	Revision

Project:  
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STREET  
BOSTON, MA

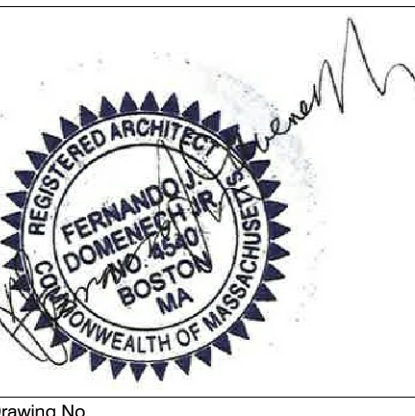
PHASE 1A  
CONSTRUCTION DOCUMENTS

Title:  
**TYPICAL WINDOW  
DETAILS**

Scale: 1/4" = 1'-0"

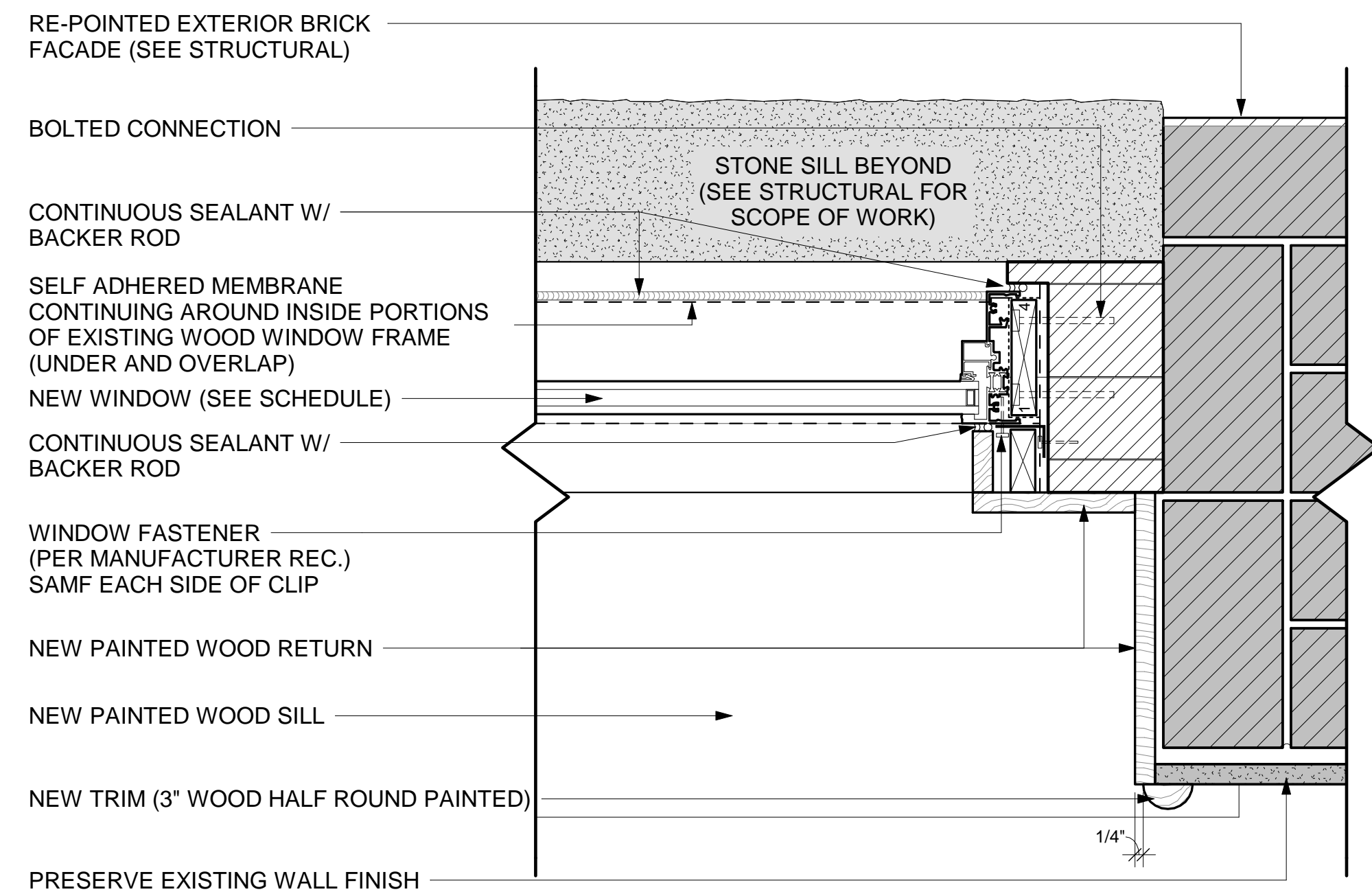


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Drawn By: RH  
Checked By: FD  
Job No.: 3704  
Date: 09/22/17

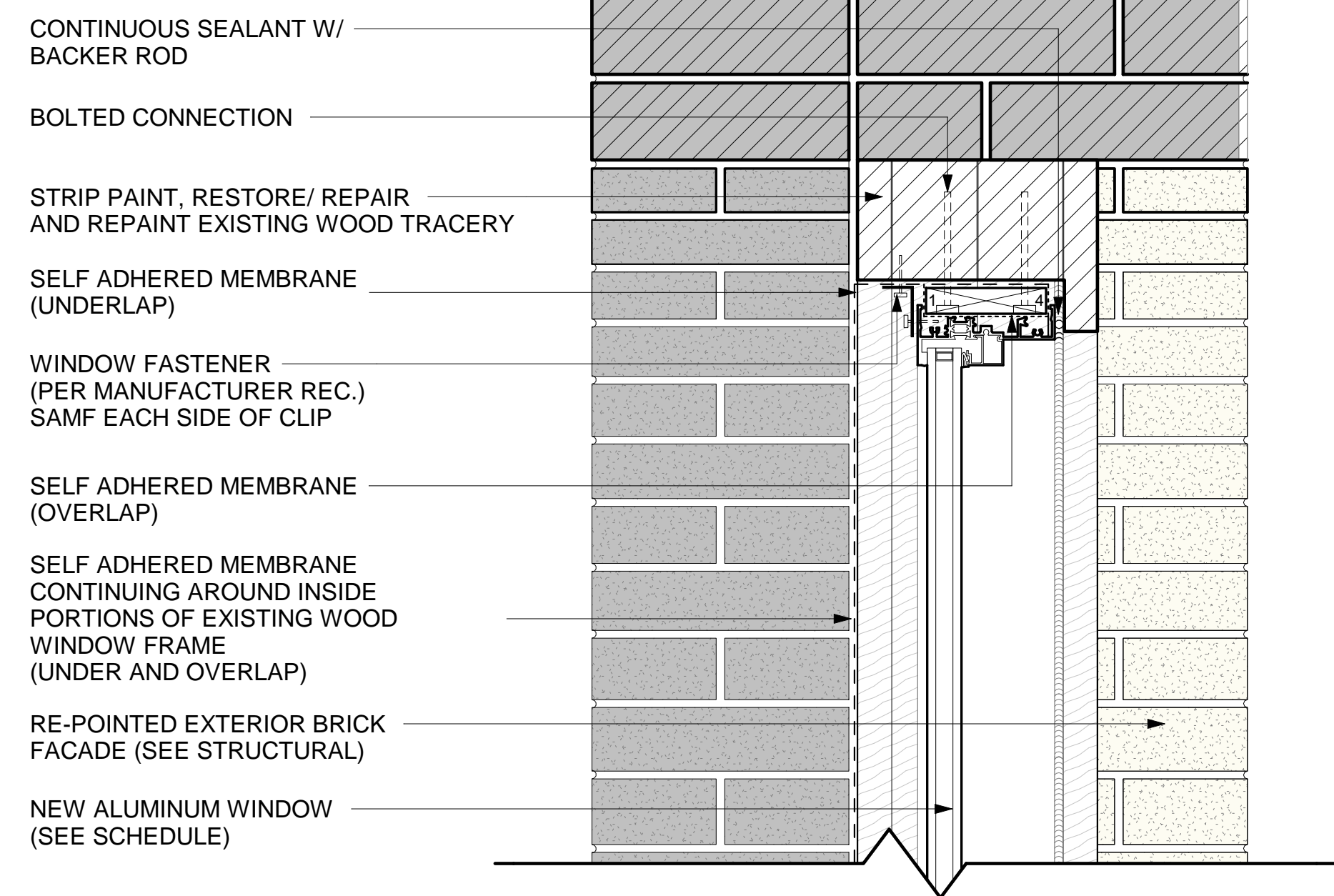


**A-501**

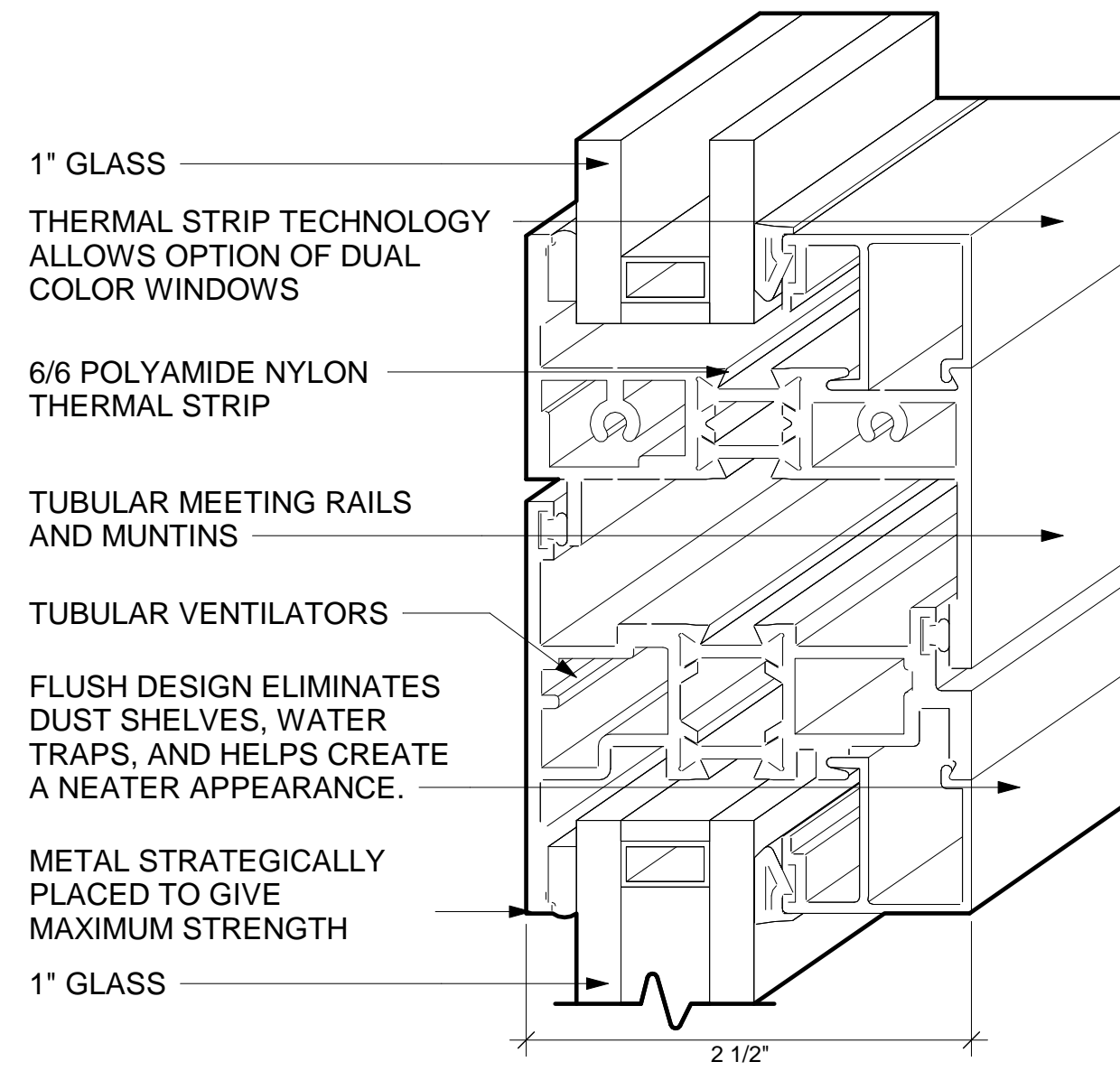




3 TYPICAL ARCHED WINDOW JAMB  
DETAIL  
3" = 1'-0"



5 TYPICAL ARCHED WINDOW HEAD  
DETAIL  
3" = 1'-0"



- Full 2 1/2" deep frame with double tubular sash, muntins and intermediate rails. (Consult factory for full specifications)

- Thermal Strip technology for added strength and Dual Color finishing capability.

- All corners are fastened on each side of the thermal break. Sash corners are mitered, heavy angle reinforced and hydraulically crimped and epoxy welded.

- Flush design eliminates dust shelves and water traps and helps create a clean, neat appearance.

- Each ventilator has two wear resistant nylon glides independent of the hinge to insure maximum alignment and weather tightness.

2 TYPICAL MUNTIN DETAIL DIAGRAM  
12" = 1'-0"

(1) NEW ALUMINUM WINDOW INSTALLED WITHIN EXISTING WOOD FRAME

PROFILE OFF NEW WINDOW BEHIND EXISTING WD FRAME + TRACERY

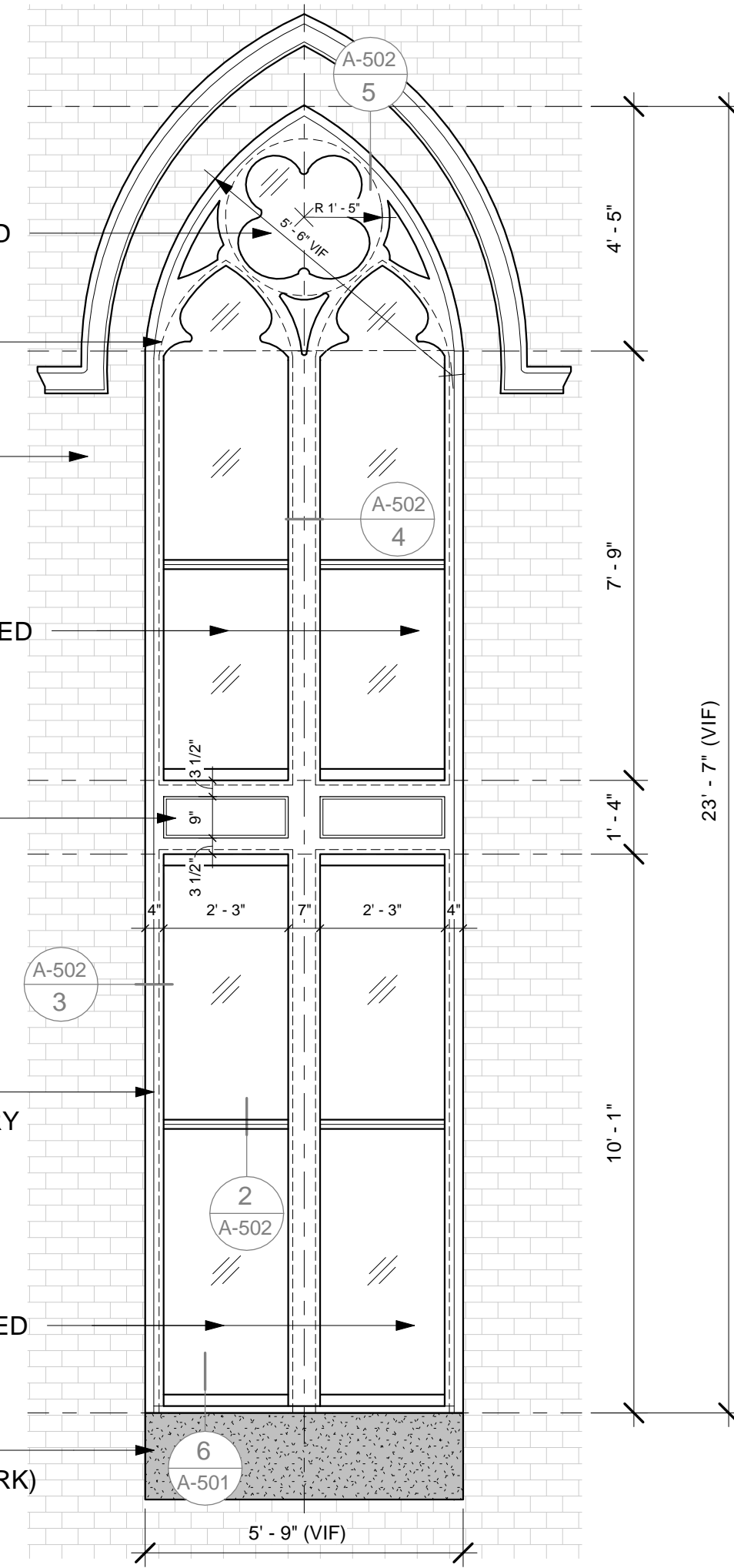
(2) NEW ALUMINUM WINDOWS INSTALLED WITHIN EXISTING WOOD FRAME

BLOCK IN BETWEEN WINDOWS AS REQUIRED

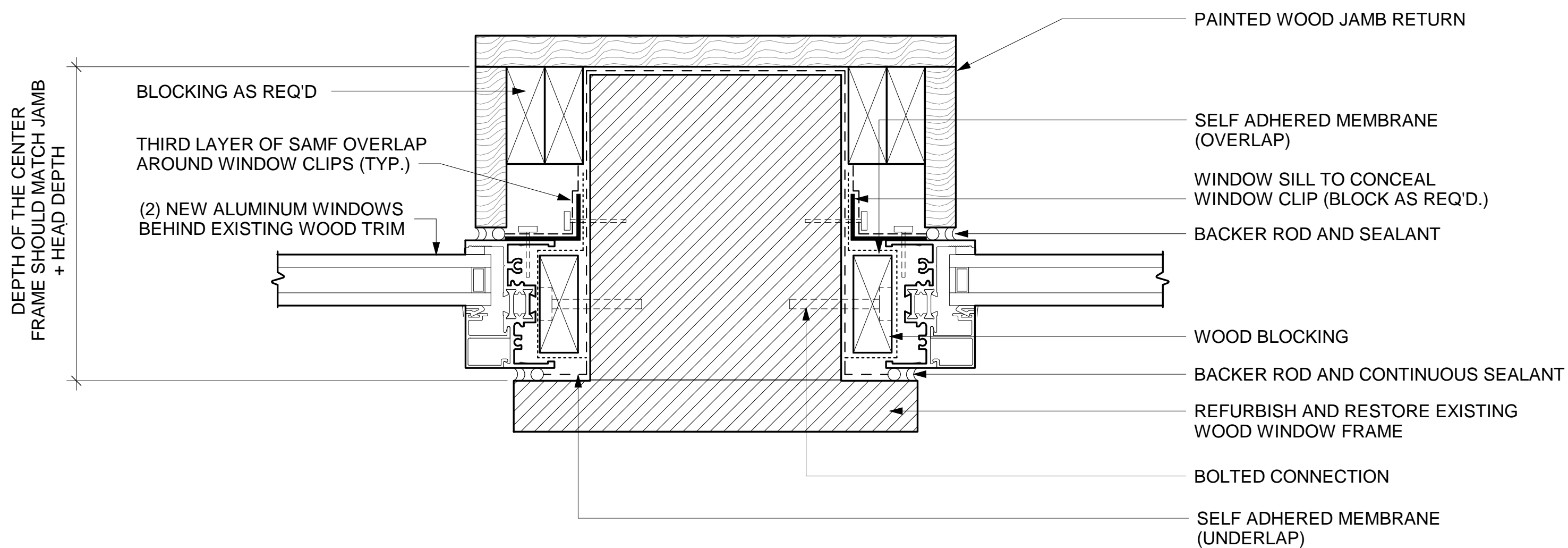
STRIP PAINT, RESTORE/ REPAIR AND REPAINT EXISTING WOOD TRACERY

(2) NEW ALUMINUM WINDOWS INSTALLED WITHIN EXISTING WOOD FRAME

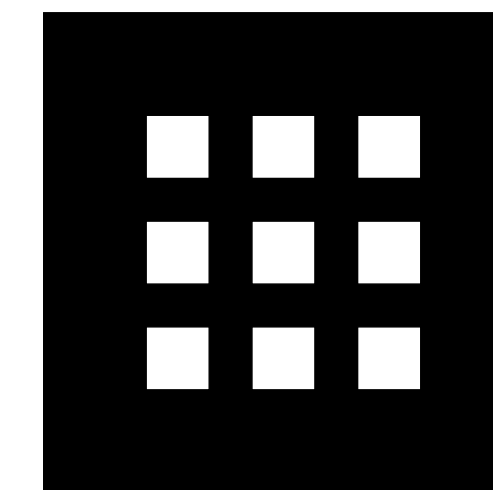
STONE SILL (SEE STRUCTURAL FOR SCOPE OF WORK)



1 ARCHED WINDOW ELEVATION  
3/8" = 1'-0"



4 TYPICAL ARCHED WINDOW CENTER  
JAMB  
6" = 1'-0"



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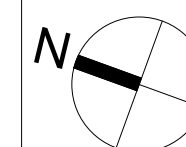
No. Date Revision

Project:  
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PHASE 1A  
CONSTRUCTION DOCUMENTS

Title:  
TYPICAL ARCHED  
WINDOW DETAILS

Scale:  
1/4" = 1'-0"



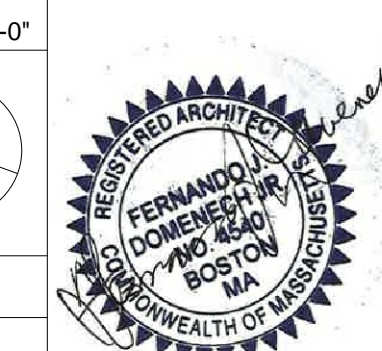
File Name:

Drawn By:  
RH

Checked By:  
FD

Job No.:  
3704

Date:  
09/22/17



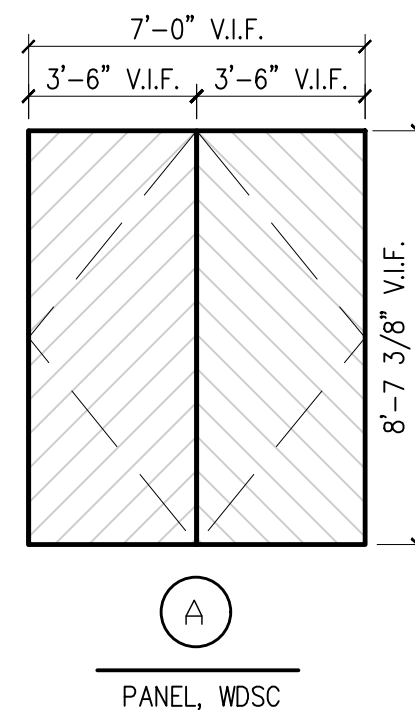
Drawing No.  
**A-502**

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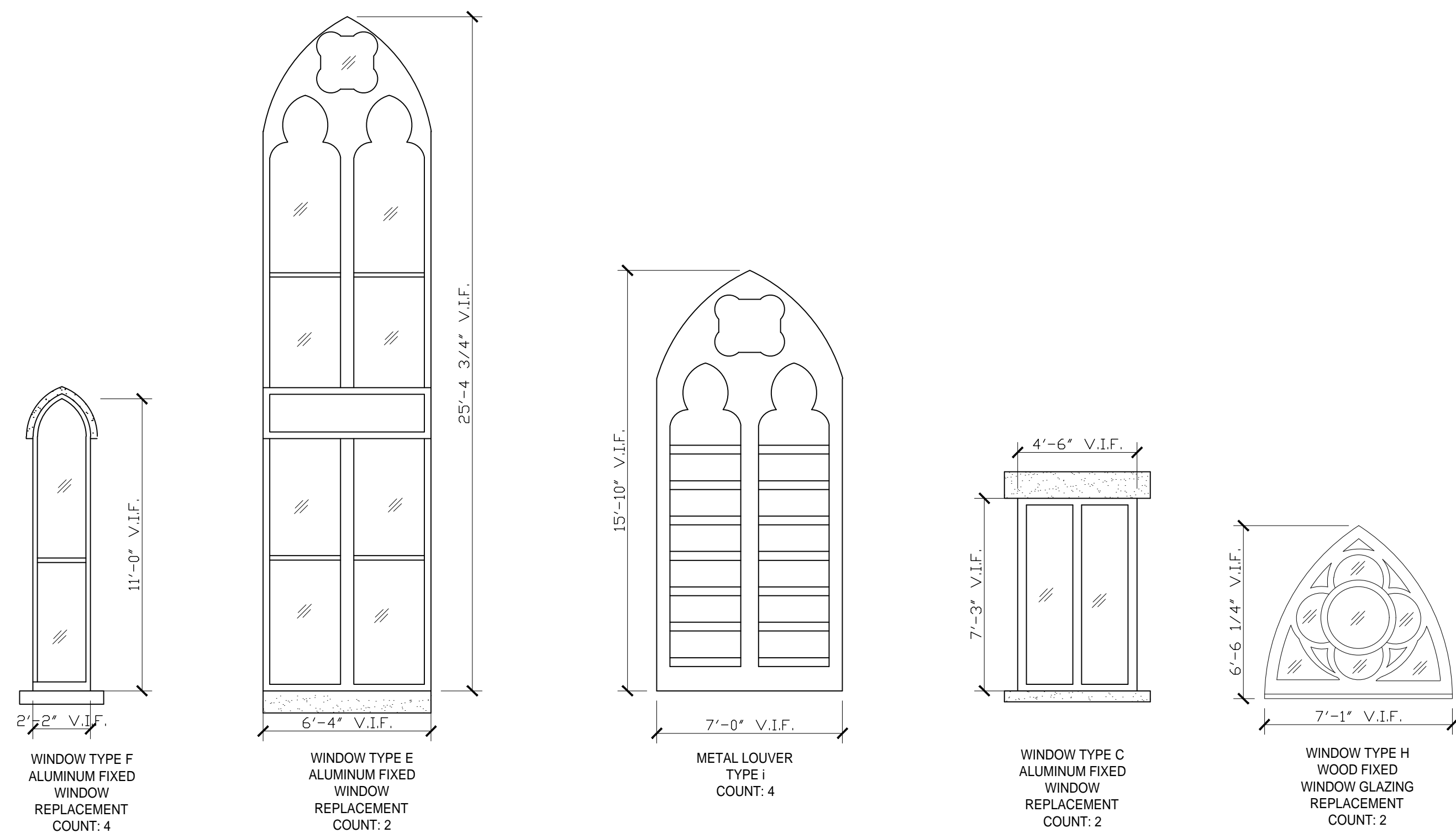


DOOR SCHEDULE									
LOCATION	NO.	TYPE	SIZE			DOOR MAT.	FRAME MAT./TYPE	HARDWARE SET	FINISH
			WIDTH	HEIGHT	THICKNESS				
EXTERIOR ENTRY	E01	A	7'-0"	7'-0"	1 3/4"	WDSC	EXISTING	1	CLEAR STAINED POLY
EXTERIOR ENTRY	E02	A	7'-0"	7'-0"	1 3/4"	WDSC	EXISTING	1	CLEAR STAINED POLY

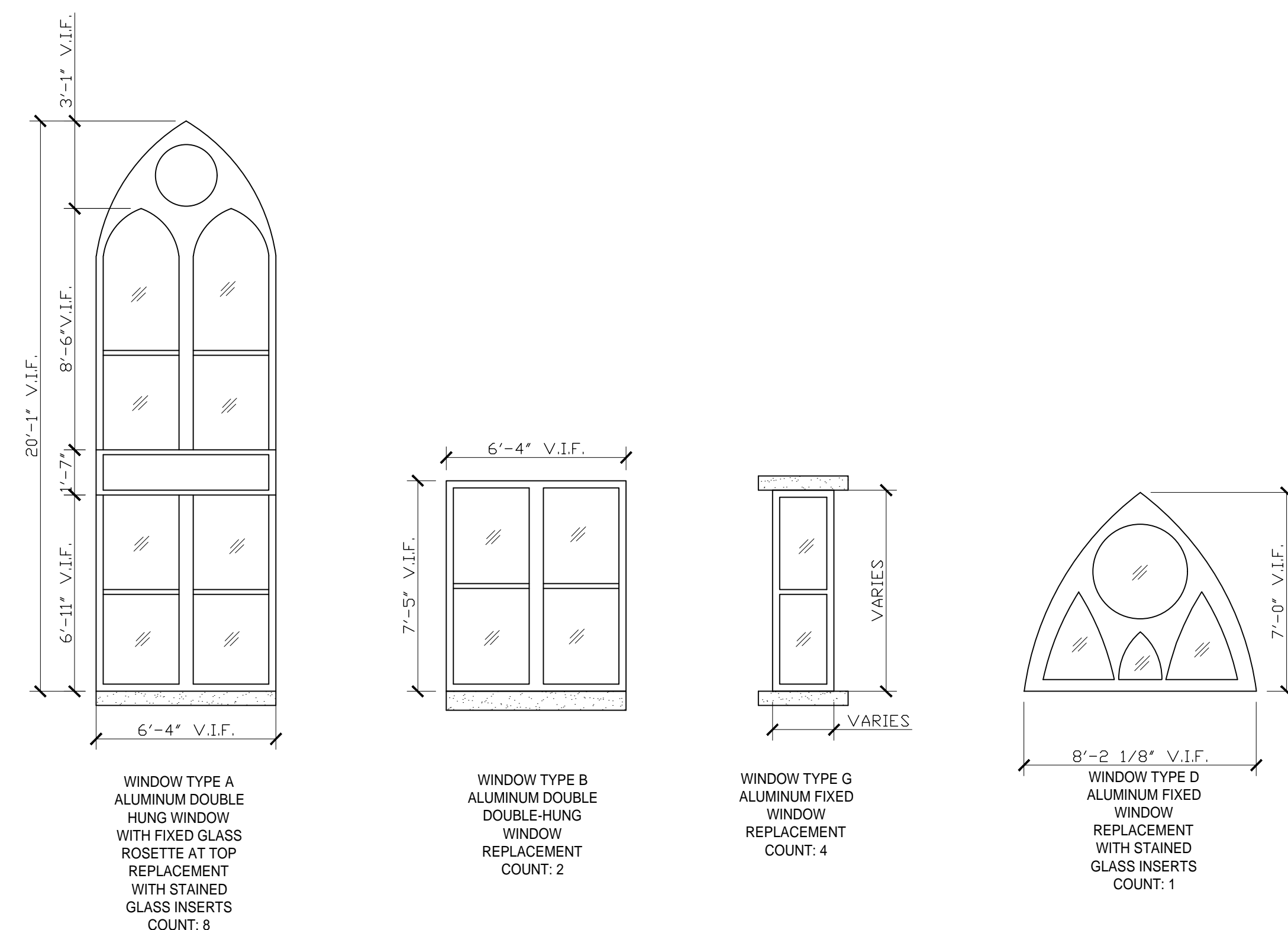


HARDWARE SCHEDULE					
HARDWARE	HARDWARE SET	MANUFACTURER	MODEL NUMBER	FINISH	REMARKS
CRASH BAR/ LOCK/PULL	1	YALE	1 each: 1530-L8F x AU673F x RHR x 722, plus 1 each 1510F x AU635F x LHR x 722	BLACK OXIDIZED BRONZE, OIL RUBBED	
CLOSER	1	SHIELD SECURITY	#801202	BRONZE	
HINGE	1	BALDWIN	#1045.402	OIL RUBBED BRONZE	
HINGE STRAP	1	ROCKY MOUNTAIN	#OH5112BD	OIL RUBBED BRONZE	1 STRAP PER HINGE

### PHASE 1A WINDOW SCHEDULE



### PHASE 1B WINDOW SCHEDULE



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PHASE 1A  
CONSTRUCTION DOCUMENTS

PHASE 1 WINDOW AND DOOR SCHEDULES

Scale: 1/8"=1'-0"

File Name:  
Drawn By: ND  
Checked By: FD  
Job No.: 3704  
Date: 9/22/17



**A-600**



### GENERAL NOTES

1. THE INFORMATION SHOWN ON THIS DRAWING HAS BEEN COMPILED FROM VARIOUS SOURCES, AND MAY NOT REFLECT THE ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION.
2. FOR THE SAKE OF CLARITY, EACH INDIVIDUAL DETAIL HAS NOT BEEN INDICATED. INSTALLATION DETAILS HAVE BEEN INDICATED FOR TYPICAL COMPONENTS.
3. HATCH PATTERNS ARE FOR REPRESENTATION ONLY.
4. ALL ITEMS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS APPLICABLE TO THE PROJECT.
5. THE CONTRACTOR SHALL REPORT DETERIORATED OR UNSUITABLE SUBSTRATES TO THE OWNER PRIOR TO PERFORMING WORK.
6. THE CONTRACTOR IS CAUTIONED THAT DUE TO BUILDING OCCUPANCY, THE OWNER REQUIRES COMPLIANCE ON WORK HOURS, SCHEDULING, SET-UP, CLEANUP, PARKING, SECURITY, ETC. REFER TO SPECIFICATIONS FOR OWNER REQUIREMENTS.
7. THE WORK SHALL BE 100% WEATHER TIGHT ON A DAILY BASIS. REMOVE ONLY AS MUCH WORK AS CAN BE REPLACED ON THE SAME DAY. PHASED CONSTRUCTION IS NOT PERMITTED.
8. FOR THE SAKE OF CLARITY, SECUREMENT FASTENERS ARE NOT SHOWN ON THE DETAIL DRAWINGS. REFER TO THE SPECIFICATIONS FOR FASTENER TYPES AND SPACING.
9. REMOVE EXISTING DESIGNATED SLATE SHINGLES, LOW SLOPED ROOF SYSTEMS, SHEET METAL EDGE COMPONENTS AND ASSOCIATED FLASHINGS AND UNDERLAYMENTS DOWN TO THE EXISTING WOOD ROOF DECK TO INSTALL THE NEW ROOF SYSTEM, AND NEW LOW SLOPE EPDM ROOF SYSTEMS.
10. DETAILS NOT DEPICTED SHALL BE CONSTRUCTED IN A MANNER CONSISTENT WITH THE DETAIL DRAWINGS.
11. REFER TO CONTRACT DOCUMENTS FOR SCHEDULE LIMITATIONS OF EXTERIOR WORK.
12. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND VERIFYING ALL DIMENSIONS, CONDITIONS, HEIGHTS, MATERIAL THICKNESSES, ETC., IN THE FIELD PRIOR TO SUBMITTING THEIR BID AND COMMENCING CONSTRUCTION.
13. THE BUILDING SHALL BE MAINTAINED IN A DUST FREE CONDITION. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY PROTECTION TO ENSURE THE INTERIOR OF THE BUILDING REMAINS DUST FREE. NO DEMOLITION CAN PROCEED UNTIL AN APPROVED TEMPORARY PROTECTION SYSTEM IS IN PLACE.

### MASONRY REPAIR NOTES

1. THIS PROJECT INVOLVES HISTORIC MASONRY ASSEMBLIES. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS TO MATCH THE EXISTING HISTORIC MORTAR, AS WELL AS REPLACEMENT STONE AND BRICK.
2. THE CONTRACTOR MUST SUBMIT ENGINEERS SEALED (CERTIFIED) SHORING SHOP DRAWINGS FOR MASONRY REMOVALS/ REBUILDING PRIOR TO THE PERFORMANCE OF ANY WORK.
3. METHODS OF DEMOLITION MUST NOT APPLY EXCESSIVE IMPACT, FORCE OR VIBRATION TO EXISTING MASONRY WALLS AND RELATED BUILDING CONSTRUCTION. THE CONTRACTOR MUST SUBMIT PROPOSED APPARATUS, EQUIPMENT, MEANS AND METHODS TO THE OWNER AND GALE FOR REVIEW AND APPROVAL PRIOR TO INITIATING THE DEMOLITION WORK.
4. IN NO CASE SHALL SAWCUTTING, HAMMER CHIPPING, DRILLING AND OTHER METHODS OF DEMOLITION DAMAGE SURROUNDING MASONRY OR BUILDING COMPONENTS WHICH ARE TO REMAIN. ANY AND ALL EXISTING ROOFING, MATERIALS OR BUILDING COMPONENTS WHICH ARE DAMAGED OR ADVERSELY AFFECTED BY OVERCUTS, CRACKS, OR OTHER DETRIMENTAL CONDITIONS AS A RESULT OF THE WORK MUST BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST.
5. NEW MASONRY CONSTRUCTION MUST BE PLACED TO REPLICATE EXISTING COURSING GEOMETRY AS A MINIMUM; UNLESS OTHERWISE INDICATED IN THESE DESIGN DOCUMENTS. COURSES MUST BE SOLID AND UNDATED, AND SOLIDLY MORTARED ALL AROUND. DAMAGED, CRACKED, SPALLED OR OTHERWISE DEFECTIVE COURSES MUST BE REPLACED WITH NEW SPECIFIED UNITS, SOLIDLY MORTARED IN PLACE.
6. MASONRY UNITS WHICH REQUIRE GEOMETRICAL MODIFICATION AROUND EXISTING OR NEW EMBEDMENTS MUST BE SHAPED TO ACHIEVE A GEOMETRICALLY PLUMB AND TRUE CONDITION. HAMMER BREAKING OF MASONRY UNITS RESULTING IN JAGGED EDGES OR UNEVEN SURFACES IS NOT ALLOWED.
7. DURING MASONRY REPAIRS, IF ADDITIONAL DEFICIENT, SOFT, DETERIORATED, DAMAGED, OR SEGREGATED MASONRY CONDITIONS ARE ENCOUNTERED, NOTIFY THE OWNER AND ENGINEER FOR REVIEW PRIOR TO APPLYING NEW REPAIRS.

### ELEVATION NOTES

1. THE ELEVATIONS ARE PROVIDED TO SHOW APPROXIMATE QUANTITIES AND CONFIGURATIONS. THE ACTUAL SIZES AND CONFIGURATION WILL VARY FROM THOSE SHOWN. THE CONTRACTOR SHALL BASE THE BID AND CONTRACT AMOUNTS ON ACTUAL FIELD CONDITIONS.
2. GRAPHIC HATCHING AND SYMBOLS ARE USED ON THE ELEVATION DRAWINGS TO INDICATE APPROXIMATE AREAS INCLUDED IN THE SCOPE OF WORK. ACTUAL DIMENSIONS AND QUANTITIES SHALL BE FIELD VERIFIED. REFER TO THE LEGEND ON THIS SHEET FOR THE CORRESPONDING SCOPE OF WORK ASSOCIATED WITH A PARTICULAR HATCH OR SYMBOL.
3. CONTRACTOR IS RESPONSIBLE FOR DESTROYING AND REMOVING BEES/HORNETS/WASPS WHICH MAY BE PRESENT.
4. REMOVE AND REPLACE SPECIFIC STONE MASONRY UNITS AS DESIGNATED ON THE ELEVATIONS.
5. REMOVE ABANDONED STEEL ANCHORS AND OTHER EMBEDMENTS AS DESIGNATED. REMOVE AND REPLACE DETERIORATED STONE MASONRY UNITS WHERE DAMAGED FROM EMBEDMENTS (PATCHING IS NOT ALLOWED).
6. REMOVE VEGETATION FROM BUILDING AS PART OF THE COMPREHENSIVE MASONRY RESTORATION CLEANING.

### CODE INFORMATION

THIS PROJECT ENTAILS REPAIRS TO THE EXTERIOR ENVELOPE OF THE BUILDING. CONSTRUCTED APPROXIMATELY C.1898 (SEE CORNERSTONE), THE FACILITY IS WITHIN BOSTON'S SOUTH END LANDMARKS DISTRICT, AND AS SUCH, INHERITS THE RESTRICTIONS AND GUIDELINES AS PROVIDED BY THE DISTRICT. INTENT SHALL BE FOR ALL WORK TO MEET THE REQUIREMENTS OF THE SECRETARY OF INTERIORS STANDARDS FOR HISTORIC PRESERVATION: REHABILITATION FOR NEW WORK, AND RESTORATION FOR REPLACEMENT AND REPAIR WORK.

THIS PROJECT CONFORMS TO THE 9TH EDITION MSBC FOR REPAIRS, 2014 IEBC AS AMENDED FOR REPAIRS AND ALTERATIONS. REFER TO STRUCTURAL DRAWINGS FOR SPECIFIC CODE REQUIREMENTS OF THOSE PORTIONS OF THE WORK.

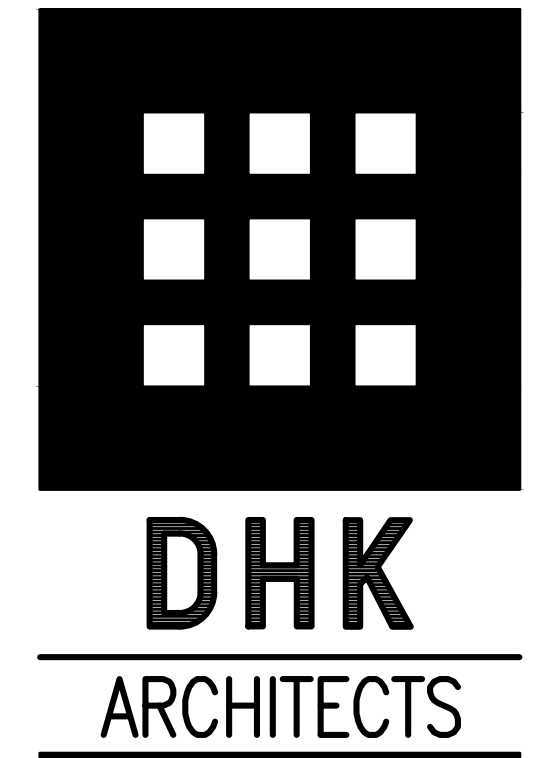
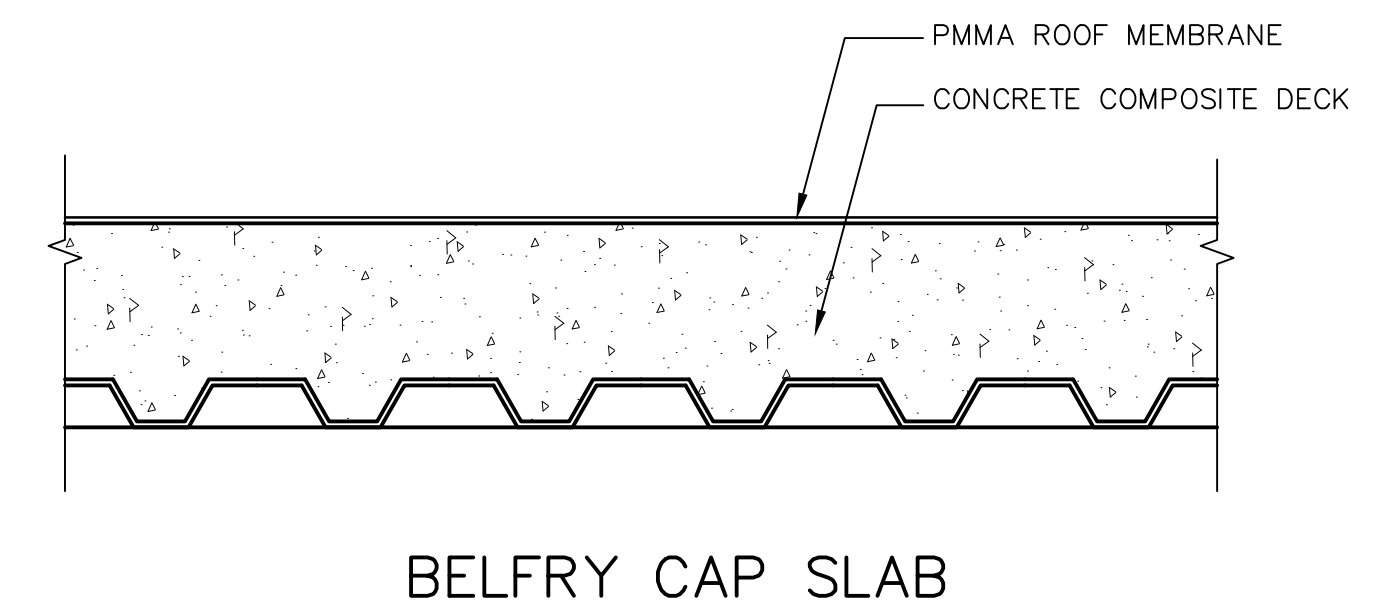
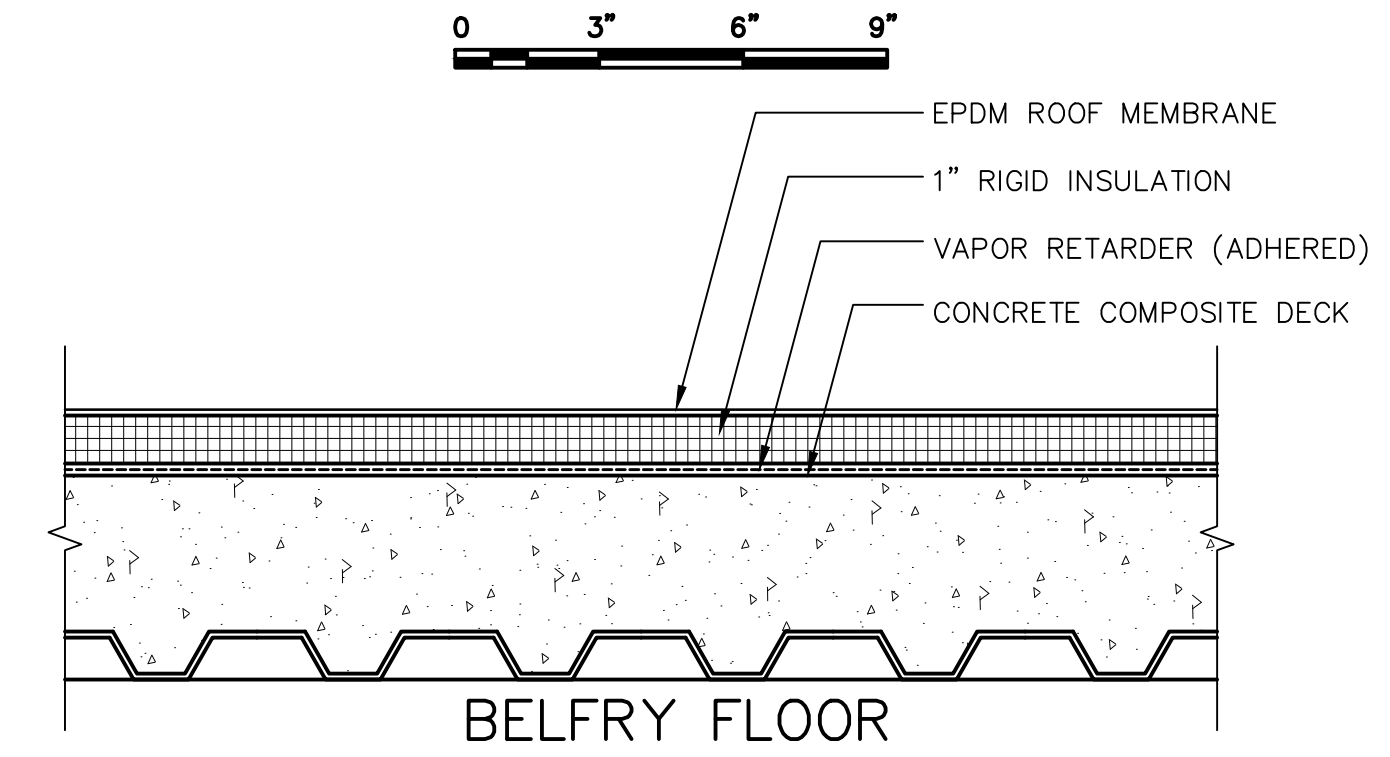
PHASE 1A WORK GENERALLY INCLUDES:

- REPLACEMENT OF THE TOWER SPIRE.
- RESTORATION AND REPAIRS TO MASONRY ASSEMBLIES OF THE 1895 BUILDING WALLS AND STEPS.
- ROOF REPLACEMENT AT THE TWO TOWERS
- REPLACEMENT OF PILASTERS ON WEST NEWTON ST. AND ALL SIDES OF THE TOWER.
- REPLACEMENT OF THE TOP PORTION OF THE LARGE TOWER MASONRY ASSEMBLIES WITH NEW CONSTRUCTION.
- MASONRY WALL REPAIRS AND RESTORATION

### NEW ROOFING SYSTEMS

NOTE: ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING  
ROOFS ARE CONSIDERED TEMPORARY FOR PROTECTION BETWEEN PHASED CONSTRUCTION AND ARE TO REMAIN IN PLACE AFTER CONSTRUCTION.

SCALE: 3"=1'-0"



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JN: 832881

No.	Date	Revision

Project:  
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PHASE 1A  
CONSTRUCTION DOCUMENTS

### GENERAL INFORMATION

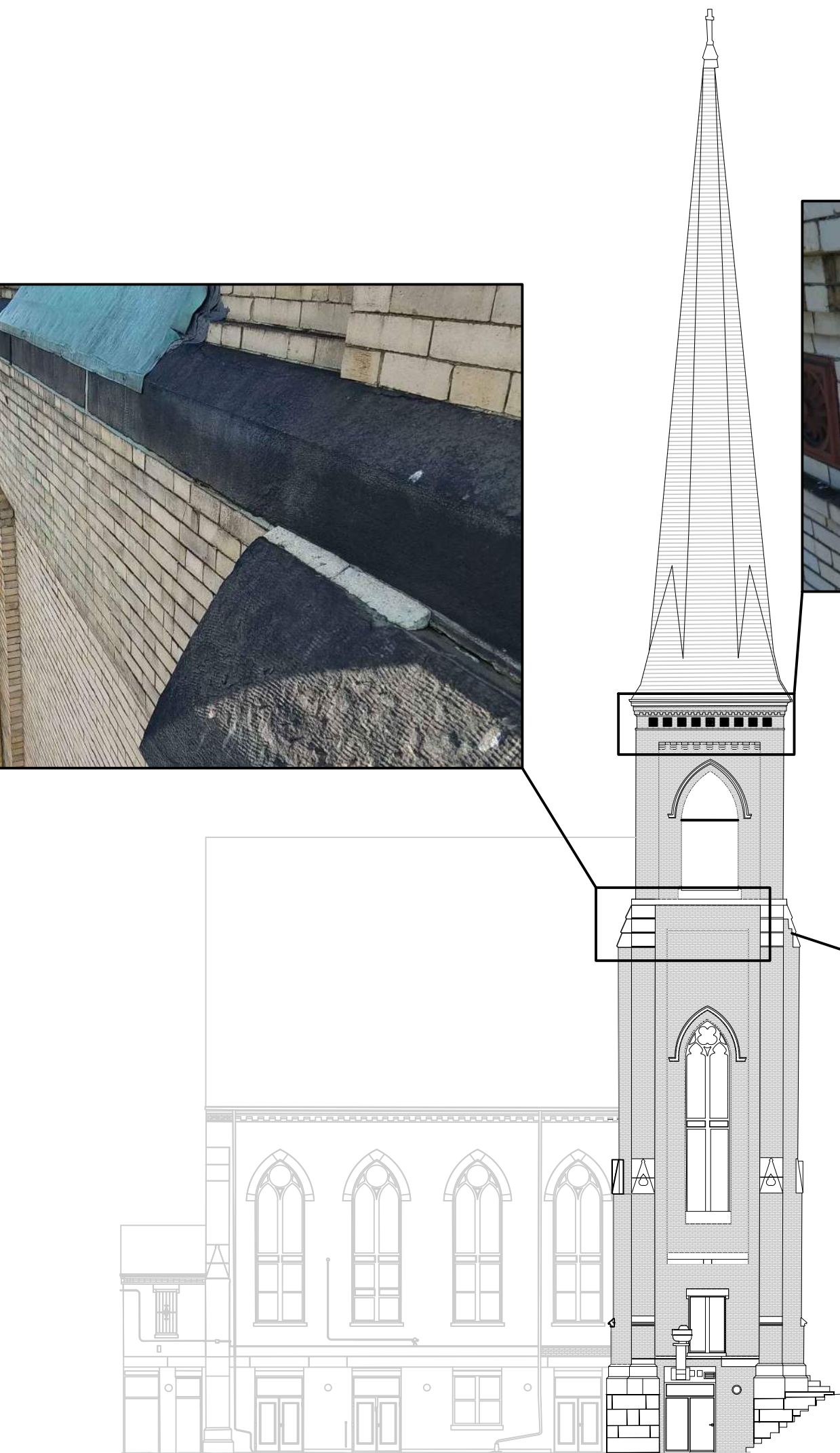
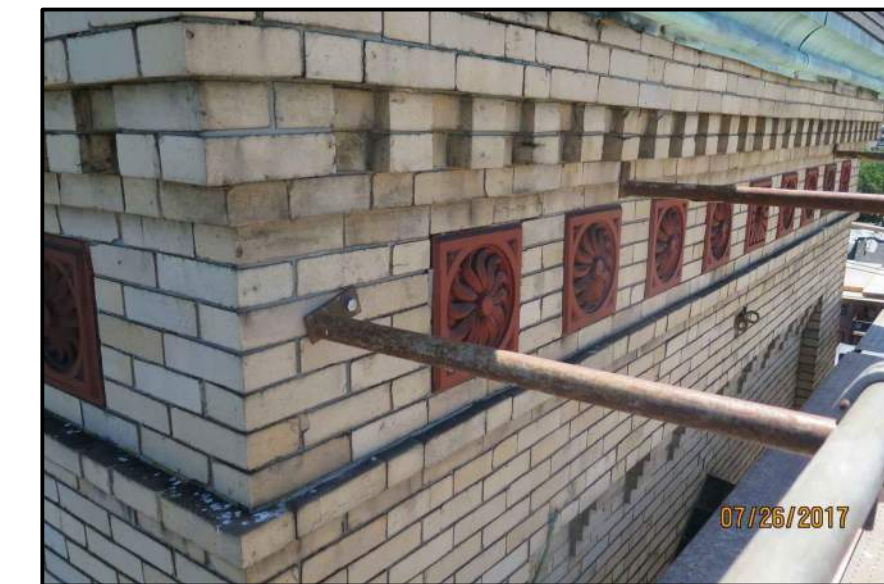
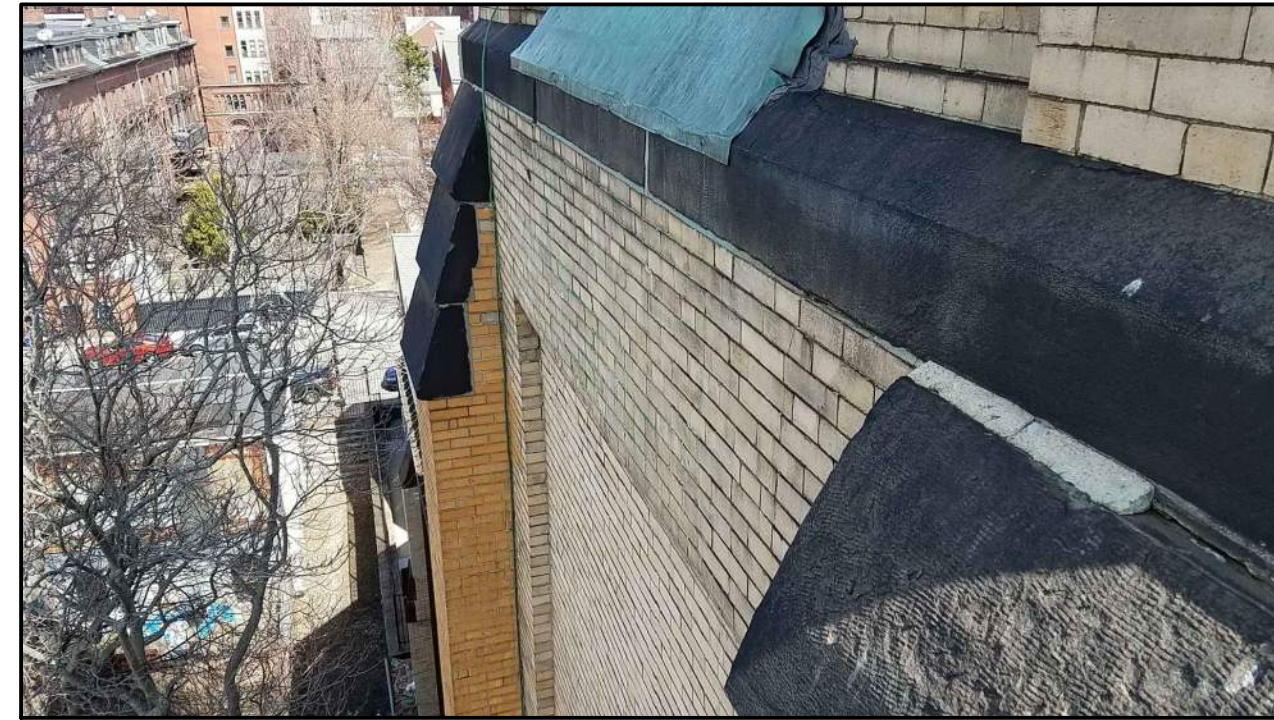
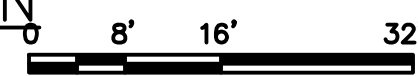
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Drawn By CAC MDF	
Checked By MDF CM	
Job No. 3704	
Date 9/22/2017	EG001





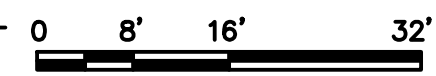
SEE DRAWING 1/EA201 FOR ENLARGED ELEVATION

1 SOUTH ELEVATION  
SCALE: 1/16"=1'-0"



SEE DRAWING 1/EA202 FOR ENLARGED ELEVATION

2 WEST ELEVATION  
SCALE: 1/16"=1'-0"

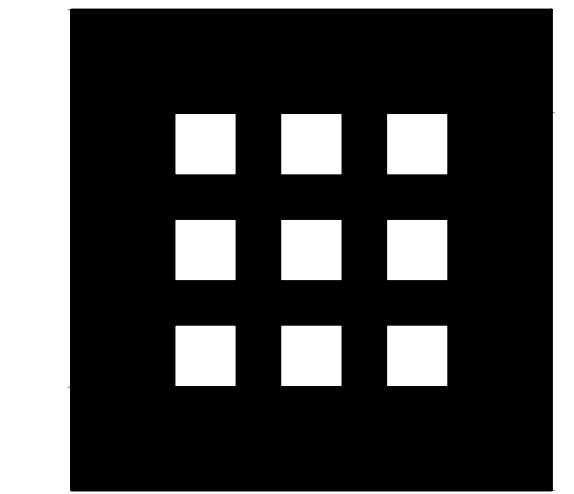
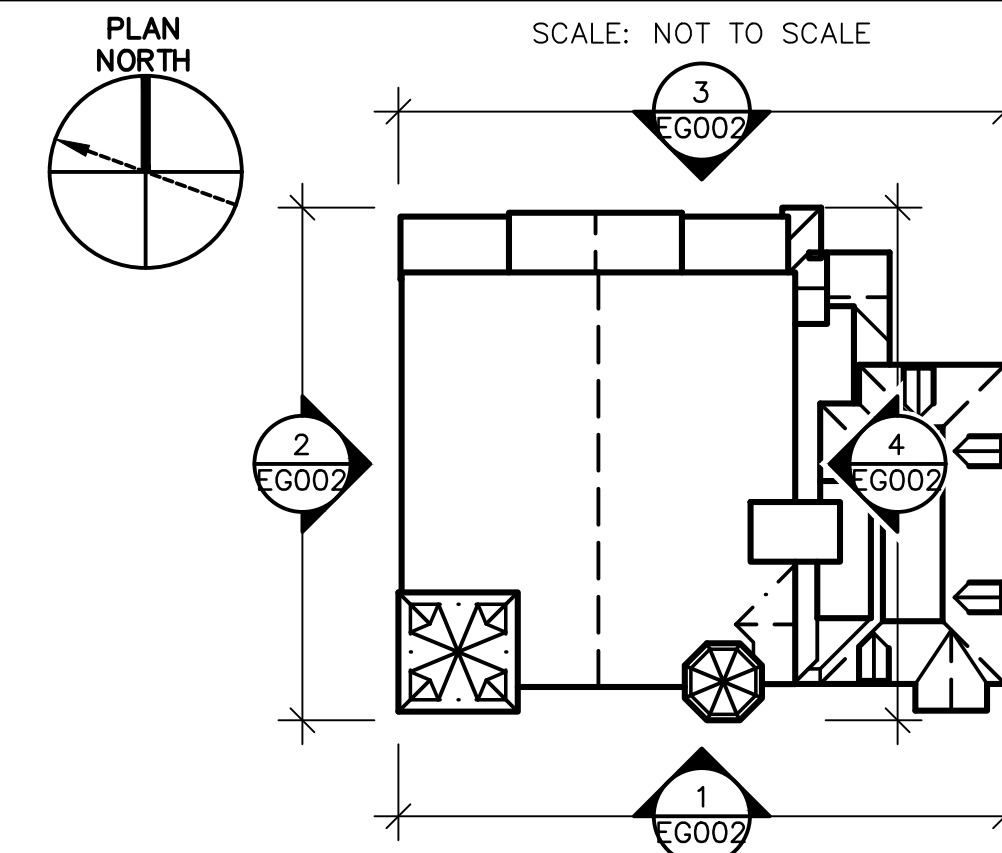


THE INTENT OF THIS PAGE IS TO PROVIDE PHOTOGRAPHIC REPRESENT

### GENERAL NOTES

1. PHASE 1A WORK IS LIMITED TO THE MAIN TOWER AND ASSOCIATED SPIRE, SMALL TOWER AND ASSOCIATED SPIRE, AND THE WEST NEWTON STREET OLD CHURCH SOUTH ELEVATION, ROOFING AND REMAINING ELEVATION WORK, INCLUDING THE PARISH HOUSE, WILL BE A PART OF PHASE 1B SCOPE OF WORK.
2. THE INTENT OF THIS PAGE IS TO PROVIDE PHOTOGRAPHIC REPRESENTATION OF THE BUILDING ELEMENTS BEING REMOVED AT THE TOWER. COMPONENTS REQUIRE MATCHING ORIGINAL CONSTRUCTION AS PART OF THE RECONSTRUCTION WORK. THE CONTRACTOR SHALL COORDINATE THE REBUILDING OF OTHER AREAS WITH CONTRACTOR CONSTRUCTION PHOTOGRAPHS TO BE TAKEN PRIOR TO DEMOLITION.
3. THESE PHOTOGRAPHS ARE NOT ALL-INCLUSIVE, AND ARE INTENDED TO PROVIDE A REPRESENTATION OF THE EXISTING CONDITIONS. THEY ARE FOR INFORMATION.

### KEY PLAN



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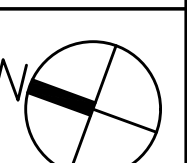
Project:

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PHASE 1A  
CONSTRUCTION DOCUMENTS

REF. BUILDING ELEVATIONS

Scale:  
AS NOTED



File Name

Drawn By CAC MDF  
KPB, EWM, SMF

Checked By  
MDF, CM

Job No. 3704  
GALE Job No. 832681

Date  
9/22/2017

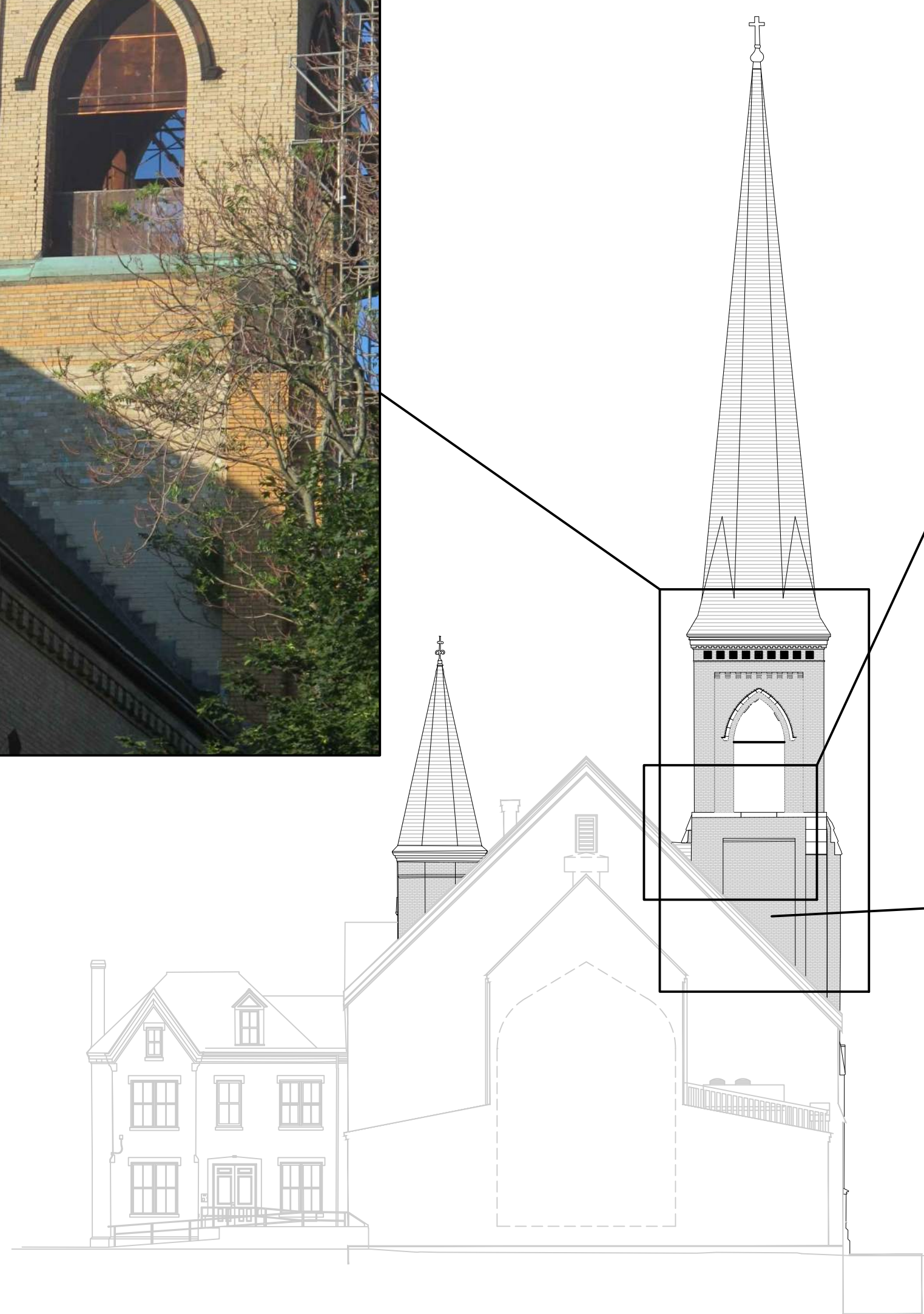
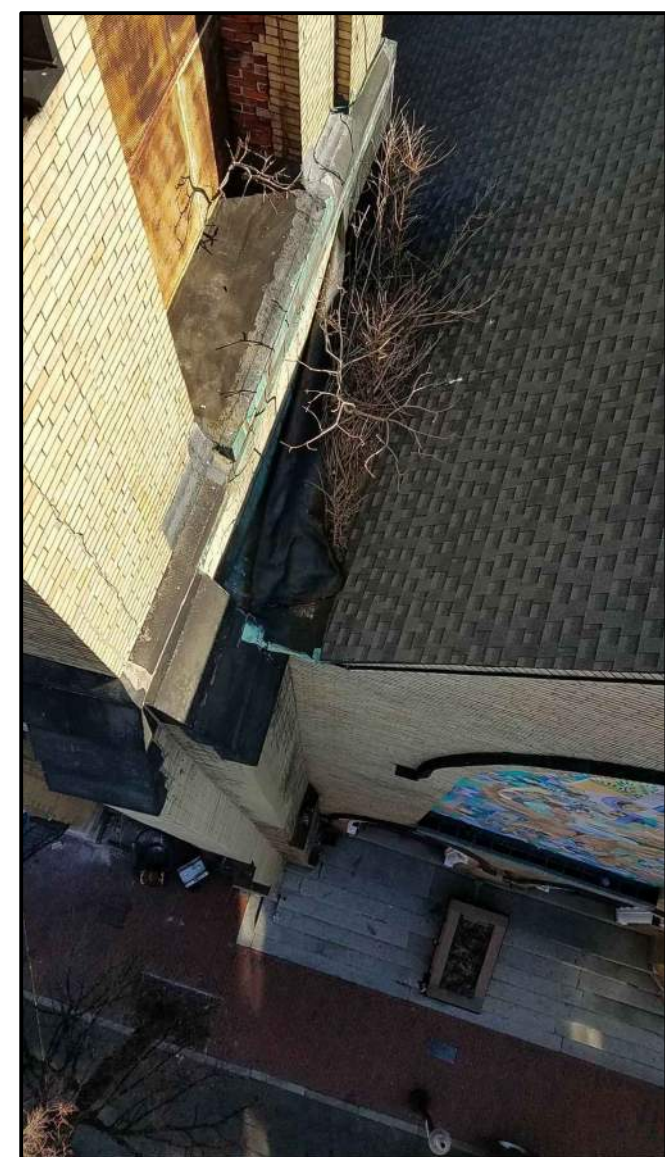
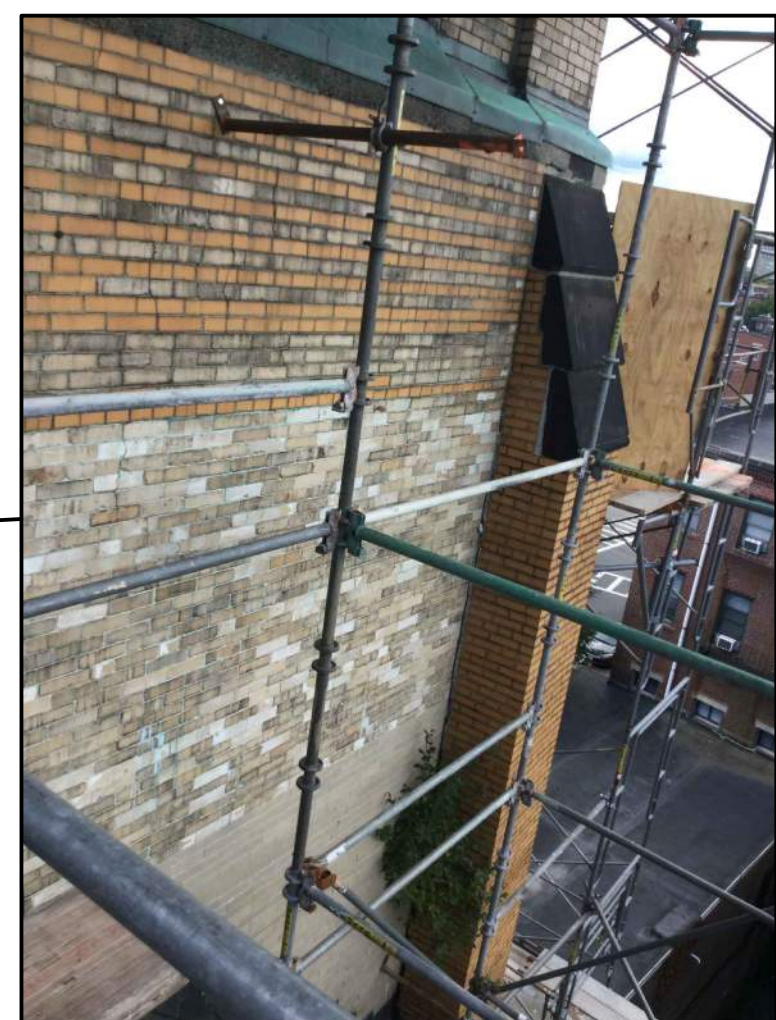
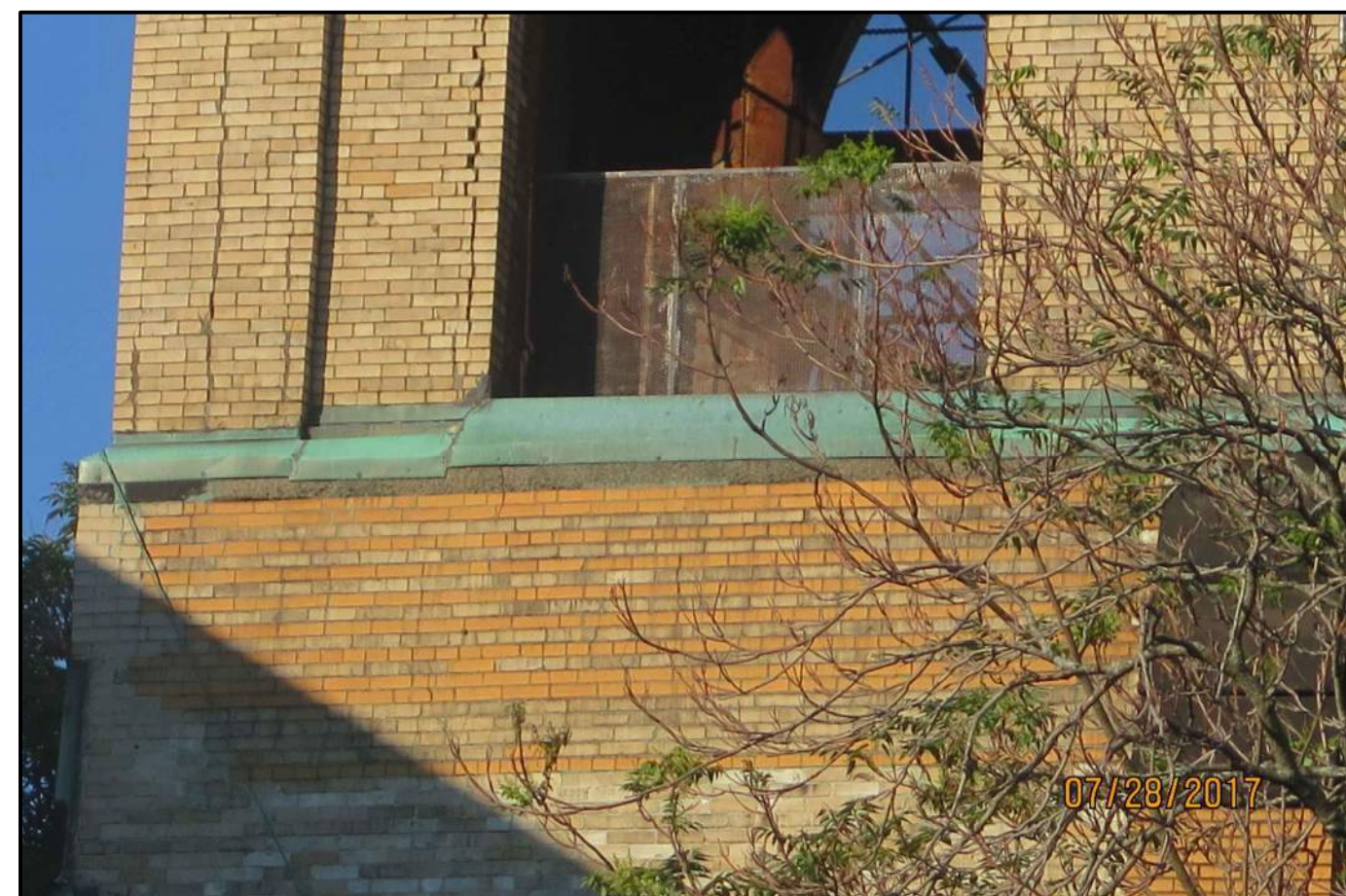
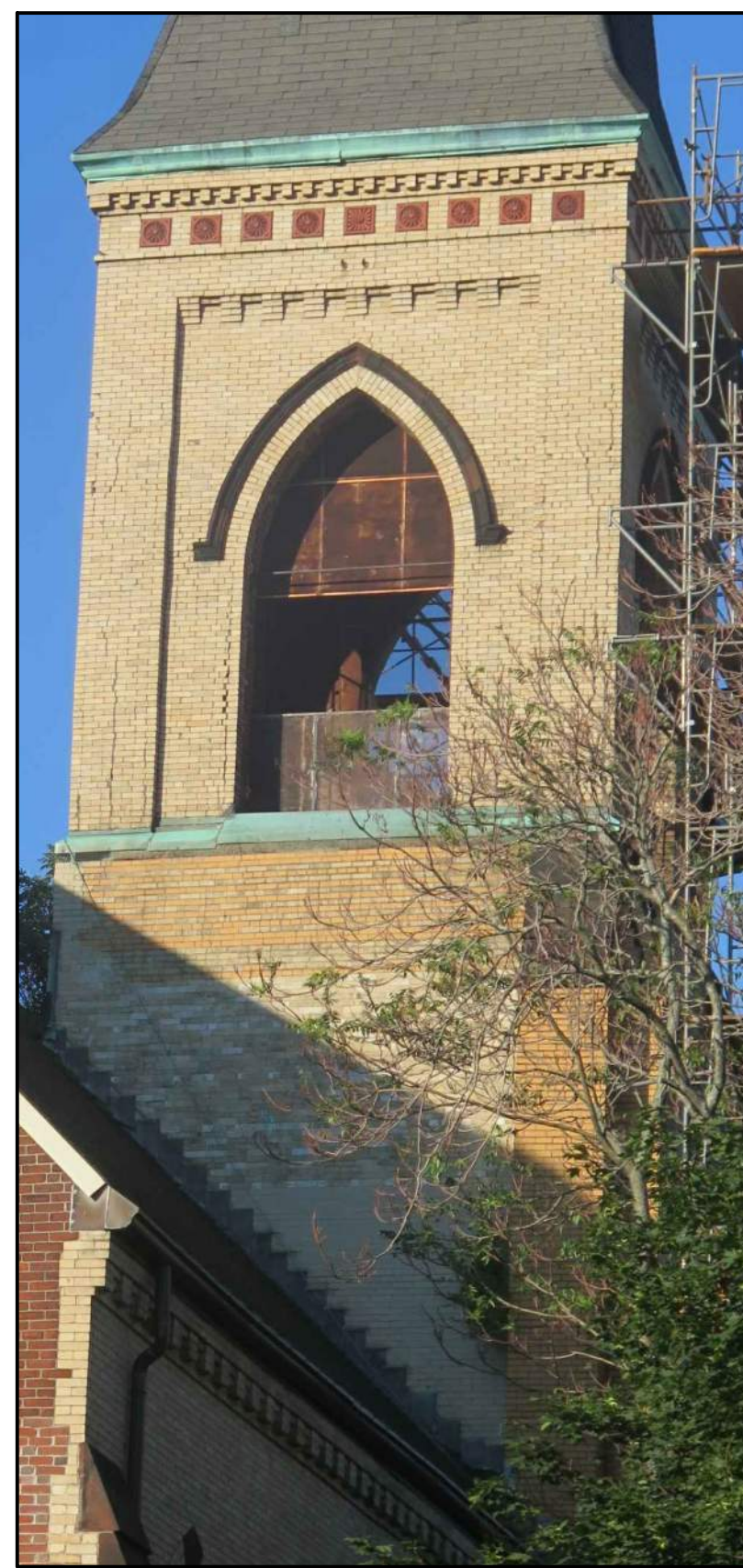
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Drawing No.

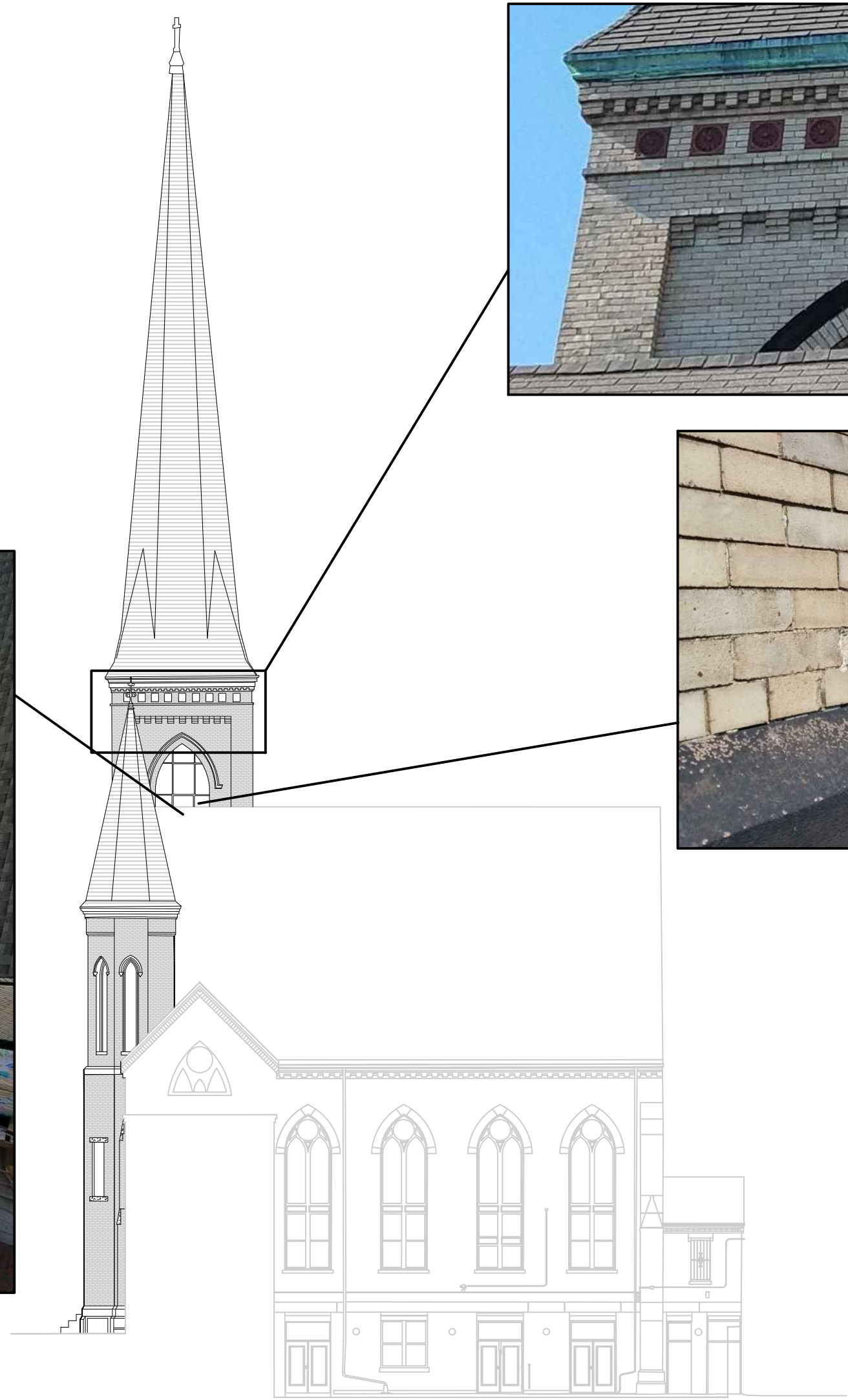
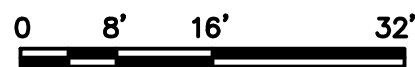
**EG002**





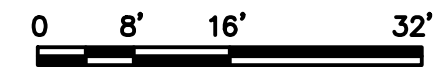
SEE DRAWING 1/EA203 FOR ENLARGED ELEVATION

**3 NORTH ELEVATION**  
SCALE: 1/16"=1'-0"



SEE DRAWING 1/EA204 FOR ENLARGED ELEVATION

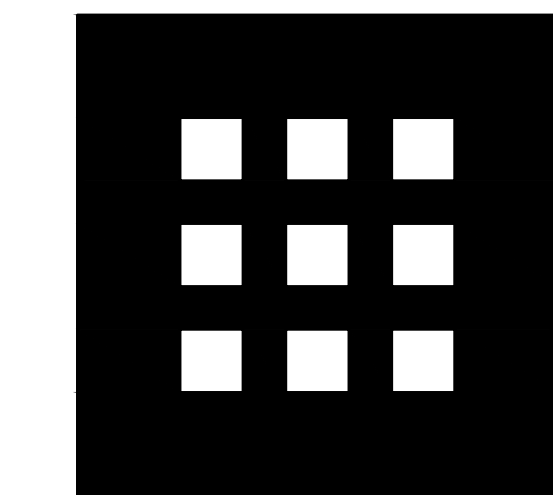
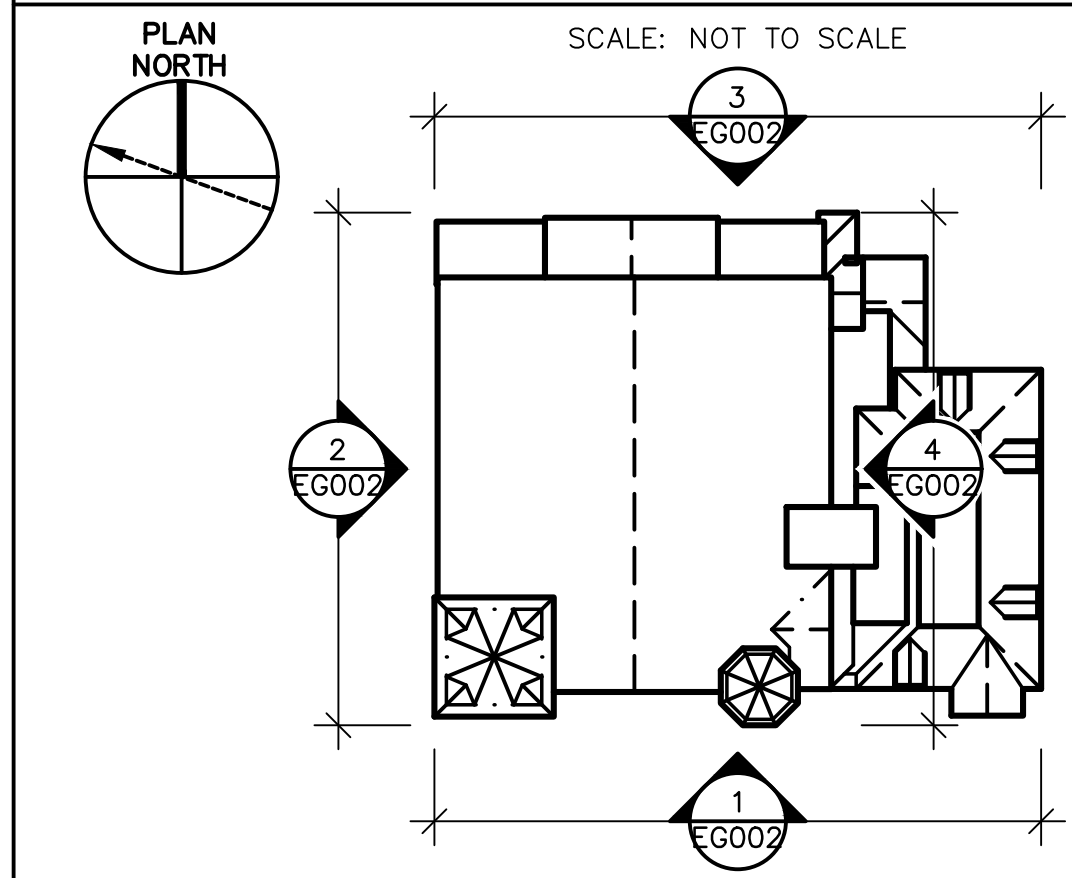
**4 EAST ELEVATION**  
SCALE: 1/16"=1'-0"



**GENERAL NOTES**

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**KEY PLAN**



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JN: 832681

No.	Date	Revision

Project:  
**Villa Victoria  
Center for the Arts**  
85 WEST NEWTON STREET  
BOSTON, MA

PHASE 1A  
CONSTRUCTION DOCUMENTS

REF. BUILDING ELEVATIONS

Scale:

AS NOTED

Stamp:

File Name:

Drawn By CAC MDF

KPB, EWM, SMF

Checked By MDF CM

Job No. 3704

GALE Job No. 832681

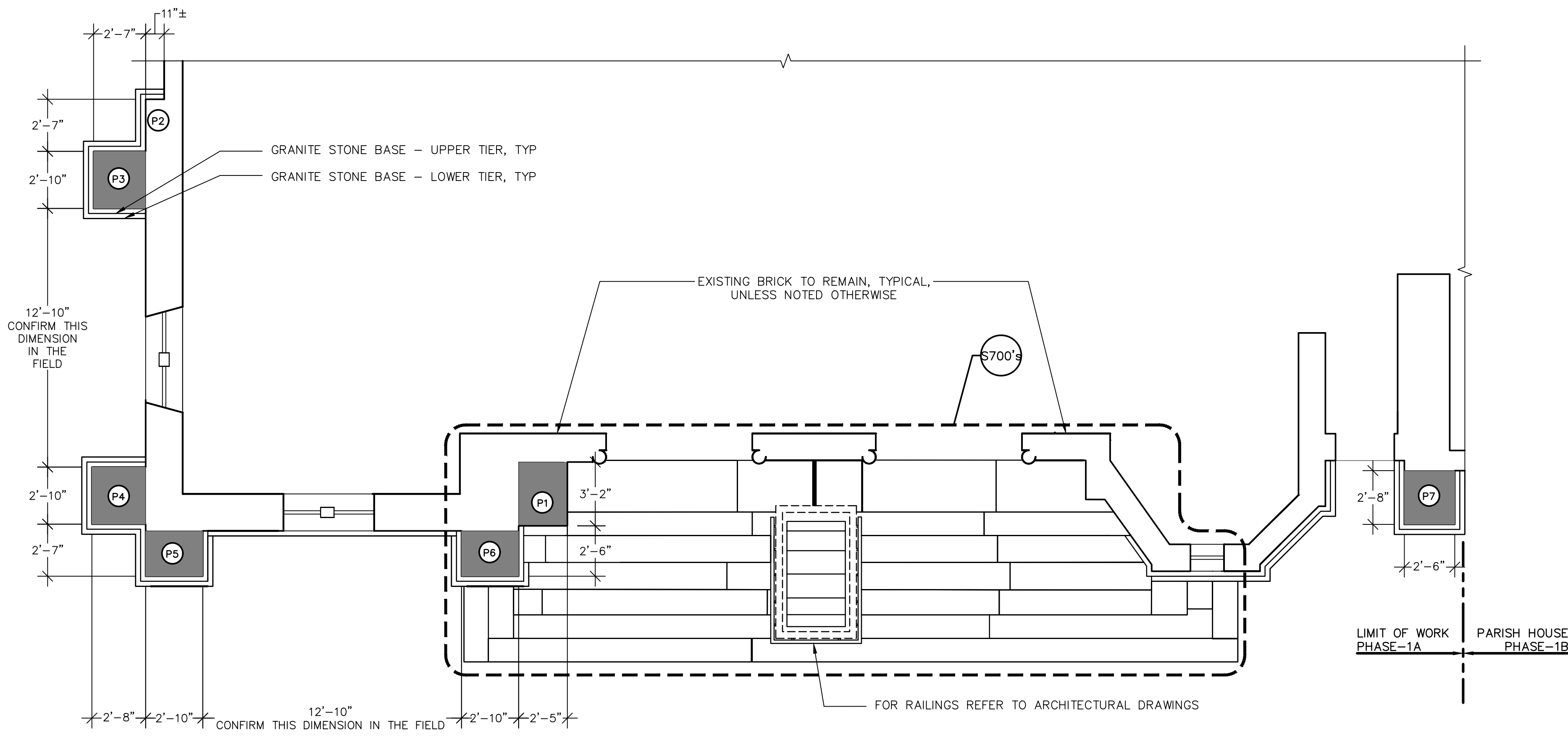
Date:

9/22/2017



**EG003**





1 PARTIAL FIRST FLOOR PLAN  
SCALE: 1/4"=1'-0"

### LEGEND

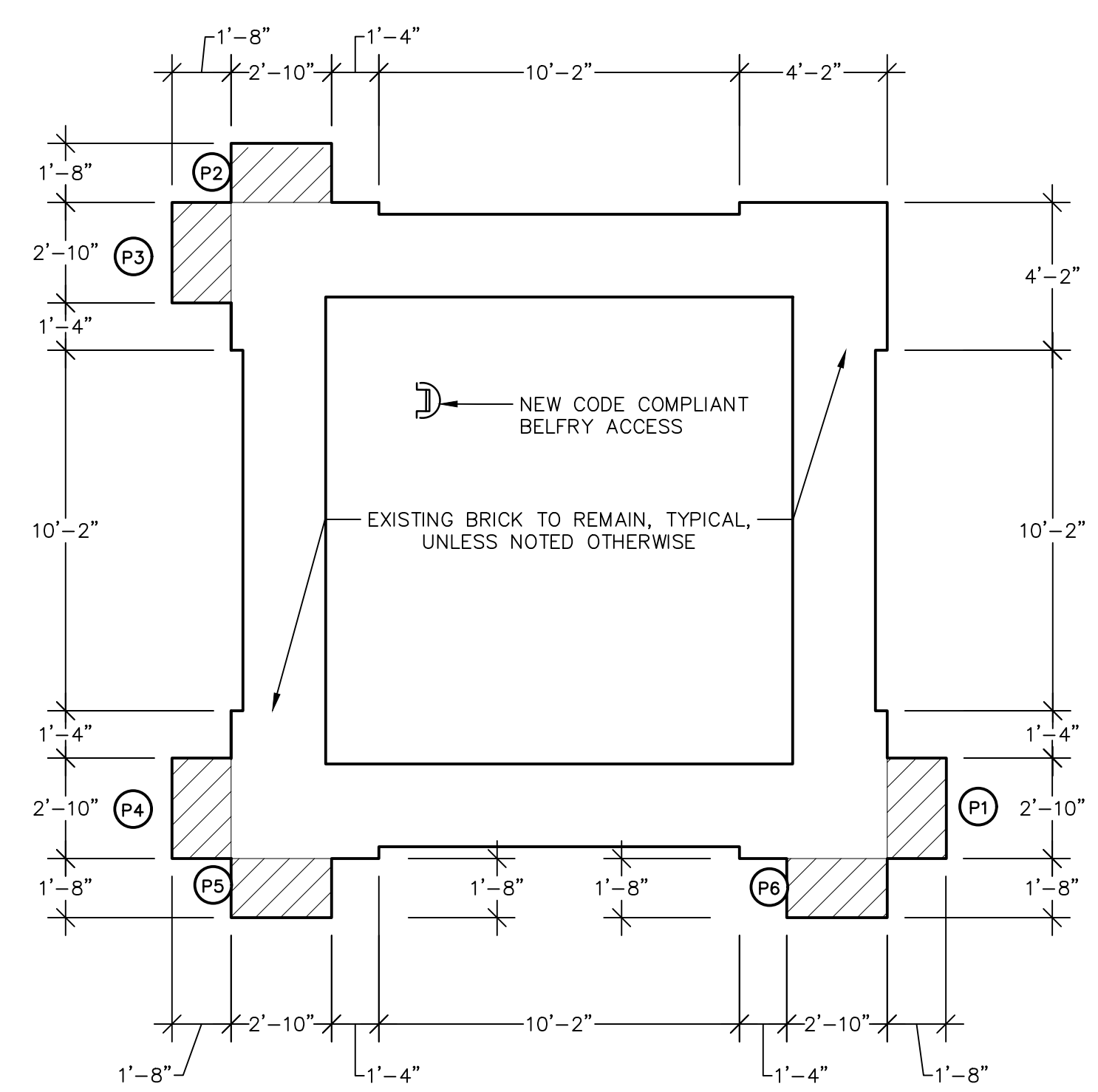
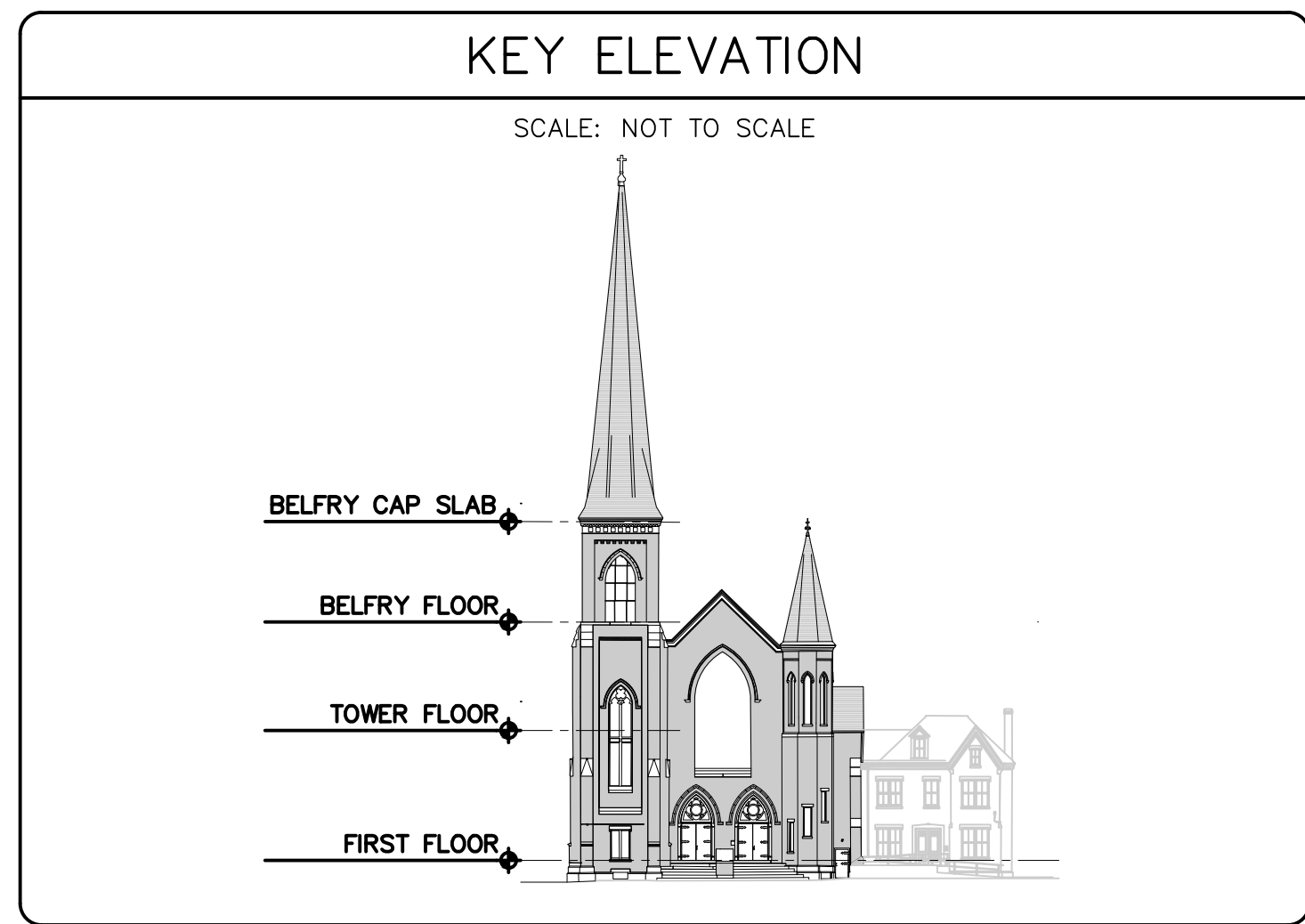
- NEW BRICK MASONRY
- EXISTING BACK-UP MASONRY TO BE ENHANCED
- NEW CMU STRUCTURAL WALL

### GENERAL NOTES

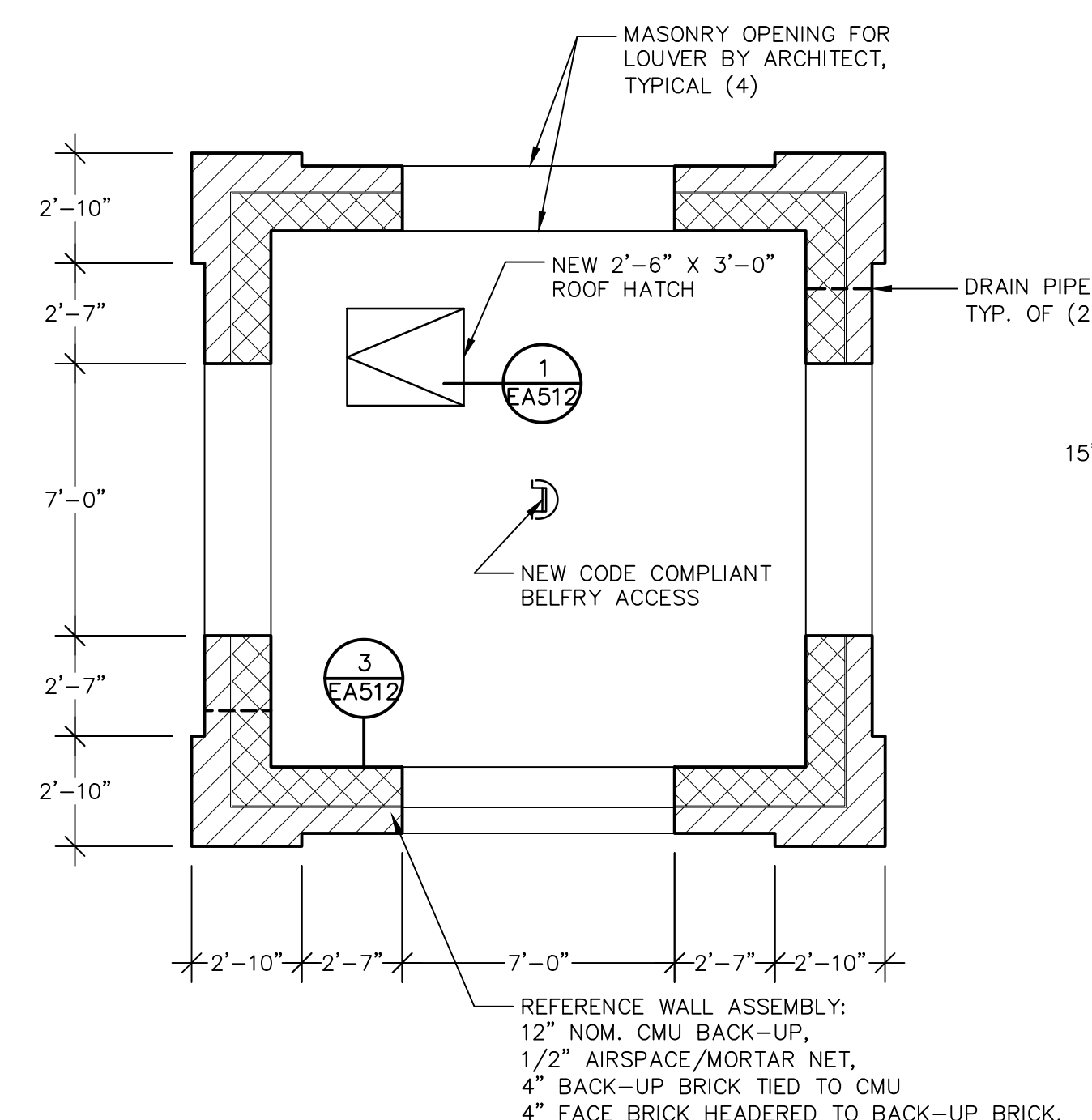
1. DIMENSIONS INCLUDED IN THESE PLANS HAVE BEEN FIELD VERIFIED BY THE DESIGN TEAM AND MUST BE CONFIRMED BY THE CONTRACTOR. THE WORK REQUIRES REPLACEMENT OF EXISTING MASONRY WALL SYSTEMS, COMPLETELY IN SOME AREAS, THAT WILL BE ALIGNED EXACTLY WITH ADJACENT SYSTEMS TO REMAIN. THE INTENT IS TO MATCH THESE EXISTING CONDITIONS SEAMLESSLY IN PLANE WITHOUT DEVIATION.

### PILASTER KEY NOTES

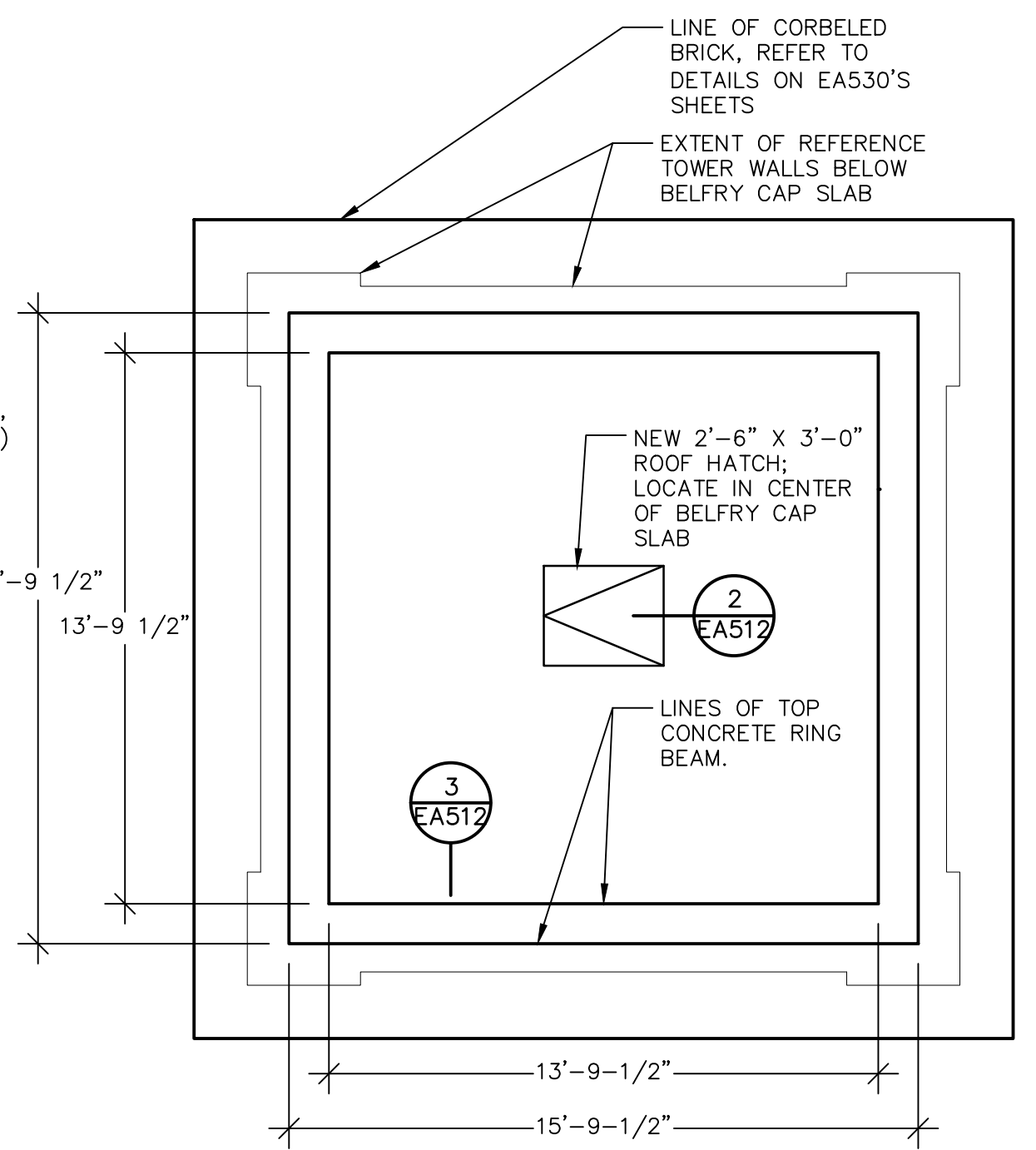
**P#** PILASTER DESIGNATION. SEE ELEVATION SHEETS EA201-204.



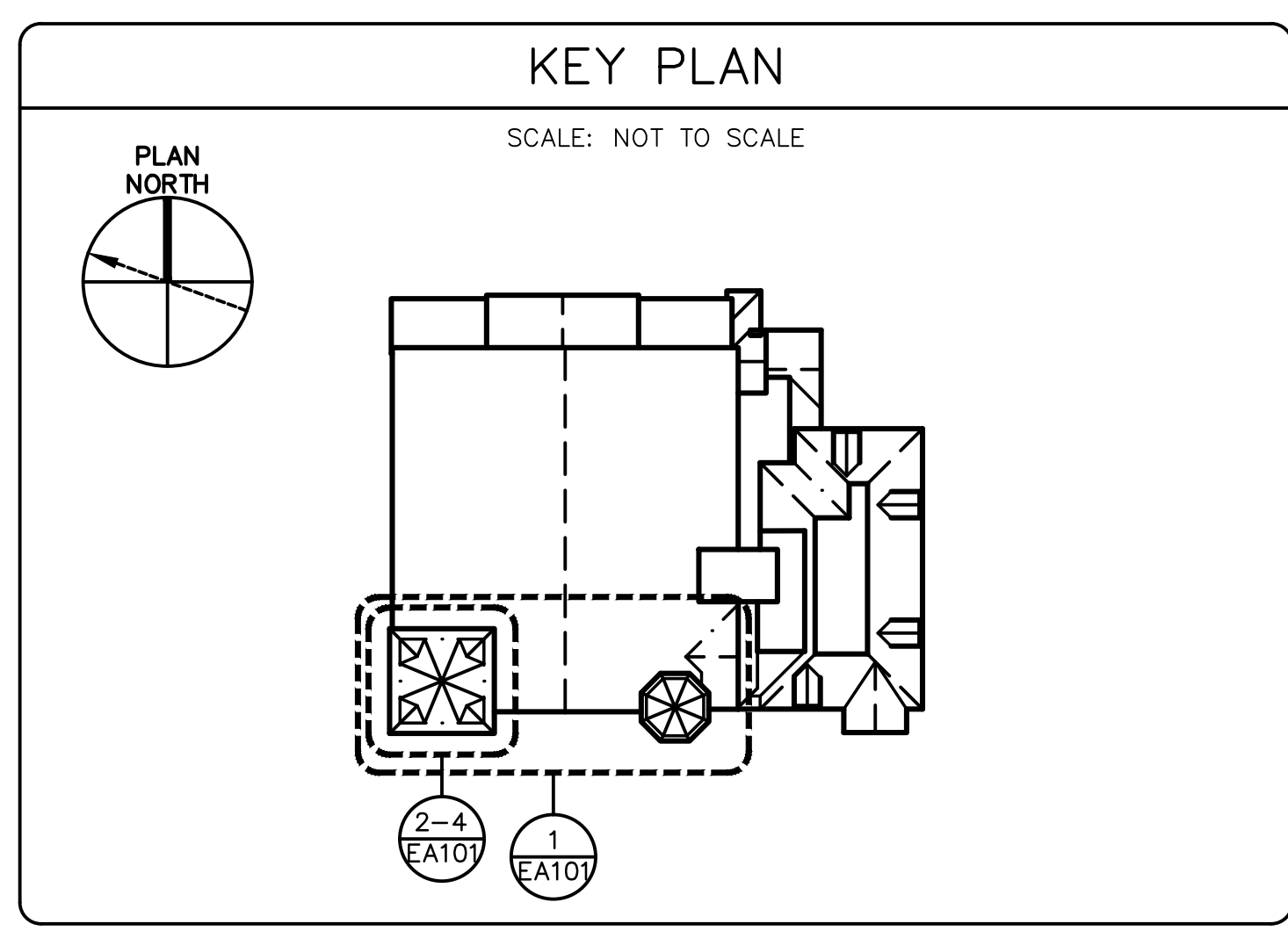
2 PARTIAL TOWER FLOOR PLAN  
SCALE: 1/4"=1'-0"



3 BELFRY FLOOR PLAN  
SCALE: 1/4"=1'-0"



4 BELFRY CAP PLAN  
SCALE: 1/4"=1'-0"



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PHASE 1A  
CONSTRUCTION DOCUMENTS

### FLOOR PLANS

Scale: 1/4"=1'-0" Sta

File Name

Drawn By CAC MDF  
KPB EWM SMF

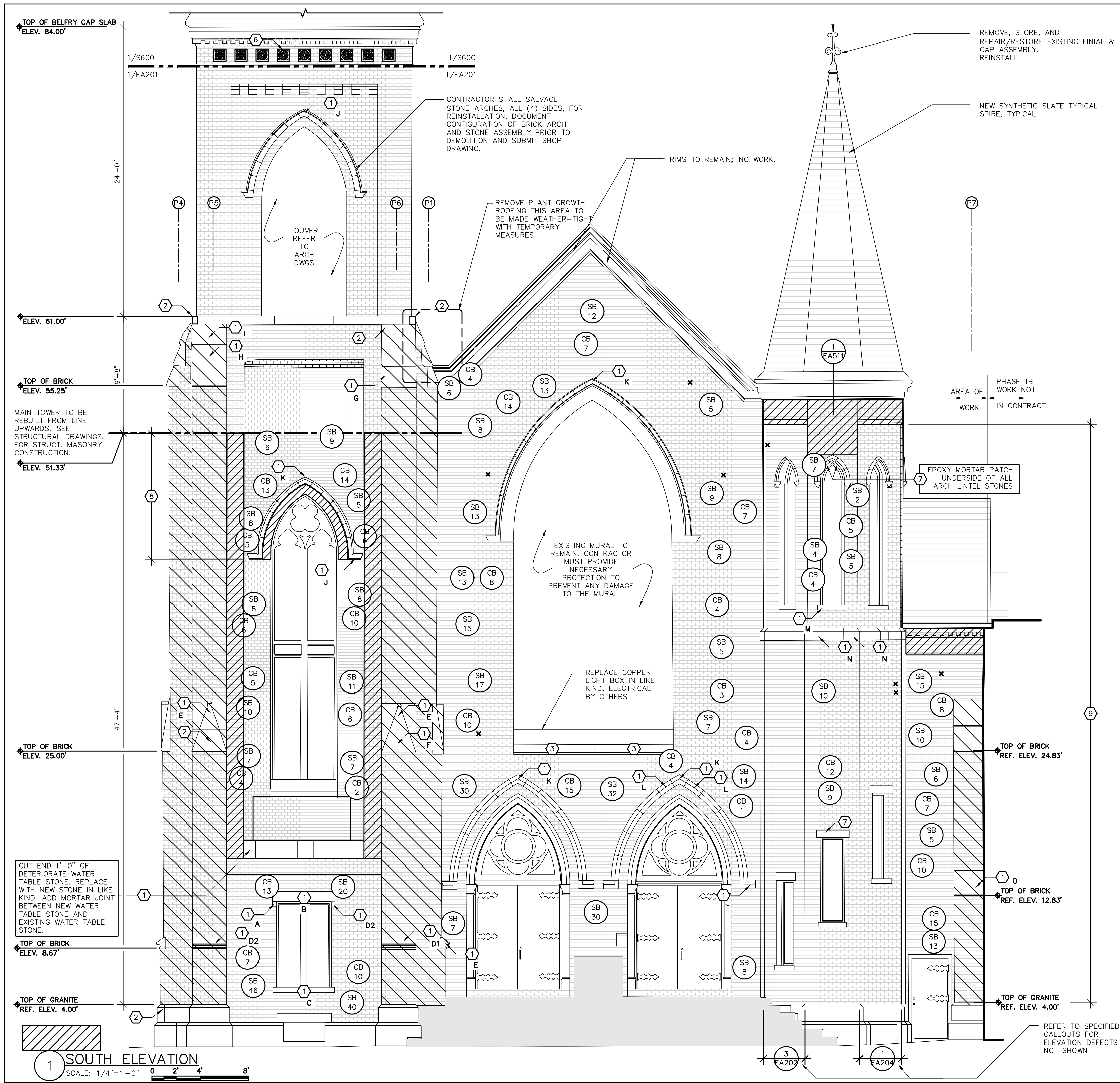
Checked By MDF CM

Job No. 3704  
Gale Job No. 832981

Date 9/22/2017

Drawing No. **EA101**





### GENERAL NOTES

- SALVAGE AND REINSTALL ALL TERRA COTTA MEDALLIONS, UNLESS NOTED OTHERWISE. CONTACT ENGINEER IMMEDIATELY OF ANY TERRA COTTA MEDALLIONS THAT ARE FOUND TO BE SPALLED OR CRACKED, AND IS NOT INDICATED AS SUCH ON THE ELEVATION.
- SALVAGE AND REINSTALL STONES, UNLESS NOTED OTHERWISE. CONTACT ENGINEER IMMEDIATELY OF ANY STONE THAT IS FOUND TO BE SPALLED OR CRACKED, AND IS NOT INDICATED AS SUCH ON THE ELEVATION.
- REFER TO SHEET EG001 FOR GENERAL TECHNICAL NOTES AND SPECIFICATIONS.
- REFER TO SHEET EA301 FOR STONE SCHEDULE, AND DIMENSIONS.
- STONE SCHEDULED FOR REPLACEMENT SHALL BE SALVAGED FOR USE ON DUTCHMAN REPAIRS, AND SHALL BE REPLACED WITH CAST STONE.
- 100% OF MASONRY ASSEMBLIES WITHIN WORK AREAS SHALL BE CLEANED AND REPOINTED.

### REPAIR NOTES

- EXISTING STONE TO BE REPLACED WITH VAST STONE. REFER TO STONE SCHEDULE 2/EA301 FOR TYPES. SUB-LETTER = STONE SHAPE TYPE.
- EXISTING STONE TO BE REPAIRED: DUTCHMAN - SEE DRAWING EA521.
- EXISTING STONE TO BE COATED WITH THIN OVERLAY: REFER TO SPECIFICATIONS
- EXISTING GRANITE STONE CRACK TO BE REPAIRED. SEE DRAWING EA521.
- EXISTING TERRA COTTA TILE TO BE REPLACED.
- EXISTING TERRA COTTA TILE TO BE REPAIRED.
- EXISTING STONE TO BE REPAIRED WITH A MIMIC PATCH: REFER TO SPECIFICATIONS
- REPOINT 100% INTERIOR BRICK IN TOWER BELOW POINT OF REMOVALS, TYP. (4) SIDES.
- REPOINT 100% INTERIOR BRICK AT SMALL SPIRE.

### REPAIR LEGEND

CB CRACKED BRICK TO BE REPLACED; # INDICATES UNITS

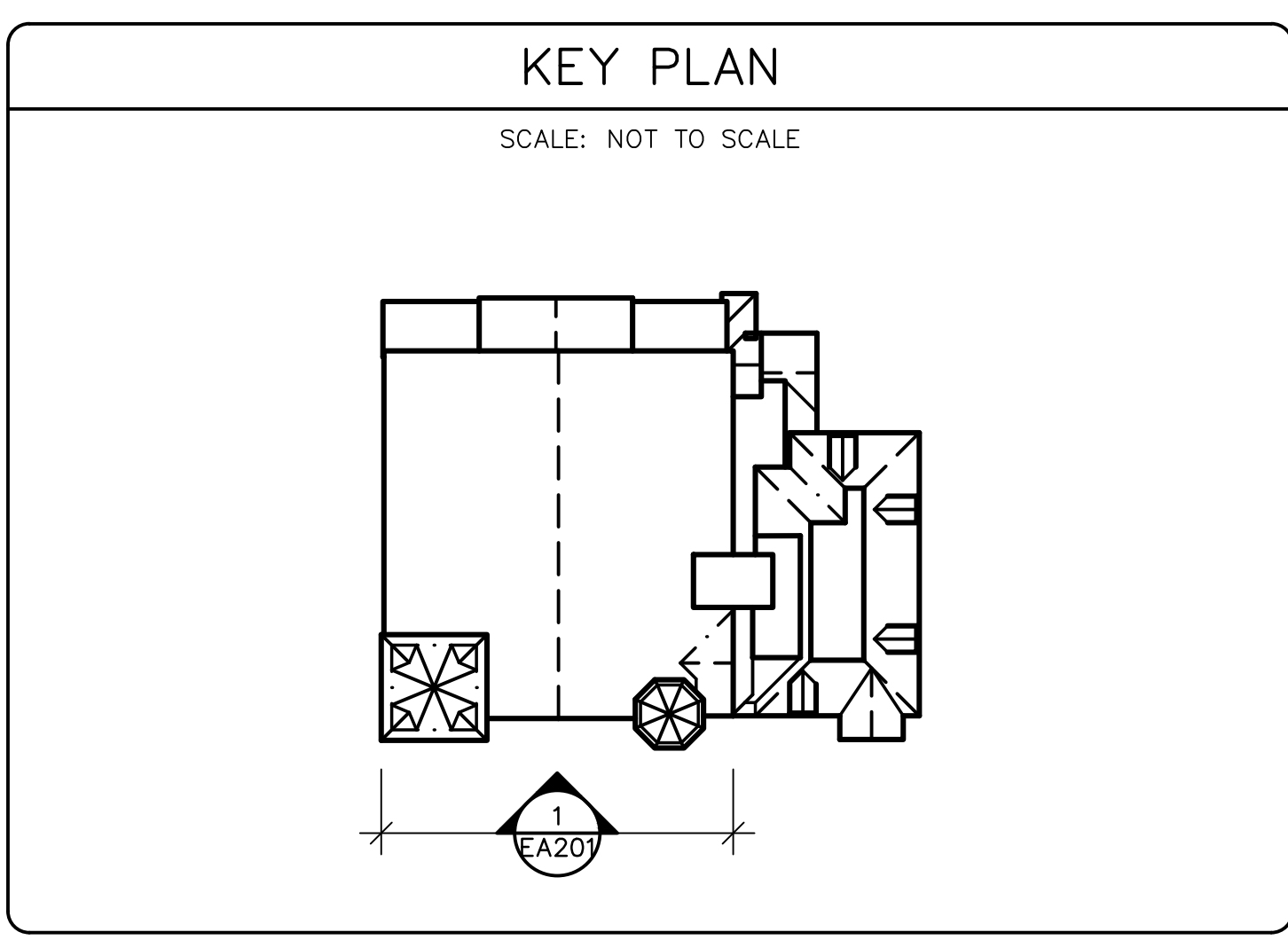
SB SPALLED BRICK TO BE REPLACED; # INDICATES UNITS

\* EXISTING ANCHOR/METAL STUB TO BE REMOVED. REMOVE AND REPLACE PENETRATED STONE/ BRICK MASONRY; # INDICATES QUANTITY

BRICK MASONRY TO BE REBUILT ONE WYTHE DEEP

BRICK MASONRY PILASTER TO BE REPAIRED PER DESIGN DETAILS. INDICATED ON SHEET SB51 & SB52.

REMOVE AND REPLACE SHEET METAL CLADDING AT TOWER WALL WITH FLAT LOCK COPPER, RE: DETAILS 4/EA512



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JN: 832681

No.	Date	Revision

Project:  
**Villa Victoria  
Center for the Arts**  
85 WEST NEWTON STREET  
BOSTON, MA

PHASE 1A  
CONSTRUCTION DOCUMENTS

**SOUTH ELEVATION**

Scale: 1/4"=1'-0"

Stamp: COREY G. MATTHEWS STRUCTURAL No. 47568 REGISTERED PROFESSIONAL ENGINEER

File Name: \_\_\_\_\_

Drawn by CAC MDF  
KPB EWM SMF

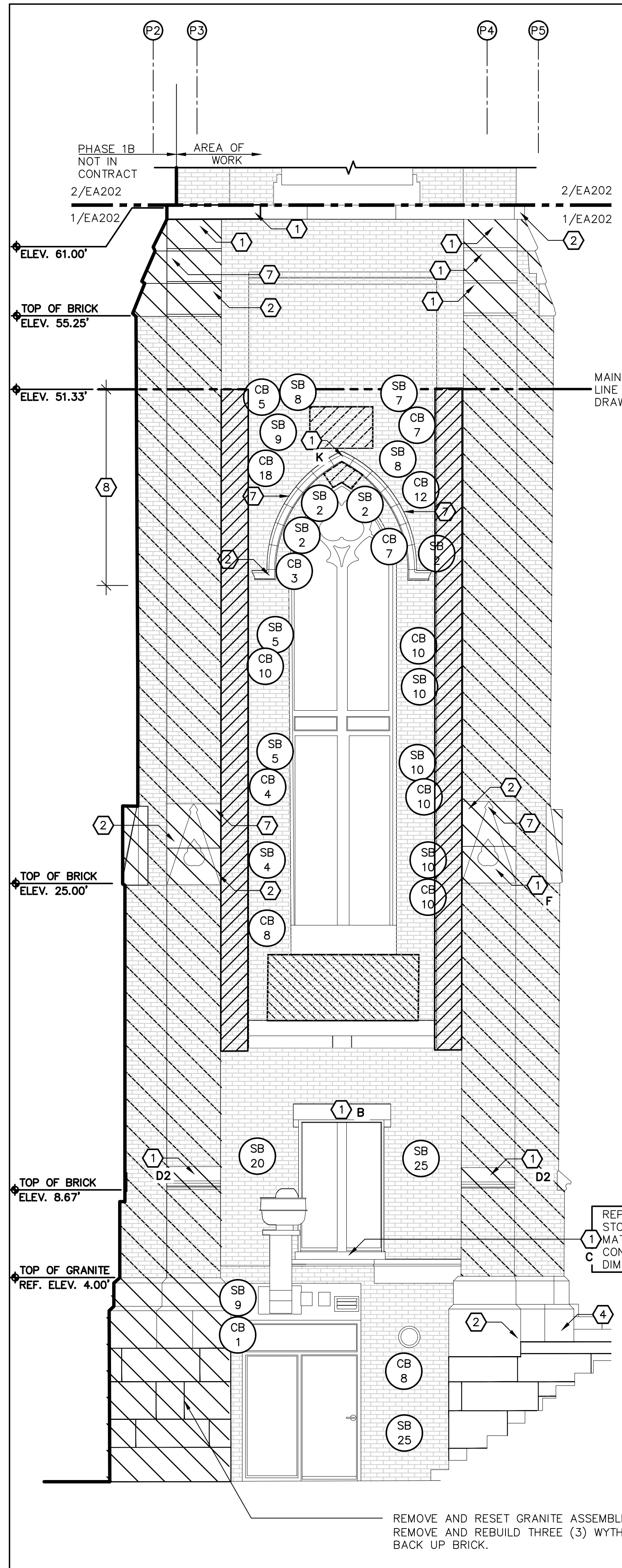
Checked by MDF CM

Job No. 3704  
CAD Job No. 832681

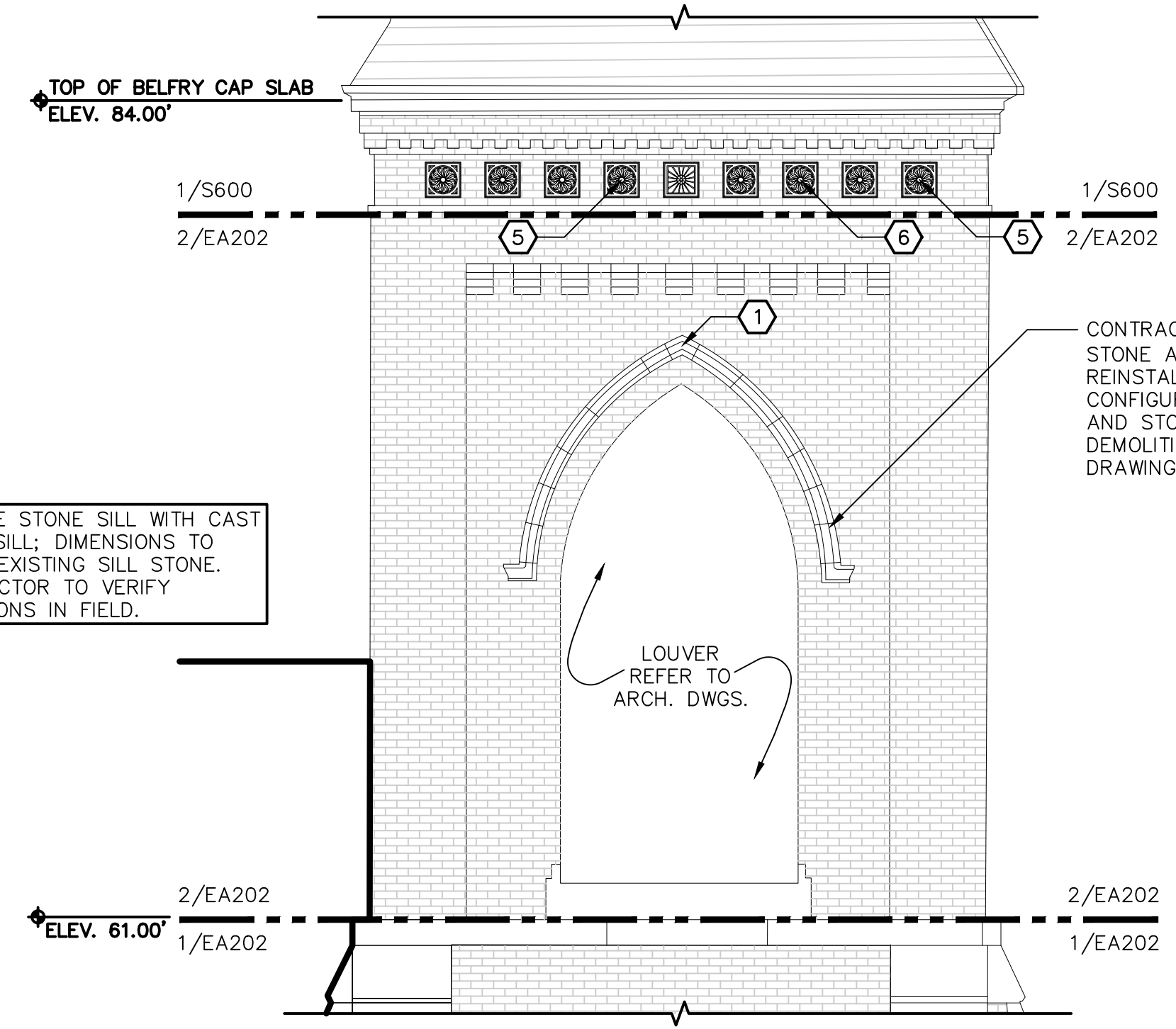
Date: 9/22/2017

**EA201**

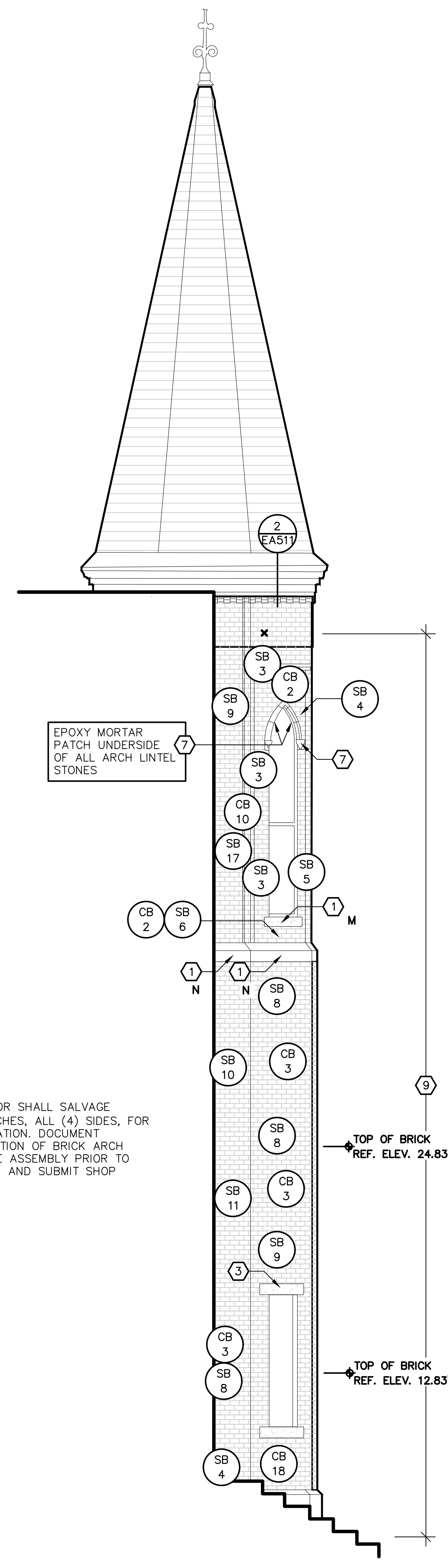




1 WEST ELEVATION (LOWER)  
SCALE: 1/4"=1'-0"



2 WEST ELEVATION (UPPER)  
SCALE: 1/4"=1'-0"



3 WEST ELEVATION (HIDDEN)  
SCALE: 1/4"=1'-0"

### GENERAL NOTES

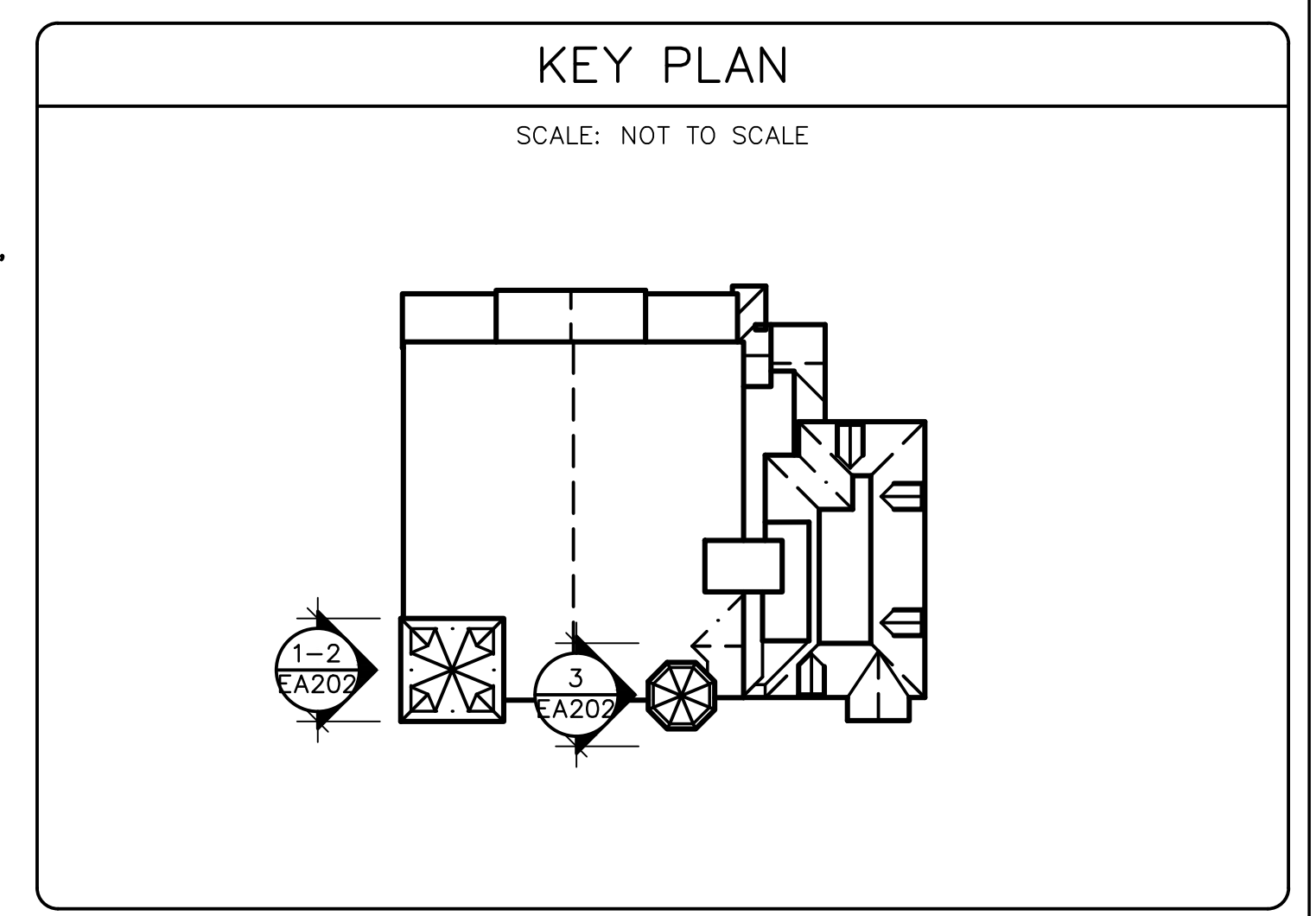
1. SALVAGE AND REINSTALL ALL TERRA COTTA MEDALLIONS, UNLESS NOTED OTHERWISE. CONTACT ENGINEER IMMEDIATELY IF ANY TERRA COTTA MEDALLIONS THAT ARE FOUND TO BE SPALLED OR CRACKED, AND IS NOT INDICATED AS SUCH ON THE ELEVATION.
2. SALVAGE AND REINSTALL STONES, UNLESS NOTED OTHERWISE. CONTACT ENGINEER IMMEDIATELY IF ANY STONE THAT IS FOUND TO BE SPALLED OR CRACKED, AND IS NOT INDICATED AS SUCH ON THE ELEVATION.
3. REFER TO SHEET EG001 FOR GENERAL TECHNICAL NOTES AND SPECIFICATIONS.
4. REFER TO SHEET EA301 FOR STONE SCHEDULE, AND DIMENSIONS.
5. STONE SCHEDULED FOR REPLACEMENT SHALL BE SALVAGED FOR USE ON DUTCHMAN REPAIRS, AND SHALL BE REPLACED WITH CAST STONE.
6. 100% OF MASONRY ASSEMBLIES WITHIN WORK AREAS SHALL BE CLEANED AND REPOINTED.

### REPAIR NOTES

1. EXISTING STONE TO BE REPLACED WITH VAST STONE. REFER TO STONE SCHEDULE 2/EA301 FOR TYPES. SUB-LETTER = STONE SHAPE TYPE.
2. EXISTING STONE TO BE REPAIRED: DUTCHMAN - SEE DRAWING EA521.
3. EXISTING STONE TO BE COATED WITH THIN OVERLAY: REFER TO SPECIFICATIONS
4. EXISTING GRANITE STONE CRACK TO BE REPAIRED. SEE DRAWING EA521.
5. EXISTING TERRA COTTA TILE TO BE REPLACED.
6. EXISTING TERRA COTTA TILE TO BE REPAIRED.
7. EXISTING STONE TO BE REPAIRED WITH A MIMIC PATCH: REFER TO SPECIFICATIONS
8. REPOINT 100% INTERIOR BRICK IN TOWER BELOW POINT OF REMOVALS, TYP. (4) SIDES.
9. REPOINT 100% INTERIOR BRICK AT SMALL SPIRE.

### REPAIR LEGEND

- CB # CRACKED BRICK TO BE REPLACED; # INDICATES UNITS
- SB # SPALLED BRICK TO BE REPLACED; # INDICATES UNITS
- X EXISTING ANCHOR/METAL STUB TO BE REMOVED. REMOVE AND REPLACE PENETRATED STONE/ BRICK MASONRY; # INDICATES QUANTITY
- BRICK MASONRY TO BE REBUILT ONE WYTHE DEEP
- BRICK MASONRY PILASTER TO BE REPAIRED PER DESIGN DETAILS. INDICATED ON SHEET SB51 & SB52.
- REMOVE AND REPLACE SHEET METAL CLADDING AT TOWER WALL WITH FLAT LOCK COPPER, RE: DETAILS 4/EA512



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JN: 832681

No.	Date	Revision

Project:  
**Villa Victoria  
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85 WEST NEWTON STREET  
BOSTON, MA

PHASE 1A  
CONSTRUCTION DOCUMENTS

WEST ELEVATIONS

Scale: 1/4"=1'-0"

File Name: \_\_\_\_\_

Drawn By: CAC MDF  
KPB EWM SMF

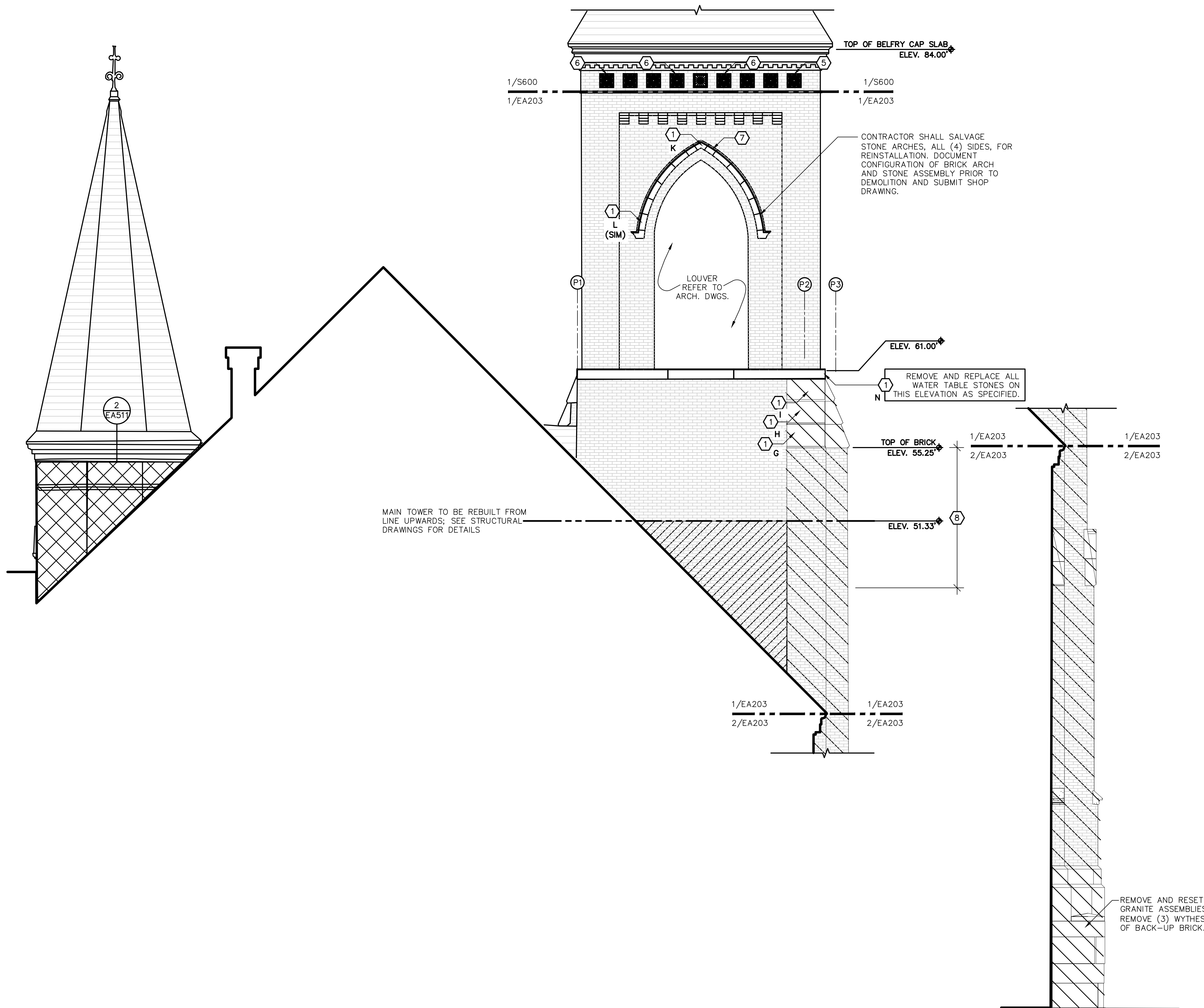
Checked By: MDF CM

Job No.: 3704  
CAD Job No.: 832681  
Date: 9/22/2017

Stamp:

Drawing No.: **EA202**





1 NORTH ELEVATION  
SCALE: 1/4"=1'-0" 0 2' 4' 8'

2 NORTH - HIDDEN ELEVATION  
SCALE: 1/4"=1'-0" 0 2' 4' 8'

GENERAL NOTES

1. SALVAGE AND REINSTALL ALL TERRA COTTA MEDALLIONS, UNLESS NOTED OTHERWISE. CONTACT ENGINEER IMMEDIATELY IF ANY TERRA COTTA MEDALLIONS THAT ARE FOUND TO BE SPALLED OR CRACKED, AND IS NOT INDICATED AS SUCH ON THE ELEVATION.
2. SALVAGE AND REINSTALL STONES, UNLESS NOTED OTHERWISE. CONTACT ENGINEER IMMEDIATELY IF ANY STONE THAT IS FOUND TO BE SPALLED OR CRACKED, AND IS NOT INDICATED AS SUCH ON THE ELEVATION.
3. REFER TO SHEET EG001 FOR GENERAL TECHNICAL NOTES AND SPECIFICATIONS.
4. REFER TO SHEET EA301 FOR STONE SCHEDULE, AND DIMENSIONS.
5. STONE SCHEDULED FOR REPLACEMENT SHALL BE SALVAGED FOR USE ON DUTCHMAN REPAIRS, AND SHALL BE REPLACED WITH CAST STONE.
6. 100% OF MASONRY ASSEMBLIES WITHIN WORK AREAS SHALL BE CLEANED AND REPOINTED.

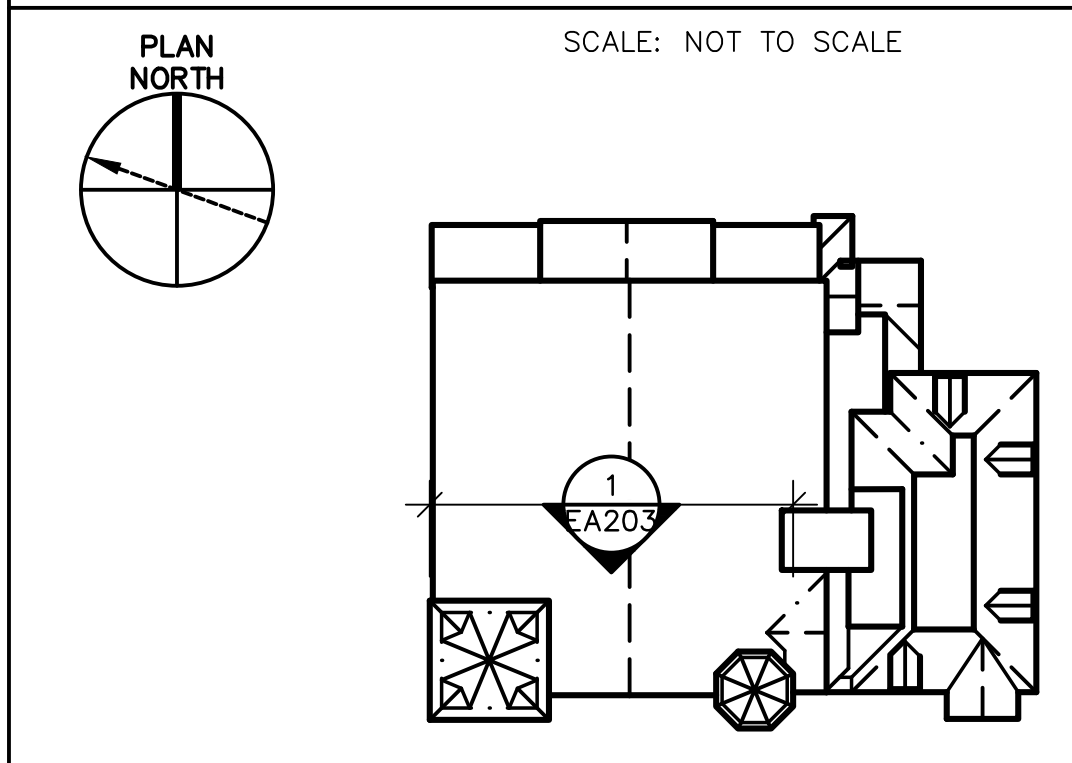
REPAIR NOTES

1. EXISTING STONE TO BE REPLACED WITH VAST STONE. REFER TO STONE SCHEDULE 2/EA301 FOR TYPES. SUB-LETTER = STONE SHAPE TYPE.
2. EXISTING STONE TO BE REPAIRED: DUTCHMAN - SEE DRAWING EA521.
3. EXISTING STONE TO BE COATED WITH THIN OVERLAY: REFER TO SPECIFICATIONS
4. EXISTING GRANITE STONE CRACK TO BE REPAIRED. SEE DRAWING EA521.
5. EXISTING TERRA COTTA TILE TO BE REPLACED.
6. EXISTING TERRA COTTA TILE TO BE REPAIRED.
7. EXISTING STONE TO BE REPAIRED WITH A MIMIC PATCH: REFER TO SPECIFICATIONS
8. REPOINT 100% INTERIOR BRICK IN TOWER BELOW POINT OF REMOVALS, TYP. (4) SIDES.
9. REPOINT 100% INTERIOR BRICK AT SMALL SPIRE.

REPAIR LEGEND

- CB # CRACKED BRICK TO BE REPLACED; # INDICATES UNITS
- SB # SPALLED BRICK TO BE REPLACED; # INDICATES UNITS
- x EXISTING ANCHOR/METAL STUB TO BE REMOVED. REMOVE AND REPLACE PENETRATED STONE/ BRICK MASONRY; # INDICATES QUANTITY
- BRICK MASONRY TO BE REBUILT ONE WYTHE DEEP
- BRICK MASONRY PILASTER TO BE REPAIRED PER DESIGN DETAILS. INDICATED ON SHEET S851 & S852.
- REMOVE AND REPLACE SHEET METAL CLADDING AT TOWER WALL WITH FLAT LOCK COPPER, RE: DETAILS 4/EA512

KEY PLAN



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JN: 832681

No.	Date	Revision

Project:  
**Villa Victoria  
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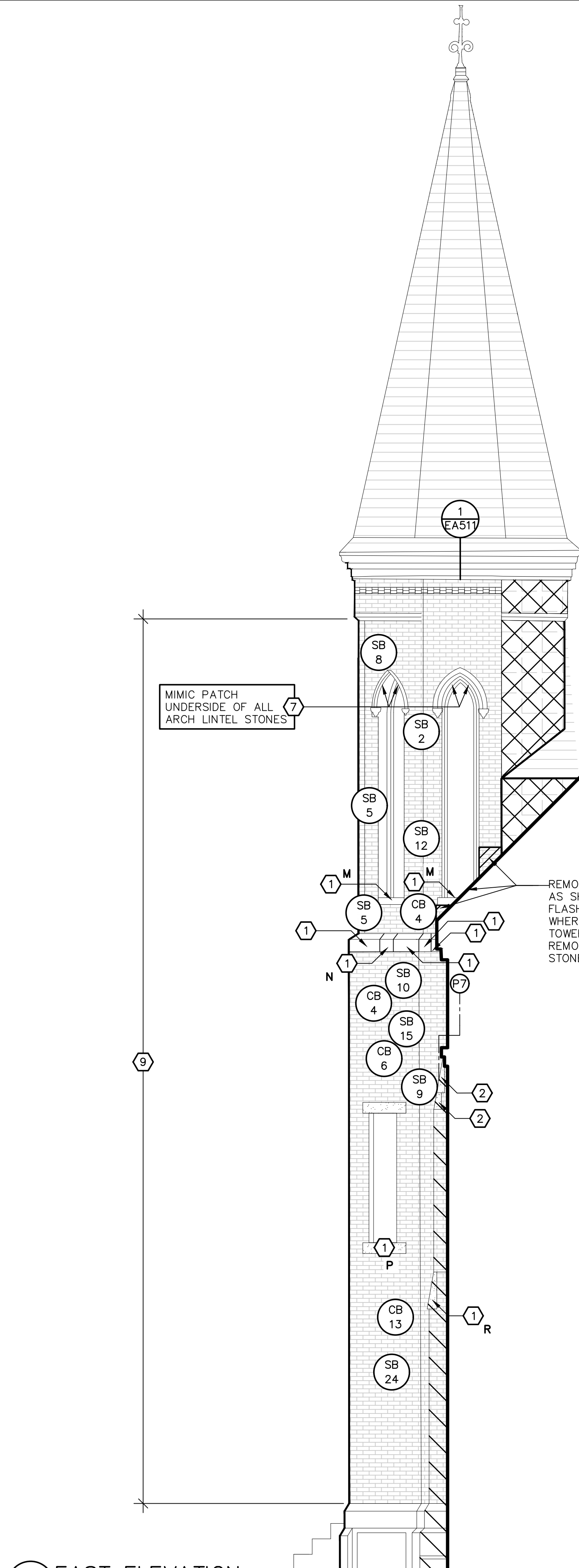
PHASE 1A  
CONSTRUCTION DOCUMENTS

NORTH ELEVATION

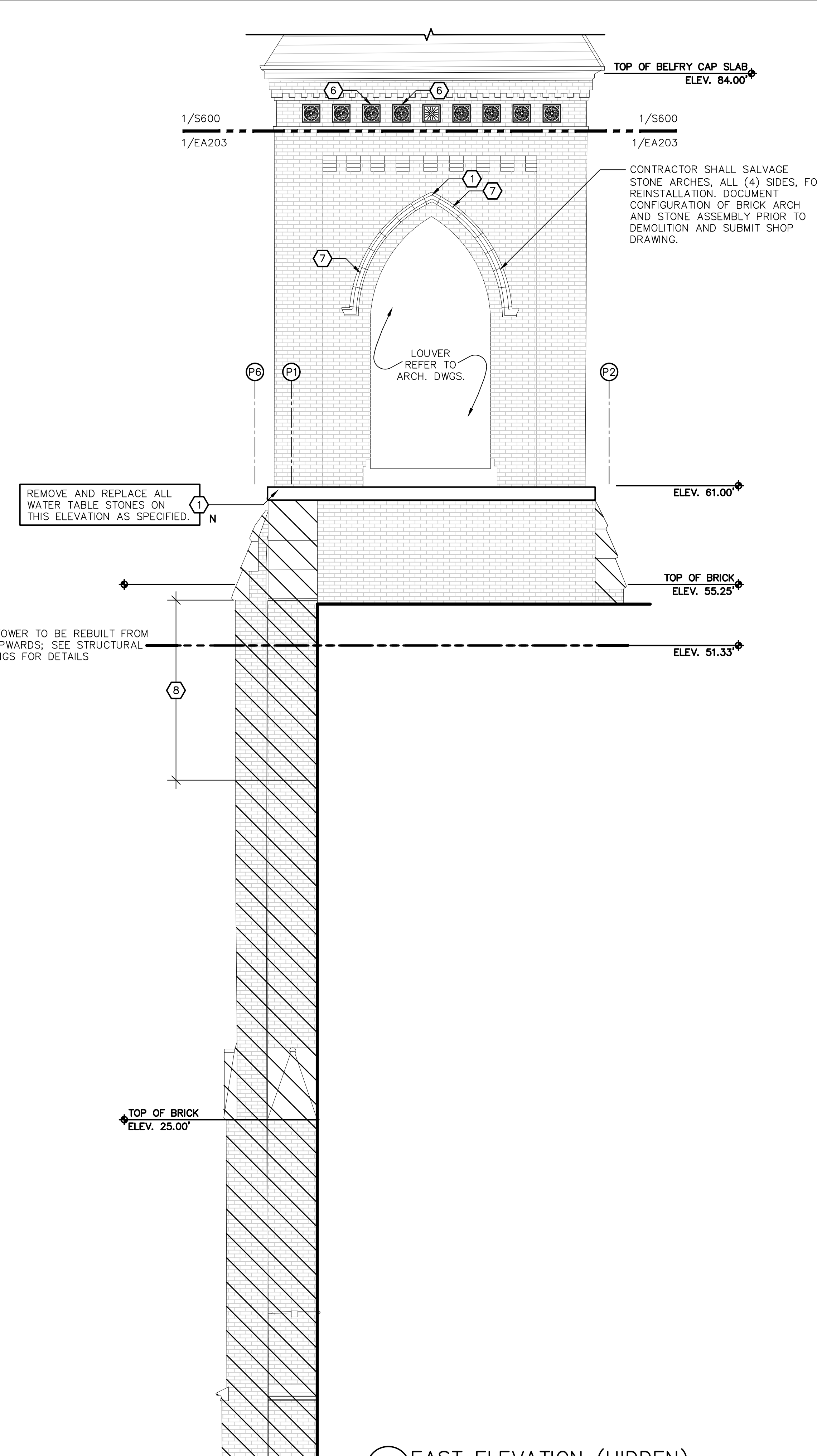
Scale: 1/4"=1'-0" Stamp:

File Name:  
Drawn By CAC MDF  
KPB EWM SMF  
Checked By MDF CM  
Drawing No. EA203  
Job No. 3704  
GAI: Job No. 832681  
Date: 9/22/2017





1 EAST ELEVATION  
SCALE: 1/4"=1'-0" 0 2' 4' 8'

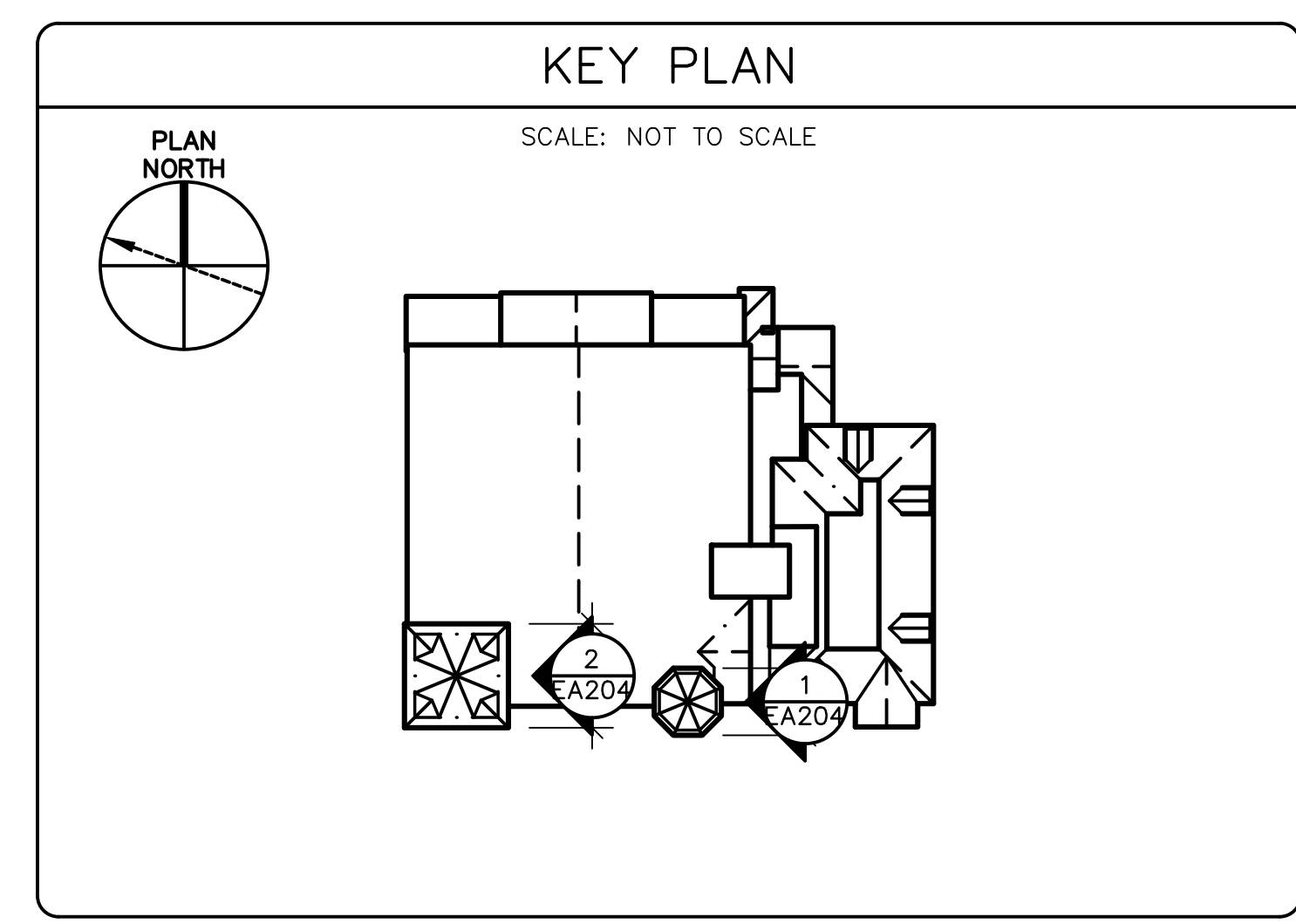


2 EAST ELEVATION (HIDDEN)  
SCALE: 1/4"=1'-0" 0 2' 4' 8'

- ### GENERAL NOTES
1. SALVAGE AND REINSTALL ALL TERRA COTTA MEDALLIONS, UNLESS NOTED OTHERWISE. CONTACT ENGINEER IMMEDIATELY OF ANY TERRA COTTA MEDALLIONS THAT ARE FOUND TO BE SPALLED OR CRACKED, AND IS NOT INDICATED AS SUCH ON THE ELEVATION.
  2. SALVAGE AND REINSTALL STONES, UNLESS NOTED OTHERWISE. CONTACT ENGINEER IMMEDIATELY OF ANY STONE THAT IS FOUND TO BE SPALLED OR CRACKED, AND IS NOT INDICATED AS SUCH ON THE ELEVATION.
  3. REFER TO SHEET EG001 FOR GENERAL TECHNICAL NOTES AND SPECIFICATIONS.
  4. REFER TO SHEET EA301 FOR STONE SCHEDULE, AND DIMENSIONS.
  5. STONE SCHEDULE FOR REPLACEMENT SHALL BE SALVAGED FOR USE ON DUTCHMAN REPAIRS, AND SHALL BE REPLACED WITH CAST STONE.
  6. 100% OF MASONRY ASSEMBLIES WITHIN WORK AREAS SHALL BE CLEANED AND REPOINTED.

- ### REPAIR NOTES
1. EXISTING STONE TO BE REPLACED WITH VAST STONE. REFER TO STONE SCHEDULE 2/EA301 FOR TYPES. SUB-LETTER = STONE SHAPE TYPE.
  2. EXISTING STONE TO BE REPAIRED: DUTCHMAN - SEE DRAWING EA521.
  3. EXISTING STONE TO BE COATED WITH THIN OVERLAY: REFER TO SPECIFICATIONS
  4. EXISTING GRANITE STONE CRACK TO BE REPAIRED. SEE DRAWING EA521.
  5. EXISTING TERRA COTTA TILE TO BE REPLACED.
  6. EXISTING TERRA COTTA TILE TO BE REPAIRED.
  7. EXISTING STONE TO BE REPAIRED WITH A MIMIC PATCH: REFER TO SPECIFICATIONS
  8. REPOINT 100% INTERIOR BRICK IN TOWER BELOW POINT OF REMOVALS, TYP. (4) SIDES.
  9. REPOINT 100% INTERIOR BRICK AT SMALL SPIRE.

- ### REPAIR LEGEND
- CB # CRACKED BRICK TO BE REPLACED; # INDICATES UNITS
  - SB # SPALLED BRICK TO BE REPLACED; # INDICATES UNITS
  - \* EXISTING ANCHOR/METAL STUB TO BE REMOVED. REMOVE AND REPLACE PENETRATED STONE/ BRICK MASONRY; # INDICATES QUANTITY
  - BRICK MASONRY TO BE REBUILT ONE WYTHE DEEP
  - BRICK MASONRY PILASTER TO BE REPAIRED PER DESIGN DETAILS. INDICATED ON SHEET SB51 & SB52.
  - REMOVE AND REPLACE SHEET METAL CLADDING AT TOWER WALL WITH FLAT LOCK COPPER, RE: DETAILS 4/EA512



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JN: 832681

No.	Date	Revision

Project:  
**Villa Victoria  
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85 WEST NEWTON STREET  
BOSTON, MA

PHASE 1A  
CONSTRUCTION DOCUMENTS

EAST ELEVATIONS

Scale: 1/8"=1'-0"

Stamp:

File Name: \_\_\_\_\_

Drawn By: CAC MDF  
KPB EWM SMF

Checked By: MDF CM

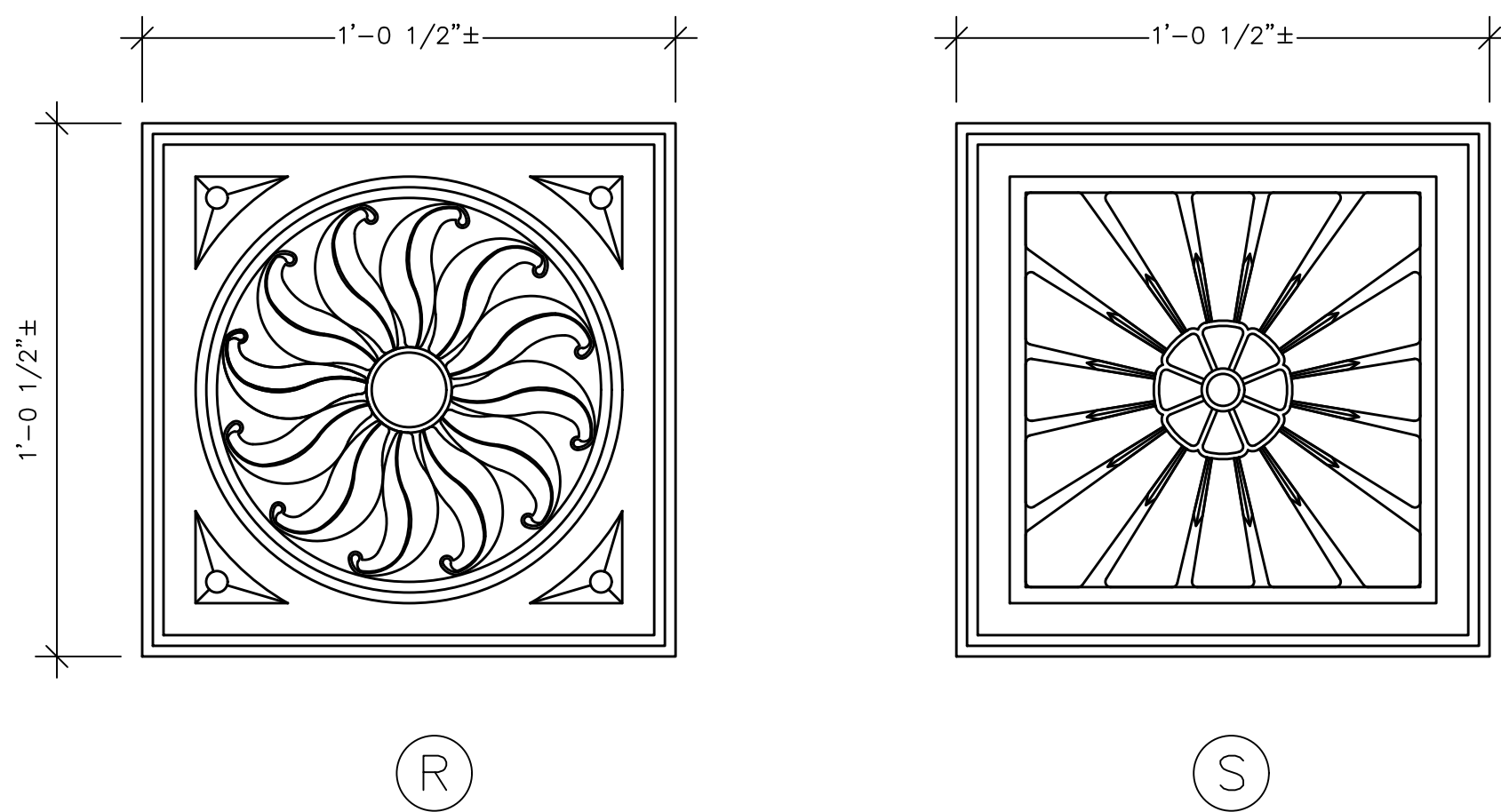
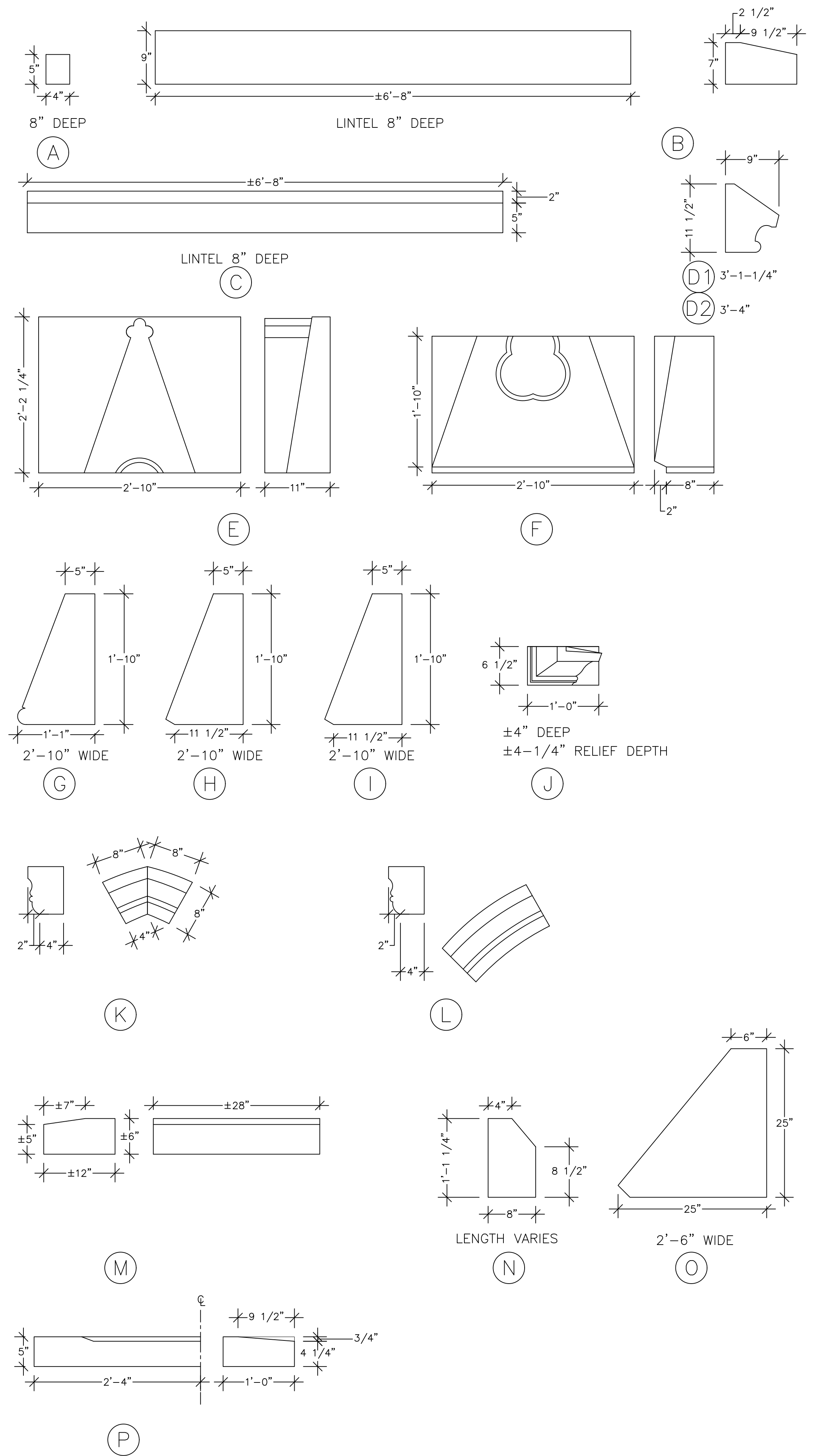
Job No.: 3704  
CAD Job No.: 832681  
Date: 9/22/2017

Drawing No.: **EA204**



**GENERAL NOTES**

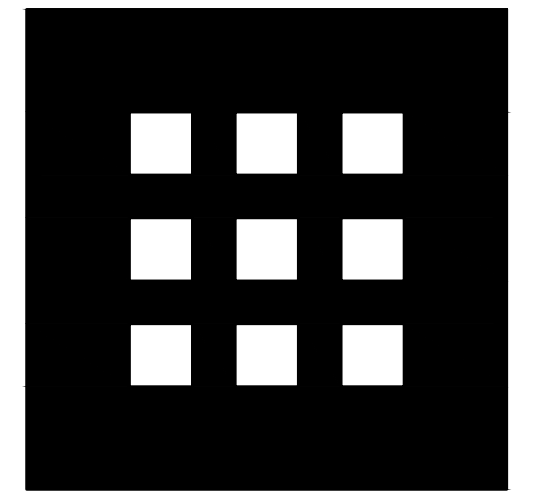
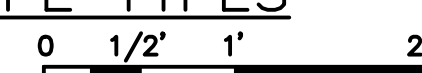
1. THE SHAPES AND DIMENSIONS SHOWN ARE APPROXIMATE, AND ARE TO BE UTILIZED FOR BIDDING PURPOSES. THEY ARE BASED ON SEVERAL SOURCES OF INFORMATION. CONTRACTOR SHALL CONFIRM ALL DIMENSIONS AND DETAILS TO MATCH EXISTING SHAPES WITH REPLACEMENT UNITS.



1 TERRA COTTA TILE SHAPE TYPES  
SCALE: 3"=1'-0"



2 STONE SHAPE TYPES  
SCALE: 1"=1'-0"



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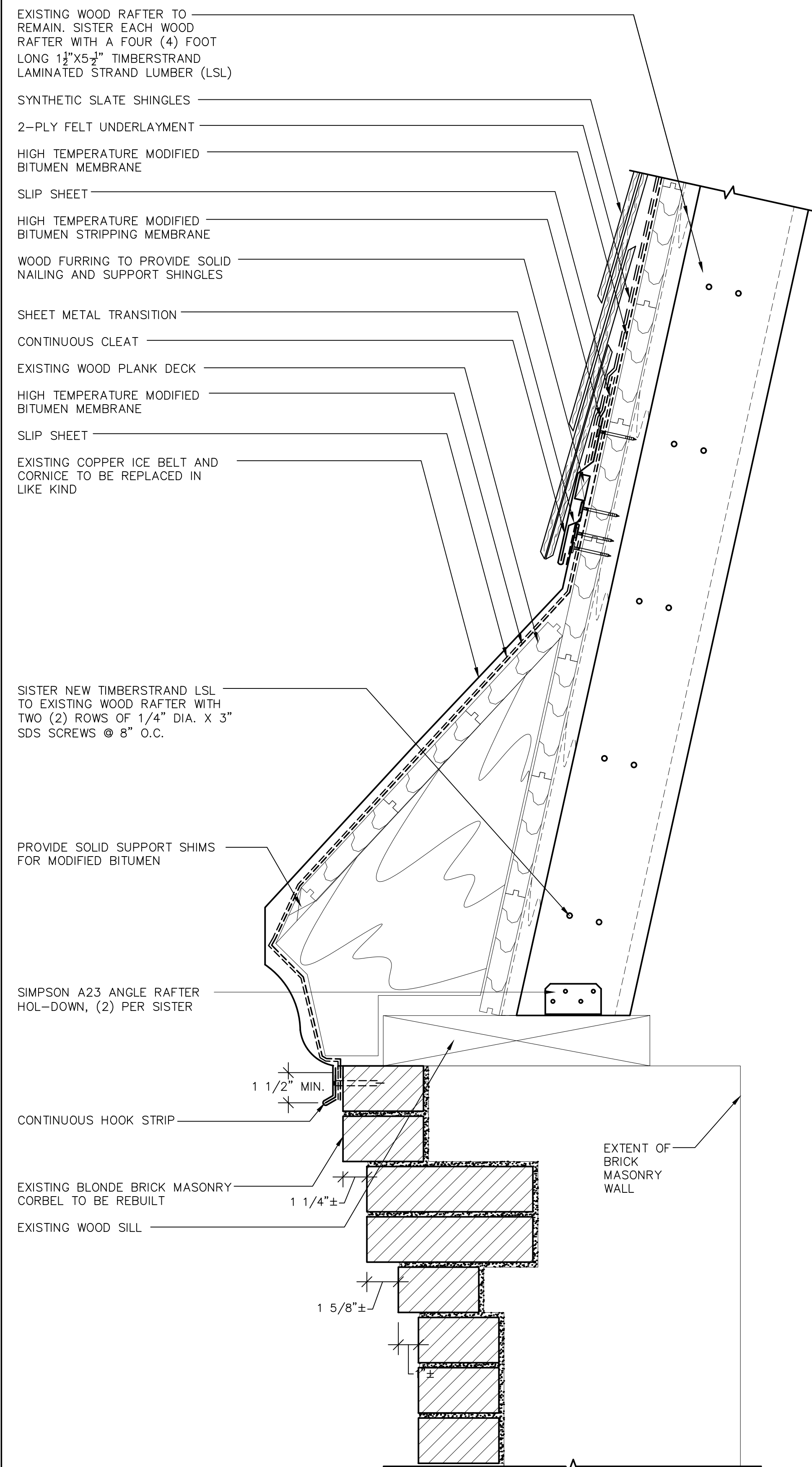
Project:  
**Villa Victoria**  
**Center for the Arts**  
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BOSTON, MA

PHASE 1A  
CONSTRUCTION DOCUMENTS

Title:  
**STONE AND TERRA COTTA**  
**SHAPE TYPES**

Scale: AS NOTED	Stamp: 
File Name: N	
Drawn By: CAC MDF KPB EWM SMF	Drawing No. <b>EA301</b>
Checked By: MDF CM	Job No.: 3704
Date: 9/22/2017	GALE Job No.: 832681

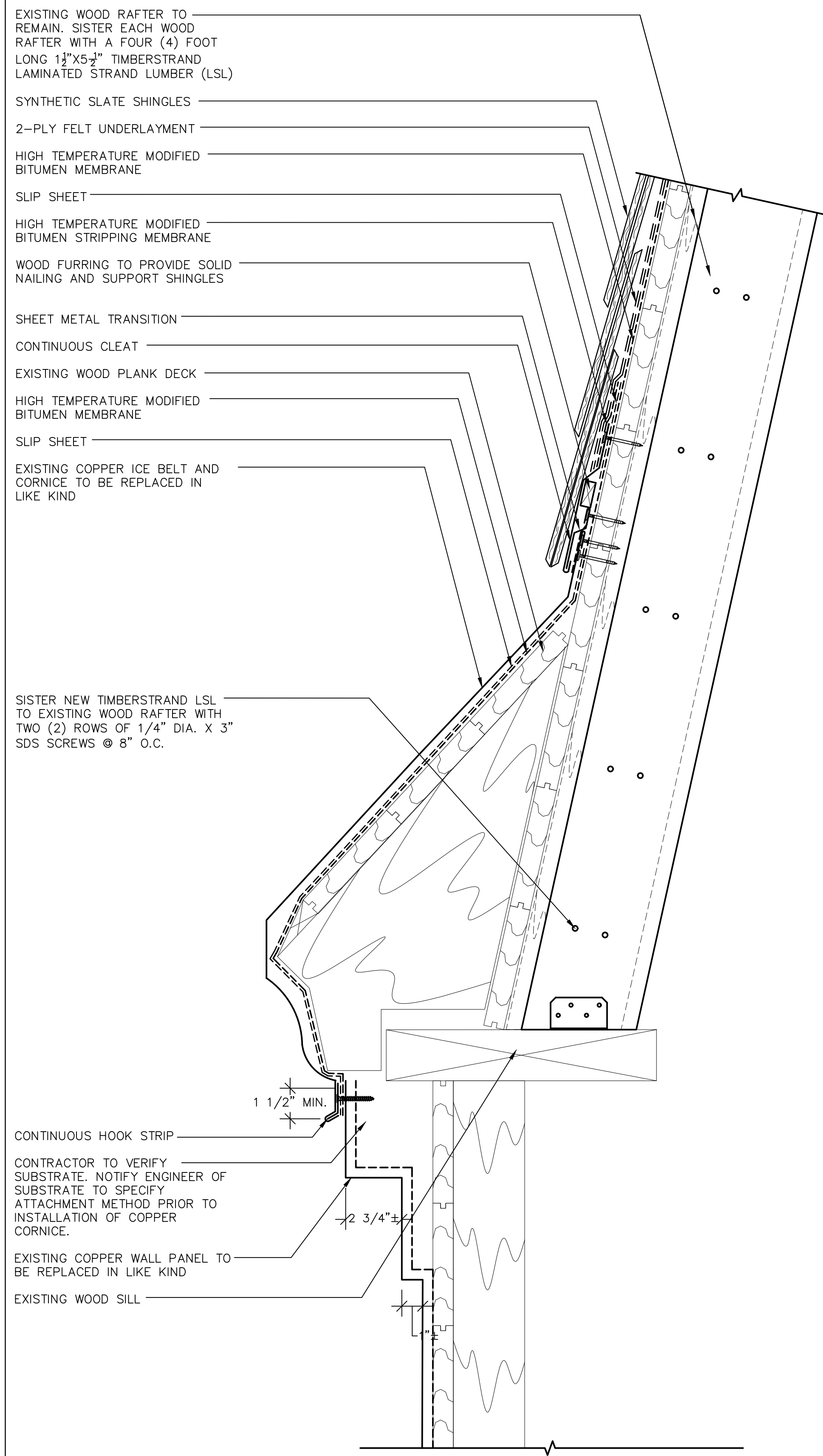




**NOTE:**

1. GAP BETWEEN SLATE SHINGLES AND UNDERLAYMENT SHOWN FOR CLARITY.
2. WOOD CANT STRIP AND BENT METAL DRIP EDGE ARE ONLY TO BE PROVIDED IF REQUIRED BY THE SYNTHETIC SLATE MANUFACTURER.
3. CONTRACTOR TO SUBMIT AS BUILT WOOD FRAMING FOR THE SMALL SPIRE TO THE ENGINEER FOR REVIEW.
4. CONTRACTOR TO NOTIFY THE ENGINEER IF ANY COMPONENTS ARE FOUND TO BE DETERIORATED OR ROTTED.

**1 ROOF EAVE – TYPE 1**  
 SCALE: 3"=1'-0"  
 (ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**NOTE:**

1. GAP BETWEEN SLATE SHINGLES AND UNDERLAYMENT SHOWN FOR CLARITY.
2. WOOD CANT STRIP AND BENT METAL DRIP EDGE ARE ONLY TO BE PROVIDED IF REQUIRED BY THE SYNTHETIC SLATE MANUFACTURER.
3. CONTRACTOR TO SUBMIT AS BUILT WOOD FRAMING FOR THE SMALL SPIRE TO THE ENGINEER FOR REVIEW.
4. CONTRACTOR TO NOTIFY THE ENGINEER IF ANY COMPONENTS ARE FOUND TO BE DETERIORATED OR ROTTED.

**2 ROOF EAVE – TYPE 2**  
 SCALE: 3"=1'-0"  
 (ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**3 ROOF EAVE – TYPE 1 – PHOTO**  
 SCALE: NTS



**4 ROOF EAVE – TYPE 1 – PHOTO**  
 SCALE: NTS



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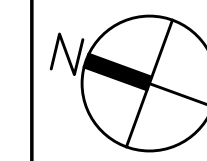
No.	Date	Revision

Project:  
**Villa Victoria**  
**Center for the Arts**  
 85 WEST NEWTON STREET  
 BOSTON, MA

PHASE 1A  
 CONSTRUCTION DOCUMENTS

Title:  
**SMALL SPIRE ROOF AND CORNICE DETAILS**

Scale:  
 3"=1'-0"



File Name:  
 Drawn By CAC MDF  
 KPBEWMSMF

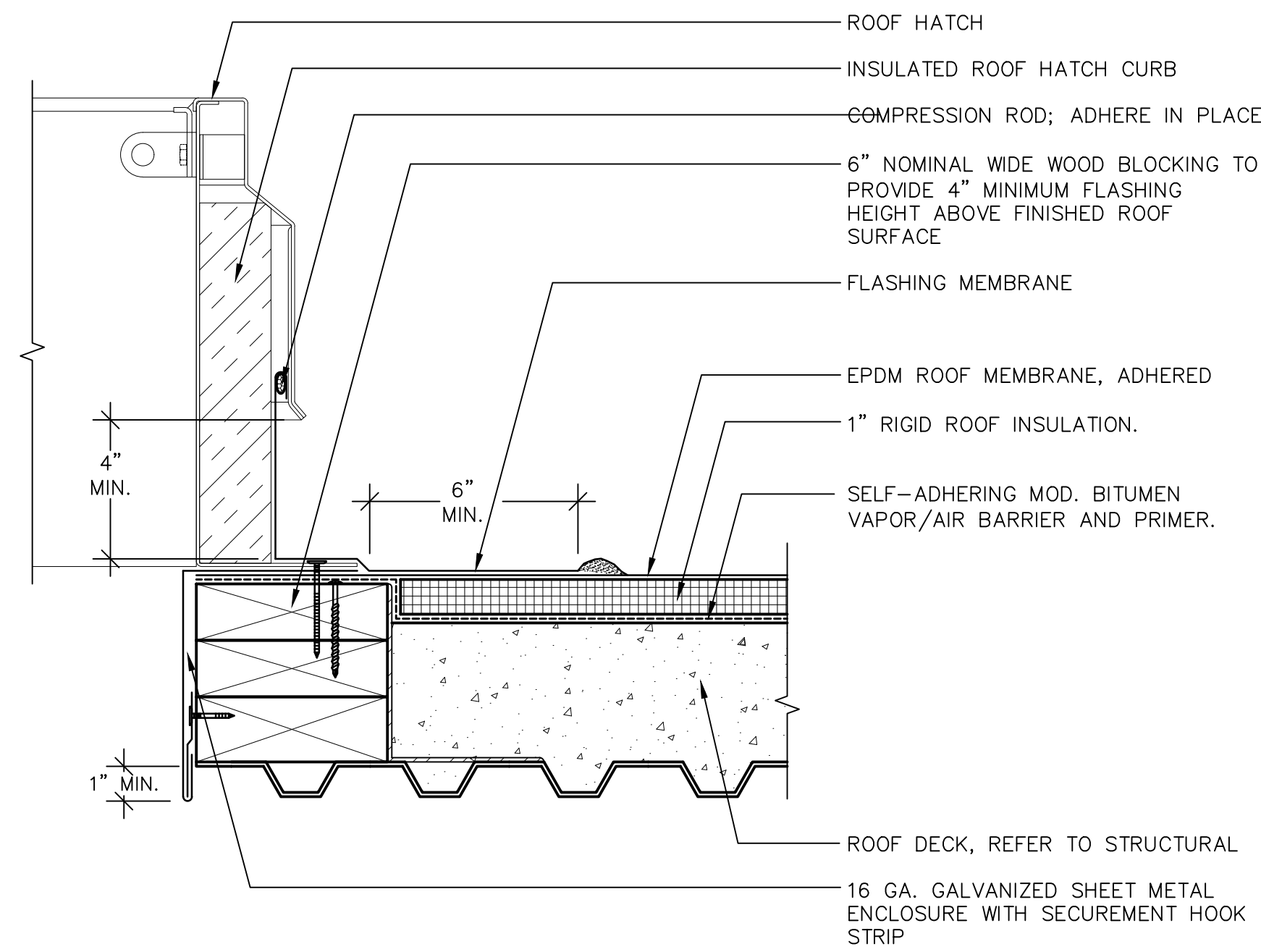
Checked By MDF CM  
 Drawing No.

Job No. 3704  
 GALE Job No. 832681  
 Date 9/22/2017



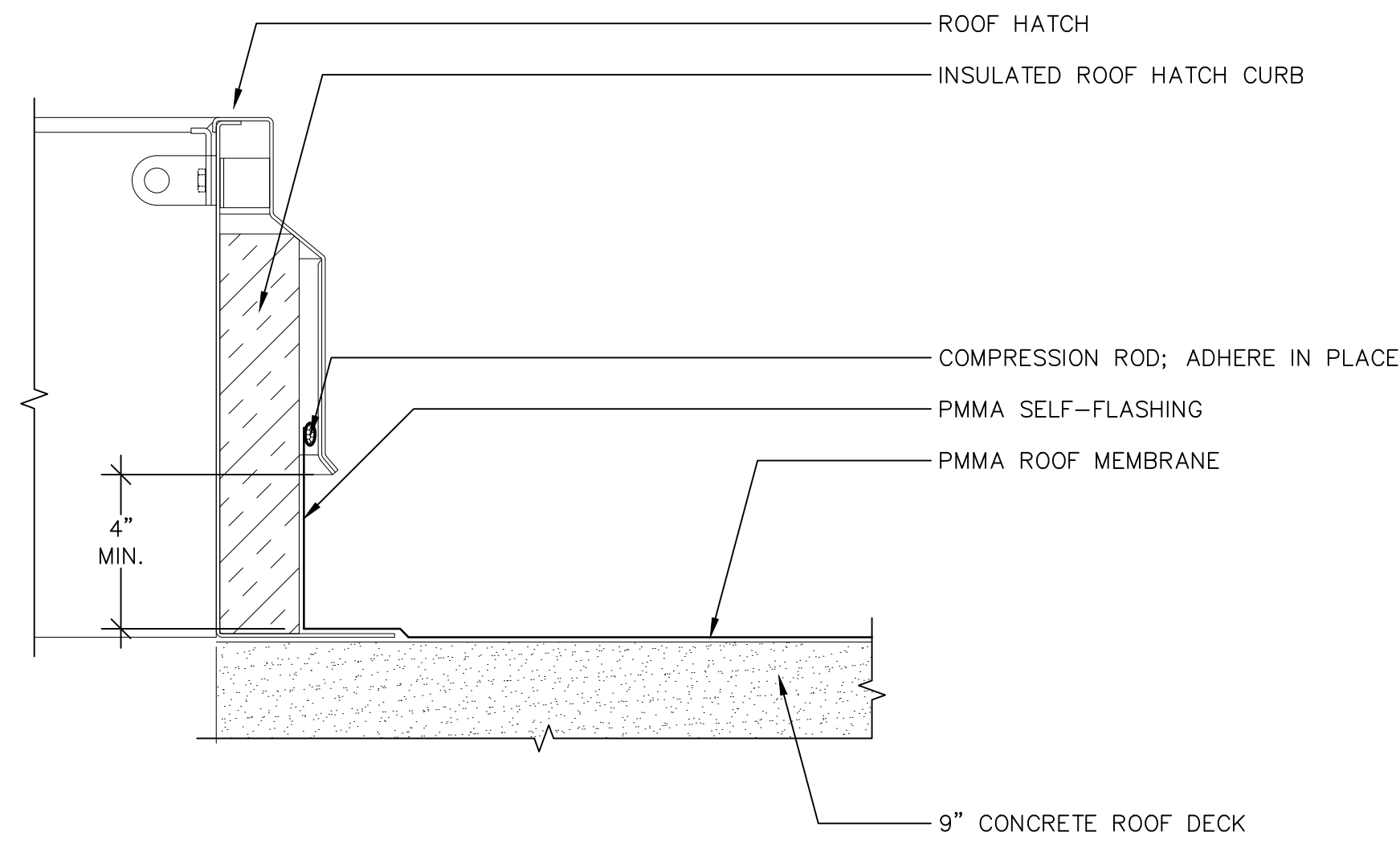
**EA511**





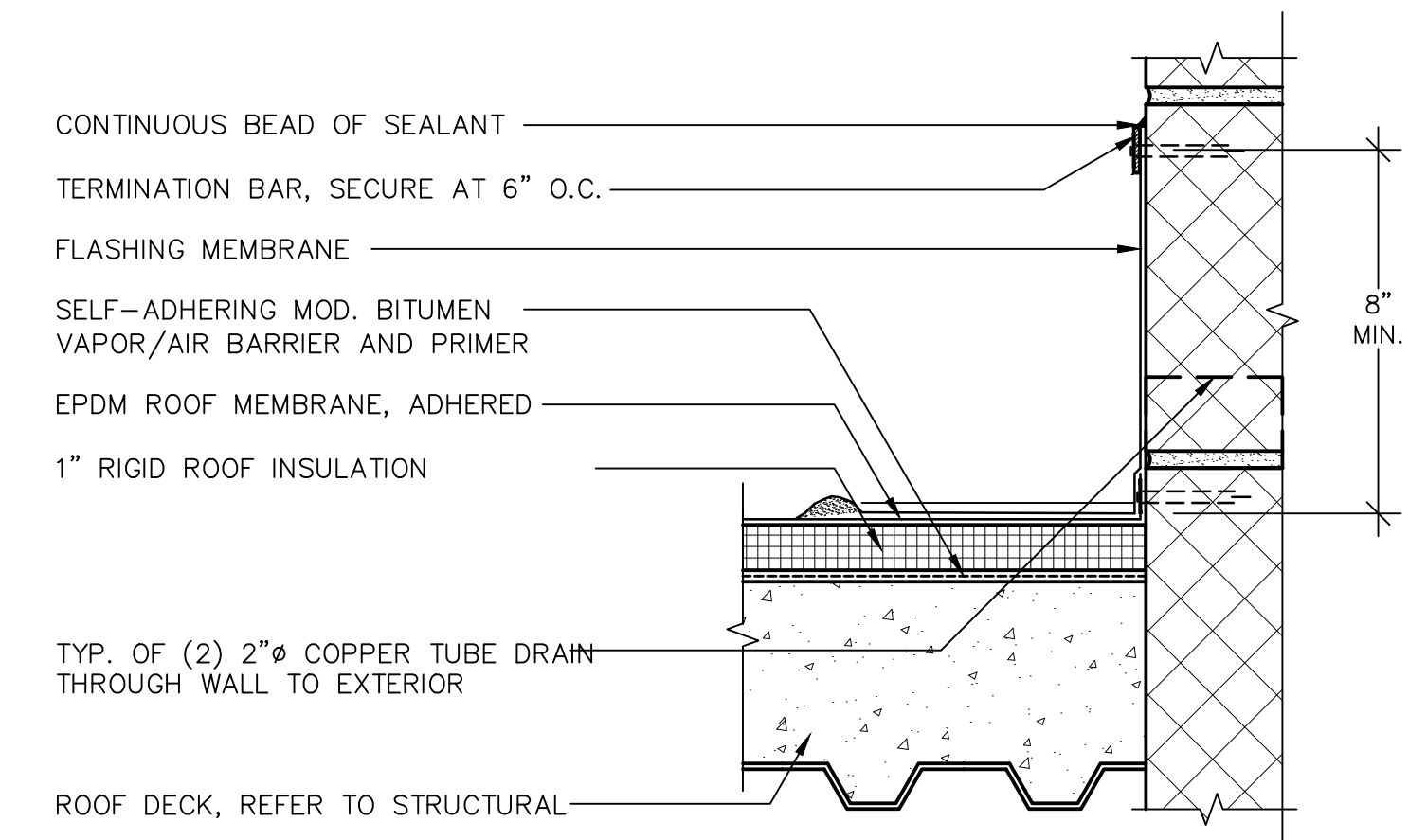
**1 BELFRY FLOOR - ROOF HATCH**

SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



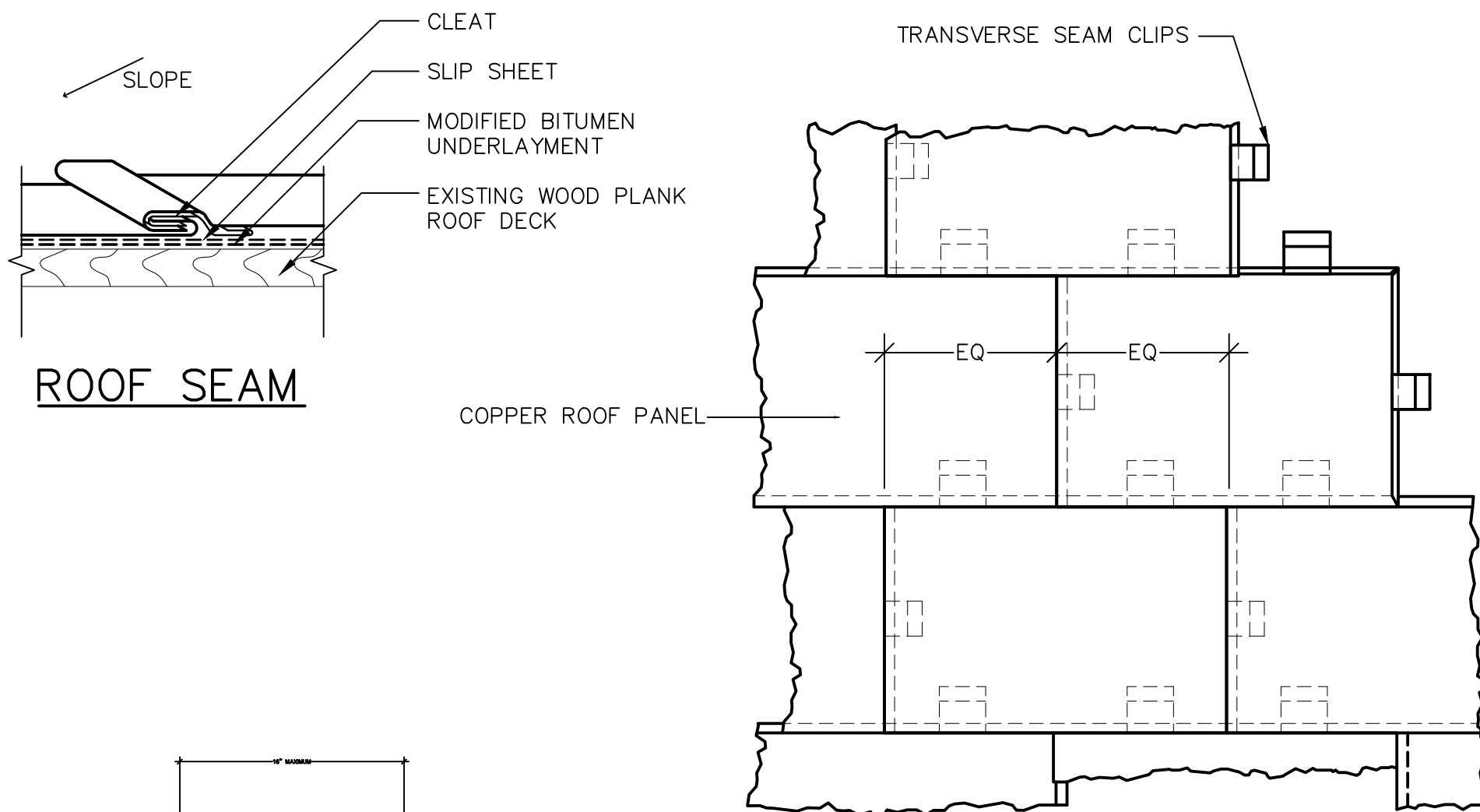
**2 BELFRY CAP SLAB - ROOF HATCH**

SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



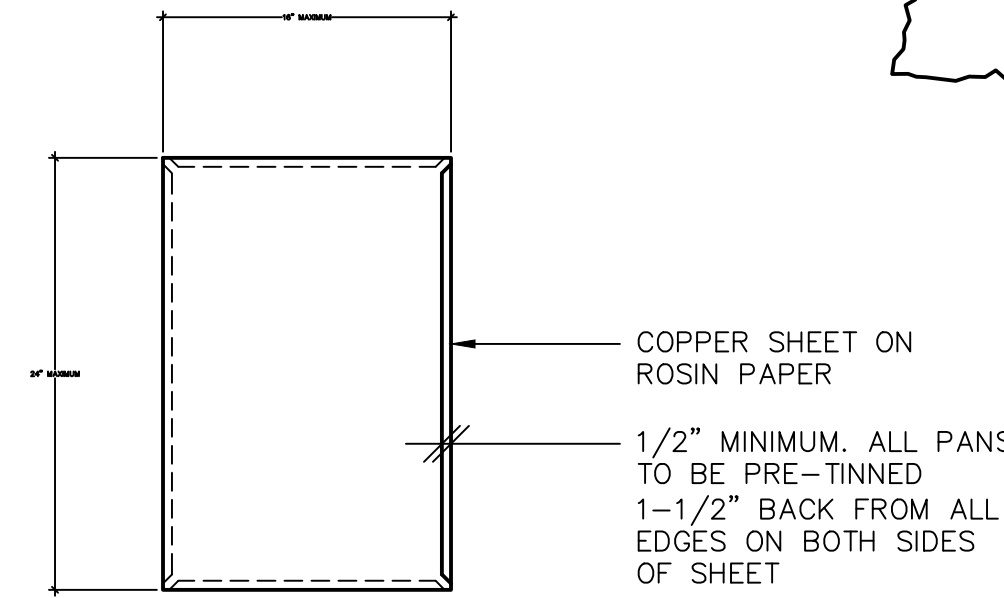
**3 ROOFING TERMINATION DETAIL**

SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**ROOF SEAM**

**TYPICAL FLAT SEAM ROOF LAYOUT**



**ROOFING PAN**

**4 VENTILATOR DETAIL**

SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**DHK**  
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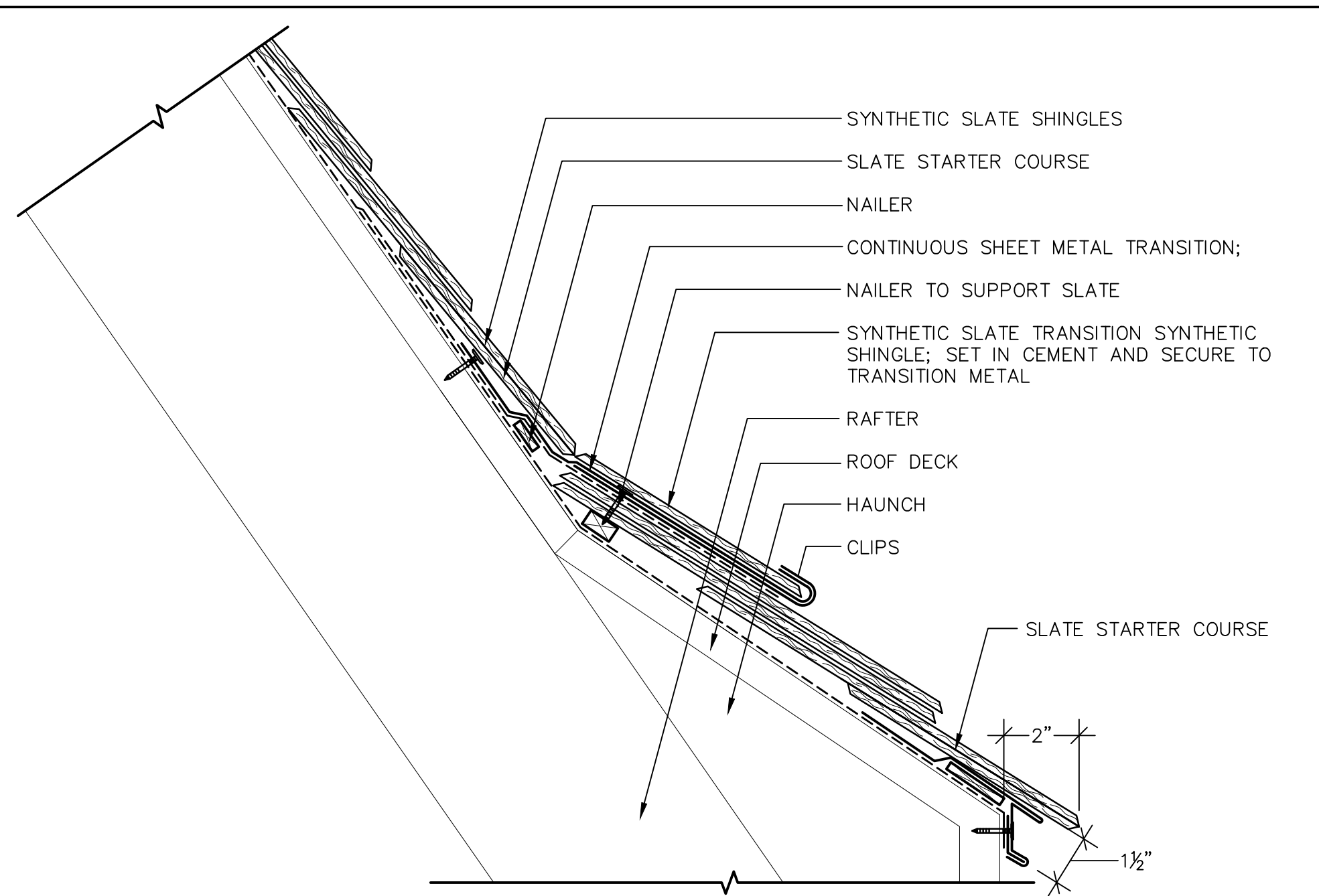
Project:  
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PHASE 1A  
CONSTRUCTION DOCUMENTS

Title:  
**ROOF DETAILS**

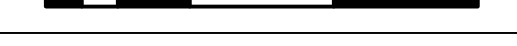
Scale: 3"=1'-0"	Stamp: 
File Name:	
Drawn By: CAC MDF KPB EWM SMF	Drawing No.:
Checked By: MDF CM	Job No.:
	Job No. 3704
	CAE Job No. 832681
	Date: 9/22/2017
<b>EA512</b>	



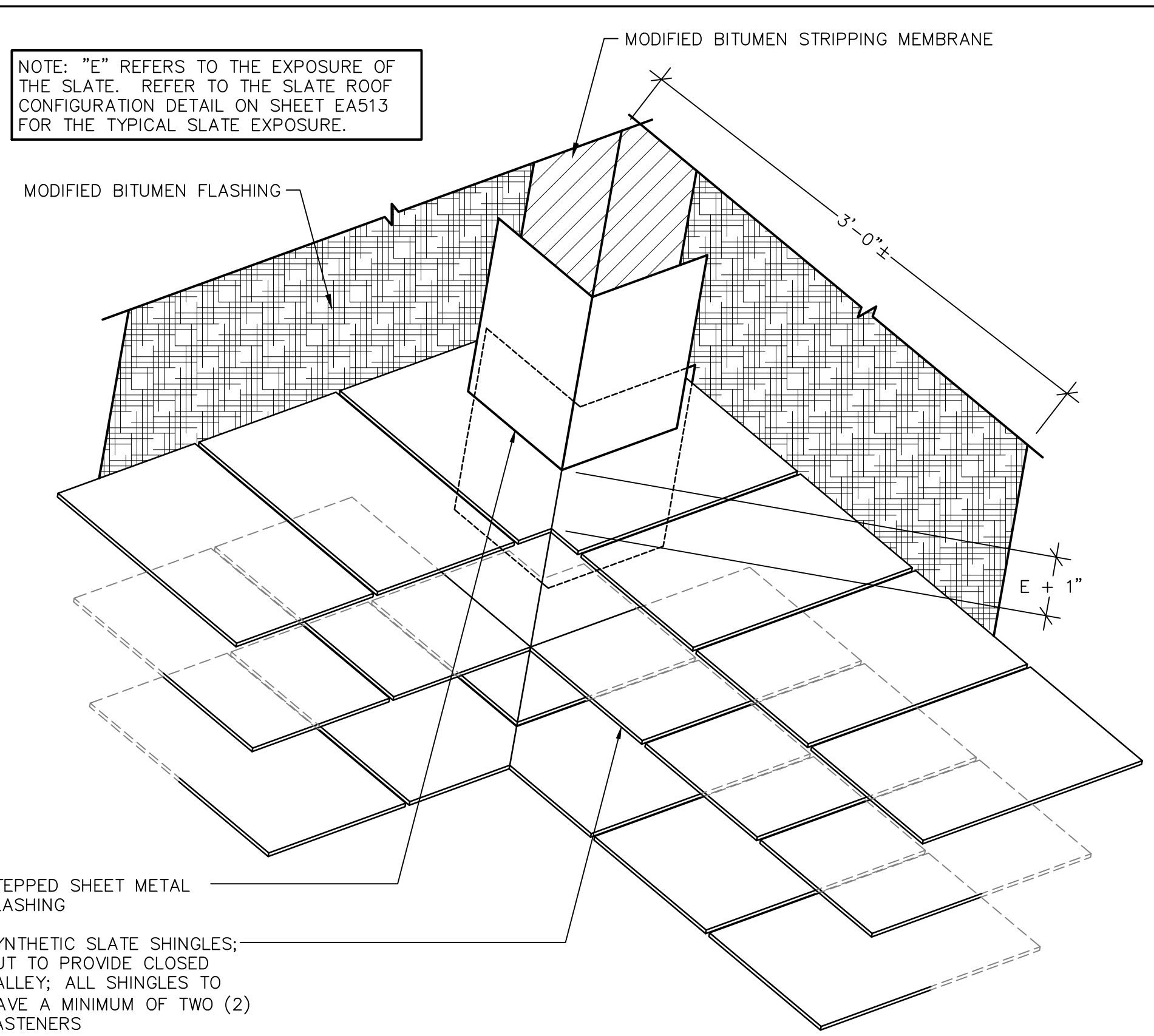


**1 DORMER EDGE SOFFIT**

SCALE: 3"=1'-0"  
 (ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**NOTE:**  
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 2. WOOD CANT STRIP AND BENT METAL DRIP EDGE ARE ONLY TO BE PROVIDED IF REQUIRED BY THE SYNTHETIC SLATE MANUFACTURER.



**2 CLOSED VALLEY ISOMETRIC**

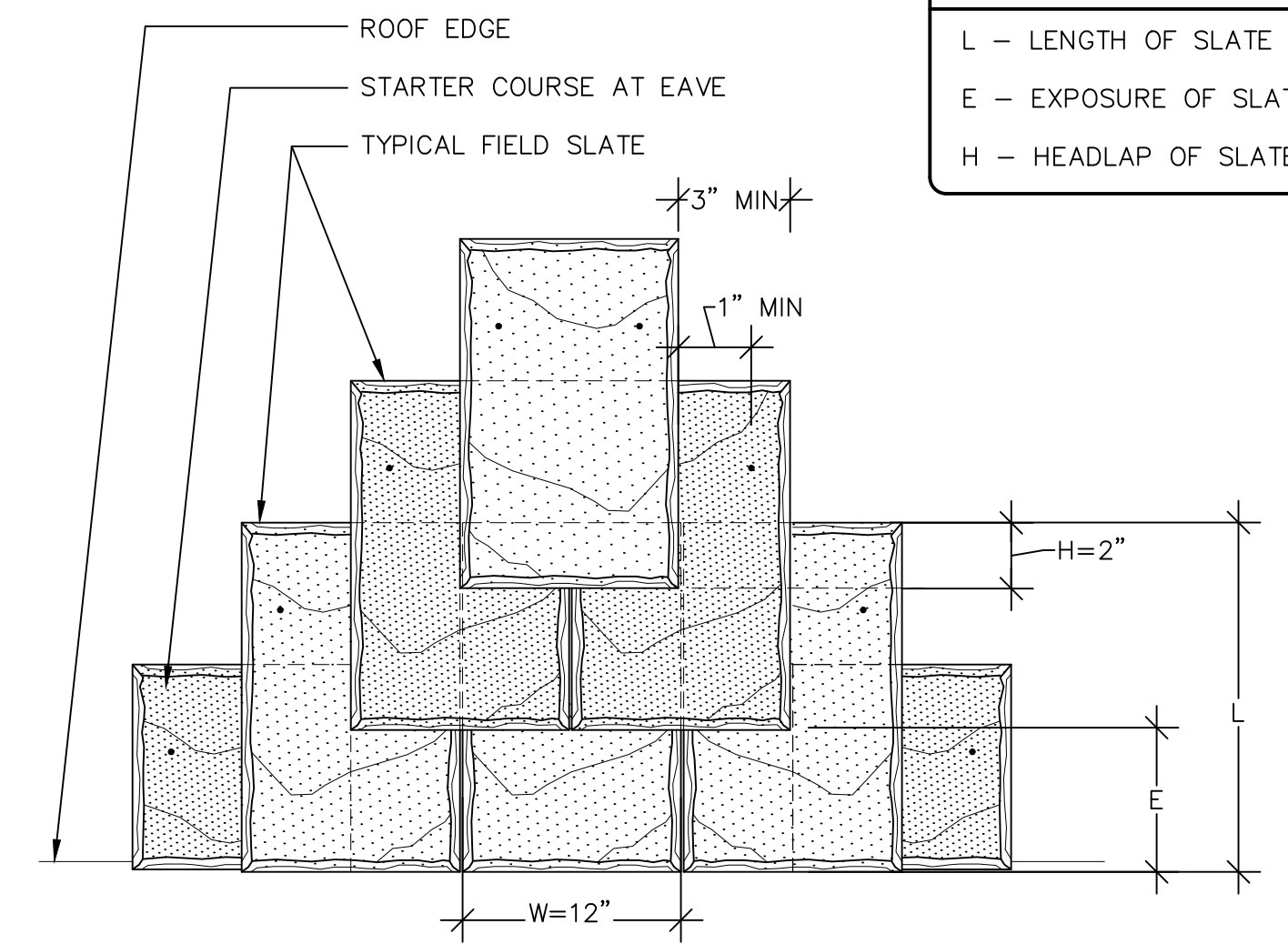
SCALE: NOT TO SCALE  
 (ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

**NOTE:**  
 1. GAP BETWEEN SLATE SHINGLES AND UNDERLAYMENT SHOWN FOR CLARITY.  
 2. WOOD CANT STRIP AND BENT METAL DRIP EDGE ARE ONLY TO BE PROVIDED IF REQUIRED BY THE SYNTHETIC SLATE MANUFACTURER.

**TYPICAL HEADLAP (AMOUNT OF SHINGLE COVERED BY SHINGLE ABOVE)**  
 HEAD LAPS FOR SYNTHETIC SLATE SHINGLE REPLACEMENT FOR THE STEEP SLOPE SPIRE SHALL BE 3" MINIMUM UNLESS REQUIRED OTHERWISE BY MANUFACTURER

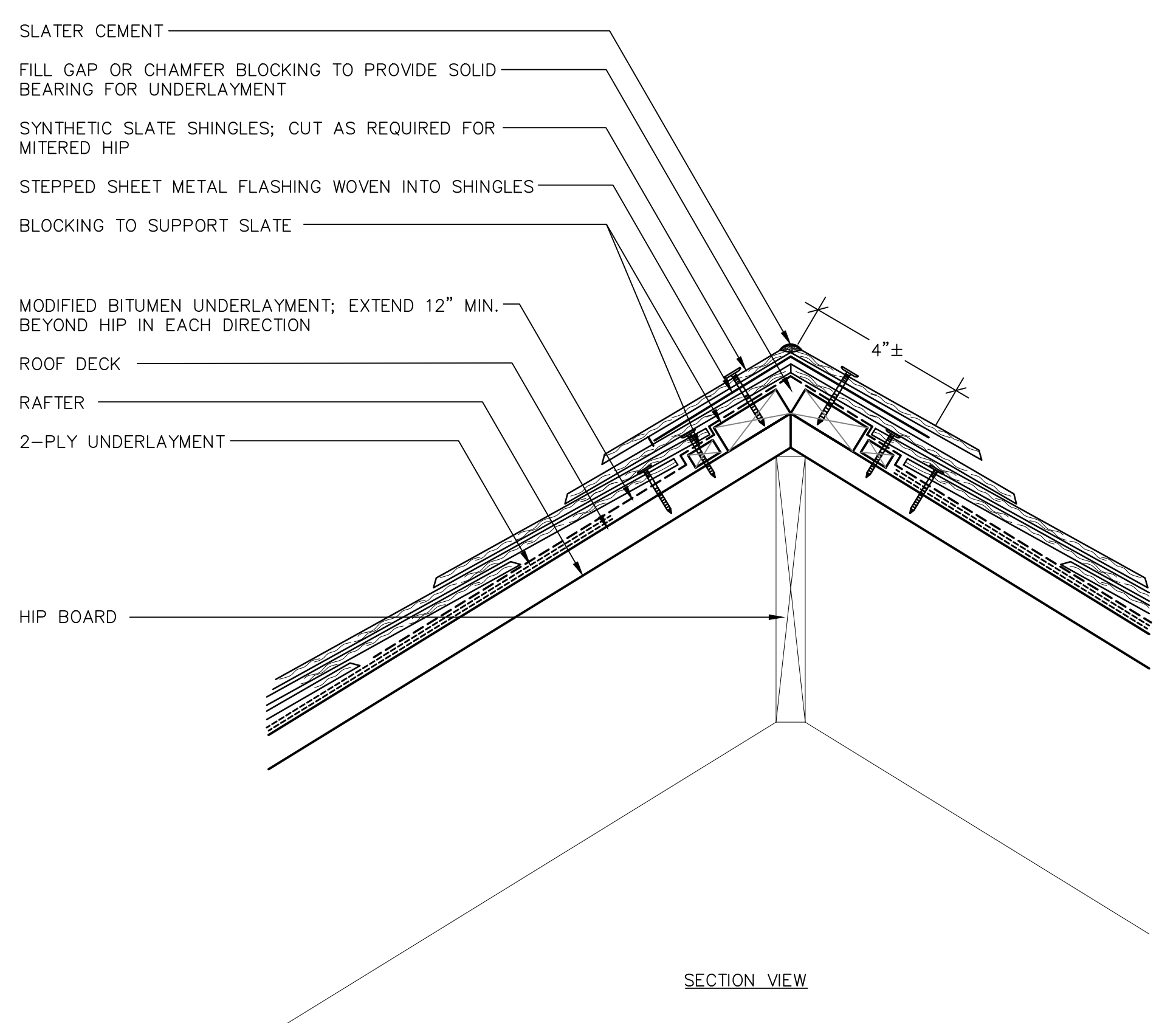
TYPICAL DIMENSIONS ARE:	
SLATE LENGTH	SLATE EXPOSURE
18"	7.5"
CONFIRM IN FIELD	

**EXPOSURE LEGEND**  
 L - LENGTH OF SLATE SHINGLE  
 E - EXPOSURE OF SLATE  
 H - HEADLAP OF SLATE



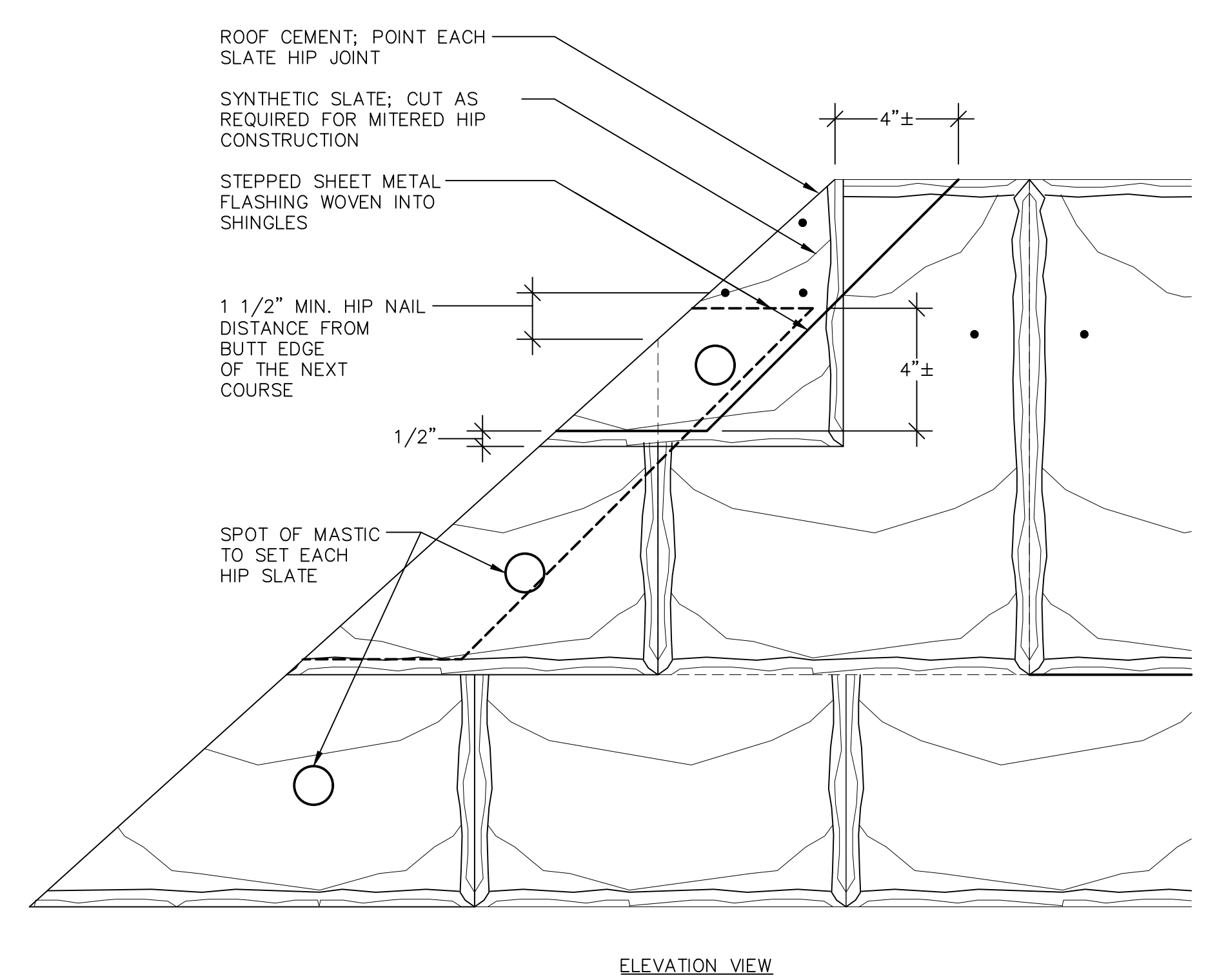
**3 SYNTHETIC SLATE CONFIGURATION AT EDGE**

SCALE: NOT TO SCALE  
 (ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**4 MITERED SLATE HIP**

SCALE: 3"=1'-0"  
 (ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**NOTE:**  
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 2. WOOD CANT STRIP AND BENT METAL DRIP EDGE ARE ONLY TO BE PROVIDED IF REQUIRED BY THE SYNTHETIC SLATE MANUFACTURER.



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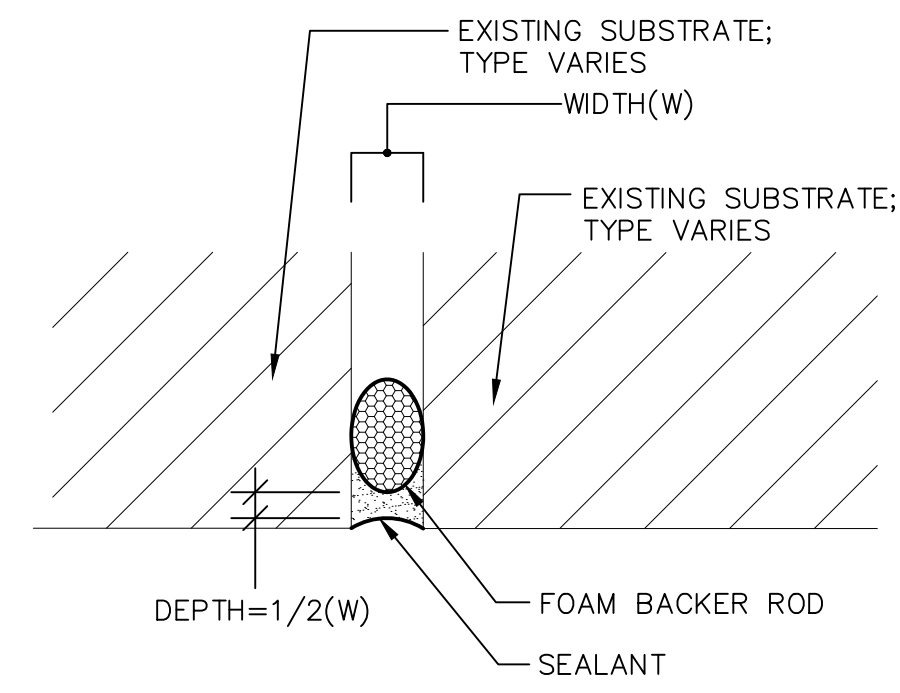
Project:  
**Villa Victoria Center for the Arts**  
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 CONSTRUCTION DOCUMENTS

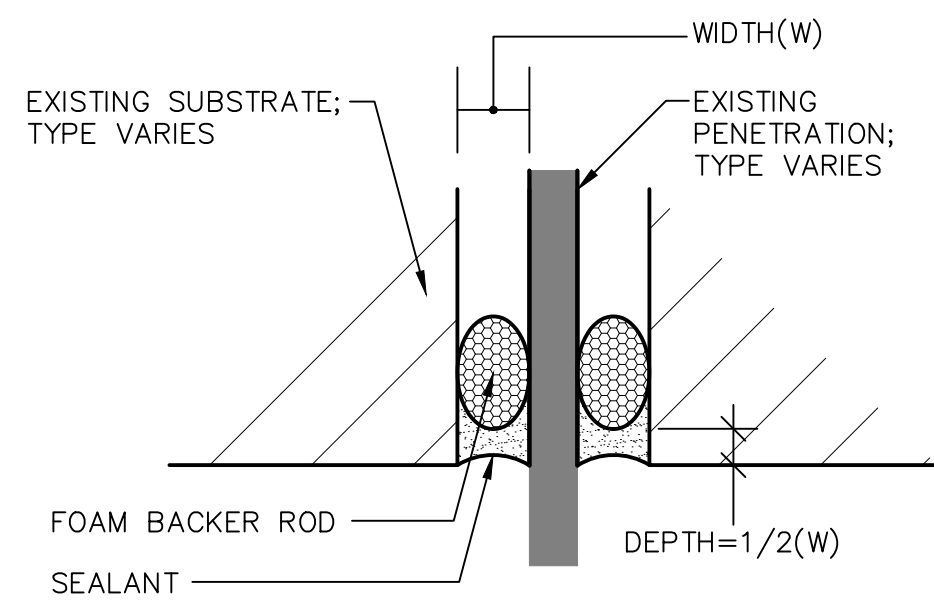
Typical SYNTHETIC SLATE ROOF DETAILS

Scale: AS NOTED  
 Stamp: COREY G. MATTHEWS, STRUCTURAL No. 47568, PROFESSIONAL ENGINEER  
 Drawn By: CAC MDF, KPBEWM SMF  
 Checked By: MDF CM  
 Job No.: 3704  
 CAC Job No.: 832681  
 Date: 9/22/2017  
**EA513**





**A SEALANT JOINT**  
SCALE: NOT TO SCALE  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**B FILLET SEALANT JOINT**  
SCALE: NOT TO SCALE  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**C PENETRATION SEALANT**  
SCALE: NOT TO SCALE  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

**1 TYPICAL SEALANT JOINTS**  
SCALE: NOT TO SCALE  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

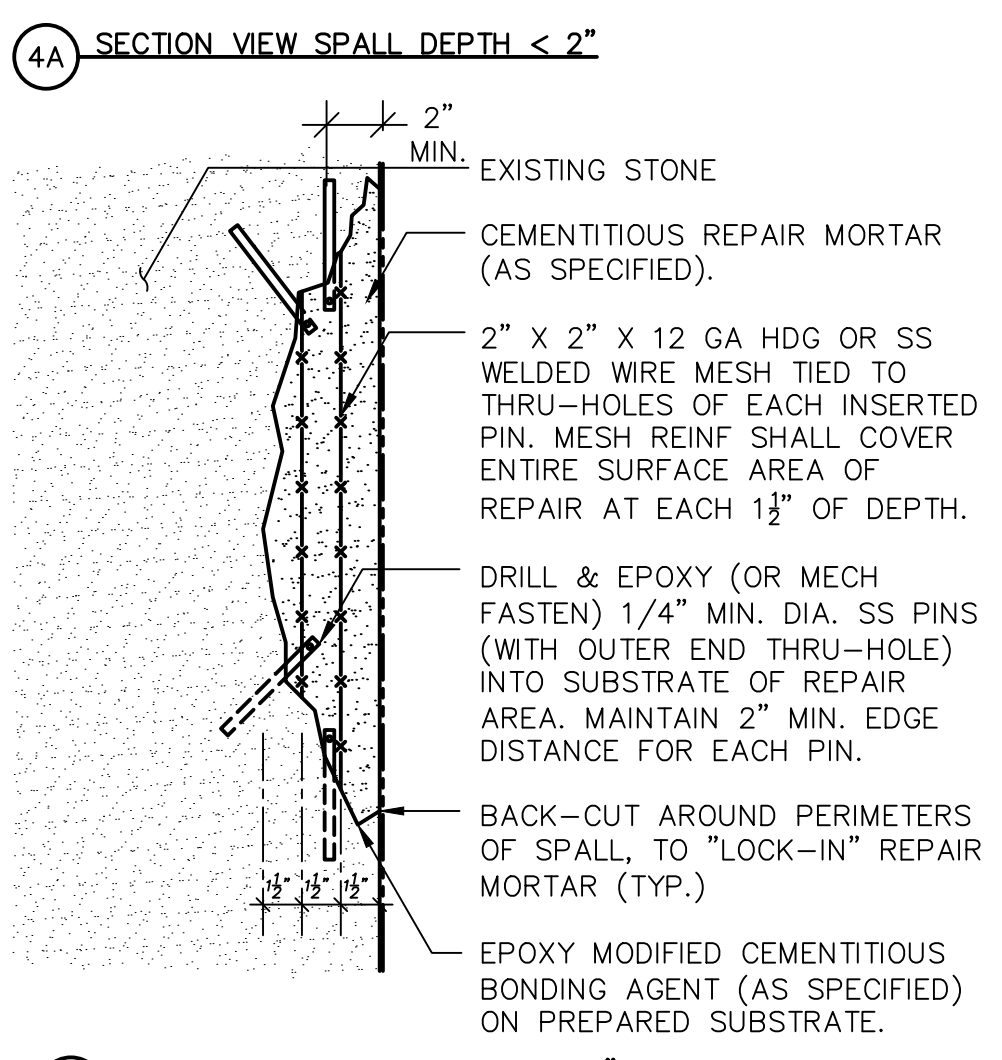
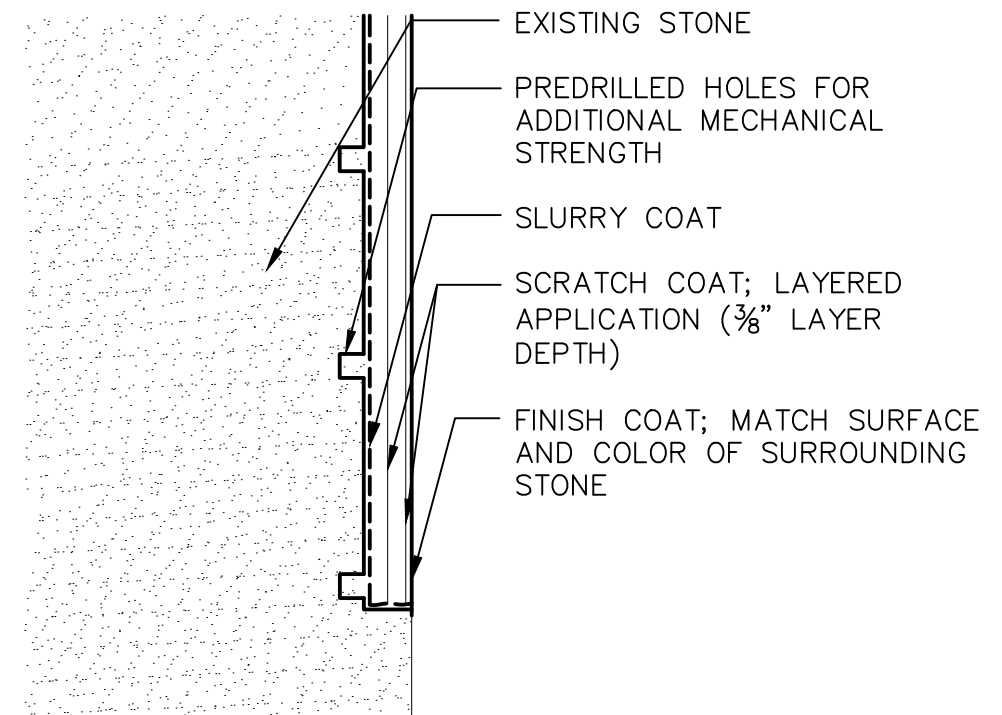
**GENERAL PROCEDURES FOR SURFACE DEFECT REPAIR**

- CUT OUT AREA OF SPALL TO CLEAN, SOUND SUBSTRATE. FOR A SPALL WITH A DEPTH OF LESS THAN TWO (2) INCHES, MECHANICAL ANCHORS MAY NOT BE REQUIRED. THE CUT OUT AREA SHOULD BE RECTILINEAR; WITH THE SIDES PARALLEL TO THE EDGES OF THE STONE BLOCK AND PERPENDICULAR TO STONE SURFACE.
- SLIGHTLY UNDERCUT THE SIDES TO CREATE A DOVETAIL.
- DRILL HOLES AT THE BACK WALL OF THE CUT FOR AN IMPROVED MECHANICAL BOND.
- APPLY SLURRY COAT TO ENTIRE SURFACE OF THE SUBSTRATE TO RECEIVE PATCH. SUBSTRATE SHOULD BE SATURATED, SURFACE DRY.
- INSTALL SCRATCH COATS OF COMPOSITE PATCH MATERIAL IN LAYERS UNTIL THE PATCH IS BUILT UP TO JUST BELOW THE SURFACE OF THE SURROUNDING STONE. REFER TO MANUFACTURER'S INSTRUCTIONS FOR APPLICATION THICKNESSES AND CURING TIMES. SURFACE OF EACH OF THE LAYERS SHOULD BE SCRATCHED AND WETTED TO ENSURE PROPER MECHANICAL AND CHEMICAL BONDING; RESPECTFULLY.
- APPLY FINISH COAT TO MATCH TEXTURE, COLOR, AND TOOLING OF THE SURROUNDING STONE AT DESIGNATED LOCATIONS. PATCH SHOULD WEATHER IN SAME MANNER AS ORIGINAL STONE.
- CURE PATCH AS RECOMMENDED BY MANUFACTURER.

**GENERAL PROCEDURES FOR DEEP SPALL REPAIR**

- BACK-ANGLE SAWCUT PERIMETER - POLYGON SHAPE.
- CHIP OUT ALL DETERIORATED STONE.
- EXAMINE SUBSTRATE FOR CRACKS. REPORT TO ENGINEER.
- SCARIFY SUBSTRATE TO 1/8" MINIMUM SURFACE PROFILE (ICRI - CSP 8 OR 9). WASH SUBSTRATE AND LEAVE SSD (SATURATED SURFACE DRY) CONDITION.
- APPLY EPOXY MODIFIED CEMENTITIOUS PRIMER/ BOND AGENT TO ALL STONE SUBSTRATE (1 COAT).
- APPLY SPECIFIED REPAIR MORTAR AFTER BONDING AGENT TO ACHIEVE A "WET-ON-WET" APPLICATION.
- SECTION SHOWN SCHEMATICALLY.

**4 TYPICAL SPALL PATCHING DETAILS**  
SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**4B SECTION VIEW SPALL DEPTH > 2"**

REMOVE EXISTING CEMENT MORTAR UP TO 1" OR 3 X WIDTH, OR TO ORIGINAL SOUND MORTAR, WHICH EVER IS GREATEST

GRIND OUT NARROW LINE ALONG THE CENTER OF JOINT. EDGES AND SIDES OF BRICK OR STONE UNIT SHALL NOT BE DAMAGED DURING MORTAR GRINDING.

EXISTING BRICK OR STONE FACING  
EXISTING MORTAR  
GRIND OUT NARROW LINE ALONG THE CENTER OF JOINT. EDGES AND SIDES OF BRICK OR STONE UNIT SHALL NOT BE DAMAGED DURING MORTAR GRINDING.

REMOVE EXISTING CEMENT MORTAR UP TO 1" OR 3 X WIDTH, OR TO ORIGINAL SOUND MORTAR, WHICH EVER IS GREATEST

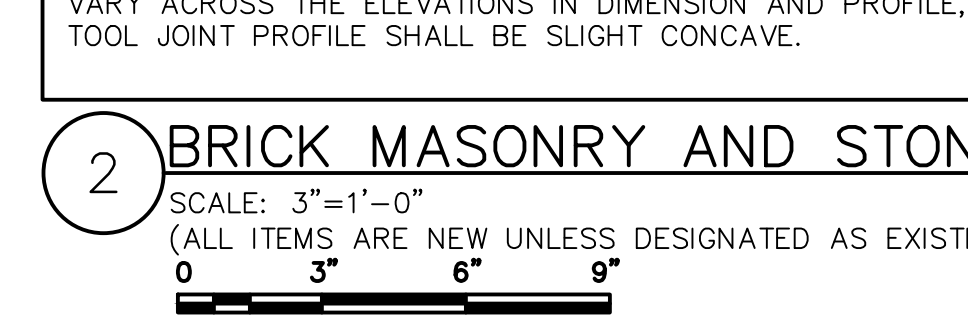
EXISTING BRICK OR STONE FACING  
EXISTING MORTAR  
GRIND OUT NARROW LINE ALONG THE CENTER OF JOINT. EDGES AND SIDES OF BRICK OR STONE UNIT SHALL NOT BE DAMAGED DURING MORTAR GRINDING.

REMOVE CEMENT MORTAR FROM WIDTH OF JOINT BY CUTTING, USING HAND HELD OR LIGHT PNEUMATIC TOOLS ONLY. REMOVE ALL MORTAR WITHOUT DAMAGING OR REMOVING THE BRICK OR STONE EDGES OR WIDENING JOINTS

REMOVE EXISTING CEMENT MORTAR UP TO 1" OR 3 X WIDTH, OR TO ORIGINAL SOUND MORTAR.

BRICK MASONRY AND STONE ARE TO BE REPOINTED. TOOL JOINTS TO MATCH THE EXISTING SURROUNDING JOINT PROFILES. THE MASONRY JOINTS IN THE STONE AND BRICK VARY ACROSS THE ELEVATIONS IN DIMENSION AND PROFILE. TOOL JOINT PROFILE SHALL BE SLIGHT CONCAVE.

**2 BRICK MASONRY AND STONE REPOINTING**  
SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



EXISTING BRICK OR STONE FACING  
APPLY PRE HYDRATED POINTING MORTAR IN 1/4" DEEP LAYERS AFTER PREVIOUS LAYER HAS BEEN TOOLED. TOOL MORTAR WHEN IT BECOMES "THUMBPRINT" HARD.

MOISTEN ALL JOINTS AND ALLOW SURFACE TO DRY PRIOR TO THE APPLICATION OF THE FIRST LAYER OF MORTAR. MORTAR TO BE TOOLED WHEN "THUMBPRINT" HARD

APPLY PRE HYDRATED POINTING MORTAR IN 1/4" DEEP LAYERS AFTER PREVIOUS LAYER HAS BEEN TOOLED. TOOL MORTAR WHEN IT BECOMES "THUMBPRINT" HARD.

EXISTING MORTAR  
EXISTING BRICK OR STONE FACING  
APPLY PRE HYDRATED POINTING MORTAR IN 1/4" DEEP LAYERS AFTER PREVIOUS LAYER HAS BEEN TOOLED. TOOL MORTAR WHEN IT BECOMES "THUMBPRINT" HARD.

EXISTING BRICK OR STONE FACING  
EXISTING MORTAR  
APPLY PRE HYDRATED POINTING MORTAR IN 1/4" DEEP LAYERS AFTER PREVIOUS LAYER HAS BEEN TOOLED. TOOL MORTAR WHEN IT BECOMES "THUMBPRINT" HARD.

EXISTING BRICK OR STONE FACING  
EXISTING MORTAR  
INSTALL LAST LAYER AND TOOL TO A CONCAVE PROFILE. DO NOT ALLOW MORTAR TO COME INTO CONTACT WITH OR RESIDUE TO REMAIN ON ANY EXPOSED BRICK OR STONE SURFACES.

EXISTING BRICK OR STONE FACING  
EXISTING MORTAR  
INSTALL LAST LAYER AND TOOL TO A CONCAVE PROFILE. DO NOT ALLOW MORTAR TO COME INTO CONTACT WITH OR RESIDUE TO REMAIN ON ANY EXPOSED BRICK OR STONE SURFACES.

EXISTING BRICK OR STONE FACING  
EXISTING MORTAR  
INSTALL LAST LAYER AND TOOL TO A CONCAVE PROFILE. DO NOT ALLOW MORTAR TO COME INTO CONTACT WITH OR RESIDUE TO REMAIN ON ANY EXPOSED BRICK OR STONE SURFACES.

**3 TYPICAL DUTCHMAN STONE REPAIR**  
SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

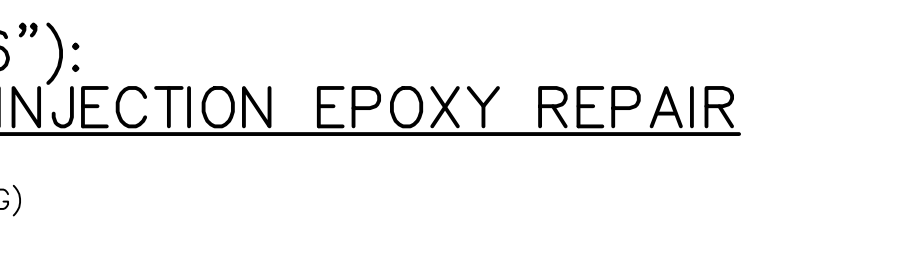
**GENERAL PROCEDURES FOR TYPICAL CRACK PRESSURE INJECTION REPAIR:**

(REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION)

- WIDEN CRACKS AS REQUIRED BY CONTINUOUS SAWCUT ROUTING. CLEAN OUT
- SPACE PORTING DEVICES AS REQUIRED BASED ON DEPTH AND WIDTH OF CRACK. DO NOT SPACE GREATER THAN 6" APART, OR D/2.
- MASK EDGES OF APPLIED CAP SEAL. CONTROL WIDTH OF APPLIED CAP SEAL.
- INSERT PORTING DEVICES.
- APPLY EPOXY CAP SEAL CONTINUOUSLY ALONG CRACK AND AROUND PORTS. CLEAR PORTS TO ENSURE EPOXY HAS NOT BLOCKED PASSAGE.
- AFTER CAP SEAL CURE, USE HIGH-PRESSURE INJECTION EQUIPMENT TO INJECT APPROPRIATE VISCOSITY EPOXY INTO PORTS. START AT BOTTOM PORT, FILLING FULL DEPTH OF CRACK. DO NOT MOVE TO NEXT PORT UNTIL EPOXY BEGINS TO FLOW FROM ADJACENT PORT, THUS INDICATING TRAVEL. EXTEND EPOXY WITH SAND AS SPECIFIED, IF REQUIRED.
- AFTER ENTIRE CRACK IS FILLED AND EPOXY CURED, REMOVE PORTS AND GRIND CAP SEAL FLUSH.
- QUANTITY OF PORTS SHOWN SCHEMATICALLY.

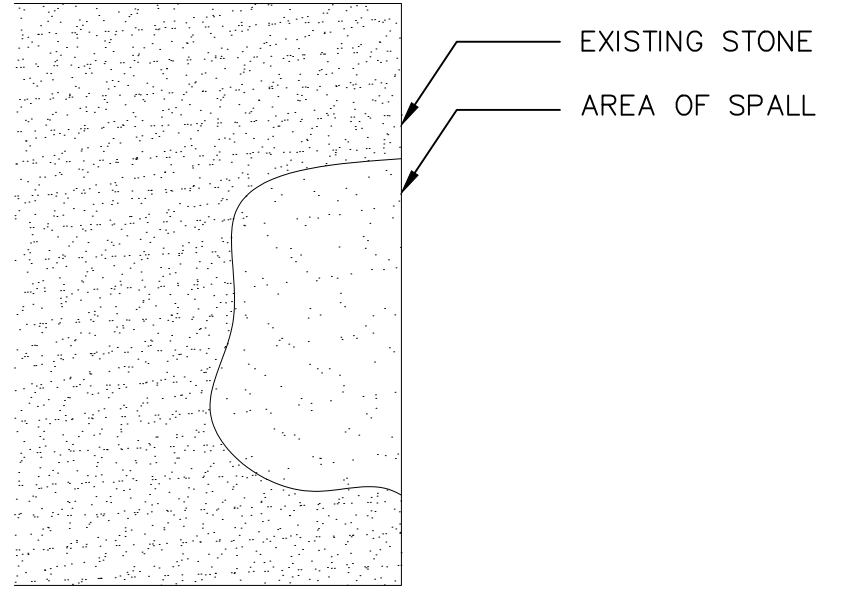
NOTE: COLOR OF CAP SEAL TO MATCH EXISTING STONE AS CLOSELY AS POSSIBLE. COLLECT STONE DUST AND APPLY TO SURFACE OF CAP SEAL TO BLEND REPAIR.

**5 STONE CRACK (WIDTH > 1/16") : TYPICAL CRACK PRESSURE INJECTION EPOXY REPAIR**  
SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

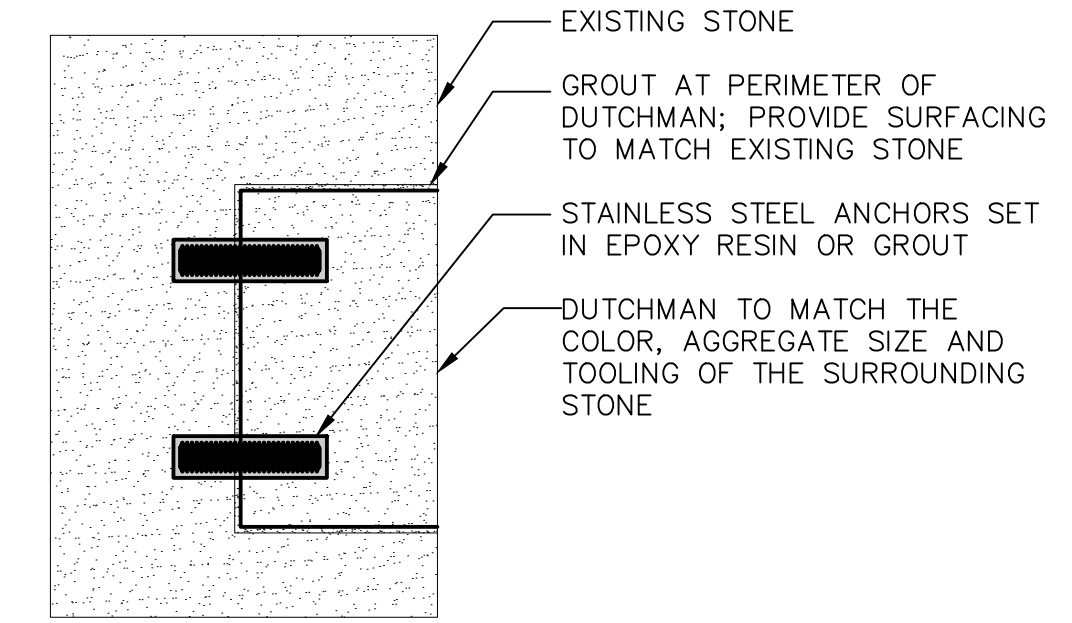
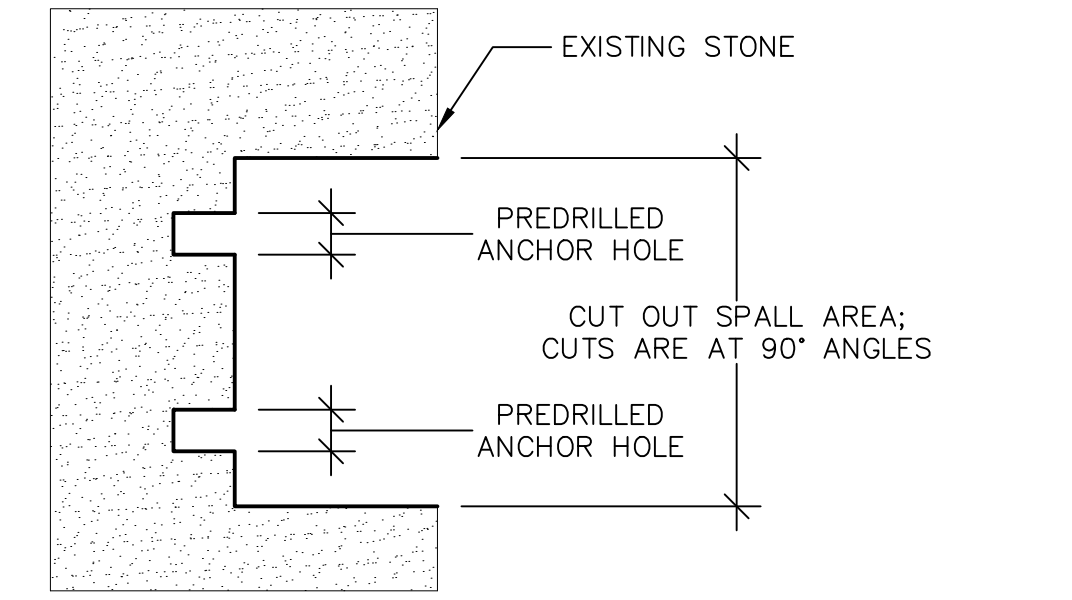


**GENERAL PROCEDURES FOR DUTCHMAN STONE REPAIR**

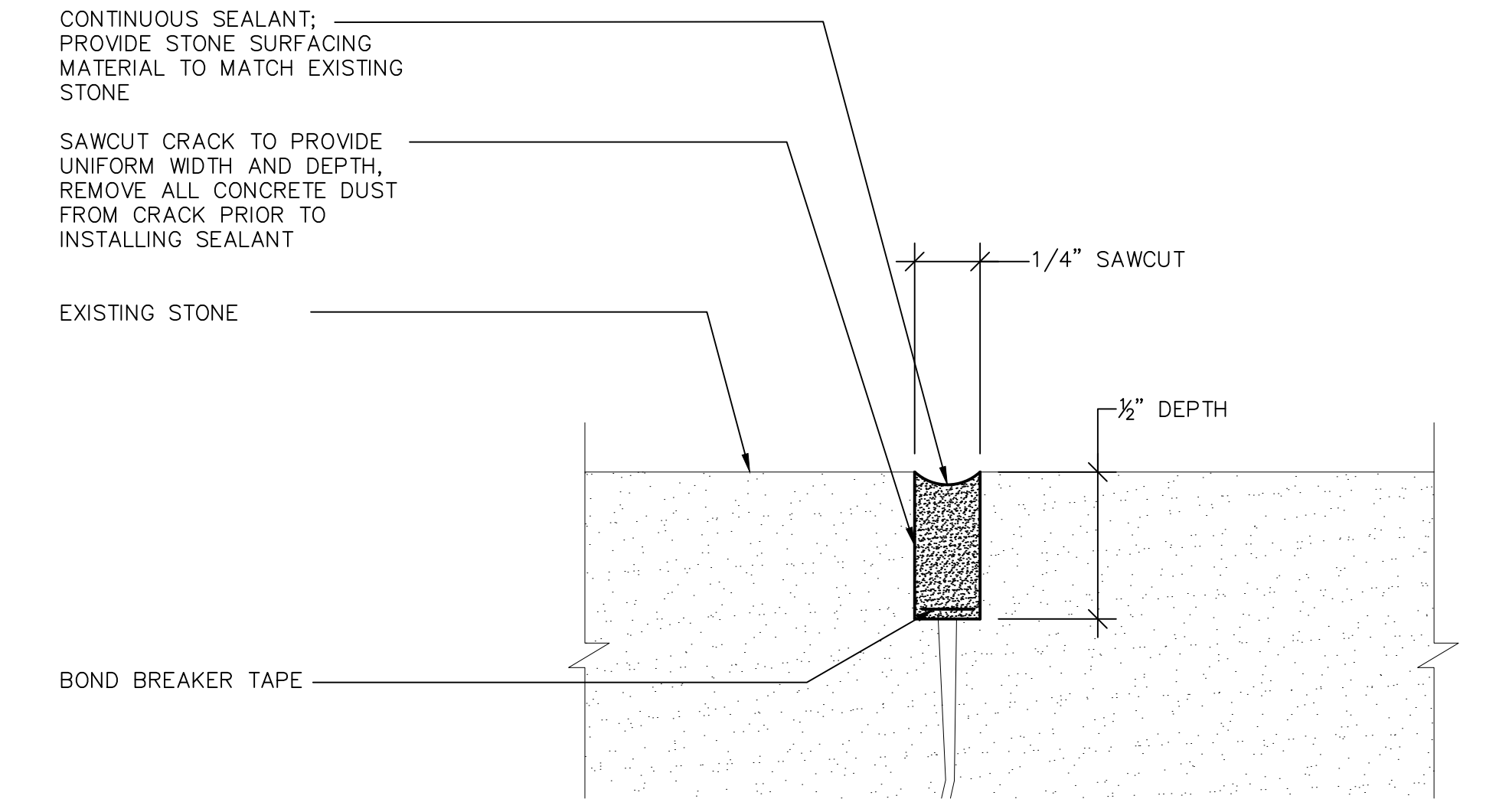
- CUT OUT AREA OF SPALL TO CLEAN, SOUND SUBSTRATE.
- THE CUT OUT AREA SHOULD BE RECTILINEAR; WITH THE SIDES PARALLEL TO THE EDGES OF THE STONE BLOCK AND PERPENDICULAR TO STONE SURFACE.
- MEASURE AND CUT NEW STONE TO MATCH THE REPAIR AREA WITH MINIMUM SIZED JOINTS AROUND THE NEW STONE.
- INSTALL ANCHORS AS REQUIRED DEPENDING ON SIZE OF THE DUTCHMAN. REFER TO TABLE BELOW. ANCHORS SHALL BE STAINLESS STEEL DOWELS OR CRAMPS AND SHALL BE SET IN EPOXY RESIN.
- INSTALL DUTCHMAN; ADHERE WITH EPOXY RESIN OR POLYMER MODIFIED CEMENT GROUT.



**3 TYPICAL DUTCHMAN STONE REPAIR**  
SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



SIZE	# OF PINS
<0.5 S.F.	TWO (2)
0.5-1.0 S.F.	FOUR (4)
1.0-2.0 S.F.	SIX (6)



**6 STONE CRACK (< 1/16") : TYPICAL STONE CRACK - ROUT & SEAL REPAIR**  
SCALE: NOT TO SCALE  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



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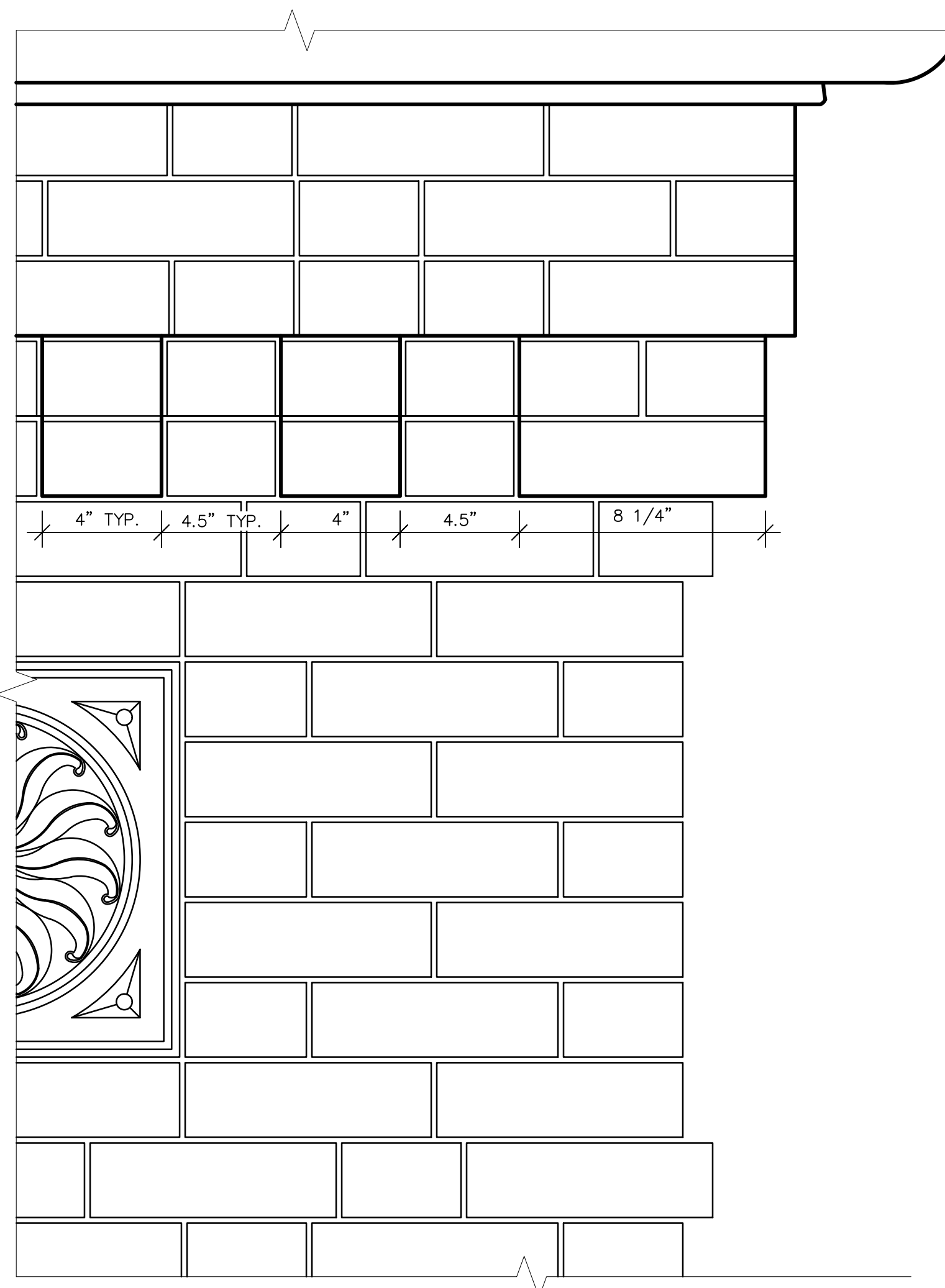
Project:  
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TYPICAL BUILDING REPAIR DETAILS

Scale: AS NOTED  
Stamp: COREY G. MATTHEWS STRUCTURAL No. 47568 REGISTERED PROFESSIONAL ENGINEER  
Drawn By: CAC MDF  
KPB EWM SMF  
Checked By: MDF CM  
Job No.: 3704  
CAD Job No.: 832681  
Date: 9/22/2017  
EA521

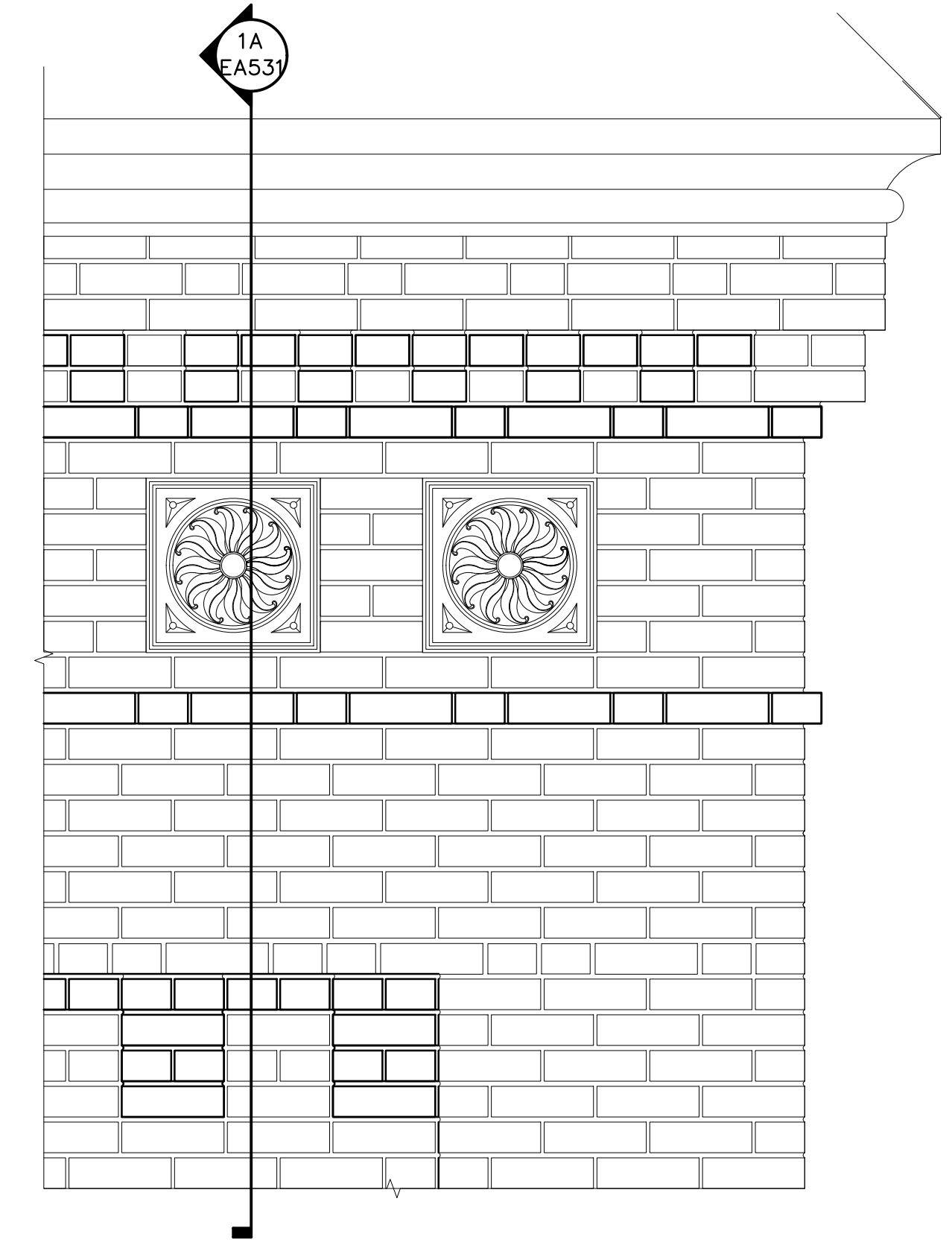
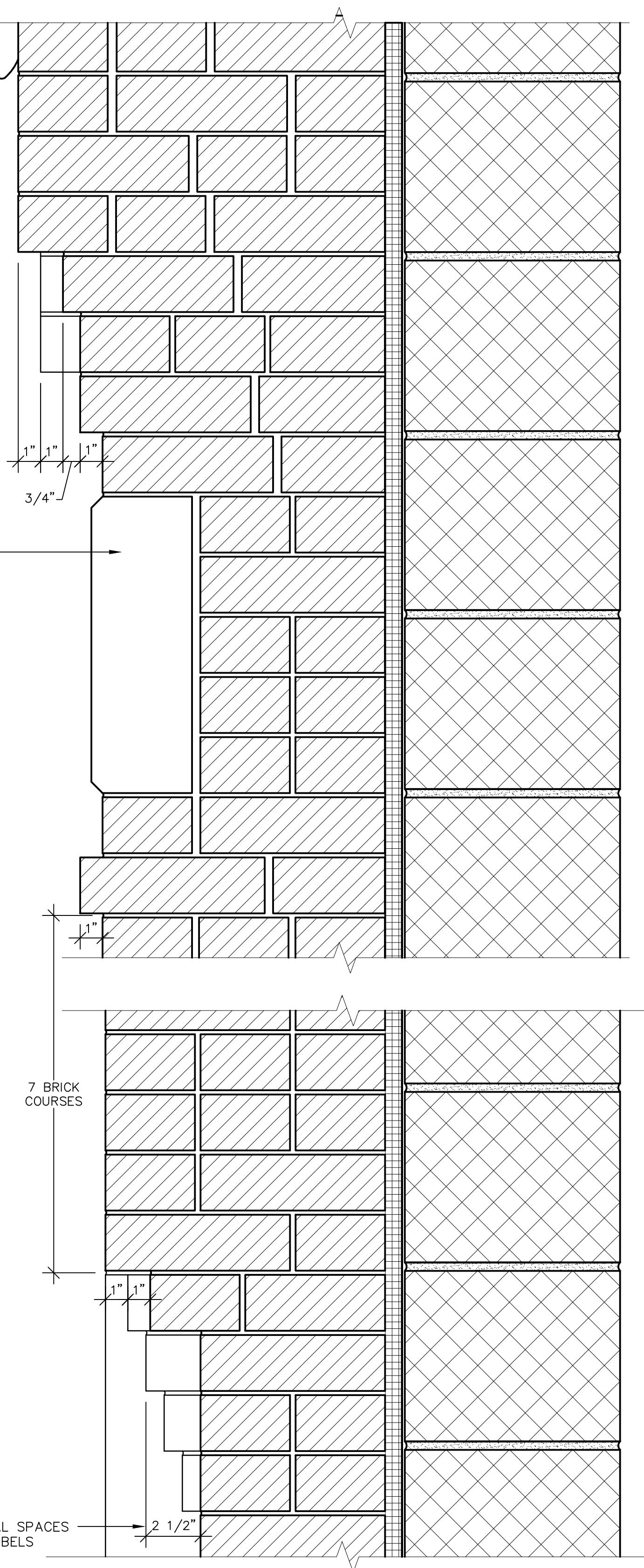




SPIRE MANUFACTURER TO REPLICATE THE EXISTING COPPER EAVE TRIM PROFILE AND PROVIDE COPPER AS PART OF THE SPIRE PACKAGE. PROVIDE FULL SOLID BLOCKING BEHIND COPPER TRIMS.

BRICK COURSING DETAILS ARE BASED ON 2-1/2\"/>

TERRA COTTA TILE, SALVAGE/REPAIR/REPLACE AND REINSTALL, TYP.



**1A WALL SECTION**  
SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

THE MAIN INTENT OF DRAWINGS ON THIS SHEET ARE TO SHOW BRICK COURSING/ DIMENSIONS FOR REFERENCE.

**1 TOWER WALL BRICK PATTERNS AND COURSING DETAILS**  
SCALE: 3"=1'-0"  
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



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MASONRY DETAILS

Scale: 3"=1'-0"	Stamp: 
File Name: 	
Drawn By: CAC MDF KPB EWM SMF	
Checked By: MDF CM	Drawing No.: EA531
Job No.: 3704 GAE Job No.: 832681	
Date: 9/22/2017	







**GENERAL NOTES (STAIRS):**

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL DRAWINGS AND PROJECT SPECIFICATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND/OR ELEVATIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
  - THE INFORMATION SHOWN ON THE DRAWINGS HAS BEEN COMPILED FROM VARIOUS SOURCES AND MAY NOT REFLECT THE ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION. ALL DIMENSIONS AND CONDITIONS MUST BE FIELD VERIFIED AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
  - SHOP DRAWINGS FOR REINFORCING STEEL (INCLUDING ALL ACCESSORIES), POUR SCHEDULES, CONCRETE MIX DESIGN, REINFORCED MASONRY AND STRUCTURAL STEEL SHALL BE SUBMITTED TO THE ENGINEER AND STAMPED ACCEPTANCE RECEIVED PRIOR TO FABRICATION. ERECTION SHALL PROCEED BASED ON ACCEPTED SHOP DRAWINGS ONLY.
  - GALE'S STAIR DESIGN IS LIMITED TO THE MAIN ENTRANCE STAIR CONDITIONS ONLY AND DOES NOT INCLUDE ENTRANCE, DOORWAY, THRESHOLD, INTERIOR SIGNAGE, OR BUILDING INTERIOR EVALUATION OF ACCESSIBILITY REQUIREMENTS.
  - NOTIFY THE ENGINEER OF ANY ARCHITECTURAL MODIFICATION OR DIMENSION CHANGES THAT MAY AFFECT THE STRUCTURAL DESIGN.
  - THE OWNER IS REQUIRED TO HIRE A CERTIFIED INDEPENDENT TESTING FIRM TO OBSERVE, REVIEW, TEST, AND REPORT ON SOILS, CONCRETE, REBAR, FORMWORK, ETC. AS OUTLINED BY THESE DESIGN DRAWINGS AND PROJECT SPECIFICATIONS. THE CONTRACTOR MUST CONTACT, COORDINATE, AND SCHEDULE THE TESTING FIRM THROUGH THE ENTIRE PROJECT DURATION.**
  - THE CONTRACTOR IS REQUIRED TO INCLUDE ALL NECESSARY LABOR, MATERIALS, EQUIPMENT, APPARATUS, CURING MEANS AND METHODS, MOBILIZATION, PERMITTING, TEMPORARY PROTECTION, SHORING, BRACING, ETC. TO COMPLETE THE WORK.
  - THE CONTRACTOR IS RESPONSIBLE FOR FULLY CLEANING THE WORK AREA ON A DAILY BASIS, REMOVING AND PROPERLY DISPOSING OF ALL DEMOLISHED MATERIALS.
  - ANY DAMAGE TO THE PROPERTY, BUILDINGS, VEHICLES, ETC. AS A RESULT OF THE WORK, MUST BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST, TO THE SATISFACTION OF THE OWNER AND ENGINEER.
  - WORK HOURS MUST BE APPROVED BY AND COORDINATED WITH THE OWNER, PRIOR TO STARTING ANY WORK.
  - THE OWNER IS REQUIRED TO PROVIDE UNOBSTRUCTED ACCESS TO ALL WORK AREAS FOR THE CONTRACTOR.
  - ACCESS TO THE EXTERIOR THROUGH THE MAIN ENTRANCE DOORS WILL BE CLOSED OFF DURING CONSTRUCTION AND MUST REMAIN CLOSED UNTIL MATERIALS HAVE ACHIEVED ACCEPTABLE CURE. THE CONTRACTOR MUST COORDINATE THIS EFFORT WITH THE OWNER AND FIRE DEPARTMENT. THE CONTRACTOR MUST PROVIDE ALTERNATE SAFE AND ACCEPTABLE (FIRE DEPARTMENT APPROVED) EXITS UNTIL THE CONSTRUCTION IS COMPLETE.
  - GENERAL CONTRACTOR TO CONFORM TO ALL LOCAL AND STATE BUILDING CODE REQUIREMENTS.
  - NOTIFY THE ENGINEER OF ANY ARCHITECTURAL MODIFICATION OR DIMENSION CHANGES THAT MAY AFFECT THE STRUCTURAL DESIGN.
  - THE INFORMATION SHOWN ON THE DRAWINGS HAS BEEN COMPILED FROM VARIOUS SOURCES AND MAY NOT REFLECT THE ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION. CONTRACTOR MUST FIELD VERIFY PRIOR TO SUBMITTING BID.
  - THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "DIG SAFE" AND PERFORMING ALL NECESSARY INVESTIGATIONS TO LOCATE AND CLEARLY MARK ALL UTILITIES AND OTHER SUBTERRANEAN ITEMS PRIOR TO CONSTRUCTION. THE OWNER WILL ASSIST IN LOCATING EXISTING WATER LINES AND DRAINAGE SYSTEMS. CONTRACTOR TO SECURE WRITTEN APPROVAL FROM THE OWNER PRIOR TO INITIATING CONSTRUCTION.
  - ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITIONS OF THE FOLLOWING BUILDING CODES AND STANDARDS:
    - 9TH EDITION OF THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE (MSBC)
    - ACI 318 – BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
    - ACI 530 – BUILDING CODE REQUIREMENTS FOR MASONRY CONSTRUCTION.
    - AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
    - 521 CMR: ARCHITECTURAL ACCESS BOARD (SECTION 24 – RAMPS)
- 2. DESIGN LOADS**  
BUILDING CATEGORY – III  
STAIRS:
- |  |               |
|--|---------------|
| LIVE LOAD  | 100 PSF       |
| ROOF:  |               |
| DEAD LOADS:  |               |
| STRUCTURE  | ACTUAL WEIGHT |
| LIVE LOADS:  |               |
| GROUND SNOW LOAD   | 45 PSF        |
| IMPORTANCE FACTOR, IS  | 1.0           |
| EXPOSURE FACTOR, CE  | 1.0           |
| THERMAL FACTOR, CT   | 1.2           |
| DRIFT, SLIDING AND UNBALANCED LOADS IN ACCORDANCE WITH ASCE 7-10 |               |
| FLOOR:   |               |
| DEAD LOADS:  |               |
| STRUCTURE  | ACTUAL WEIGHT |
| LIVE LOADS:  |               |
| BELFRY FLOOR   | 40 PSF        |
- SEISMIC CRITERIA: (NON-STRUCTURAL COMPONENTS)  
RISK CATEGORY = III  
SEISMIC DESIGN CATEGORY = C  
COMPONENT IMPORTANCE FACTOR, IP = 1.0  
SITE CLASS E (UNKNOWN SOIL CONDITIONS)  
SPECTRAL ACCELERATION (SHORT PERIOD), SDS = 0.357  
COMPONENT AMPLIFICATION FACTOR, Ap = 2.5  
COMPONENT RESPONSE MODIFICATION FACTOR, Rp = 1.0  
COMPONENT OPERATING WEIGHT, W
- WIND CRITERIA: (ASCE 7-10 – DIRECTIONAL PROCEDURE)  
BASIC WIND SPEED, V = 139MPH (ULTIMATE)  
EXPOSURE CATEGORY = B  
RISK CATEGORY = III (OCCUPANCY GREATER THAN 300)  
EXPOSURE COEFFICIENT, Kz (TABLE 27.3-1)  
TOPOGRAPHIC FACTOR COEFFICIENT, Kzt = 1.0  
DIRECTIONALITY FACTOR, Kd = 0.95  
GUST FACTOR, G = 0.85  
VELOCITY PRESSURE, Qz = 0.00256 \* Kz \* Kzt \* Kd \* V2 (PSF)

**DEMOLITION NOTES:**

- THE INFORMATION SHOWN ON THESE DRAWINGS HAS BEEN COMPILED FROM VARIOUS SOURCES, AND MAY NOT REFLECT THE ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION. ALL DIMENSIONS AND FOOTING LOCATIONS ARE BASED ON ENGINEERING ASSUMPTIONS.
- SCOPE OF DEMOLITION WORK INCLUDES THE REMOVAL OF ALL MATERIALS ASSOCIATED WITH EXISTING STAIRS, INCLUDING EXISTING FOUNDATIONS, GRAVEL BACKFILL, BRICK MASONRY PLANTER, HANDRAILS ETC. AND AS SHOWN ON THE DEMOLITION PLANS. ALL EXISTING GRANITE STAIR TREADS SHALL BE SALVAGED AND RE-INSTALLED AT A LATER POINT DURING THE CONSTRUCTION.
- CONTRACTOR IS TO FIELD-VERIFY AND CATALOGUE ALL STAIR DIMENSIONS AND TREAD ASSOCIATED CLEARANCES. EXISTING STONES WILL BE RE-SET AND ALIGNED IN LIKE-KIND ATOP OF NEW FOUNDATION BASE.
- CONTRACTOR MAY REMOVE THE EXISTING STONE TREADS WITH CAUTION TO MAINTAIN INTEGRITY OF THE EXISTING MARTIAL FOR FURTHER USE.
- THE CONTRACTOR SHALL USE CAUTION WHILE PERFORMING DEMOLITION WORK ADJACENT TO THE EXISTING BUILDING TO AVOID UNDERMINING EXISTING MASONRY FOUNDATIONS. DO NOT IMPOSE LATERAL SURCHARGE OR IMPACT FORCES TO EXISTING BUILDING COMPONENTS, SYSTEMS, OR FOUNDATIONS AT ANY TIME.
- CONTRACTOR IS TO INFORM ENGINEER IF EXISTING GRANITE STONES EXPOSE HEAVY SPALLING, CRACKING OR OTHER DETERIORATION WHICH CAN IMPEDE THE RE-USE OF MATERIAL.
- ALL ITEMS NOTED TO BE REMOVED OR DEMOLISHED (NOT INDICATED TO BE REUSED) MUST BE PROPERLY DISPOSED OF IN ACCORDANCE WITH MASSACHUSETTS REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "DIG SAFE" AND PERFORMING ALL NECESSARY INVESTIGATIONS TO LOCATE AND CLEARLY MARK ALL UTILITIES AND OTHER SUBTERRANEAN ITEMS PRIOR TO CONSTRUCTION. THE OWNER WILL ASSIST IN LOCATING EXISTING WATER LINES AND DRAINAGE SYSTEMS. CONTRACTOR TO SECURE WRITTEN APPROVAL FROM THE OWNER PRIOR TO INITIATING CONSTRUCTION.
- ALL EXISTING UTILITIES, ELECTRICAL CONDUITS, ETC. WHICH INTERFERE IN THE REPAIR WORK SHALL BE REMOVED, REPOSITIONED AND RE-CONNECTED AFTER COMPLETION OF WORK BY THE CONTRACTOR. AS THE WORK PROGRESSES IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTRACT, COORDINATE, FIRE AND PAY FOR LICENSED ELECTRICIANS, PLUMBERS AND HVAC SUBCONTRACTORS TO COMPLETE THE TEMPORALLY REMOVAL AND RE-CONNECTION/ RELOCATION OF ALL BUILDING SERVICES UNLESS OTHERWISE.
- DEMOLITION TO COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE STARTING SELECTIVE DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
- SURVEY THE CONDITION OF THE SITE TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN UNDESIRABLE DAMAGE OF ANY PORTION OF ADJACENT FACILITIES DURING SELECTIVE DEMOLITION. NOTIFY GALE IF FOUND, PRIOR TO INITIATING THE WORK.
- MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS.
- CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, PARKING LOTS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
- CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS, FACILITIES, AND SITE IMPROVEMENTS TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
- USE WATER MIST AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS.
- REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
- CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITION.
- DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO THE EXTENT REQUIRED BY NEW CONSTRUCTION AND AS INDICATED. CONTRACTOR TO BE RESPONSIBLE FOR ANY CUTTING AND PATCHING THAT IS REQUIRED.
- PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.
- DO NOT BURN DEMOLISHED MATERIALS.
- TRANSPORT DEMOLISHED MATERIALS OFF OWNER'S PROPERTY AND LEGALLY DISPOSE OF THEM, IF NOT DESIGNATED TO BE SALVAGED BY THE OWNER OR REUSED.
- IN AREAS WHERE CONCRETE IS TO BE REMOVED, THE EDGE OF ANY CONCRETE TO REMAIN MUST BE A CLEAN SAW-CUT EDGE OR AS SPECIFIED ON THE CONTRACT DRAWINGS.

**CONCRETE NOTES:**

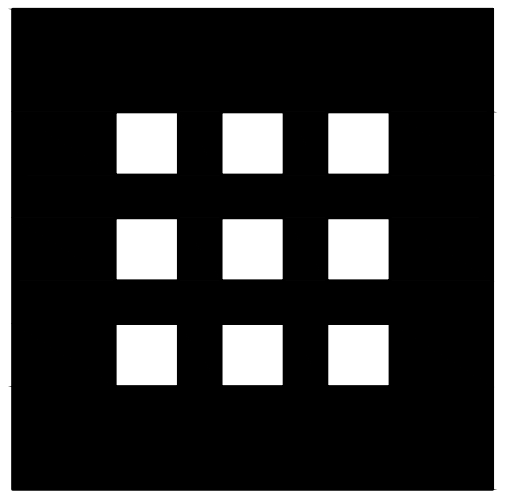
- CONCRETE WORK SHALL CONFORM TO THE LATEST AMERICAN CONCRETE INSTITUTE CODE FOR "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
  - SLAB CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS WITH A SLUMP OF NO MORE THAN 2" TO 4" AND AIR ENTRAINMENT OF 4 1/2 – 7 1/2%. THE USE OF CALCIUM CHLORIDE IS NOT PERMITTED. PROVIDE PROPER CONCRETE PROTECTION OR HEAT IN COLD WEATHER AND MAINTAIN PROPER CURING PROCEDURES IN ACCORDANCE WITH ALL CURRENT A.C.I. STANDARDS. SLUMP MEASUREMENT CHANGES MAY BE ALLOWED IF MIX INCLUDES MID-RANGE, HIGH-RANGE OR SUPERPLASTICIZER ADMIX.
  - STEEL REINFORCEMENT SHALL CONFORM TO ASTM 615, GRADE 60, DEFORMED BARS.
  - WHERE CONTINUOUS BARS ARE CALLED FOR THEY SHALL BE RUN CONTINUOUSLY AROUND CORNERS AND LAPPED AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS. LAPS SHALL BE 40 BAR DIAMETERS (MINIMUM), UNLESS OTHERWISE SHOWN. USE 2"-0"x 2"-0" CORNER BARS AT EACH CORNER FOR EACH CONTINUOUS HORIZONTAL BAR.
  - ALL REINFORCING SHALL BE ELECTRICALLY GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, AS AMENDED BY THE MA STATE BUILDING CODE. COORDINATE WITH ELECTRICAL ENGINEER.
  - ALL REINFORCING BARS SHALL BE COLD BENT IN ACCORDANCE TO THE PROPER RADIUS ESTABLISHED BY THE AMERICAN CONCRETE INSTITUTE. UNDER NO CONDITIONS SHALL HEAT BE APPLIED TO THE BARS TO OBTAIN BENDS.
  - FORMS SHALL BE OILED PRIOR TO THEIR ERECTION. REINFORCING BARS WHICH ARE COATED WITH FORM OIL OR ANY OTHER BOND BREAKING MATERIAL WILL BE REJECTED AND WILL REQUIRE REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER.
  - CONCRETE SHALL NOT CONTAIN SLAG OR SILICA FUME, IF USING FLY-ASH, THE MAXIMUM QUANTITY PER WEIGHT OF CEMENT SHALL BE 20%. SUBMIT FLY-ASH CERTIFICATION FOR APPROVAL WITH MIX DESIGNS.
  - SUBMIT COMPLETE REINFORCING STEEL SHOP DRAWINGS ALONG WITH COMPLETE CONCRETE MIX DESIGN (INCLUDING ALL ADDITIVES AND THEIR CONTENT) TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATING STEEL.
  - ADDITION OF WATER TO CONCRETE MIXES AT THE SITE IS NOT ALLOWED. SUCH CONCRETE SHALL BE IMMEDIATELY REJECTED. MID-RANGE, OR HIGH RANGE, OR SUPERPLASTICIZERS ARE ALLOWED IN THE MIX TO ASSIST IN WORKABILITY AND PUMPING OPERATIONS, AND MIX-DESIGN MAKE-UP WATER MAY BE POST SUPPLEMENTED AT THE SITE. TESTING FIRM MUST MEASURE AND REPORT.
  - CONCRETE CEMENT SHALL BE TYPE I OR II PORTLAND CEMENT. MAXIMUM AGGREGATE SIZE IN CONCRETE SHALL BE 1".
  - ALL CONCRETE SHALL BE READY-MIXED AT PLANT COMPLYING WITH ASTM C94 AND ASTM C1116. SITE MIXING IS NOT ALLOWED.
  - ALL CONCRETE SHALL BE REINFORCED AS SHOWN ON THE DRAWINGS. PROVIDE SUFFICIENT CHAIR OR SUPPORT BARS AS NECESSARY TO PROPERLY POSITION REINFORCING STEEL. PULL UP OF BARS OR MESH, OR UNSUPPORTED BARS OR MESH WILL NOT BE ALLOWED. "WET STICKING" OF BARS WILL NOT BE ALLOWED.
  - ALL CONCRETE SHALL BE POURED TO THE SPECIFIED THICKNESS AND REINFORCED AS SHOWN ON THE DRAWINGS. WELDED WIRE MESH REINFORCEMENT SHALL CONFORM TO A.S.T.M. A185, AND SHALL LAP 6" MINIMUM OR ONE SPACE, WHICHEVER IS LARGER, AND SHALL BE WIRED TOGETHER. IT IS REQUIRED THAT CHAIR BARS BE USED TO MAINTAIN PROPER LOCATION OF WELDED WIRE MESH.
  - CONCRETE USED FOR ALL (SLABS AND BEAMS) SHALL BE TESTED BY AN INDEPENDENT ACI CERTIFIED TESTING LAB, HIRED AND PAID FOR BY THE OWNER. THE CONTRACTOR IS REQUIRED TO CONTACT AND COORDINATE THE TESTING LAB SERVICES.** THE FOLLOWING MINIMUM TESTING SHALL BE PERFORMED, AND FIELD/LAB-RESULT REPORTS SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL:
    - AIR ENTRAINMENT AT PLACEMENT – ASTM C-231-97
    - SLUMP – ASTM C-143
    - COMPRESSIVE STRENGTH – ASTM C-39
  - CONCRETE CYLINDER SAMPLES SHALL BE OBTAINED FROM EACH CONCRETE DELIVERY TRUCK FOR COMPRESSIVE STRENGTH TESTING. FIVE (5) CYLINDERS SHALL BE MADE FROM EACH SAMPLE. EACH CYLINDER SHALL BE STANDARD 6" DIAMETER BY 12" TALL. ONE (1) CYLINDER WILL BE TESTED AT 7-DAY CURE, AND THREE (3) CYLINDERS WILL BE TESTED AT 28-DAY CURE TO DETERMINE COMPRESSIVE STRENGTH OF THE CONCRETE IN ACCORDANCE WITH ASTM C-39. AIR ENTRAINMENT AND SLUMP WILL BE TESTED AT EACH SAMPLE AS WELL. RETAIN THE FIFTH CYLINDER SAMPLE FOR POTENTIAL 56 DAY COMPRESSIVE TESTING AND/OR PETROGRAPHIC EXAMINATION. TEST RESULTS WHICH ARE DETERMINED BY GALE TO BE DEFICIENT OR QUESTIONABLE WILL REQUIRE THAT THE CONTRACTOR PAY FOR ADDITIONAL TESTING AND CORING OF THE IN-PLACE CONCRETE, INCLUDING PETROGRAPHIC EXAMINATION WITH REPORT AS DIRECTED BY GALE. CONCRETE DETERMINED BY GALE TO REMAIN DEFICIENT AFTER FINAL TESTING SHALL BE ENTIRELY REMOVED AND REPLACED AT NO ADDITIONAL COST.
  - CHAIR BARS FOR SECURE PLACEMENT AND POSITIONING OF REINFORCING STEEL IS TO BE PROVIDED. CHAIR BAR OR SIMILAR APPROVED MANUFACTURED DEVICES INTENDED FOR USE MUST BE SUBMITTED TO GALE AND APPROVED IN WRITING PRIOR TO ORDERING MATERIALS. REINFORCING SUPPORTS SHALL BE OF PROPER HEIGHT, LENGTH, SPACING, SIZE AND MATERIAL TYPE; AND SUBMITTAL SHALL INCLUDE THIS DATA WITH CURRENT MANUFACTURER DATA SHEETS. IN NO CASE SHALL BRICK, WOOD OR OTHER NON-CONFORMING REINFORCING STEEL SUPPORTS BE USED.
- METAL ROOF DECK NOTES:**
- STEEL ROOF DECK SHALL BE 1½" DEPTH 20 GAUGE, TYPE B, AS MANUFACTURED BY VULCRAFT, OR AN ENGINEER APPROVED EQUIVALENT PRODUCT OF ANY MEMBER OF THE STEEL DECK INSTITUTE (SDI) AND SHALL CONFORM TO ASTM DESIGNATION A446 GRADE A (FOR GALVANIZED DECK).
  - MINIMUM STRUCTURAL PROPERTIES BASE ON MINIMUM YIELD STRENGTH OF 33,000 PSI WITH A WORKING STRESS NOT TO EXCEED 20,000 PSI.
  - THE DEFLECTION OF THE DECK UNDER DESIGN LIVE LOAD SHALL NOT EXCEED L/240 OF THE SPAN.
  - ROOF DECK SHALL BE CAPABLE OF SUPPORTING THE DESIGN LOADS SHOWN ON THE DRAWINGS AND AS REQUIRED BY REFERENCED DESIGN CODES.
  - ALL DECK SHALL BE HOT-DIP GALVANIZED. GALVANIZING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A525 COATING CLASS G60.
  - DECK SHALL BE FASTENED TO THE STRUCTURAL SUPPORTS MUST BE AS PER MANUFACTURER'S RECOMMENDATIONS, SDI REQUIREMENTS, OR AS DIRECTED BY THE ENGINEER. FASTENING PATTERN FOR END LAPS MUST BE A 36/4. ALL SCREWS SHALL PENETRATE ¾" MINIMUM INTO BEAM FLANGE OR ANGLE LEG WHEN SEAL IS FULLY SEATED ON DECK.
  - DECK SHEETS SHALL EXTEND CONTINUOUSLY OVER MINIMUM OF TWO (2) SPANS.
  - DECK DESIGN CAPACITIES, DETAILS, INSTALLATION REQUIREMENTS, FASTENER PATTERNS, REQUIRED LAPS, PLANS, ETC. SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION.
  - END LAPS OF METAL DECK SHEETS SHALL BE MINIMUM OF 2" AND SHALL OCCUR OVER SUPPORTS WITH SPECIFIED FASTENING.
  - SIDELAP FASTENING SHALL BE SELF-TAPPING MACHINE SCREWS SPACED AT 24" O.C.

**CONCRETE MASONRY NOTES:**

- ALL REINFORCED CONCRETE MASONRY SHALL CONFORM TO THE LATEST EDITIONS OF THE NCM "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD-BEARING CONCRETE MASONRY," AND ACI 530 "BUILDING CODE REQUIREMENTS FOR MASONRY CONSTRUCTION.
- CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N, TYPE I NORMAL WEIGHT BLOCK AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4800 PSI ON THE NET AREA. BRICK MASONRY SHALL CONFORM TO ASTM C62, GRADE SW AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI ON THE NET AREA.
- MORTAR SHALL CONFORM TO ASTM C270, TYPE S MORTAR FOR THE REINFORCED CONCRETE MASONRY AND TYPE N FOR THE BRICK MASONRY.
- GROUT TO FILL CELLS AND BOND BEAMS SHALL CONFORM TO ASTM C476, FINE TYPE, AND SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI:
  - ALL GROUTING PROCEDURES SHALL CONFORM TO NCM "TEK SERIES #23A" 9-02B AND 9-04A.
  - GROUT SLUMP SHALL BE BETWEEN 8 AND 11 INCHES. SUBMIT MIX DESIGN TO ENGINEER FOR APPROVAL.
- ALL REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED.
- PROVIDE HORIZONTAL AND VERTICAL REINFORCING AS NOTED ON THE DRAWINGS AND FILL ALL CELLS WITH REINFORCING WITH GROUT. REFER TO "MINIMUM WALL REINFORCING SCHEDULE," OR SECTIONS, FOR REQUIRED WALL REINFORCEMENT. HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CORNERS, INTERSECTIONS AND PILASTERS, AND SHALL CONSIST OF TRUSS OR LADDER NO. 9 WIRE SPACED NOT MORE THAN 4'-0" ON CENTER.
- GROUTING SHALL BE LIMITED TO A MAXIMUM WALL HEIGHT OF 64 INCHES PER LIFT, AND MUST BE VERIFIED FOR FULL HEIGHT SOLID PLACEMENT VIA CODE REQUIRED CLEAN OUTS.
- ALL CMU DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF CHAPTERS 1 THROUGH 8 OF ASCE/ACI 530. PLACE CMU IN RUNNING BOND.
- SET REINFORCING BARS AS INDICATED. PROVIDE VERTICAL AND HORIZONTAL LAP SPLICES, 40 BAR DIAMETERS MINIMUM OR OTHERWISE INDICATED. THE BARS AND CENTER BARS IN CELL. INSPECT ALL CELLS FOR ALIGNMENT AND DEBRIS IN CELL PRIOR TO GROUTING.
- CONTRACTOR TO NOTE THAT FLASHING, WEEPS, END DAMS, SEALANTS AND DRIP-EDGES ARE REQUIRED AT LOCATIONS SHOWN ON THE DRAWINGS AND SPECIFICATIONS FOR REQUIRED WORK AND MATERIALS.

**STRUCTURAL STEEL:**

- ALL STRUCTURAL STEEL MATERIALS, WORKMANSHIP, AND DETAILS, SHALL CONFORM TO THE LATEST EDITION OF THE ANS/AISC 360 "SPECIFICATION FOR THE STRUCTURAL STEEL BUILDINGS" AND AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES". STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS.
  - STRUCTURAL STEEL SHAPES – W SHAPES GRADE 50
  - STRUCTURAL STEEL PLATES ASTM A36 MIN.
  - STEEL ANGLES AND CHANNELS ASTM A36 MIN.
- ALL SHOP CONNECTIONS SHALL BE WELDED TO CONFORM TO "STRUCTURAL WELDING CODE"; AWS D1.1, LATEST EDITION OF THE AMERICAN WELDING SOCIETY, E70 SERIES. SHOP CONNECTIONS MAY BE HIGH STRENGTH BOLTED TO CONFORM TO ASTM A325.
- ALL BOLTED CONNECTIONS SHALL BE HIGH STRENGTH BOLTED TO CONFORM TO ASTM A325-N, UNO. WHERE WELDING IS SPECIFIED, WELDING PER NOTE ABOVE SHALL APPLY.
- ANCHOR BOLTS MUST BE CAST INTO CONCRETE AND SET/ TIED IN PLACE VIA TEMPLATE. WET-STICKING OF ANCHOR BOLTS INTO CONCRETE IS NOT ALLOWED.
- ANCHOR RODS SHALL BE GRADE 60, UNO, AND SHALL BE HOT-DIP GALVANIZED. EMBEDMENT INTO CONCRETE SHALL BE 1'-4" MINIMUM WITH A 3" LONG 90° HOOK OR HEX-HEADED BOLT HEAD, UNO. SET ANCHOR RODS WITH TEMPLATE TO ENSURE PROPER POSITIONING.
- ALL SIMPLY SUPPORTED BEAM CONNECTIONS SHALL CONFORM TO THE TYPICAL DETAILS AND SHALL BE DESIGNED BY THE STEEL FABRICATOR AND SUBMITTED ON STEEL SHOP DRAWINGS. INCLUDE ENGINEER'S CERTIFIED CALCULATIONS.
- ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS. CERTIFICATIONS MUST BE CURRENT WHEN WELDING IS PERFORMED.
- PROVIDE A MINIMUM OF 1/4" FILLET WELDS (ALL AROUND) AT WELDED CONNECTIONS, UNO.
- ALL STEEL SHALL BE NEW STEEL CONFORMING TO THE AISC SPECIFICATIONS FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
- ALL WELDS SHALL DEVELOP THE FULL STRENGTH OF THE MATERIAL BEING WELDED. USE EXX 70 ELECTRODES.
- NO PERMANENT CONNECTIONS SHOULD BE MADE UP UNTIL THE STRUCTURE HAS BEEN PROPERLY ALIGNED. PROVIDE TEMPORARY BRACING AS REQUIRED.
- SUBMIT THREE (3) COPIES OF SHOP DRAWINGS TO THE ENGINEER SHOWING SETTING PLANS, ERECTION PLANS, ALL DETAILS AND SIZES OF MEMBERS INCLUDING CONNECTIONS AND ALL ENGINEERING CALCULATIONS. STEEL FABRICATOR IS RESPONSIBLE FOR FINAL CONNECTION DETAILS AND DESIGN IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE AISC DETAILING MANUAL.
- CONNECTION BOLTS TO BE 3/4" DIAMETER HIGH STRENGTH, ASTM A325. PROVIDE A MINIMUM OF THREE (3) BOLTS PER CONNECTION.



**DHK**

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JN: 832881


No.	Date	Revision
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Project:

**Villa Victoria  
Center for the Arts**  
85 WEST NEWTON STREET  
BOSTON, MA

**PHASE 1A  
CONSTRUCTION DOCUMENTS**

<b>TECHNICAL NOTES</b>	
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Scale	Stamp
File Name	
Drawn By KPB EWM SMF	Drawing No.
Checked By MDF CM CGM	
Job No. 3704	
GALE Job No. 832881	<b>S001</b>
Date 9/22/2017	



**GRANITE STONE NOTES (STAIRS):**

1. AFTER REMOVAL, GRANITE SHALL BE STORED ON WOOD SKIDS OR PALLETS, COVERED WITH NON-STAINING, WATERPROOF MEMBRANE AND PROTECTED FROM THE WEATHER. SKIDS SHALL BE PLACED AND STACKED IN SUCH A MANNER AS TO EVENLY DISTRIBUTE THE WEIGHT OF THE GRANITE MATERIALS AND TO PREVENT DAMAGE TO GRANITE PIECES. GRANITE MATERIALS SHALL BE STORED IN SUCH A MANNER AS TO ALLOW AIR TO CIRCULATE AROUND THE MATERIAL. GRANITE SHALL NOT BE PERMITTED TO BE IN DIRECT CONTACT WITH THE GROUND ANY TIME DURING STORAGE.

2. GRANITE SHALL BE CAREFULLY HANDLED TO PREVENT CHIPPING, BREAKAGE, SOILING OR OTHER DAMAGE. PINCH OR WRECKING BARS SHALL NOT BE USED WITHOUT PROTECTING EDGES OF GRANITE WITH WOOD OR OTHER RIGID MATERIALS. GRANITE UNITS SHALL BE LIFTED WITH WIDE-BELT TYPE SLINGS WHEREVER POSSIBLE; WIRE ROPE OR ROPES CONTAINING TAR OR OTHER SUBSTANCES WHICH MIGHT CAUSE STAINING OR DAMAGE TO GRANITE FINISH WILL NOT BE PERMITTED.

3. MATERIALS ASSOCIATED WITH THE GRANITE TREAD PLACEMENT SHALL BE:

- STEEL DOWELS:

EACH STONE BEARING END SHALL BE PROVIDED WITH A MINIMUM OF ONE (1) #5 DOWEL EMBEDDED FOUR (4) INCHES WITHIN THE GRANITE STONE AND A MINIMUM OF SIX (6) INCHES WITHIN THE CONCRETE FOUNDATION OR CMU WALL. REFER TO DESIGN DETAILS FOR FURTHER SPECIFICATIONS.

- GROUT:

GRANITE BLOCK SETTING BEDS SHALL BE A NON-SHRINK, HIGH PERFORMANCE, CEMENTITIOUS GROUT CONFORMING TO ASTM C 1107 (GRADE C) SUCH AS SIKAGRout 212 AS MANUFACTURED BY SIKa, OR APPROVED EQUAL.

- MORTAR:

MORTAR AT ALL GRANITE BLOCK JOINTS SHALL BE A NON-SHRINK, HIGH PERFORMANCE, CEMENTITIOUS GROUT CONFORMING TO ASTM C 1107 (GRADE C) SUCH AS SIKAGRout 212 AS MANUFACTURED BY SIKa, OR APPROVED EQUAL.

- SHIMS:

SHIMS FOR ACHIEVING PROPER LEVELING OF GRANITE BLOCKS SHALL BE HIGH-DENSITY POLYETHYLENE SHIMS SUCH AS SHIM-PAKS, BY KOROLATH OF NEW ENGLAND, OR APPROVED EQUAL.

4. ALL SETTING SHALL BE DONE BY COMPETENT GRANITE SETTERS UNDER ADEQUATE SUPERVISION AND IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS.

5. PLACE GRANITE TREADS AND BLOCKS ON CONCRETE PIERS WITH 2-INCH MAXIMUM DEPTH GROUTED SETTING BED.

6. INSTALL BOTH MORTAR JOINTS AND SEALANT JOINTS AT GRANITE JOINTS. REFER TO CONTRACT DRAWINGS FOR FURTHER DETAILS.

7. BEFORE SETTING, GRANITE SHALL BE CLEAN AND FREE OF DIRT AND FOREIGN MATTER ON ALL SIDES. GRANITE SHALL BE DRY BEFORE SETTING. GRANITE SHALL BE SET ON BED OF GROUT AS SPECIFIED.

8. GRANITE SHALL BE SET TRUE TO THE REQUIRED LINES AND GRADES. JOINTS SHALL BE UNIFORM IN THICKNESS. DIRECT BEARING CONTACT BETWEEN GRANITE PIECES SHALL BE PROHIBITED.

9. EXPOSED SURFACES SHALL BE KEPT FREE FROM MORTAR AT ALL TIMES. ANY MORTAR SMEARS SHALL BE IMMEDIATELY REMOVED WITH A CLEAN SPONGE AND CLEAN WATER BEFORE LATEX-MODIFIED MORTAR CAN SET

10. HOLES, SLOTS, AND OTHER SINKAGES FOR ANCHORS AND DOWELS SHALL BE COMPLETELY FILLED WITH MORTAR DURING SETTING OF GRANITE.

**MASONRY NOTES (STAIRS):**

1. ALL REINFORCED CONCRETE MASONRY SHALL CONFORM TO THE LATEST EDITIONS OF THE NCMA "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD-BEARING CONCRETE MASONRY," AND ACI 530 "BUILDING CODE REQUIREMENTS FOR MASONRY CONSTRUCTION.

2. MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N, TYPE I NORMAL WEIGHT BLOCK AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI ON THE NET AREA.

3. MORTAR SHALL CONFORM TO ASTM C270, TYPE S MORTAR FOR THE REINFORCED CONCRETE MASONRY AND TYPE N FOR THE BRICK MASONRY.

4. GROUT TO FILL CELLS AND BOND BEAMS SHALL CONFORM TO ASTM C476, FINE TYPE, AND SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI, WITH THE FOLLOWING MIX DESIGN:

- GROUT PROPORTIONS:
 

3/8" PEASTONE	1650 LB.
SAND	1200 LB.
TYPE II PORTLAND CEMENT	6 SACKS
WATER	52 GALLONS
"WRDA" BY W.R. GRACE CO. (OR APPROVED EQUAL)	52 OZ.
- ALL GROUTING PROCEDURES SHALL CONFORM TO NCMA "TEK SERIES #23A" 9-02B AND 9-04A.
- GROUT SLUMP SHALL BE BETWEEN 8 AND 11 INCHES. SUBMIT MIX DESIGN TO ENGINEER FOR APPROVAL.

5. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED.

6. PROVIDE HORIZONTAL AND VERTICAL REINFORCING AS NOTED ON THE DRAWINGS AND FILL ALL CELLS WITH REINFORCING WITH GROUT. REFER TO "MINIMUM WALL REINFORCING SCHEDULE," OR SECTIONS, FOR REQUIRED WALL REINFORCEMENT. HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CORNERS, INTERSECTIONS AND PILASTERS, AND SHALL CONSIST OF TRUSS OR LADDER NO. 9 WIRE SPACED NOT MORE THAN 1'-4" ON CENTER.

7. GROUTING SHALL BE LIMITED TO A MAXIMUM WALL HEIGHT OF 64 INCHES PER LIFT, AND MUST BE VERIFIED FOR FULL HEIGHT SOLID PLACEMENT VIA CODE REQUIRED CLEAN OUTS.

8. ALL CMU DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF CHAPTERS 1 THROUGH 8 OF ASCE/ACI 530. PLACE CMU IN RUNNING BOND.

9. SET REINFORCING BARS AS INDICATED. PROVIDE VERTICAL AND HORIZONTAL LAP SPLICES, 40 BAR DIAMETERS MINIMUM. TIE BARS AND CENTER BARS IN CELL. INSPECT ALL CELLS FOR ALIGNMENT AND DEBRIS IN CELL PRIOR TO GROUTING.

**CONCRETE AND FOUNDATION NOTES (STAIRS):**

1. CONCRETE SHALL BEAR LEVEL ON SPECIFIED VAPOR BARRIER AND CRUSHED STONE ATOP SPECIFIED FILTER FABRIC AND STRUCTURAL FILL OVER UNDISTURBED ACCEPTABLE SOIL (PROOF-ROLLED WITH AT LEAST SIX PASSES EACH WAY WITH A LARGE PLATE COMPACTOR) OR STRUCTURAL COMPACTED FILL HAVING AN ALLOWABLE BEARING CAPACITY OF 3500 POUNDS PER SQUARE FOOT (MINIMUM).

2. IF BEARING MATERIALS WITH A LOWER BEARING CAPACITY THAN 3500 POUNDS PER SQUARE FOOT ARE ENCOUNTERED (AS DETERMINED BY THE GEOTECHNICAL ENGINEER), AT THE SPECIFIED ELEVATIONS, THE UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL TO BE APPROVED BY THE STRUCTURAL AND GEOTECHNICAL ENGINEER.

3. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS.

4. NO CONCRETE SHALL BE PLACED IN WATER OR ON FROZEN GROUND.

5. ALL CONCRETE SHALL BE PROTECTED AGAINST FROST UNTIL PROJECT IS COMPLETED.

6. BACKFILL SHALL BE COMPACTED IN 8" THICK MAXIMUM LOOSE LIFTS AND COMPACTED TO 95% MODIFIED PROCTOR (CLASS 1), ASTM D1557.

7. BACKFILL SIMULTANEOUSLY ALONG EACH SIDE WITH SPECIFIED COMPACTED FILL.

8. CONCRETE WORK SHALL CONFORM TO THE LATEST AMERICAN CONCRETE INSTITUTE CODE FOR "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

9. FOUNDATION AND SLAB CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS WITH A SLUMP OF NO MORE THAN 4" AND AIR ENTRAINMENT OF 4½-7½%. THE USE OF CALCIUM CHLORIDE IS NOT PERMITTED. PROVIDE PROPER CONCRETE PROTECTION OR HEAT IN COLD WEATHER AND MAINTAIN PROPER CURING PROCEDURES IN ACCORDANCE WITH ALL CURRENT A.C.I. STANDARDS. SLUMP MEASUREMENT CHANGES MAY BE ALLOWED IF MIX INCLUDES MID-RANGE, HIGH-RANGE OR SUPERPLASTICIZER ADMIX.

10. STEEL REINFORCEMENT SHALL CONFORM TO ASTM 615, GRADE 60, DEFORMED BARS.

11. WHERE CONTINUOUS BARS ARE CALLED FOR THEY SHALL BE RUN CONTINUOUSLY AROUND CORNERS AND LAPPED AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS. LAPS SHALL BE 40 BAR DIAMETERS (MINIMUM), UNLESS OTHERWISE SHOWN. USE 2'-0" X 2'-0" CORNER BARS AT EACH CORNER FOR EACH CONTINUOUS HORIZONTAL BAR.

12. NOTIFY ENGINEER FOR INSPECTION OF COMPLETED INSTALLATION OF REINFORCEMENT AT LEAST 2 WORK DAYS PRIOR TO SCHEDULED PLACEMENT OF CONCRETE.

13. PLACEMENT OF CONCRETE POURS SHOULD HAVE A VERTICAL 2"x4" KEY WITH CONTINUOUS REINFORCING (40 BAR DIAMETER MINIMUM) THRU THE CONSTRUCTION JOINT. CONSTRUCTION JOINTS SHALL BE PLACED NO CLOSER THAN 10 FT. FROM ANY CORNER.

14. ALL REINFORCING BARS SHALL BE COLD BENT IN ACCORDANCE TO THE PROPER RADI ESTABLISHED BY THE AMERICAN CONCRETE INSTITUTE. UNDER NO CONDITIONS SHALL HEAT BE APPLIED TO THE BARS TO OBTAIN BENDS.

15. FORMS SHALL BE OILED PRIOR TO THEIR ERECTION. REINFORCING BARS WHICH ARE COATED WITH FORM OIL OR ANY OTHER BOND BREAKING MATERIAL WILL BE REJECTED AND WILL REQUIRE REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER.

16. CONCRETE SHALL NOT CONTAIN SLAG OR SILICA FUME. IF USING FLY-ASH, THE MAXIMUM QUANTITY PER WEIGHT OF CEMENT SHALL BE 20%. SUBMIT FLY-ASH CERTIFICATION FOR APPROVAL WITH MIX DESIGNS.

17. SUBMIT COMPLETE REINFORCING STEEL SHOP DRAWINGS ALONG WITH COMPLETE CONCRETE MIX DESIGN (INCLUDING ALL ADDITIVES AND THEIR CONTENT) TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATING STEEL.

18. ADDITION OF WATER TO CONCRETE MIXES AT THE SITE IS NOT ALLOWED. SUCH CONCRETE SHALL BE IMMEDIATELY REJECTED. MID-RANGE, OR HIGH RANGE, OR SUPERPLASTICIZERS ARE ALLOWED IN THE MIX TO ASSIST IN WORKABILITY AND PUMPING OPERATIONS, AND MIX-DESIGN MAKE-UP WATER MAY BE POST SUPPLEMENTED AT THE SITE. TESTING FIRM MUST MEASURE AND REPORT.

19. CONCRETE CEMENT SHALL BE TYPE I OR II PORTLAND CEMENT. MAXIMUM AGGREGATE SIZE IN FOUNDATION CONCRETE SHALL BE 1½". MAXIMUM AGGREGATE SIZE IN SLAB CONCRETE SHALL BE ¾".

20. ALL CONCRETE SHALL BE READI-MIXED AT PLANT COMPLYING WITH ASTM C94 AND ASTM C1116. SITE MIXING IS NOT ALLOWED.

21. CONCRETE SHALL BE PLACED UPON A MINIMUM 12" THICK BED OF 3/4" CRUSHED, WASHED STONE COMPACTED TO A STABLE AND UNYIELDING STATE, IN 6" (MAX.) LIFTS. ALL STONE BED SUB-BASE COMPACTED MATERIALS SHALL BE PLACED ATOP SPECIFIED FILTER FABRIC AND COMPACTED STRUCTURAL FILL AND PROOF-ROLLED, ACCEPTABLE (AS DETERMINED BY GEOTECHNICAL ENGINEER) MATERIALS.

22. ALL CONCRETE SHALL BE REINFORCED AS SHOWN ON THE DRAWINGS. PROVIDE SUFFICIENT CHAIR OR SUPPORT BARS AS NECESSARY TO PROPERLY POSITION REINFORCING STEEL. PULL UP OF BARS OR MESH, OR UNSUPPORTED BARS OR MESH WILL NOT BE ALLOWED. "WET STICKING" OF BARS WILL NOT BE ALLOWED.

23. SUBMIT ALL GEOTECHNICAL ENGINEER REPORTS TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WITH PLACEMENT OF SUB-BASE MATERIALS, FILTER FABRIC, REINFORCING STEEL, ETC. SUBMIT CONCRETE TEST RESULTS FROM TESTING AGENCY TO THE ENGINEER. OBTAIN ENGINEER'S APPROVAL OF ALL SUBMITTALS PRIOR TO COMMENCING WITH WORK.

24. ALL CONCRETE SHALL BE POURED TO THE SPECIFIED THICKNESS AND REINFORCED AS SHOWN ON THE DRAWINGS. WELDED WIRE MESH REINFORCEMENT SHALL CONFORM TO A.S.T.M. A185, AND SHALL LAP 6" MINIMUM OR ONE SPACE, WHICHEVER IS LARGER, AND SHALL BE WIRED TOGETHER. WELDED WIRE USED AT EXTERIOR SLABS SHALL BE EPOXY COATED TO CONFORM TO LATEST CRSI SPECIFICATIONS, AND SHALL BE SET 2 INCHES BELOW TOP SURFACE OF SLAB. IT IS REQUIRED THAT CHAIR BARS BE USED TO MAINTAIN PROPER LOCATION OF WELDED WIRE MESH.

**GRANITE JOINTS (STAIRS):**

1. GRANITE BLOCK JOINT SEALANT SHALL BE A HIGH DROMETER, MULTI-COMPONENT URETHANE SEALANT WITH A MINIMUM SHORE A HARDNESS OF 40. SEALANT SHALL CONFORM TO ASTM C920, TYPE M, GRADE NS, SUCH AS SIKAFLEX-2c-NS-TG OR APPROVED EQUAL. SEALANT WILL BE INSTALLED OVER MORTAR JOINT.

2. COLOR(S) SHALL BE SELECTED BY THE OWNER FROM THE APPROVED MANUFACTURER'S PREMIUM COLOR CHART.

3. CLEANERS AND PRIMERS SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE CAULKING.

4. BACKER ROD SHALL BE CONTINUOUS LENGTH, CLOSED CELL POLYETHYLENE FOAM, AS RECOMMENDED BY THE SEALANT MANUFACTURER. BACKER ROD SHALL BE COMPRESSIBLE, RESILIENT, NON-WAXING, NON-EXTRUDING AND NON-STAINING. BACKER ROD SHALL BE OF SUFFICIENT SIZE TO BE COMPRESSED 30% OF MAXIMUM JOINT WIDTH AND SHALL BE TOTALLY COMPATIBLE WITH THE SEALANT, PRIMER AND SUBSTRATES. BACKERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 962 - TYPE A, ASTM D 1622, ASTM D 1623 AND ASTM D 5249.

5. BOND BREAKER TAPE SHALL BE SELF-ADHESIVE POLYETHYLENE TAPE AS RECOMMENDED BY THE SEALANT MANUFACTURER.

6. REMOVE EXISTING SEALANTS OR REMNANTS OF MORTAR FROM ALL SURFACES TO RECEIVE NEW SEALANTS. WIRE BRUSH, SCRAPE, CHIP OR GRIND SUBSTRATE AND ADJACENT SURFACES TO RECEIVE SEALANT AS REQUIRED TO REMOVE ALL TRACES OF EXISTING SEALANTS MORTAR AND ALL CONTAMINANTS WHICH WILL EFFECT BONDING. OBTAIN SURFACES ACCEPTABLE BY THE SEALANT MANUFACTURER FOR INSTALLATION OF NEW SEALANTS. GRANITE SURFACES MUST HAVE AN OPEN CAPILLARY, MILDLY ROUGHENED, DUST FREE, GROUND SURFACE PRIOR TO APPLYING PRIMER AND SEALANTS.

7. FOLLOWING REMOVAL OF EXISTING SEALANTS AND PREPARATION OF BONDING SURFACES, CLEAN BONDING SURFACES WITH TWO APPLICATIONS OF THE MANUFACTURER'S RECOMMENDED CLEANING SOLUTION. APPLY SOLUTION WITH BRUSHES AND WIPE WITH CLEAN WHITE RAGS.

8. JOINT PRIMER SHALL BE APPLIED TO PROPERLY PREPARED, CLEANED AND DRIED SUBSTRATES. PRIMER SHALL BE AS PROVIDED BY THE SEALANT MANUFACTURER FOR EACH SUBSTRATE AND SHALL BE COMPLETELY COMPATIBLE WITH THE EXISTING MATERIALS AND PROPOSED SEALANTS AND ACCESSORIES.

9. PRIMER SHALL BE APPLIED AND ALLOWED TO DRY PRIOR TO THE APPLICATION OF BOND BREAKER AND SEALANT.

10. SEALANT JOINTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WIDTH TO DEPTH RATIO REQUIREMENTS AND AS DETAILED.

11. SEALANT SHALL BE APPLIED TO CLEAN, DRY JOINTS BY KNIFE, TROWEL, MANUAL OR AIR PRESSURE CAULKING GUNS USING PROPER NOZZLE SIZES.

12. SEALANT SHALL BE FORCED INTO THE JOINT TO COMPLETELY FILL THE VOID. FORCE SEALANT INTO THE JOINT AND AGAINST THE SIDES OF THE JOINT. AVOID PULLING SEALANT FROM THE SIDES OF THE JOINT.

13. ALL JOINT SEALANT SHALL BE IMMEDIATELY TOOLED TO ASSURE FULL ADHESION. SEALANT SHALL BE DRY TOOLED STRAIGHT, UNIFORM, SMOOTH, AND NEATLY FINISHED TO THE PROFILES DETAILED. NO SOAPS, WETTING OR SLICKING AGENTS WILL BE ALLOWED.

14. USE CAUTION NOT TO DISTURB THE EXISTING SEALANT JOINTS AFTER INSTALLATION.

**QUALITY CONTROL (STAIRS)**

1. FOR ALL CONSTRUCTION MATERIALS SUBMIT AS PER SECTION 01300: LIST OF MATERIALS AND MANUFACTURERS, CATALOG DATA, MANUFACTURER'S INSTRUCTIONS, MATERIALS SAFETY DATA SHEETS, AND SHOP DRAWINGS.

2. SUBMIT A CONSTRUCTION SCHEDULE.

3. THE CONTRACTOR SHALL PROVIDE GRANITE SAMPLE FOR OWNER APPROVAL AS TO ACCEPTABILITY OF COLOR, TEXTURE AND APPEARANCE MATCH WITH THE EXISTING CONSTRUCTION.

4. THE CONTRACTOR SHALL PROVIDE A COLOR CHART FROM THE APPROVED MORTAR MANUFACTURER. COLOR(S) SHALL BE SELECTED BY OWNER.

5. COORDINATE WORK WITH THAT OF OTHER SECTIONS AFFECTING, AFFECTED BY, THIS WORK, AS NECESSARY TO ASSURE THE STEADY PROGRESS OF THE WORK UNDER THE CONTRACT.

6. DO ALL CUTTING AND DRILLING TO ACCOMMODATE WORK OF OTHER SECTIONS, AS EXPRESSLY INDICATED AND AS REASONABLY INFERRED FROM CONTRACT DOCUMENTS AND SPECIFICATIONS, OR REQUIRED FOR THE PROPER COMPLETION OF THE WORK.

**CLEANING:**

7.1. AFTER POINTING GRANITE, WORK SHALL BE CAREFULLY CLEANED, REMOVING ALL DIRT, EXCESS MORTAR, STAINS AND OTHER DEFACEMENTS.

7.2. MILD ABRASIVE CLEANERS THAT CONTAIN NO HARSH OR CAUSTIC INGREDIENTS MAY BE USED, WITH FIBER BROOMS OR BRUSHES AND CLEAR WATER. WIRE BRUSHES, STEEL WOOL, AND ACIDS OR OTHER SOLUTIONS WHICH MAY CAUSE DISCOLORATION ARE EXPRESSLY PROHIBITED.

7.3. UPON COMPLETION OF GRANITE WORK, SURFACES SHALL BE LEFT IN A CLEAN, UNSOILED CONDITION, ACCEPTABLE TO THE ARCHITECT AND OWNER.

7.4. CLEAN THE ENTIRE WORK AREA OF DEBRIS PRIOR TO DEPARTING FROM THE WORK SITE ON A DAILY BASIS TO THE SATISFACTION OF THE OWNER.

7.5. ALL BUILDING COMPONENTS, PAVED AND LANDSCAPED AREAS SHALL BE THOROUGHLY CLEANED OF ALL DEBRIS AND MATERIALS OF CONSTRUCTION. ALL CLEAN-UP SHALL BE TO THE SATISFACTION OF THE OWNER, AND SHALL BE PERFORMED ON A DAILY BASIS.

7.6. ANY LANDSCAPED, PAVED AREAS, INTERIOR OR EXTERIOR BUILDING COMPONENTS DAMAGED DUE TO THE WORK SHALL BE REPAIRED OR REPLACED, TO THE SATISFACTION OF AND AT NO ADDITIONAL COST TO THE OWNER.

**PROTECTION:**

8.1. GRANITE WORK SHALL BE PROPERLY AND ADEQUATELY PROTECTED UNDER THE RESPONSIBILITY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE OF THE PROJECT BY OWNER.

8.2. AFTER THE GRANITE WORK HAS BEEN INSTALLED, IT SHALL BE PROPERLY AND ADEQUATELY PROTECTED FROM DAMAGE. BOXING OR OTHER SUITABLE PROTECTION SHALL BE PROVIDED BY CONTRACTOR WHEREVER REQUIRED. HOWEVER, NO LUMBER WHICH MAY STAIN OR DEFACE THE GRANITE SHALL BE USED. NAILS SHALL BE HIGH-QUALITY GALVANIZED OR NON-RUSTING.

**GEOTECHNICAL NOTES (STAIRS):**

1. THE SITE MAY POTENTIALLY CONTAIN ORGANICS, FILL, BURIED WOOD AND TOPSOIL, AND OTHER UNSUITABLE SOILS AT SOME LOCATIONS. OVER-EXCAVATION TO REMOVE THESE UNACCEPTABLE SOILS MAY BE REQUIRED FOR THE PROJECT CONCRETE AND SUB-BASE MATERIAL PLACEMENT. COMPACTED STRUCTURAL FILL AND COMPACTED STONE SUB-BASE MATERIALS WILL BE REQUIRED TO BE PLACED IN CONTROLLED LOOSE LIFTS AT ALL BACKFILLING LOCATIONS.

2. THE CONTRACTOR SHALL PROVIDE AMPLE AND CONTINUOUS SITE DEWATERING DURING THE ENTIRE CONSTRUCTION PHASE OF THIS PROJECT AS REQUIRED. OBTAIN TOWN APPROVAL FOR DISCHARGE METHODS.

3. THE ENTIRE CONSTRUCTION PHASE OF THIS PROJECT MUST INCLUDE THE FIELD REVIEW SERVICES OF A MASSACHUSETTS LICENSED GEOTECHNICAL ENGINEER, OR THEIR REPRESENTATIVE, TO OBSERVE, REVIEW, MAKE CORRECTIVE ACTIONS, REPORT, AND CERTIFY THAT ALL EARTH-WORK CONFORMS WITH THE PROJECT REQUIREMENTS. THE LICENSED GEOTECHNICAL ENGINEER'S FIELD SERVICES MUST INCLUDE THE FOLLOWING AS A MINIMUM:

- OBSERVE REPRESENTATIVE SOIL OVER-EXCAVATION PROCEDURES TO VERIFY THAT ALL UNSUITABLE MATERIALS HAVE BEEN SUFFICIENTLY REMOVED.
- VERIFY THAT THE UNDERLYING SOILS (AFTER REMOVAL OF UNSUITABLE MATERIALS) ARE ACCEPTABLE FOR USE AS THE SUB-BASE TO STRUCTURAL FILL, CRUSHED STONE AND FOUNDATION PLACEMENT.
- OBSERVE REPRESENTATIVE PROOF-ROLLING OPERATIONS AND PROCEDURES OF UNDISTURBED OR VIRGIN, ON SITE SOIL MATERIALS, IF FOUND ACCEPTABLE TO OWNER.
- OBSERVE LOOSE LIFT PLACEMENT AND CONTROLLED COMPACTION OF STRUCTURAL FILL AND CRUSHED STONE SUB-BASE AND BACKFILL MATERIALS.
- PROVIDE RECOMMENDATIONS VERIFYING COMPLIANCE AND ADEQUACY OF SITE DEWATERING.
- A FIELD REPORT FOR EACH SITE VISIT PERFORMED BY THE LICENSED GEOTECHNICAL ENGINEER OR THEIR REPRESENTATIVE SHALL BE WRITTEN AND SUBMITTED TO THE OWNER AND ENGINEER. THE REPORT SHALL INCLUDE THE DATE, PERSONNEL PRESENT AT THE SITE, WEATHER, TIME, PURPOSE OF SITE VISIT, AREAS INCLUDED IN THE SITE OBSERVATIONS WITH PLAN SKETCH, CORRECTIVE ACTIONS RECOMMENDED, AND RESULTS OF OBSERVED WORK.
- UPON COMPLETION OF THE GEOTECHNICAL ENGINEER'S FIELD OBSERVATION WORK, AND SUBMISSION OF ALL FIELD REPORTS AND SITE TESTING (IF REQUIRED), THE GEOTECHNICAL ENGINEER MUST SUBMIT AN ENGINEER'S SEALED FINAL LETTER OF CERTIFICATION TO STATE THAT THE GEOTECHNICAL RELATED CONSTRUCTION HAS MET THE REQUIREMENTS OF THE PROJECT.
- THE GEOTECHNICAL ENGINEER SHALL INCLUDE FIELD TESTING TO VERIFY COMPACTION AND VALIDATION OF STRUCTURAL FILL, GRANULAR FILL, CRUSHED STONE AND OTHER BORROWED SOIL MATERIALS FOR THE PROJECT. THE GEOTECHNICAL ENGINEER SHALL SUBMIT THEIR INTENDED TESTING FREQUENCY AND PROTOCOL TO THE OWNER AND ENGINEER FOR ACCEPTANCE PRIOR TO INITIATING THE WORK.

5. ALL SLABS AND FOUNDATIONS SHALL BEAR UPON THE SPECIFIED, COMPACTED, CRUSHED STONE LAYER OVER COMPACTED STRUCTURAL FILL AFTER REMOVAL OF ALL UNSUITABLE MATERIALS. IF THE EXISTING MATERIALS ARE FOUND TO BE ACCEPTABLE BY THE GEOTECHNICAL ENGINEER IN LIEU OF USING THE STRUCTURAL FILL MATERIALS, THIS ACCEPTANCE MUST BE SUBMITTED TO THE OWNER AND STRUCTURAL ENGINEER IN WRITING BEFORE PLACING ANY SLAB OR FOUNDATIONS. ALL BACKFILLED STRUCTURAL FILL MATERIALS SHALL BE COMPACTED TO 95% (MINIMUM) MODIFIED PROCTOR, ASTM D1557, MAXIMUM DRY DENSITY.

6. THE OWNER IS REQUIRED TO HIRE AND PAY FOR ALL GEOTECHNICAL ENGINEERING SERVICES THROUGH THE DURATION OF THAT PORTION OF THE PROJECT.

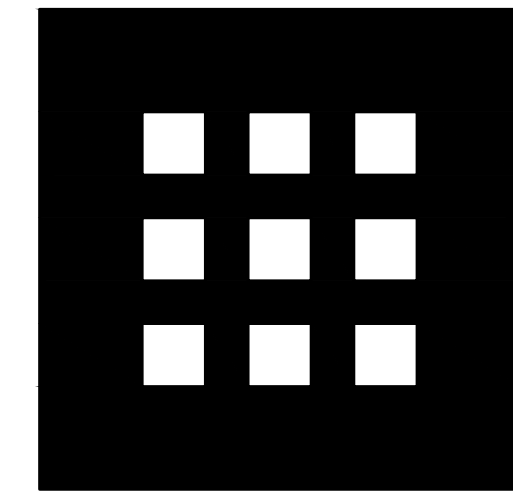
7. THE CONTRACTOR IS REQUIRED TO CONTACT, COORDINATE, SCHEDULE, AND ASSIST THE GEOTECHNICAL ENGINEER FOR ALL FIELD REVIEW WORK.

8. CRUSHED STONE FOR USE UNDER CONCRETE SLABS AND FOUNDATIONS SHALL BE ¾" CRUSHED, ANGULAR, WASHED STONE OF GRANITE (OR OTHER APPROVED) QUARRY. ALL CRUSHED STONE SHALL BE PLACED IN A MAXIMUM 4" THICK LOOSE LIFT, AND THEN COMPACTED TO A STABLE, NON-YIELDING STATE.

SIEVE (ASTM D422)	PERCENT PASSING BY WEIGHT
1 INCH	100
3/4-INCH	90 - 100
1/2-INCH	10 - 50
3/8-INCH	0 - 20
NO. 4	0 - 5

9. STRUCTURAL FILL SHALL BE FREE FROM ICE, SNOW, ROOTS, SOD, RUBBISH, DEBRIS AND OTHER DELETERIOUS OR ORGANIC MATTER AND CONFORM TO THE FOLLOWING GRADATION:

SIEVE (ASTM D422)	PERCENT PASSING BY WEIGHT
3 INCH	100
1/2-INCH	50 - 85
NO. 4	40 - 75
NO. 40	10 - 35
NO. 200	0 - 8



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No.	Date	Revision
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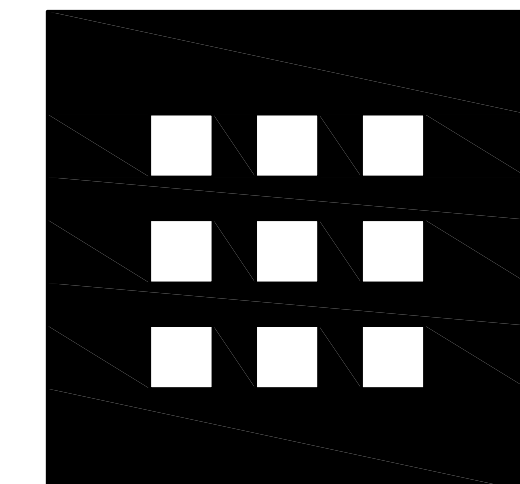
Project:  
**Villa Victoria  
Center for the Arts**  
85 WEST NEWTON STREET  
BOSTON, MA

**PHASE 1A  
CONSTRUCTION DOCUMENTS**

**TECHNICAL NOTES  
(CONT.)**

Scale	Stamp
File Name	
Drawn By KPB EWM SMF	Drawing No.
Checked By MDF CM CGM	<b>S002</b>
Job No. 3704 GALE Job No. 832981	
Date 9/22/2017	





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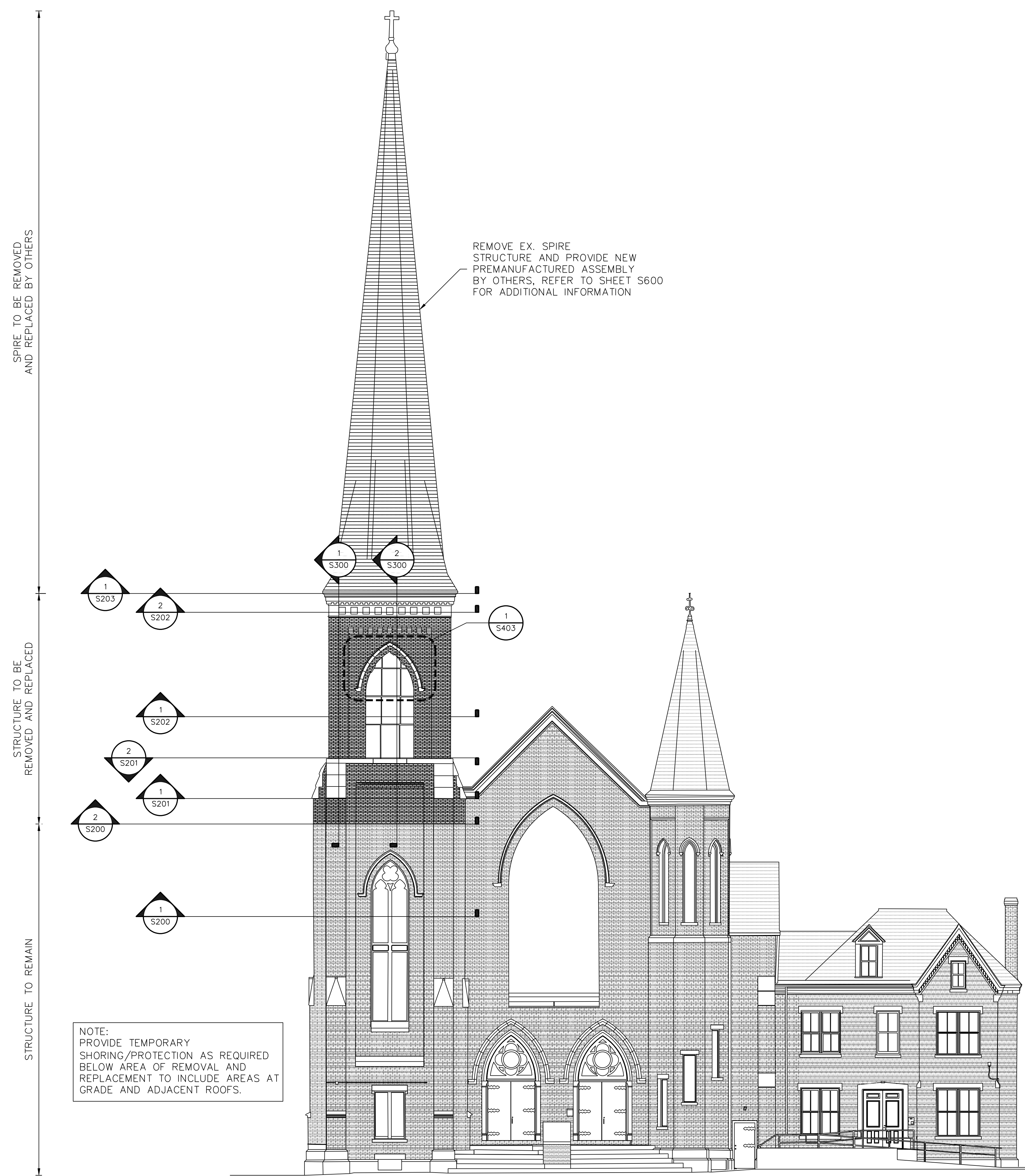


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LEGEND	
BMU	BRICK MASONRY UNIT
CMU	CONCRETE MASONRY UNIT
EX	EXISTING
TR	TO REMAIN
∅	DIAMETER
∠	ANGLE
CONT	CONTINUOUS
SSTL	STAINLESS STEEL



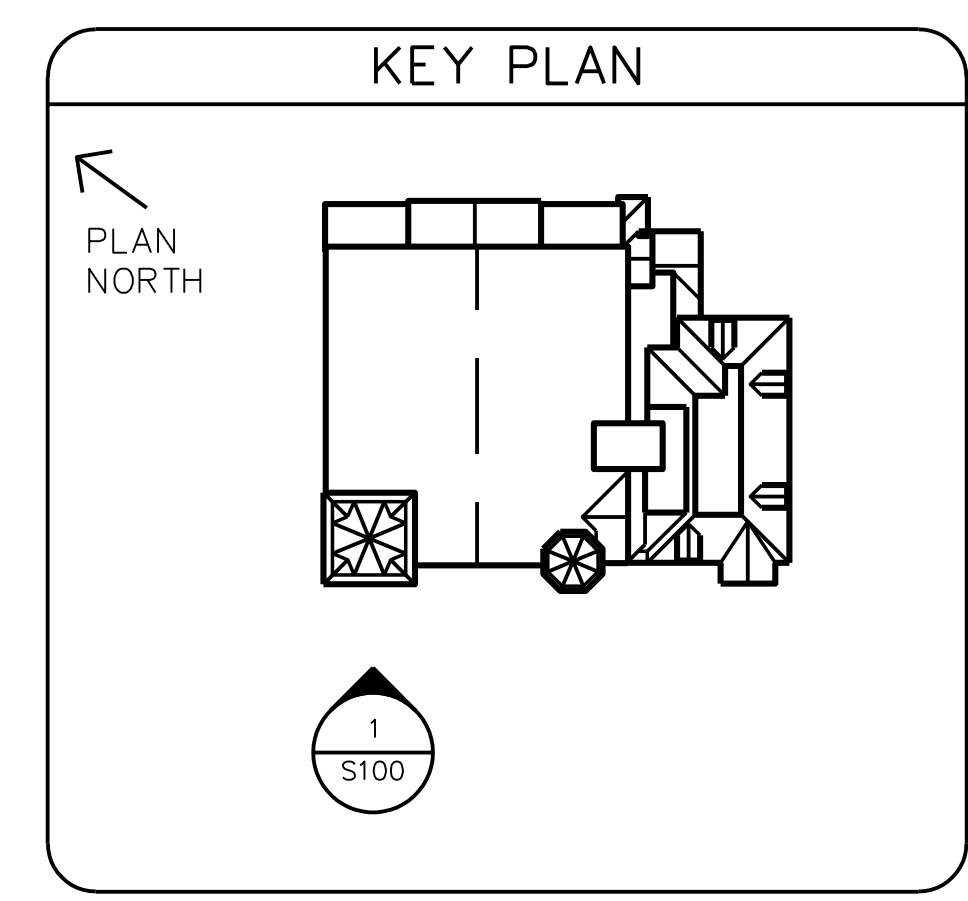
SPIRE TO BE REMOVED AND REPLACED BY OTHERS

STRUCTURE TO BE REMOVED AND REPLACED

STRUCTURE TO REMAIN

REMOVE EX. SPIRE STRUCTURE AND PROVIDE NEW PREMANUFACTURED ASSEMBLY BY OTHERS, REFER TO SHEET S600 FOR ADDITIONAL INFORMATION

NOTE:  
PROVIDE TEMPORARY SHORING/PROTECTION AS REQUIRED BELOW AREA OF REMOVAL AND REPLACEMENT TO INCLUDE AREAS AT GRADE AND ADJACENT ROOFS.



1 SOUTH ELEVATION  
1/8" = 1'  
0 4' 8' 16'

No.	Date	Revision
1	9/26/2017	

Project:  
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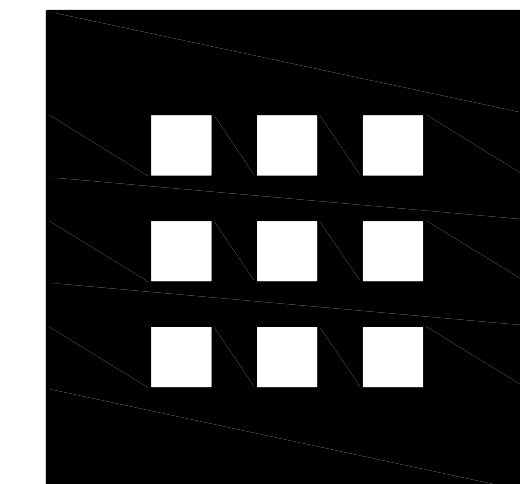
PHASE 1A  
CONSTRUCTION DOCUMENTS

Title:  
**ELEVATION**

Scale	Stamp
File Name	
Drawn By	
Checked By	
Job No.	
GALE Job No.	
Date	

S100





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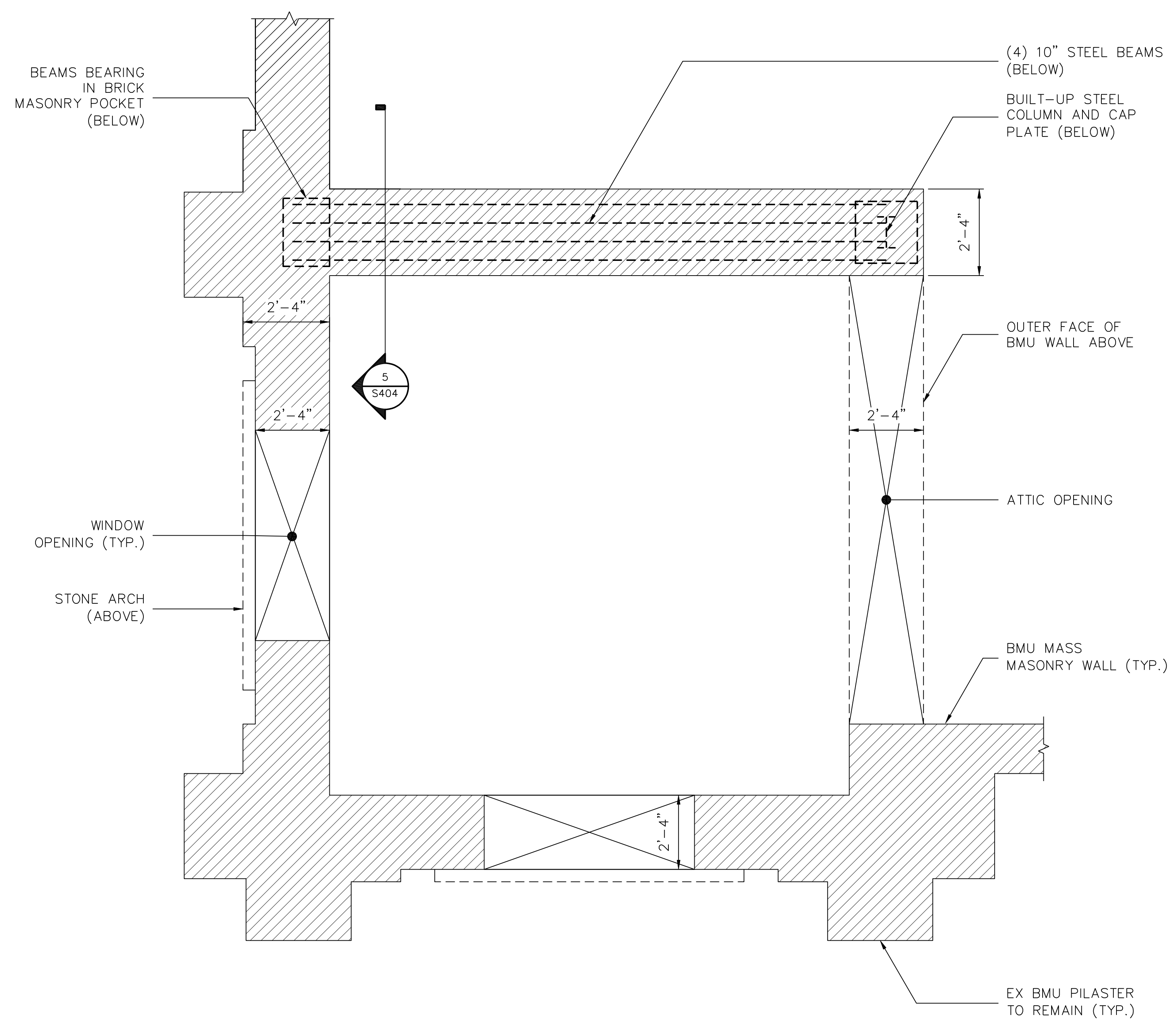
No.	Date	Revision
1	9/26/2017	

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PHASE 1A  
CONSTRUCTION DOCUMENTS

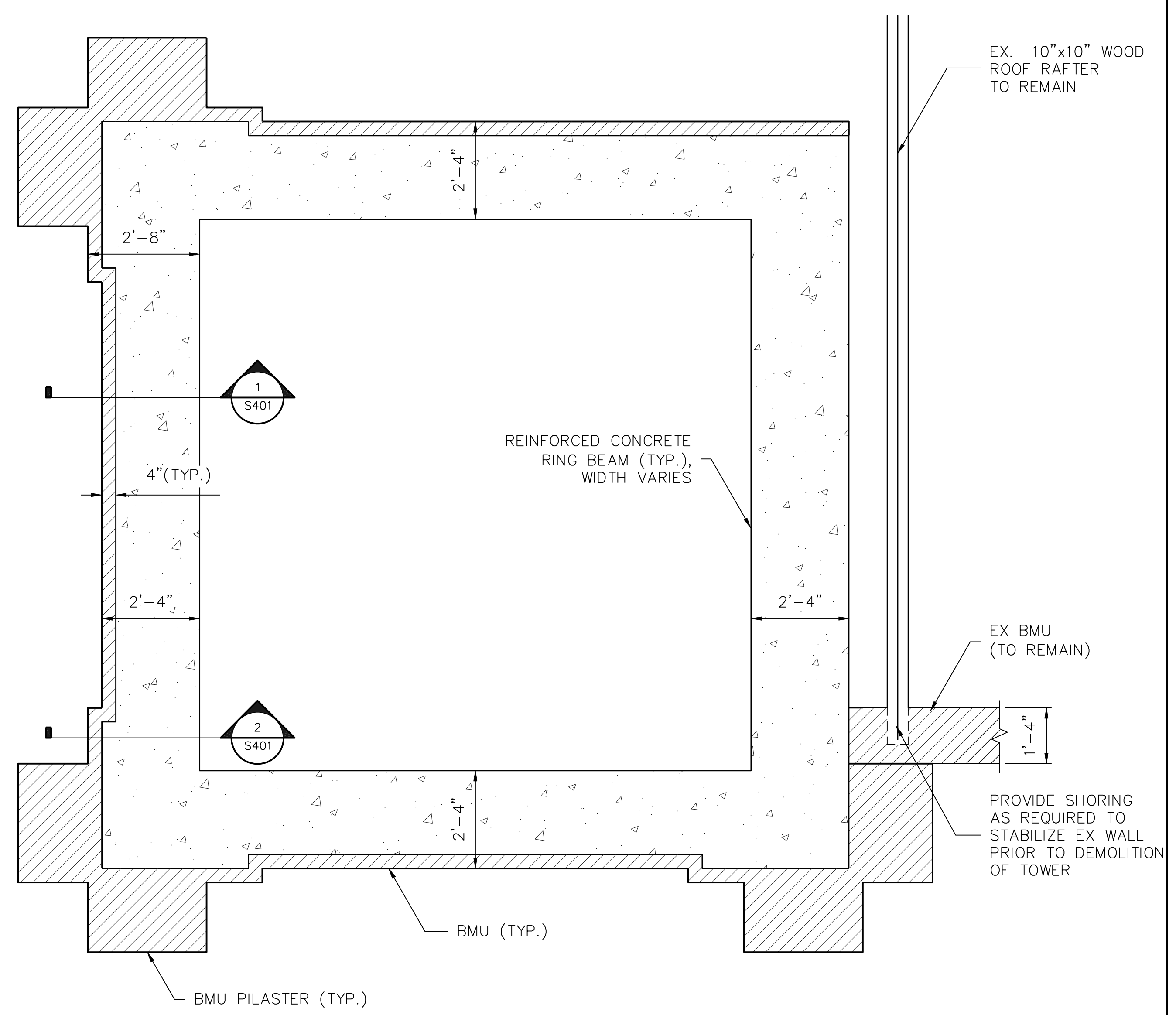
**TOWER PLANS**

Scale	Stamp
File Name	
Drawn By DJZ MLF PDA	Drawing No.
Checked By PDA CM CGM	
Job No. 3704	
GALE Job No. 832681	
Date 9/22/2017	<b>S200</b>



**1 TOWER PLAN - BELOW EX STEEL LINTEL**  
1/2" = 1'-0"  
0 1 2 4

ALL ITEMS ARE EXISTING (EX) TO REMAIN

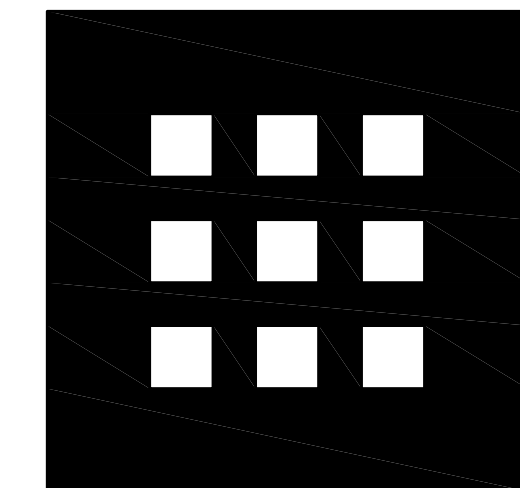


**2 TOWER PLAN @ LOWER RING BEAM**  
1/2" = 1'-0"  
0 1 2 4

ALL ITEMS ARE NEW UNLESS INDICATED AS EXISTING (EX)

- GENERAL NOTES**
- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION OF NEW MASONRY WALLS AND REBUILT PILASTERS.
  - REFER TO SPECIFICATIONS FOR CONSTRUCTION OF NEW MASONRY WALLS.





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PHASE 1A  
CONSTRUCTION DOCUMENTS

PLANS

Scale

Stamp



File Name

Drawn By  
DJZ MLF PDA

Checked By  
PDA CM CGM

Job No. 3704

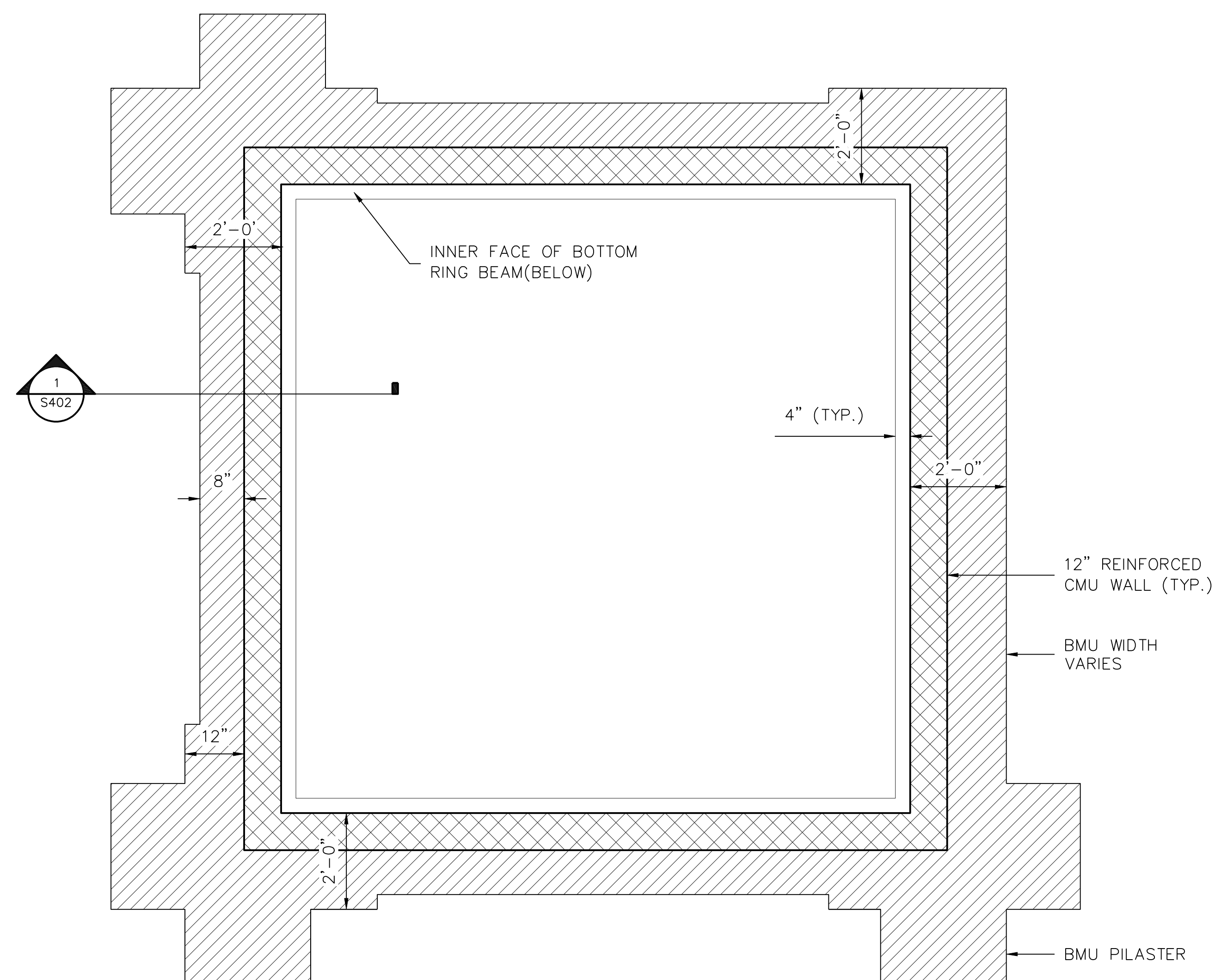
GALE Job No. 832681

Date  
9/22/2017

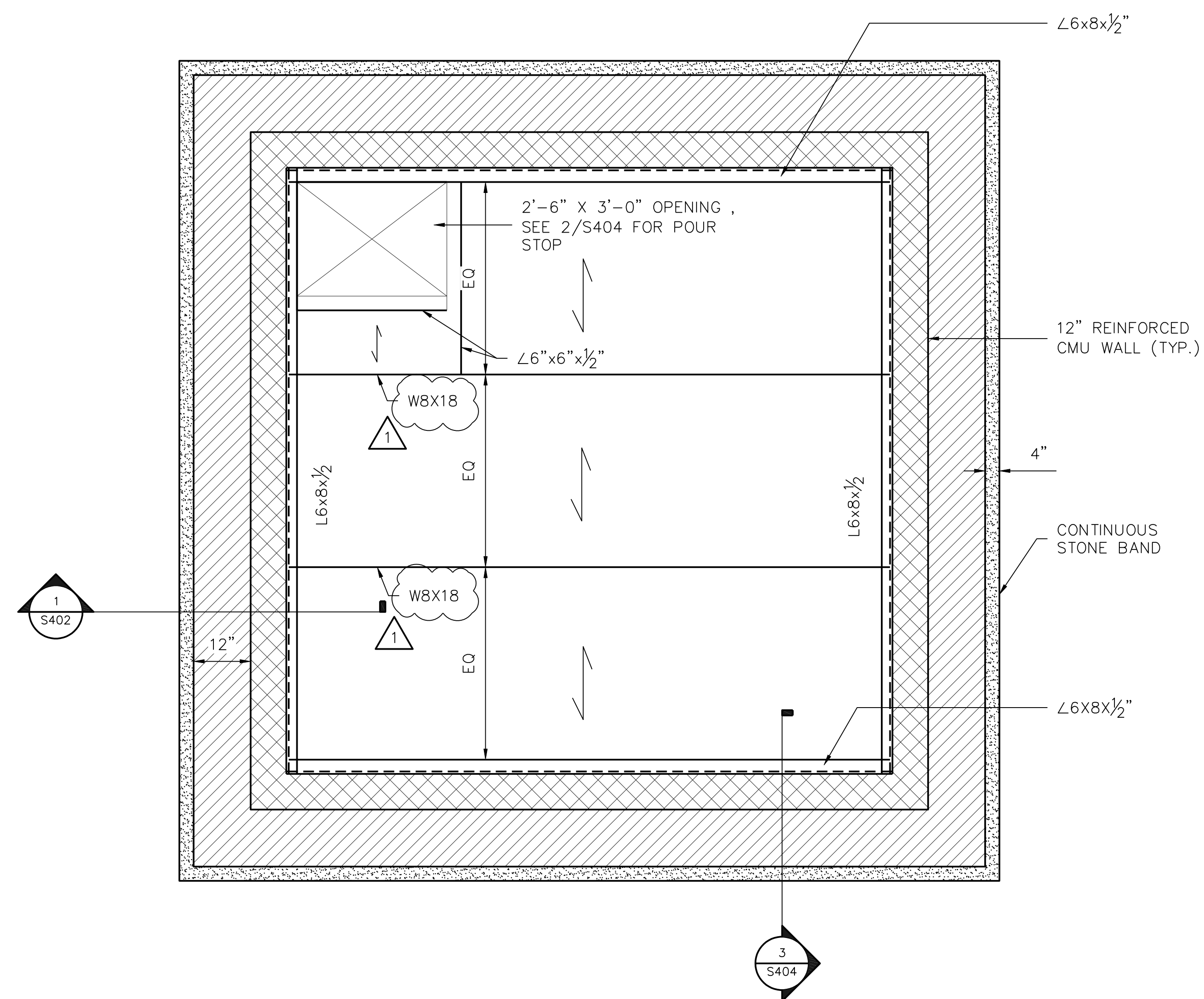
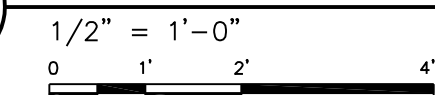
Drawing No.

**S201**

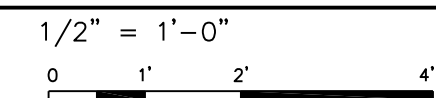
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1 TOWER PLAN - BELOW BELFRY FLOOR



2 TOWER PLAN @ BELFRY FLOOR



GENERAL NOTES

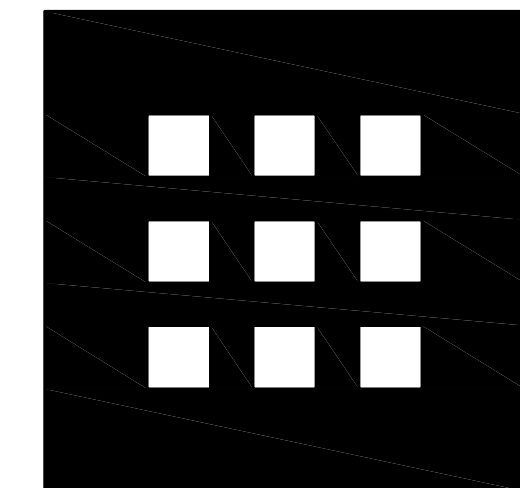
- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION OF NEW MASONRY WALLS AND REBUILT PILASTERS.
- REFER TO SPECIFICATIONS FOR CONSTRUCTION OF NEW MASONRY WALLS.
- SPRAY APPLIED FIREPROOFING TO BE PROVIDED AT STEEL FRAMING.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEV. OF TOP OF SLAB.

LEGEND

INDICATES SPAN DIRECTION OF 1 1/2" DEEP SM TYPE B METAL DECK WITH 3 1/2" NORMAL WEIGHT CONCRETE SLAB. CONCRETE TO BE REINFORCED WITH WWF 4x4 W4.0xW4.0







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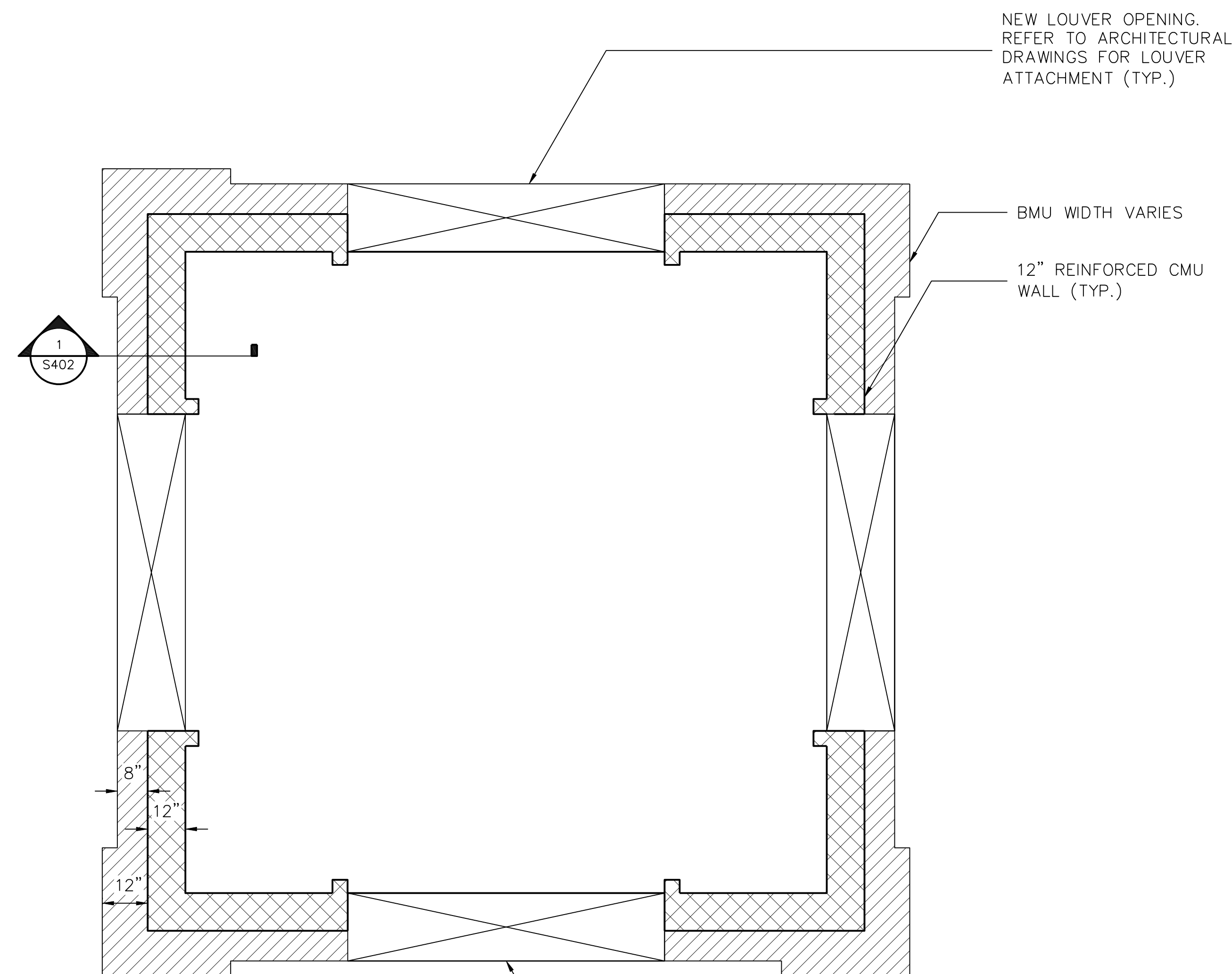
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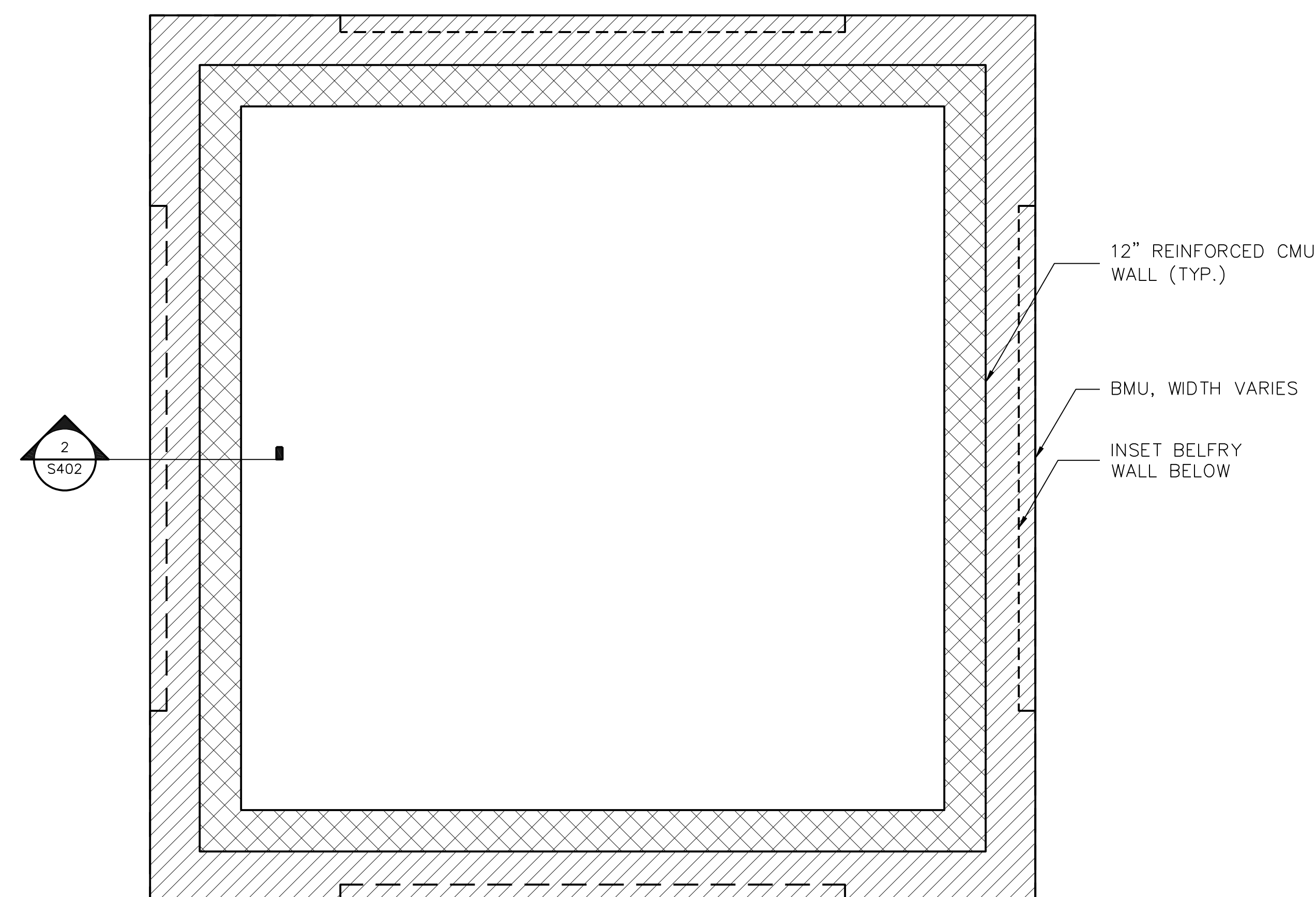
PHASE 1A  
CONSTRUCTION DOCUMENTS

PLANS

Scale	Stamp
File Name	
Drawn By DJZ MLF PDA	
Checked By PDA CM CGM	Drawing No.
Job No. 3704	
GALE Job No. 832681	
Date 9/22/2017	<b>S202</b>



1 TOWER PLAN @ BELFRY WALL OPENING  
1/2" = 1'-0"  
0 1' 2' 4'

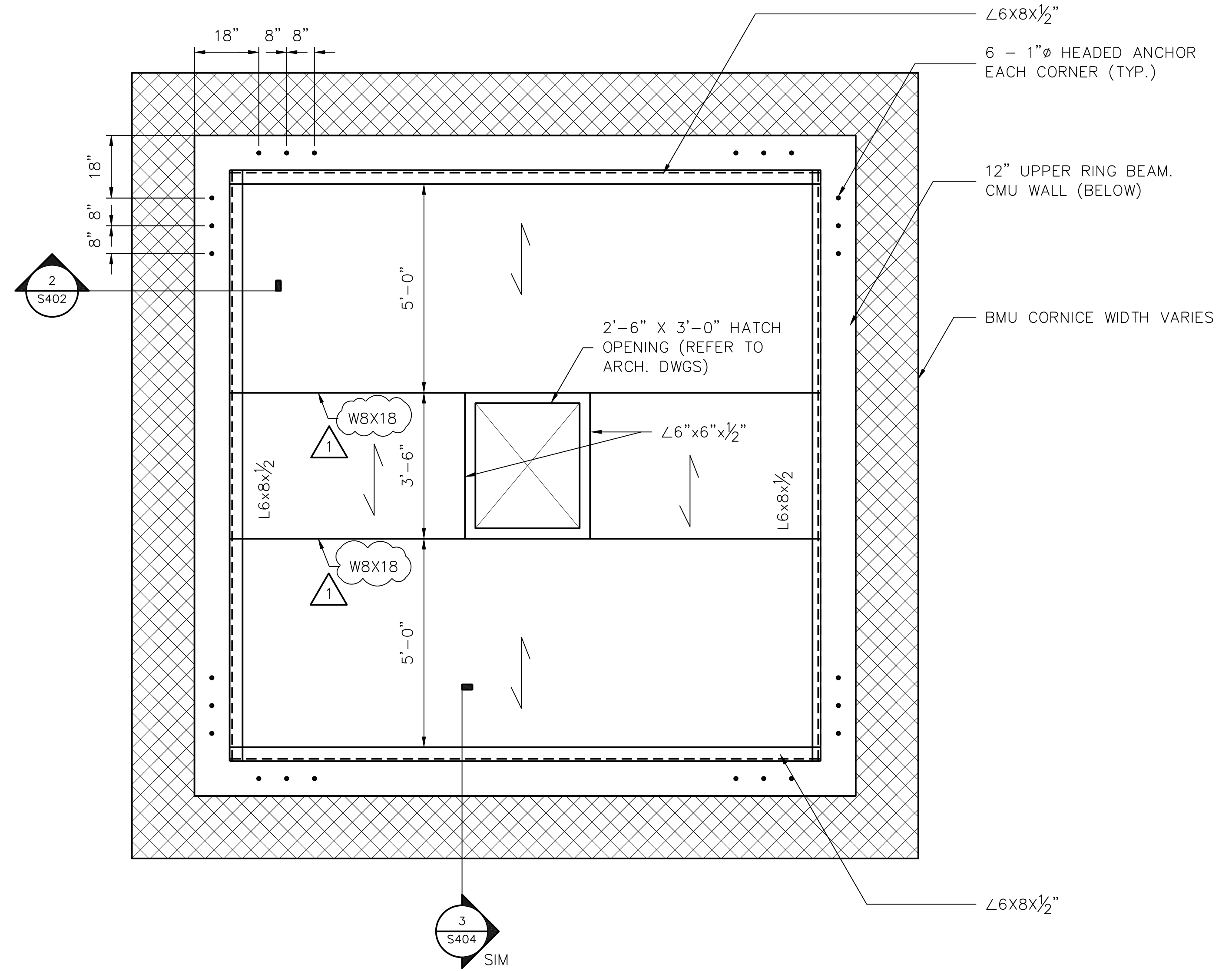


2 TOWER PLAN @ BASE OF BRICK MASONRY CORNICE  
1/2" = 1'-0"  
0 1' 2' 4'

- GENERAL NOTES**
- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION OF NEW MASONRY WALLS AND REBUILT PILASTERS.
  - REFER TO SPECIFICATIONS FOR CONSTRUCTION OF NEW MASONRY WALLS.



NOTE:  
1" Ø HEADED ANCHORS ARE PROVIDED FOR ATTACHMENT OF NEW STEEPLE FRAMING AND STRUCTURE FOR ANTICIPATED IMPOSED LOADS.

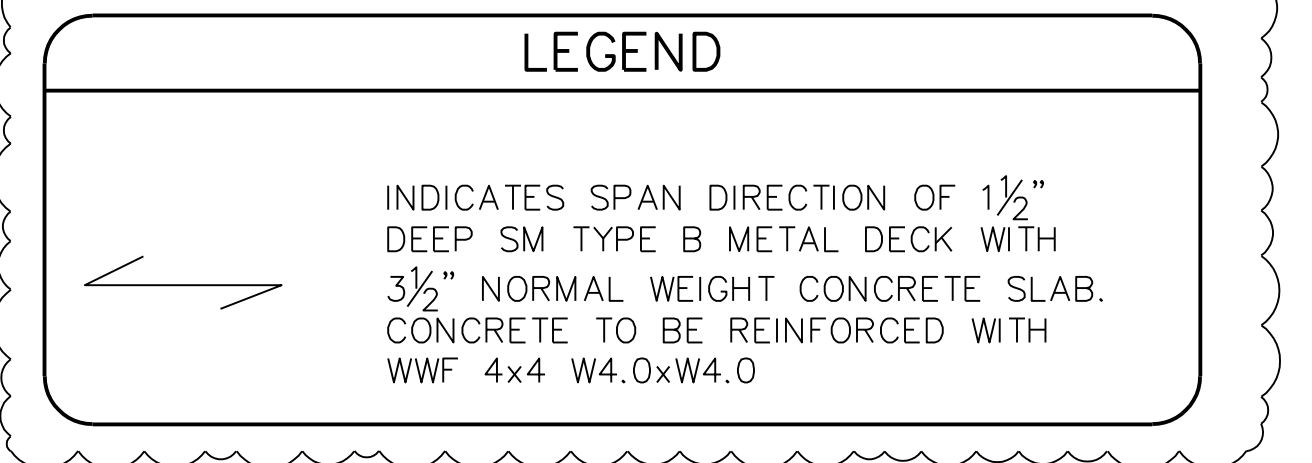


1 TOWER PLAN @ UPPER RING BEAM AND ROOF SLAB  
1/2" = 1'-0"  
0 1' 2' 4'

GENERAL NOTES

- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION OF NEW MASONRY WALLS AND REBUILT PILASTERS.
- REFER TO SPECIFICATIONS FOR CONSTRUCTION OF NEW MASONRY WALLS.
- SPRAY APPLIED FIREPROOFING TO BE PROVIDED AT STEEL FRAMING.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEV. OF TOP OF SLAB.

LEGEND



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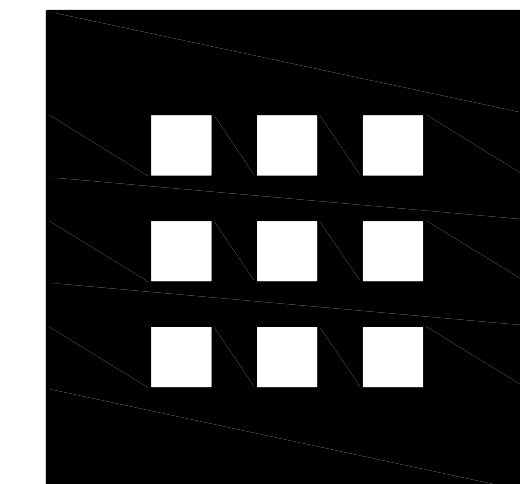
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PHASE 1A  
CONSTRUCTION DOCUMENTS

PLANS

Scale	Stamp
File Name	
Drawn By DJZ MLF PDA	
Checked By PDA CM CGM	Drawing No.
Job No. 3704	<b>S203</b>
GALE Job No. 832681	
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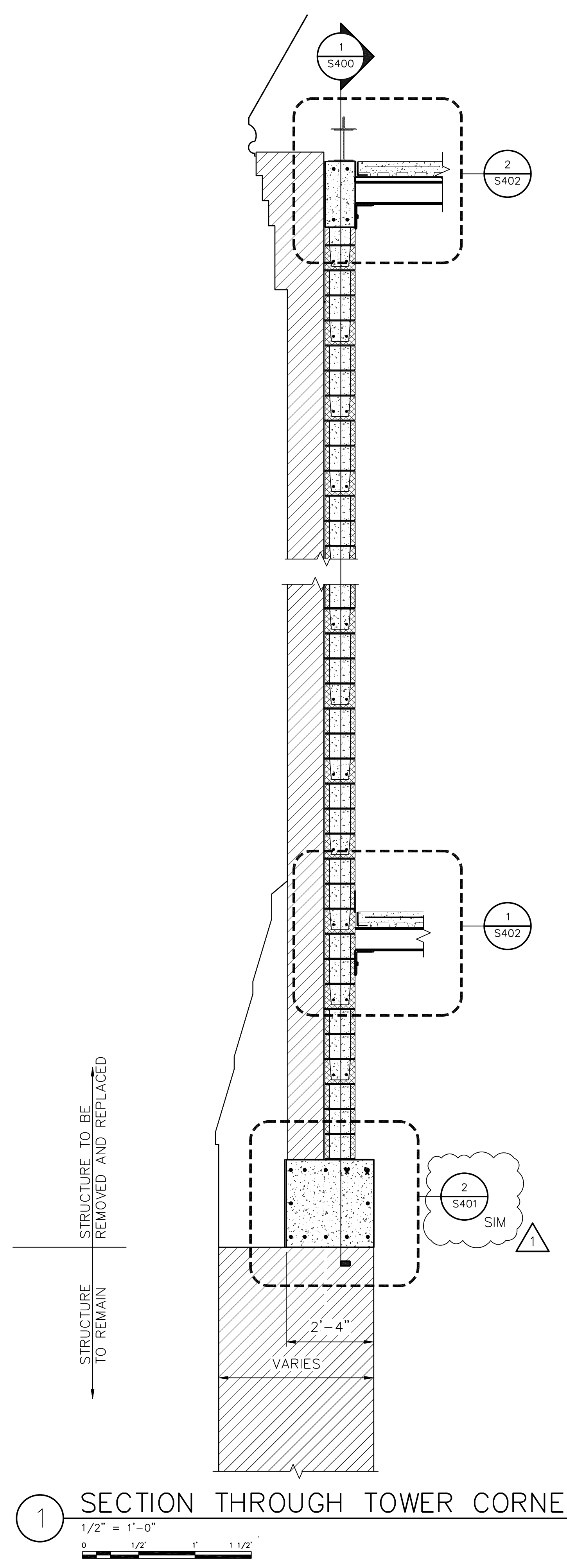
9/26/2017	
No.	Date
	Revision

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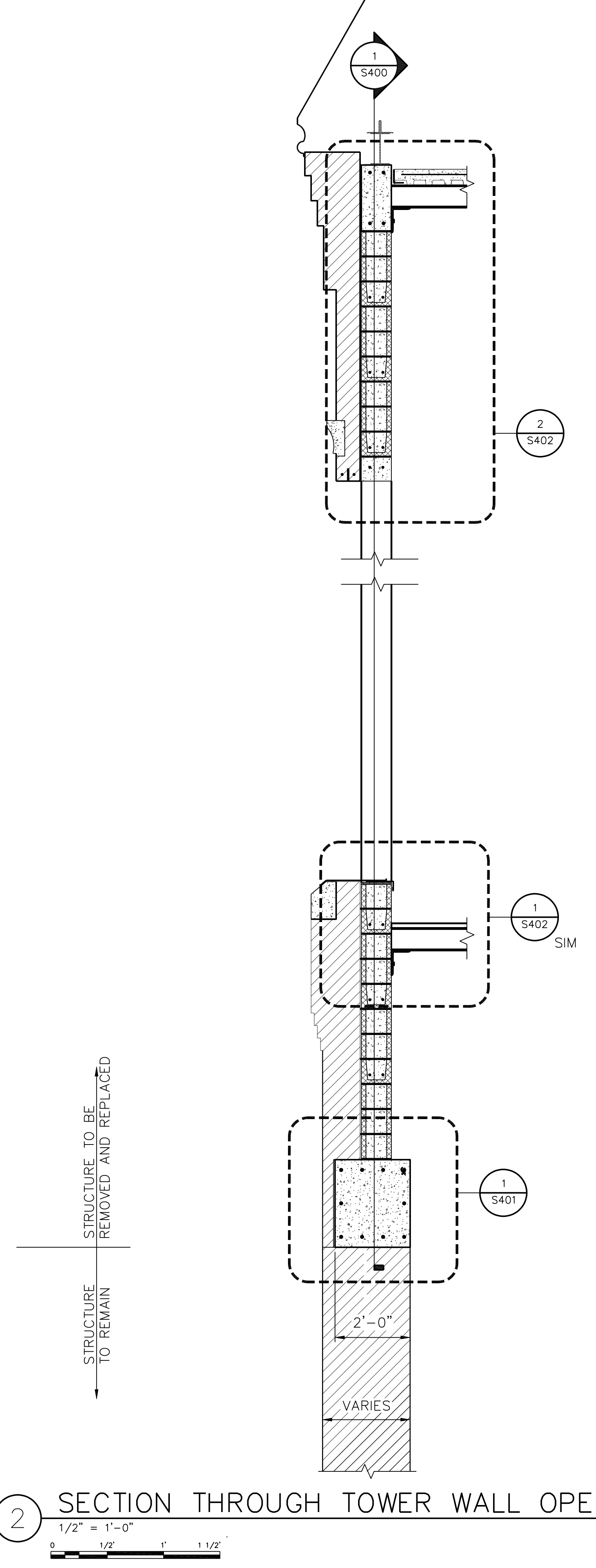
PHASE 1A  
CONSTRUCTION DOCUMENTS

Title:  
**SECTIONS**

Scale	Stamp
File Name	
Drawn By DJZ MLF PDA	Drawing No. <b>S300</b>
Checked By PDA CM CGM	Job No. 3704
	GALE Job No. 832681
	Date 9/22/2017



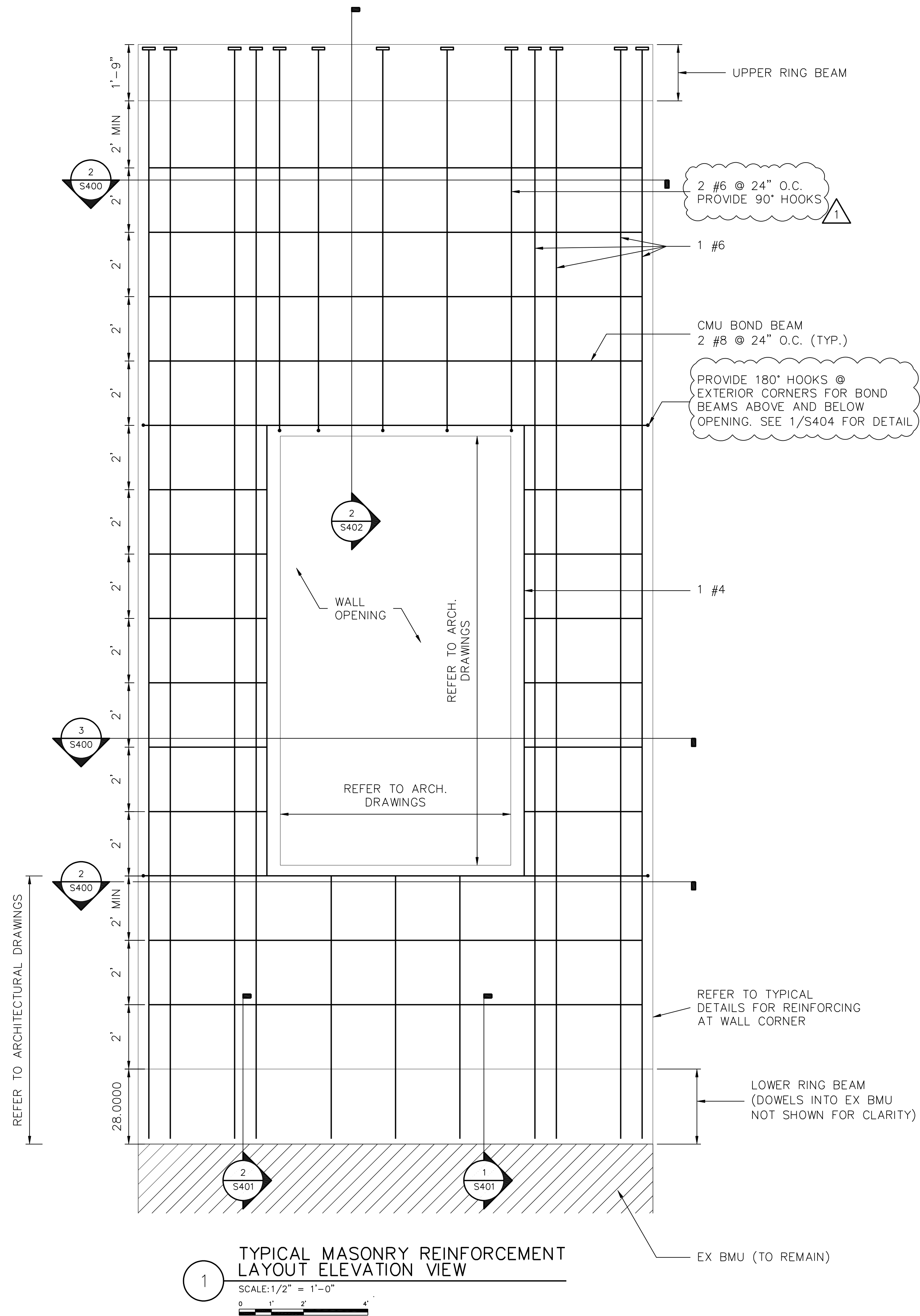
**1** SECTION THROUGH TOWER CORNER  
1/2" = 1'-0"  
0 1/2" 1" 1 1/2"



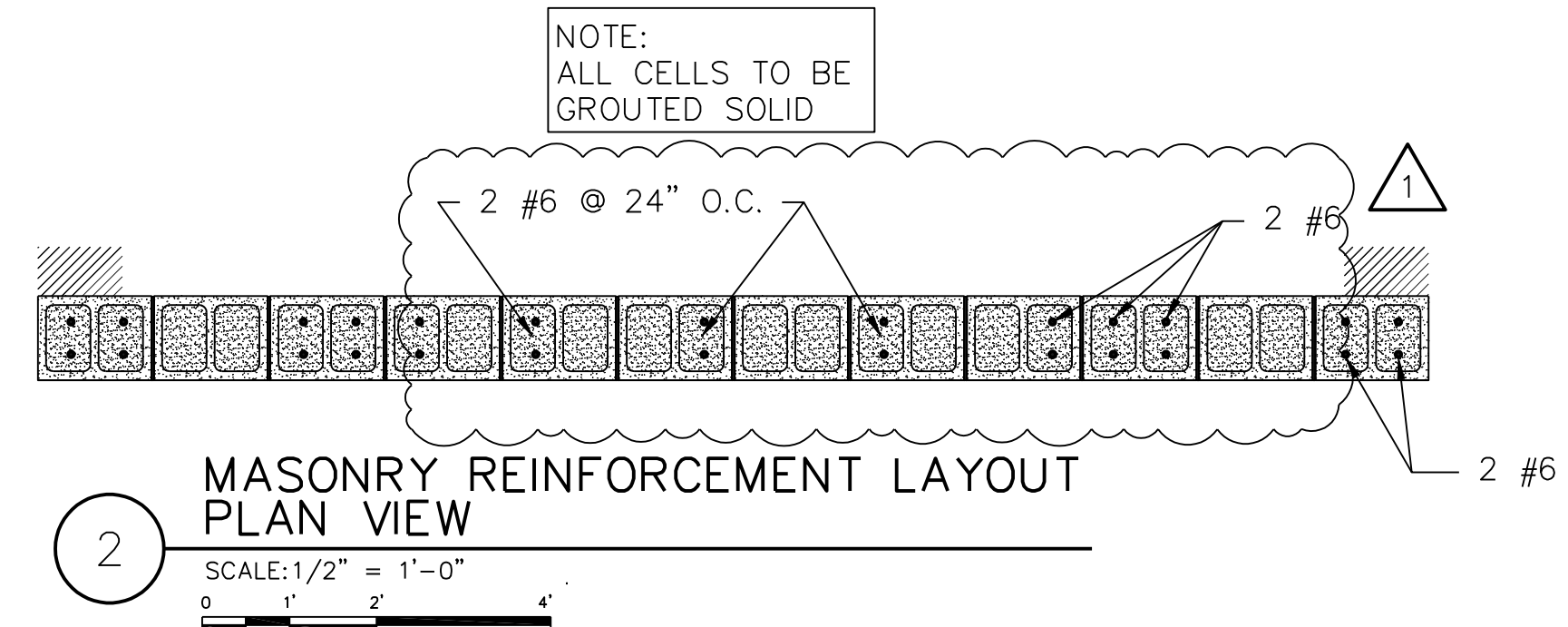
**2** SECTION THROUGH TOWER WALL OPENING  
1/2" = 1'-0"  
0 1/2" 1" 1 1/2"



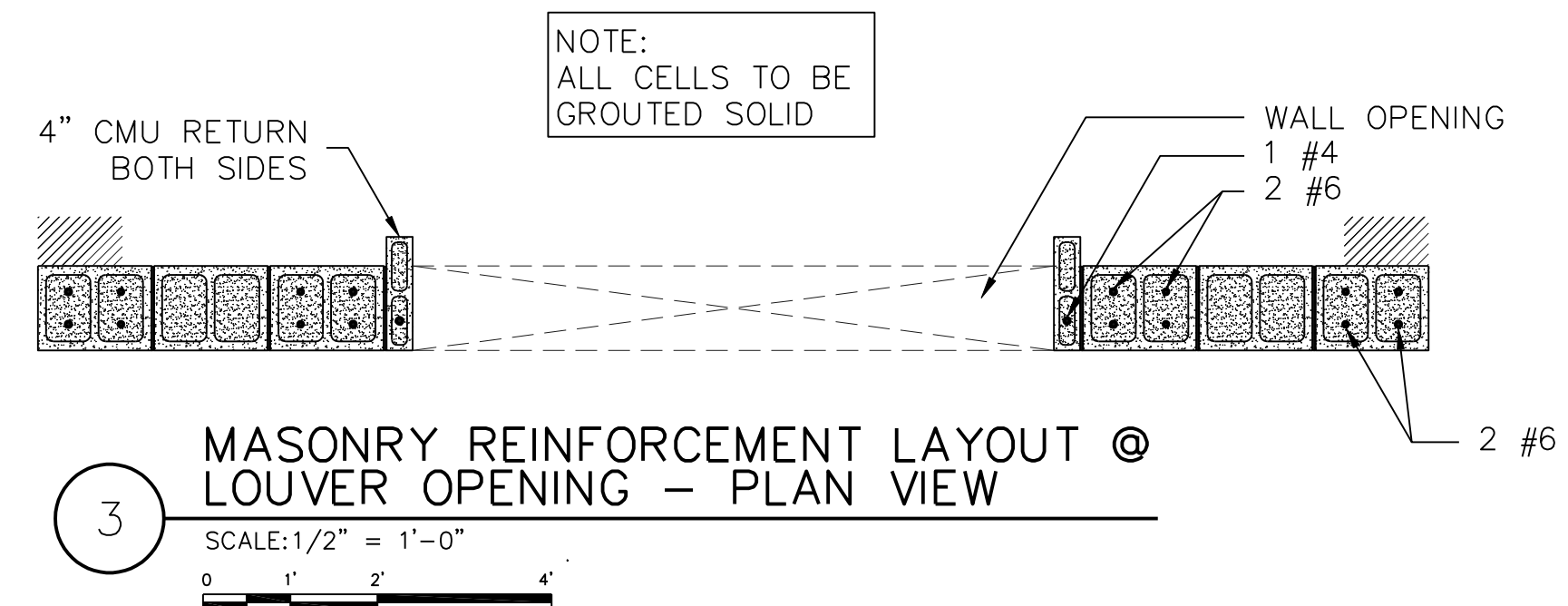
NOTE:  
PROVIDE HEADED REINFORCING BARS INTO  
UPPER RING.



1  
TYPICAL MASONRY REINFORCEMENT  
LAYOUT ELEVATION VIEW  
SCALE: 1/2" = 1'-0"  
0 1 2 4



2  
MASONRY REINFORCEMENT LAYOUT  
PLAN VIEW  
SCALE: 1/2" = 1'-0"  
0 1 2 4



3  
MASONRY REINFORCEMENT LAYOUT @  
LOUVER OPENING - PLAN VIEW  
SCALE: 1/2" = 1'-0"  
0 1 2 4



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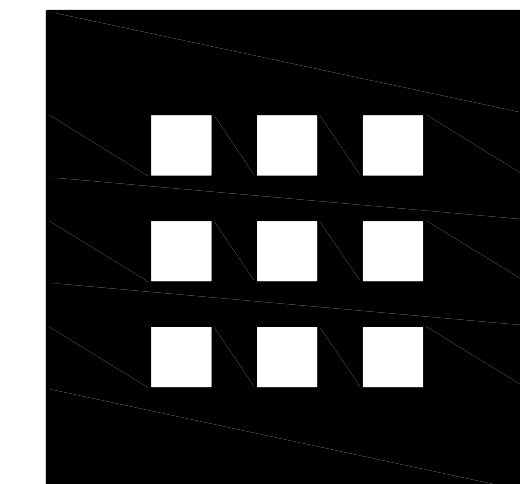
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CONSTRUCTION DOCUMENTS

Title:  
**DETAILS**

Scale	Stamp
File Name	
Drawn By DJZ MLF PDA	
Checked By PDA CM CGM	Drawing No.
Job No. 3704 GALE Job No. 832681 Date 9/22/2017	<b>S400</b>





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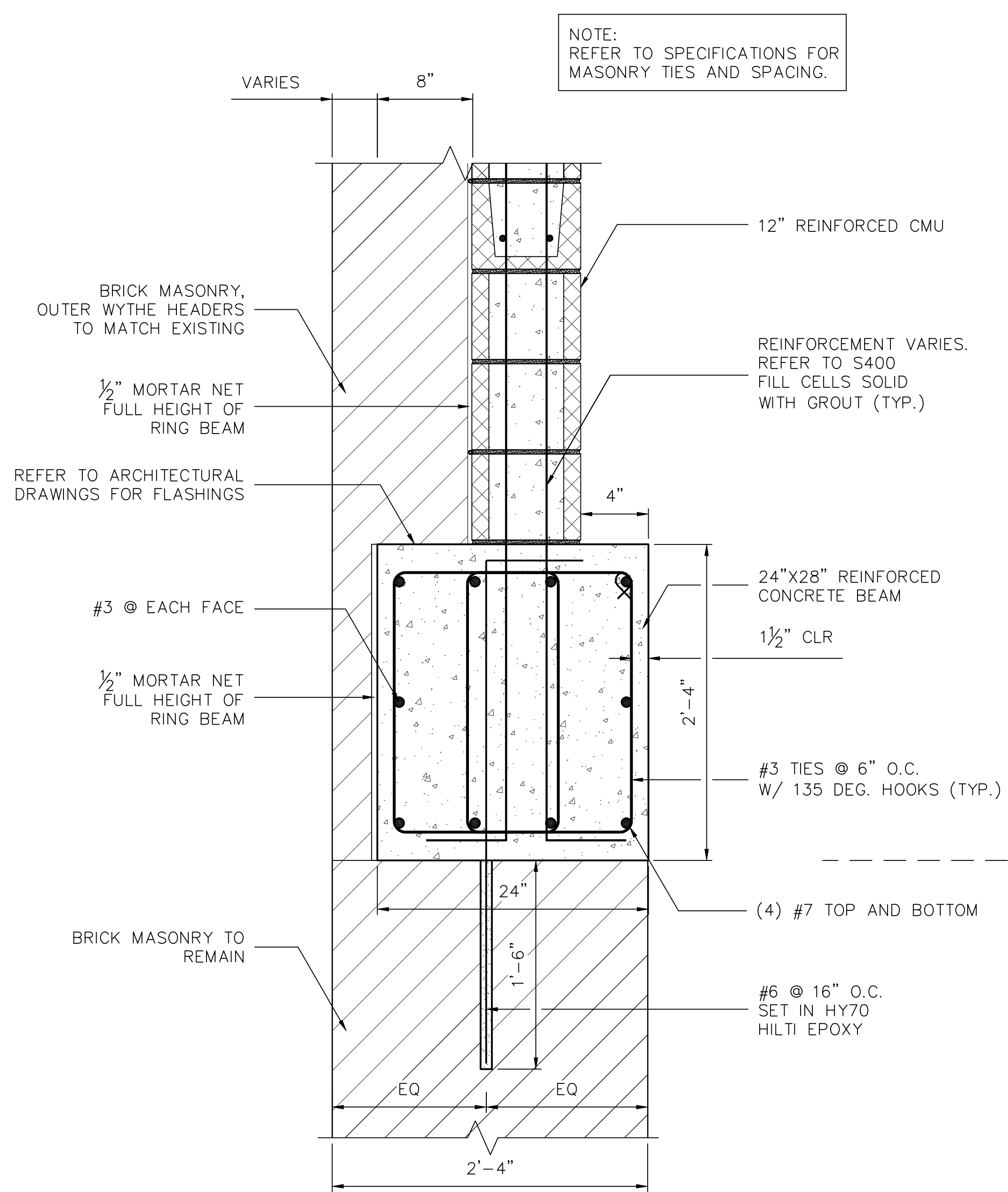
9/26/2017		
No.	Date	Revision

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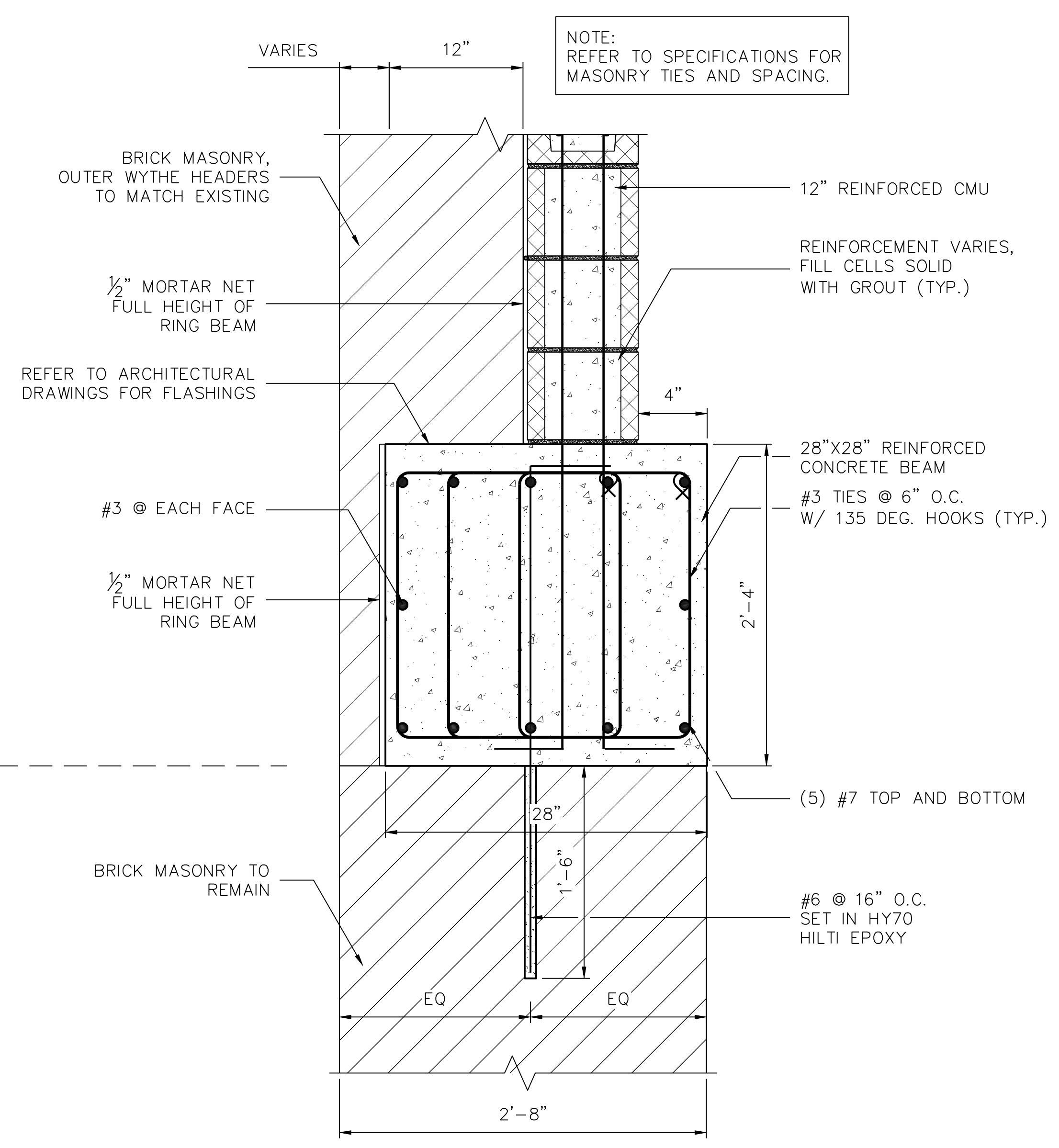
PHASE 1A  
CONSTRUCTION DOCUMENTS

Title:  
**DETAILS**

Scale	Stamp
File Name	
Drawn By DJZ MLF PDA	
Checked By PDA CM CGM	Drawing No.
Job No. 3704	<b>S401</b>
GALE Job No. 832681	
Date 9/22/2017	



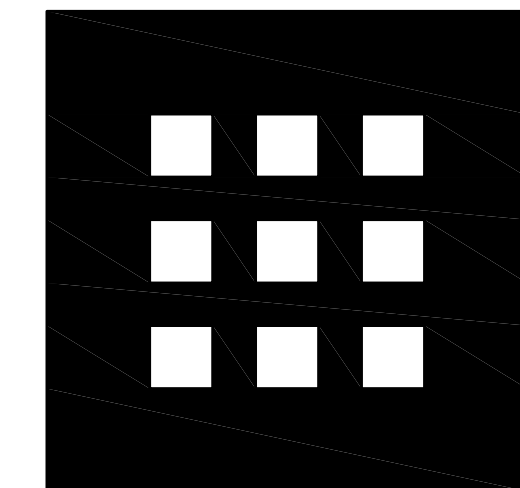
1 LOWER RING BEAM – TYPICAL WALL  
SCALE: 1-1/2"=1'-0"  
0 1/2" 1" 1 1/2"



2 LOWER RING BEAM @ CORNER  
SCALE: 1-1/2"=1'-0"  
0 1/2" 1" 1 1/2"

NEW CONSTRUCTION  
STRUCTURE TO REMAIN





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CONSTRUCTION DOCUMENTS

Title:

**DETAILS**

Scale:

Stamp:



File Name:

Drawn By:

DJZ MLF PDA

Checked By:

PDA CM CGM

Job No.:

3704

Gale Job No.:

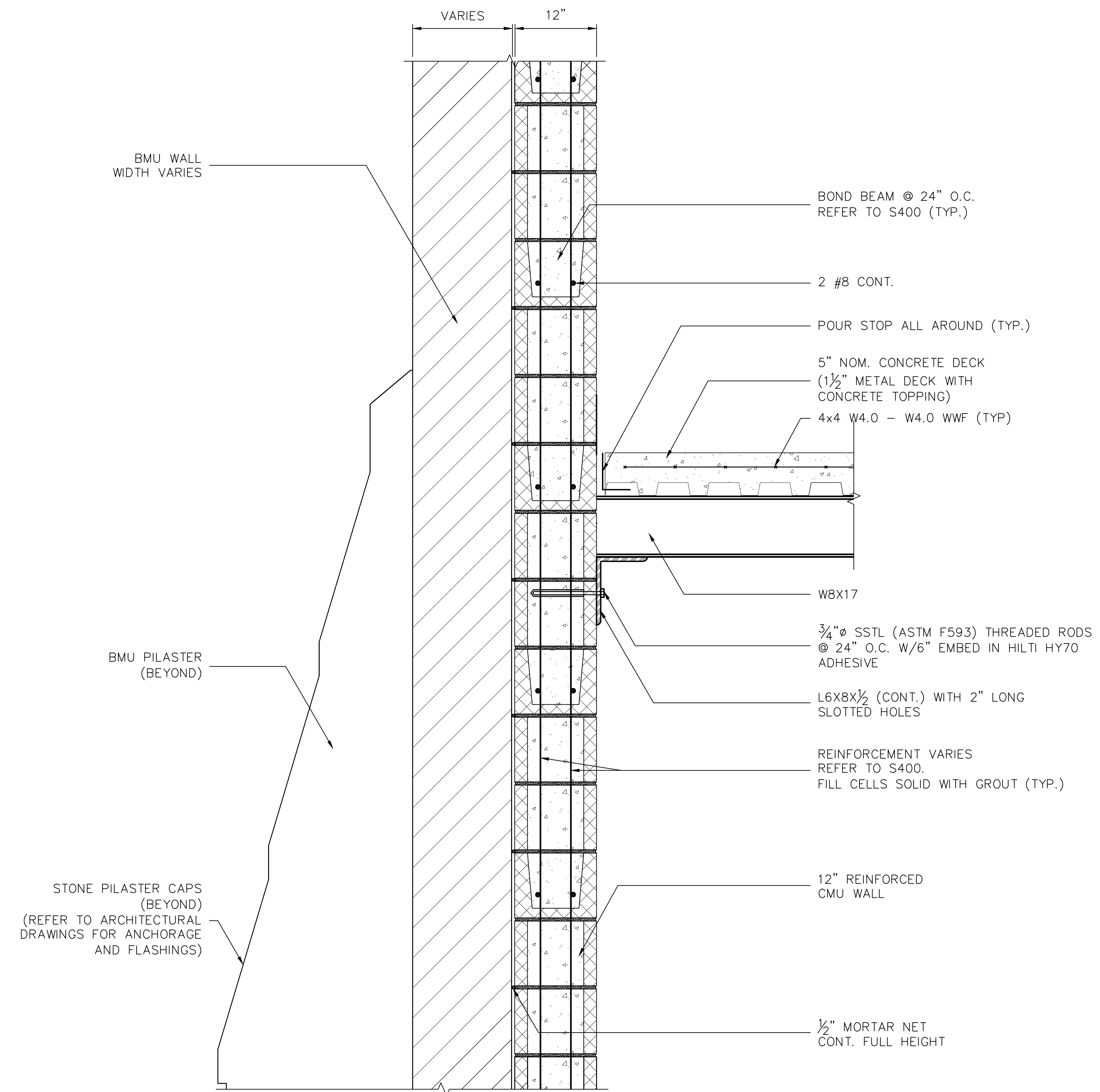
832681

Date:

9/22/2017

**S402**

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NOTE:  
REFER TO SPECIFICATIONS FOR  
MASONRY TIES AND SPACING.

**1 BELFRY FLOOR**  
SCALE: 1-1/2" = 1'-0"  
0 1/2" 1" 1 1/2"

1" Ø THREADED ROD WITH HEADED END  
TO RECEIVE STEEPLE FRAMING BY  
OTHERS. REFER TO S203 FOR  
LOCATION AND SPACING

REFER TO ARCHITECTURAL  
SHEETS FOR CORNICE  
CONFIGURATION

NOTE:  
REFER TO SPECIFICATIONS FOR  
MASONRY TIES AND SPACING.

**2 UPPER RING BEAM**  
SCALE: 1-1/2" = 1'-0"  
0 1/2" 1" 1 1/2"

NOTE:  
PROVIDE HEADED  
REINFORCING BARS INTO  
UPPER RING BEAM

2 #6 @ 24" O.C. ABOVE AND  
BELOW LOUVER OPENING  
REFER TO S400

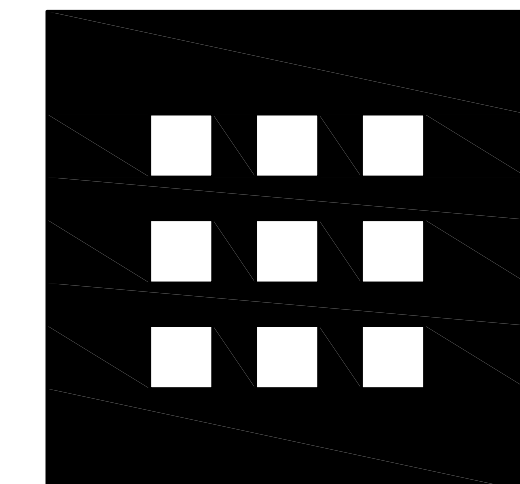
REINFORCEMENT (BEYOND)  
VARIES REFER TO S400.  
FILL CELLS SOLID  
WITH GROUT (TYP.)

(2) #4 CONTINUOUS  
BOND BEAM @ 24" O.C.  
REFER TO S400 (TYP.)

REINFORCED CONCRETE ARCH  
SEE DRAWING S403 FOR  
REINFORCEMENT AND PROFILE

REFER TO ARCHITECTURAL DRAWINGS  
FOR LOUVER ATTACHMENT (TYP.)





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PHASE 1A  
CONSTRUCTION DOCUMENTS

Title:  
**DETAILS**

Scale	Stamp
File Name	
Drawn By	DJZ MLF PDA
Checked By	PDA CM CGM
Job No.	3704
GALE Job No.	832681
Date	9/22/2017
	<b>S403</b>

12" REINFORCED CMU. REINFORCEMENT VARIES.  
REFER TO S400 FOR REINFORCING STEEL

CMU BOND BEAM

2 #4 (TYP.)

8"

8"

REFER TO ARCHITECTURAL DRAWINGS

REINFORCED CMU WALL.  
BUILD PRIOR TO INSTALLING  
ARCH

1 #4

REFER TO ARCHITECTURAL DRAWINGS

#3 @ 8" O.C.  
EACH WAY, EACH FACE. 1

2  
S402

2  
S403

1

#3 LJ BAR @ 12" O.C.  
@ 90° TO OUTER #4 BARS (TYP.)  
#4 DOWEL @ 8" O.C.  
SET INTO HILTI HY70  
WITH 6" EMBED, (TYP.)  
EXTEND 6" INTO  
CONCRETE

REINFORCED CONCRETE  
INFILL ABOVE ARCH  
OPENING

1 #4 EACH FACE, (TYP.) 1

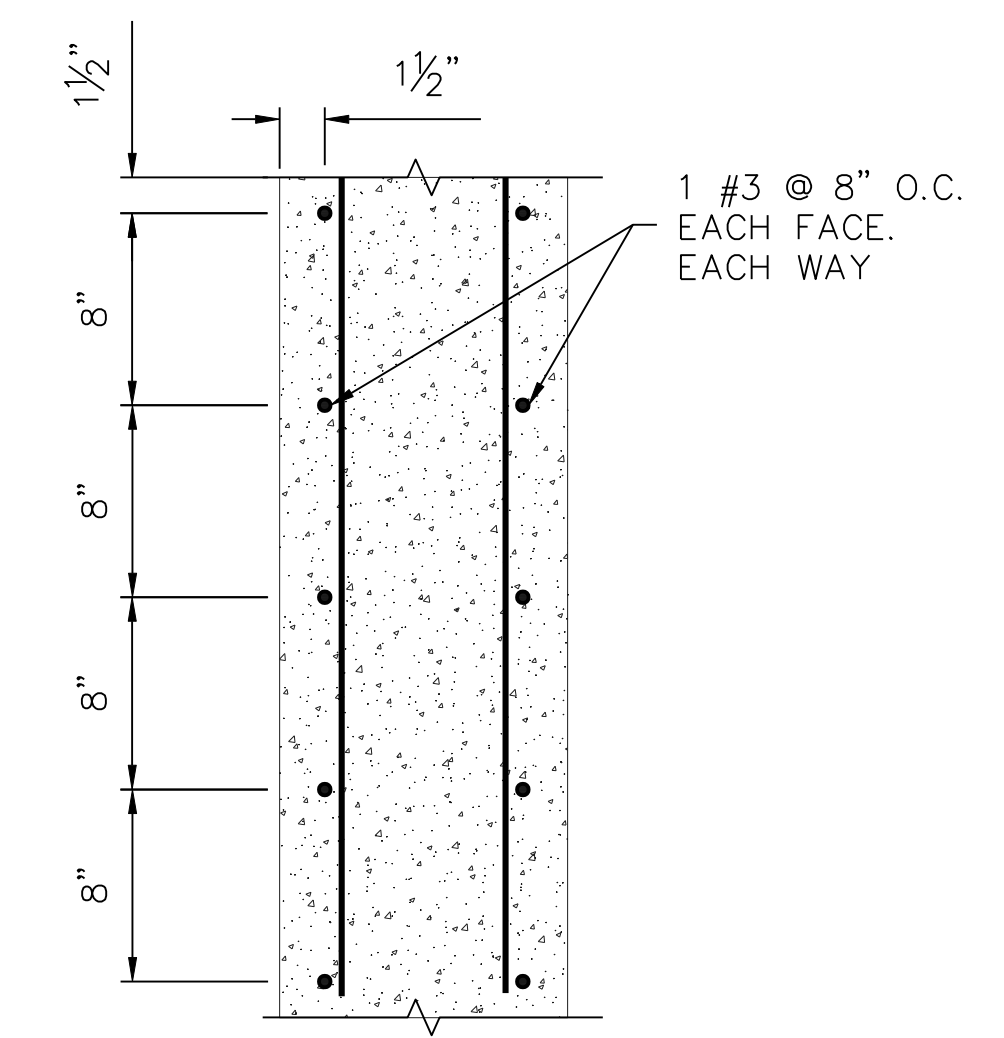
GOTHIC ARCH PROFILE TO  
MATCH EXISTING

1 #4 EACH FACE (TYP.) 1

12" REINFORCED  
CMU (TYP.)

4" REINFORCING CMU  
@ JAMB (TYP.)  
BOTH SIDES

NOTE:  
BMU NOT SHOWN FOR  
CLARITY, REFER TO  
SPECIFICATIONS FOR BMU TIES  
TO CONCRETE ARCH.



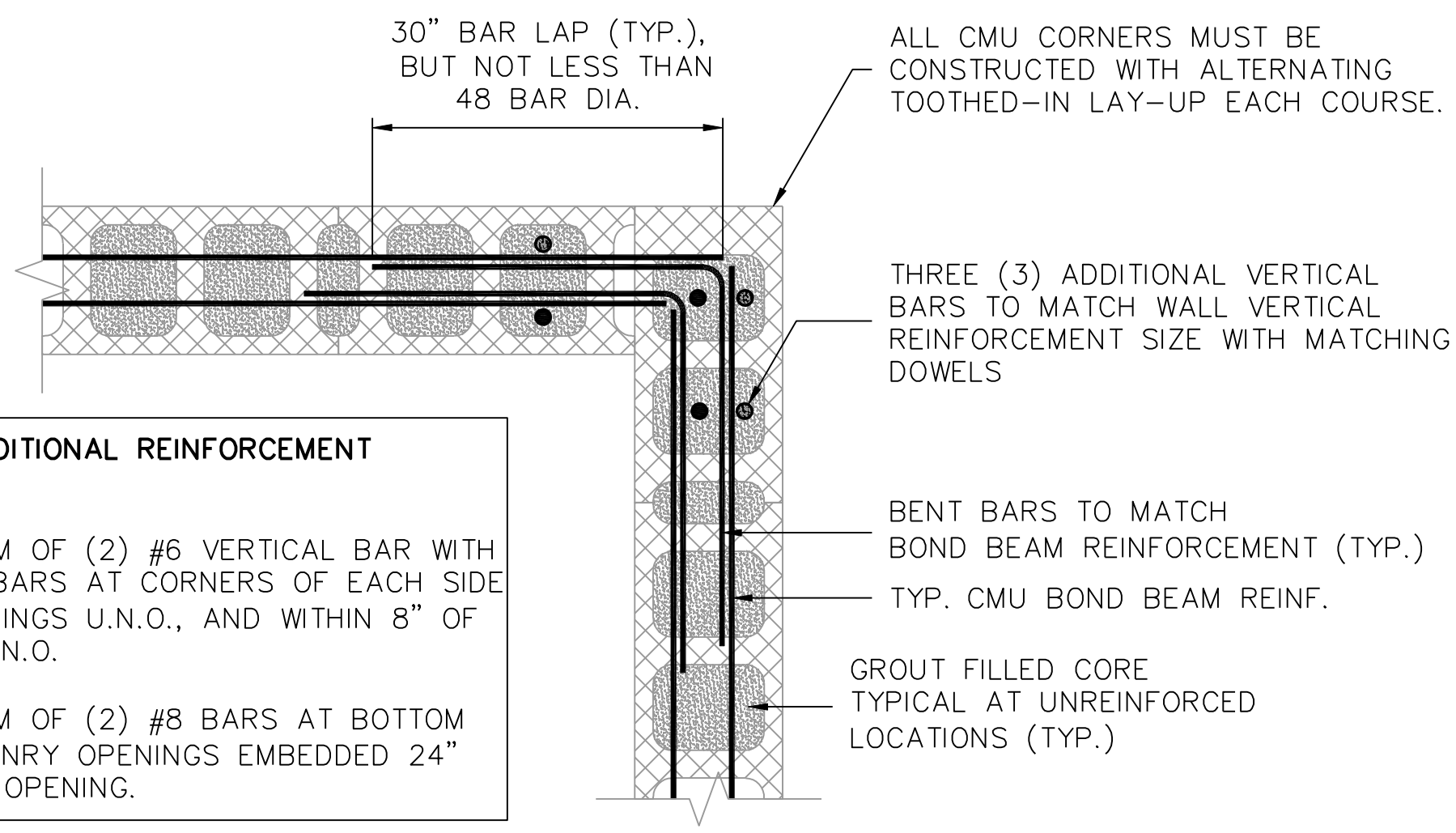
**2 REINFORCEMENT BARS**  
SCALE: 1 1/2" = 1'-0"  
0 1/2" 1" 1 1/2"

**1 CONCRETE ARCH AT BELFRY OPENING**  
SCALE: 1-1/2" = 1'-0"  
0 1/2" 1" 1 1/2"

**GENERAL NOTES**

- REFER TO S400 FOR BALANCE OF STEEL REINFORCEMENT AND BOND BEAMS.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOUVER CONNECTIONS TO CONCRETE AND CMU.

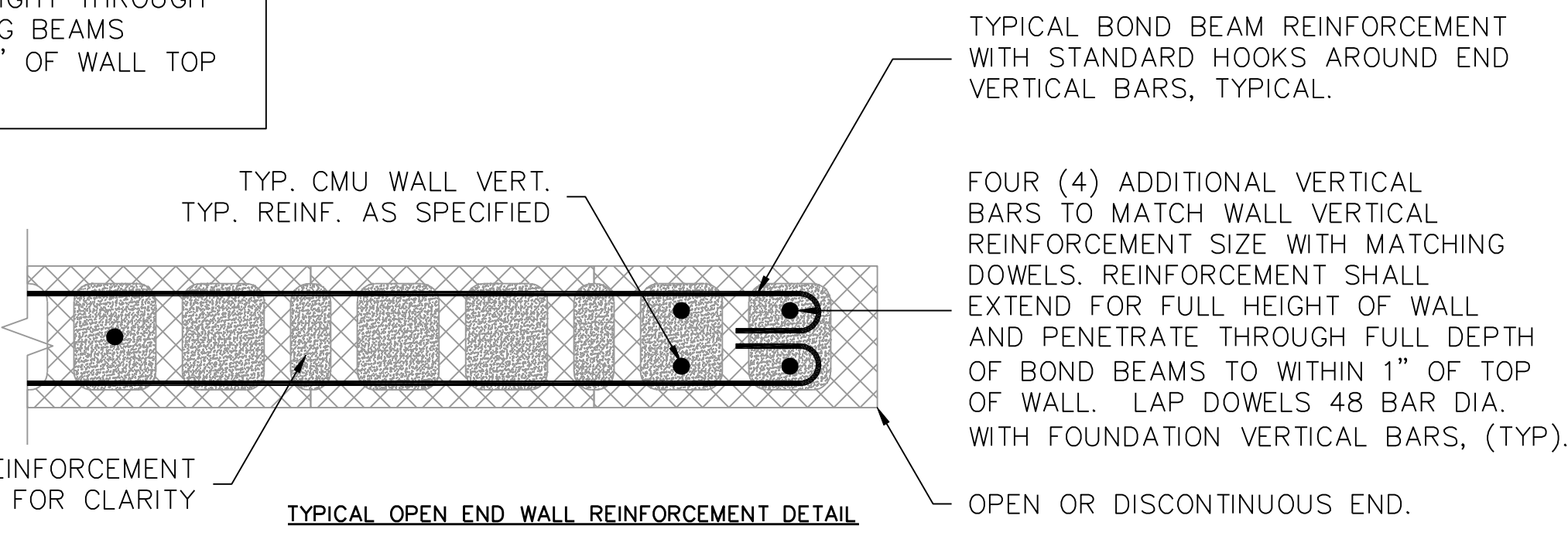




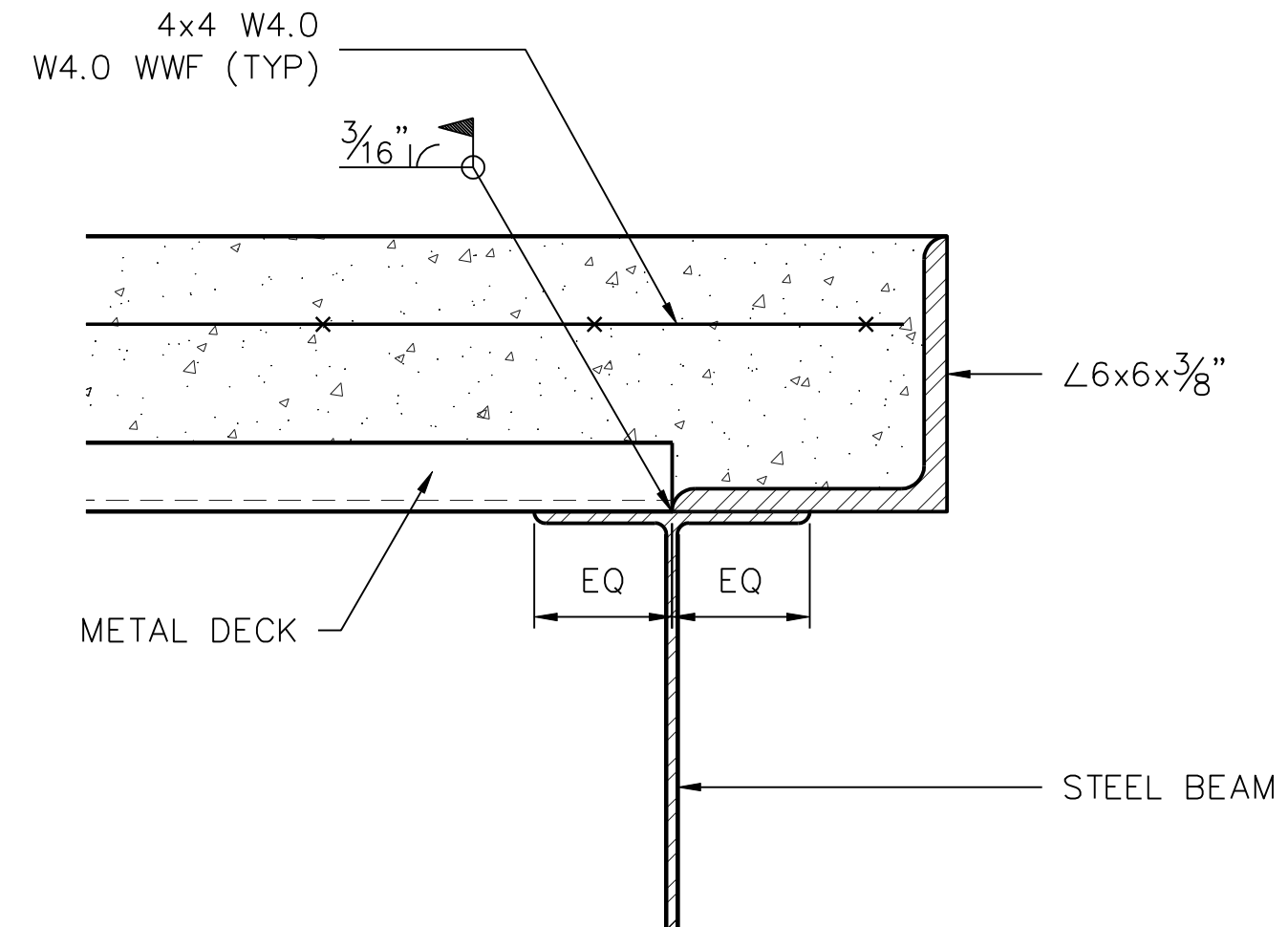
- MINIMUM MASONRY ADDITIONAL REINFORCEMENT SCHEDULE**
- PROVIDE A MINIMUM OF (2) #6 VERTICAL BAR WITH MATCHING DOWEL BARS AT CORNERS OF EACH SIDE OF MASONRY OPENINGS U.N.O., AND WITHIN 8" OF ENDS OF WALLS U.N.O.
  - PROVIDE A MINIMUM OF (2) #8 BARS AT BOTTOM AND TOP OF MASONRY OPENINGS EMBEDDED 24" BEYOND MASONRY OPENING.

TYPICAL WALL CORNER REINFORCEMENT DETAIL

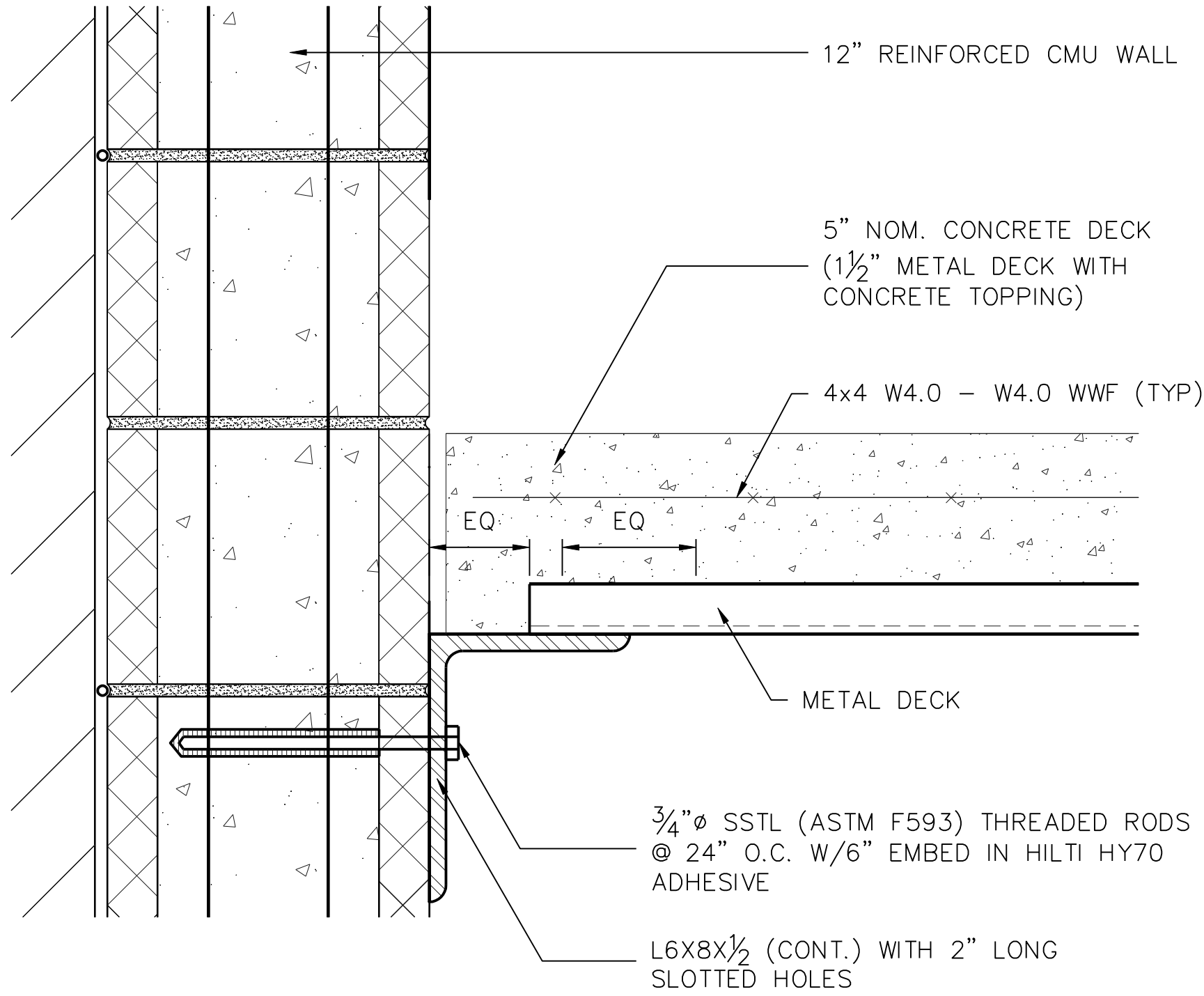
NOTE: ALL CMU VERTICAL REINFORCING BARS MUST EXTEND FULL HEIGHT THROUGH TOP OF CONCRETE RING BEAMS (TYPICAL) TO WITHIN 1" OF WALL TOP ELEVATION.



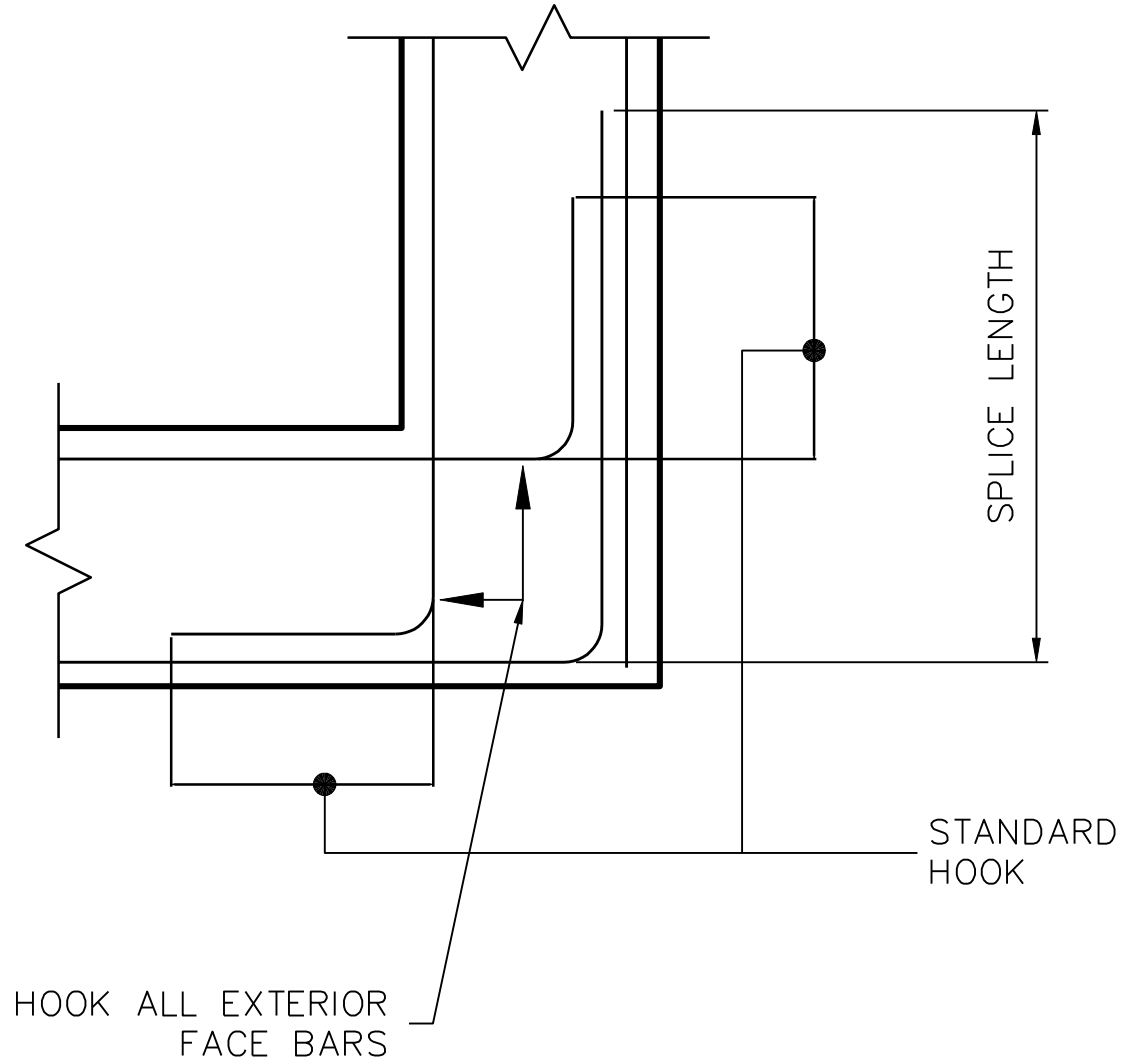
1 TYPICAL CMU WALL PLAN DETAILS  
NOT TO SCALE



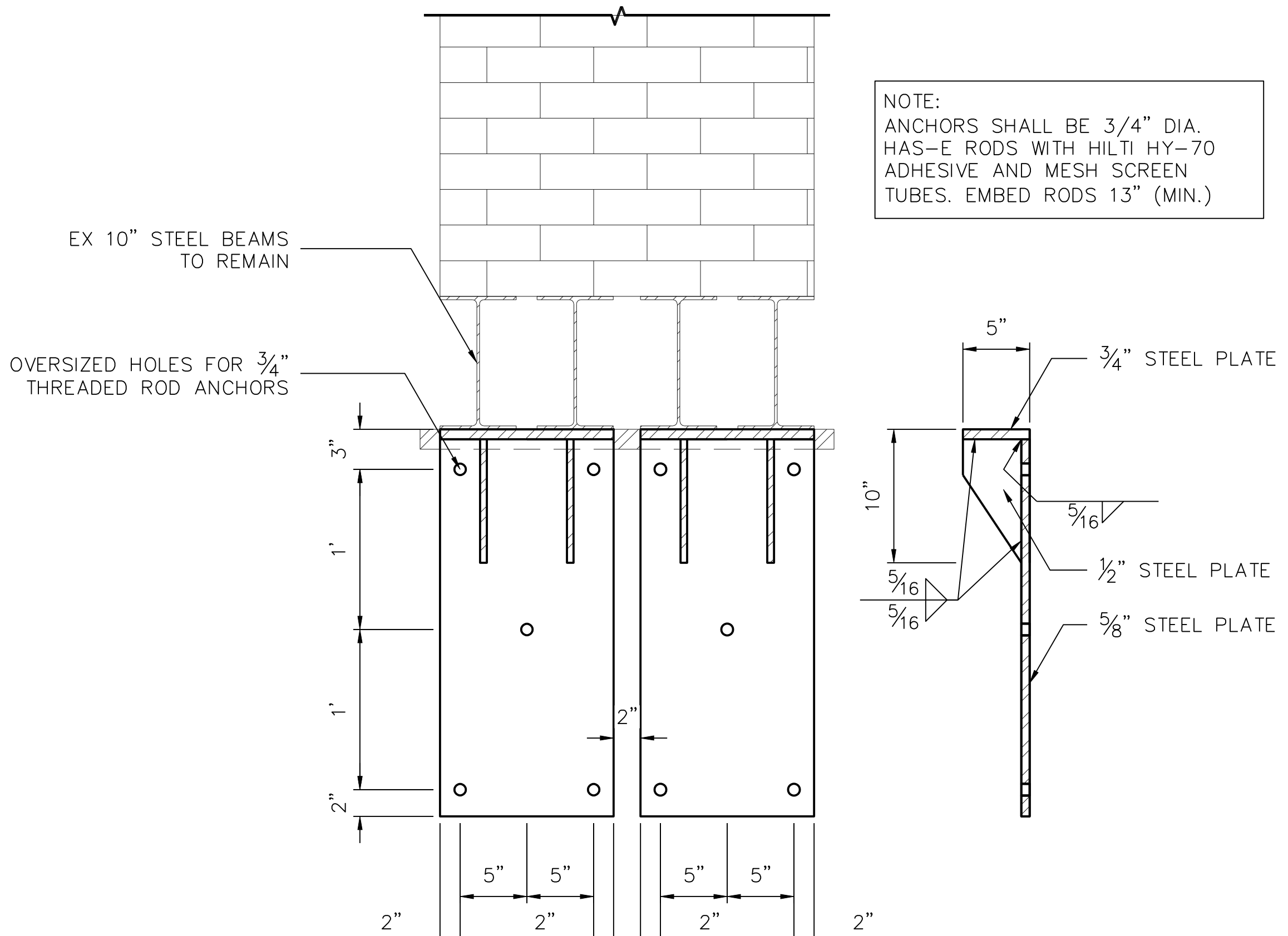
2 TYPICAL FLOOR DECK OPENING  
3" = 1"



3 TYPICAL FLOOR DECK SUPPORT  
3" = 1"



4 TYPICAL CONCRETE RING BEAM PLAN DETAILS  
NOT TO SCALE

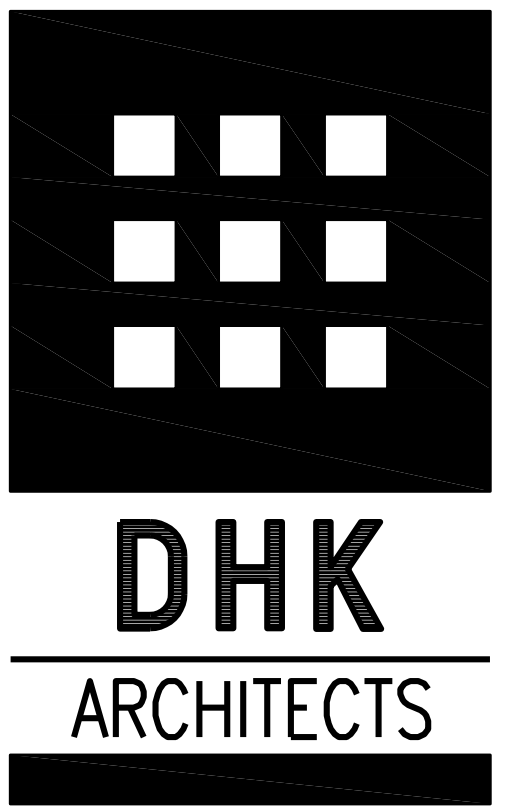


NOTE: ANCHORS SHALL BE 3/4" DIA. HAS-E RODS WITH HILTI HY-70 ADHESIVE AND MESH SCREEN TUBES. EMBED RODS 13" (MIN.)

5 STEEL BEAM STRUCTURAL AUGMENTATION  
1 1/2" = 1"

MASONRY SPLICE SCHEDULE	
BAR SIZE	SPLICE LENGTH
#4	32"
#6	52"
#7	96"
#8	126"

CONCRETE SPLICE SCHEDULE		
BAR SIZE	SPLICE LENGTH	90° DEG HOOK LENGTH
#4	28"	5"
#6	28"	8"
#7	36"	11"



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DETAILS

Scale \_\_\_\_\_ Stamp \_\_\_\_\_

File Name \_\_\_\_\_

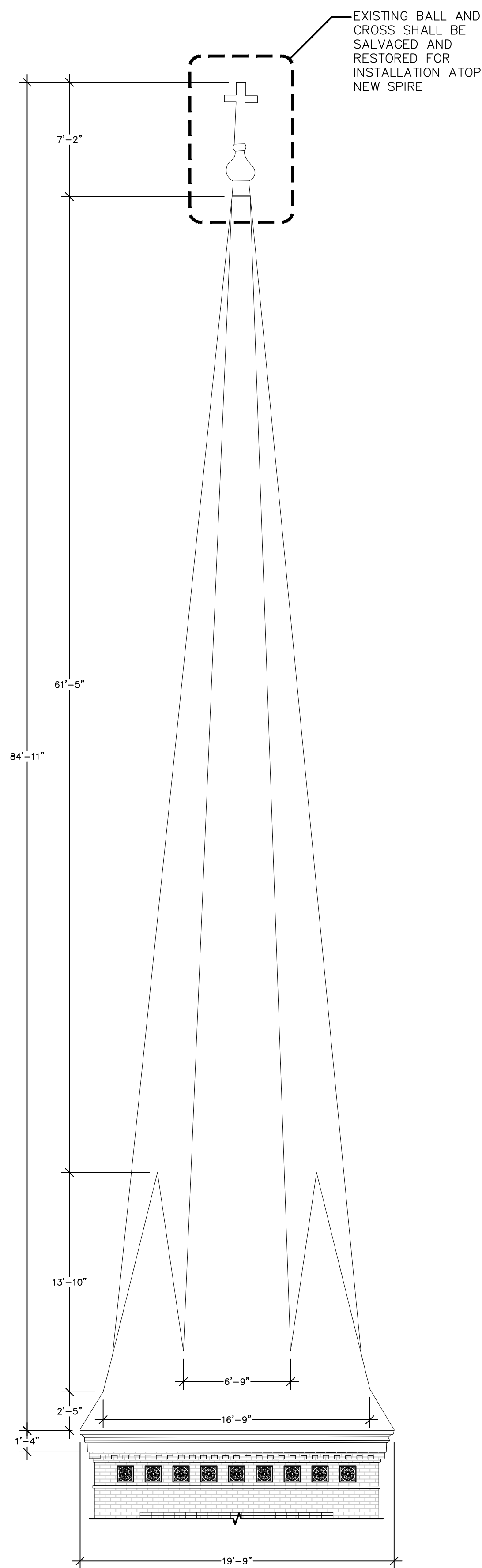
Drawn By DJZ MLF PDA

Checked By PDA CM CGM

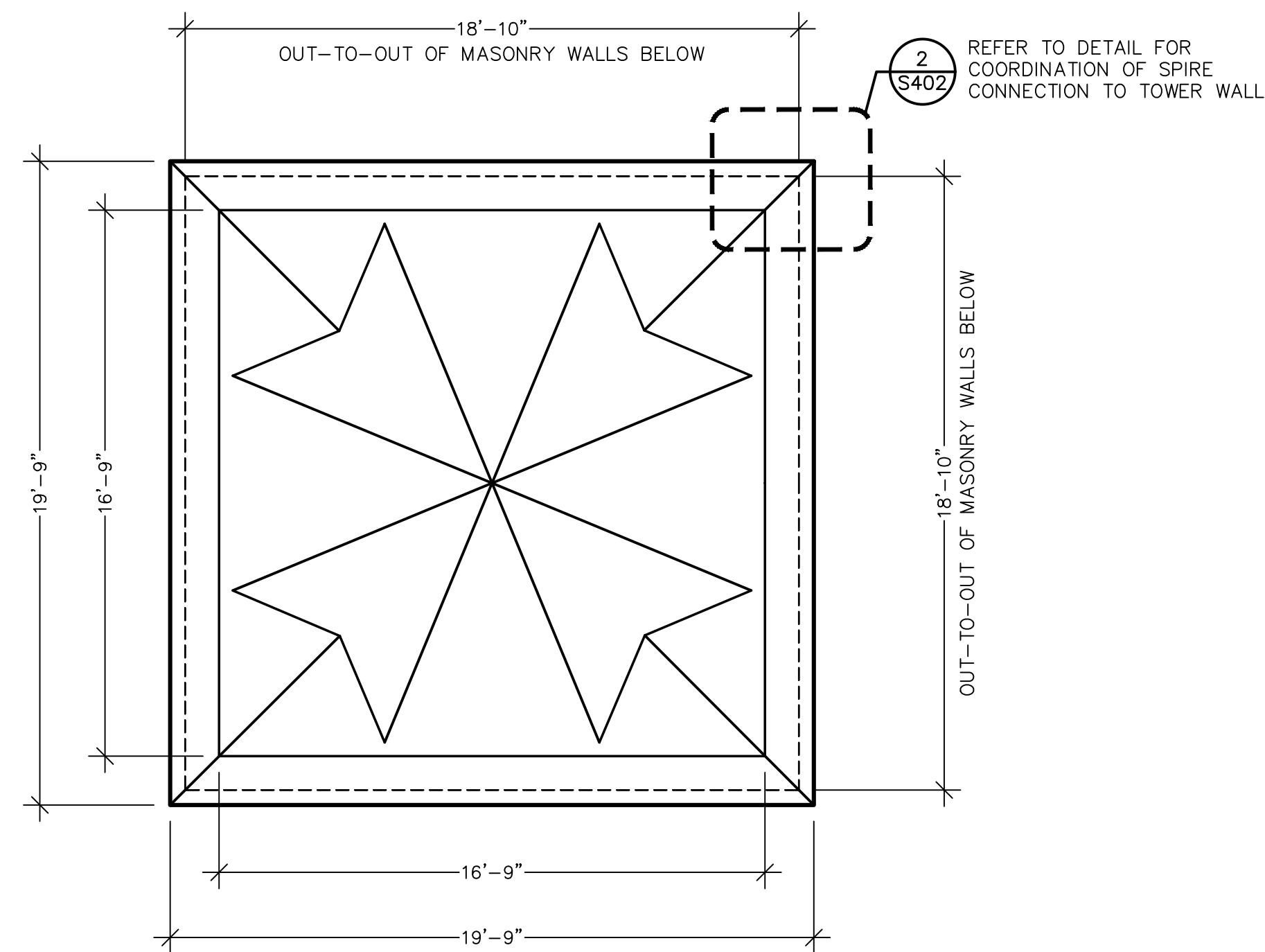
Job No. 3704  
Gale Job No. 83281  
Date 9/22/2017

Drawing No. **S404**





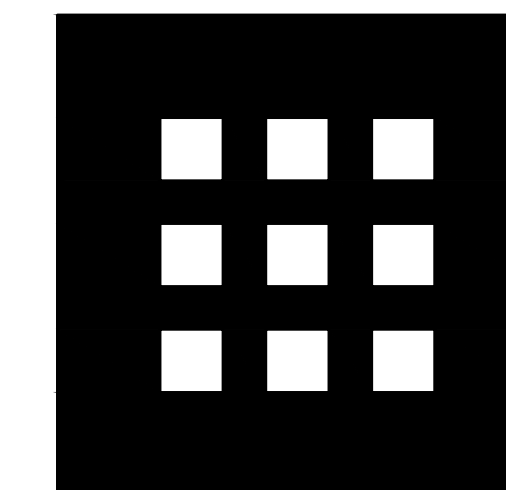
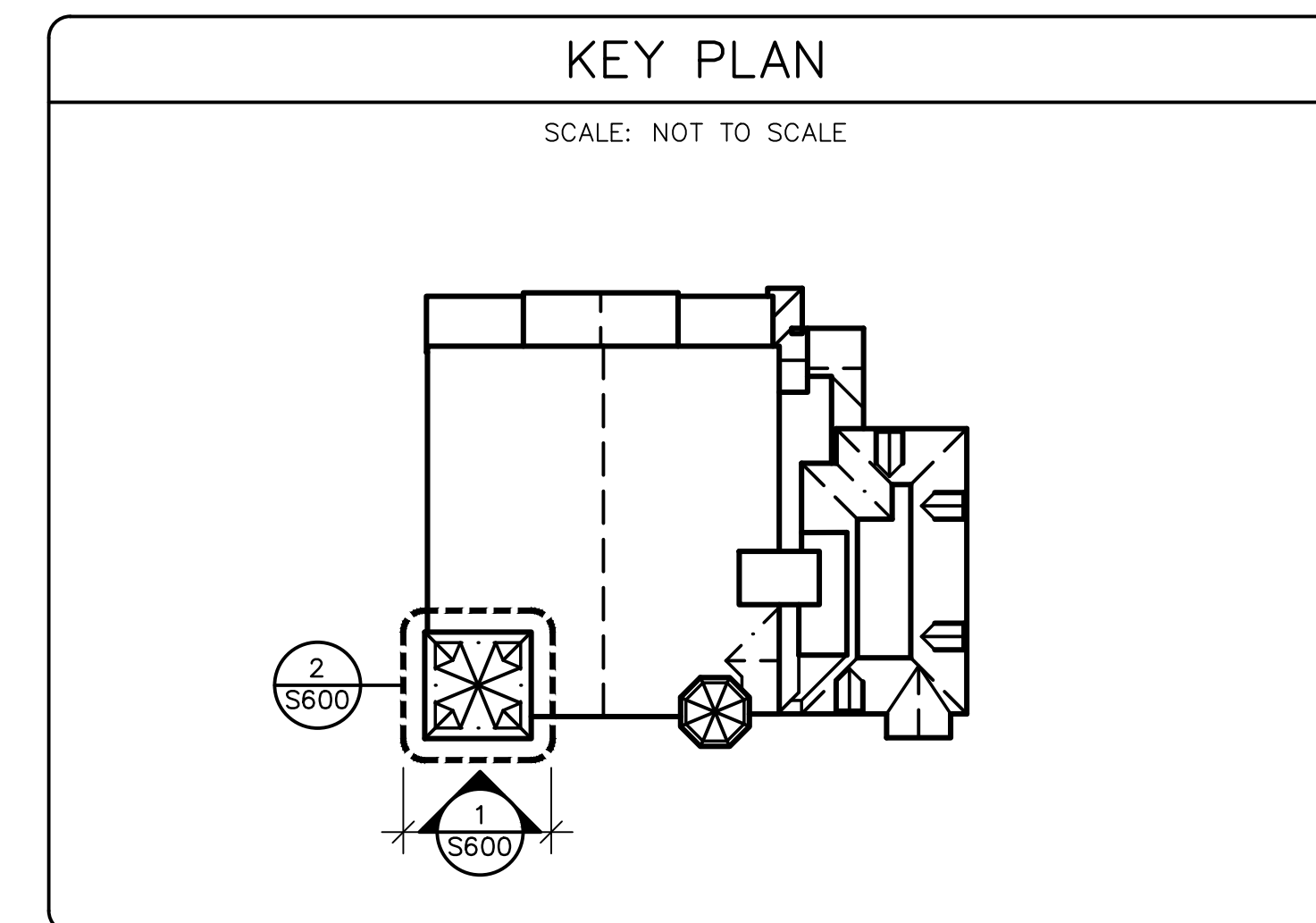
**1 TYPICAL SPIRE ELEVATION**  
 SCALE: 3/16"=1'-0"  
 TYP. ALL FOUR (4) ELEVATIONS



**2 SPIRE ROOF PLAN**  
 SCALE: 1/4"=1'-0"

### LARGE SPIRE DESIGN CRITERIA

- THE SPIRE STRUCTURAL FRAMING AND ITS COMPONENTS SHALL BE DESIGNED TO CONFORM TO 9TH EDITION OF THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE (CMR 780).
- THE GEOMETRY OF THE EXISTING SPIRE HAS BEEN GENERATED FROM FIELD MEASUREMENTS, LASER SURVEY AND PHOTOGRAPHS. THE EXTERIOR FINISH LINES OF THE NEW SPIRE SHALL MATCH THE EXISTING GEOMETRY. NOTIFY THE ENGINEER OF ANY ARCHITECTURAL MODIFICATION OR DIMENSION CHANGES THAT MAY AFFECT THE STRUCTURAL DESIGN OR THE APPEARANCE OF THE NEW SPIRE.
- SPIRE SHALL BE DESIGNED, MANUFACTURED AND DELIVERED TO THE PROJECT SITE AS A COMPLETED SYSTEM WITH ROOFING MATERIALS, PAINT, LOUVERS, AND TRIM FACTORY INSTALLED. SPIRE SHALL BE SEGMENTED FOR SHIPMENT SUCH THAT THE NUMBER OF FIELD SPLICES ARE MINIMIZED. SPIRE MANUFACTURER SHALL PROVIDE TEMPORARY BRACING OF SEGMENTS REQUIRED FOR TRANSPORTATION, HANDLING AND ERECTION.
- SPIRE SHALL BE EQUIPPED WITH A LIGHTENING PROTECTION SYSTEM THAT CAN BE TIED INTO THE EXISTING COPPER CONDUCTORS AT THE TOP OF THE BELFRY.
- THE SPIRE FRAMING SHALL BE DESIGNED AND DETAILED AS "LIMITED COMBUSTIBLE" IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION AGENCY (NFPA-13). ALL MATERIALS AND ASSEMBLIES MUST BE TESTED IN ACCORDANCE WITH ASTM-84 OR ANSI/UL 723.
- REFER TO DRAWING EA510'S FOR INFORMATION REGARDING SLATE ROOF ASSEMBLIES TO BE INCORPORATED INTO NEW SPIRE ROOF.
- SPIRE DESIGN AND DOCUMENTATION SHALL INCLUDE THE FOLLOWING:
  - LAYOUT DRAWINGS: SCALED DRAWINGS SHALL PROVIDE OVERALL PLAN DIMENSIONS, ELEVATIONS, MEMBER SIZES, MATERIALS, CONNECTIONS, SPLICES, FASTENERS, TEMPORARY AND PERMANENT BRACING, ETC.
  - CALCULATIONS: STRUCTURAL DESIGN CALCULATIONS FOR FRAMING MEMBERS, INCLUDING CONNECTIONS, SHALL DEMONSTRATE CONFORMANCE WITH DESIGN AND PERFORMANCE CRITERIA. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF MASSACHUSETTS.
  - PRODUCT DATA: PROVIDE MATERIAL DATA SHEETS, MILL CERTIFICATES, SAMPLES (UPON REQUEST), ETC. FOR MATERIALS AND COMPONENTS USED TO MANUFACTURE THE NEW SPIRE.
- ELECTRONIC SUBMISSION OF SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE ARCHITECT AND/OR ENGINEER IS ACCEPTABLE. REFER TO THE PROJECT SPECIFICATIONS FOR SHOP DRAWING SUBMITTAL REQUIREMENTS.
- SEE PLANS AND ELEVATIONS FOR SPIRE CONFIGURATION AND DIMENSIONS. THE FOLLOWING MINIMUM DESIGN CRITERIA SHALL BE USED FOR PROPORTIONING FRAMING MEMBERS:
  - DEFLECTION CRITERIA:
    - LIVE LOAD DEFLECTION < L/360
    - TOTAL DEFLECTION < L/240
    - LATERAL DRIFT < H/200
  - LOADING CRITERIA:
    - LIVE LOAD ON INTERNAL PLATFORMS AND STAIRS.....100 PSF OR 350 LBS
  - SEISMIC CRITERIA: (NON-STRUCTURAL COMPONENTS)
    - RISK CATEGORY = III
    - SEISMIC DESIGN CATEGORY = C
    - COMPONENT IMPORTANCE FACTOR, IP = 1.0
    - SITE CLASS E (UNKNOWN SOIL CONDITIONS)
    - SPECTRAL ACCELERATION (SHORT PERIOD), SDS = 0.357
    - COMPONENT AMPLIFICATION FACTOR, Ap = 2.5
    - COMPONENT RESPONSE MODIFICATION FACTOR, Rp= 1.0
    - COMPONENT OPERATING WEIGHT, Wp
  - WIND CRITERIA: (ASCE 7-10 - DIRECTIONAL PROCEDURE)
    - BASIC WIND SPEED, V = 139MPH (ULTIMATE)
    - EXPOSURE CATEGORY = B
    - RISK CATEGORY = III (OCCUPANCY GREATER THAN 300)
    - EXPOSURE COEFFICIENT, Kz (TABLE 27.3-1)
    - TOPOGRAPHIC FACTOR COEFFICIENT, Kzt = 1.0
    - DIRECTIONALITY FACTOR, Kd = 0.95
    - GUST FACTOR, G = 0.85
    - VELOCITY PRESSURE, Qz = 0.00256 \* Kz \* Kzt \* Kd \* V2 (PSF)
    - HEIGHT OF APPLIED WIND, Z = 113 FEET (APPROX.)
    - FORCE COEFFICIENT, Cf (TABLE 27.4-1)
    - DESIGN WIND FORCE, F = Qz \* G \* Cf \* Af (LBS)



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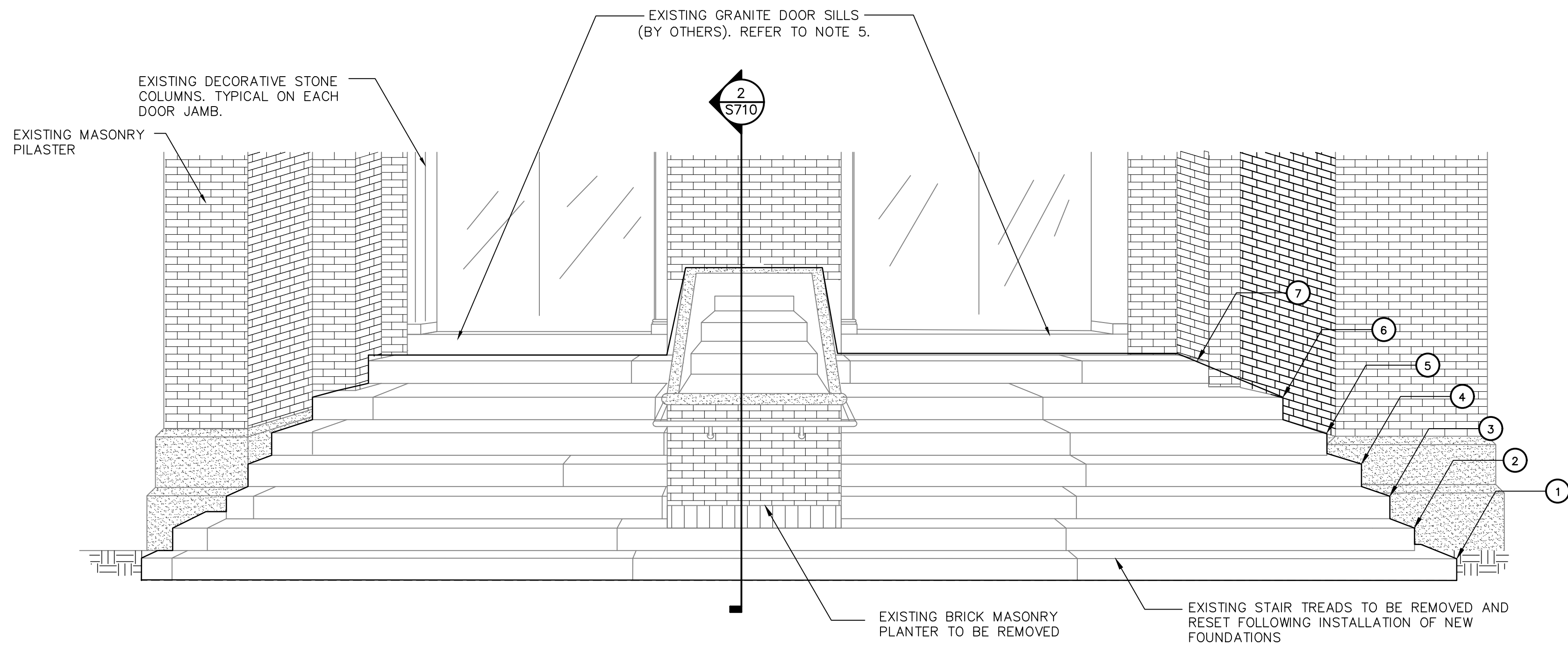
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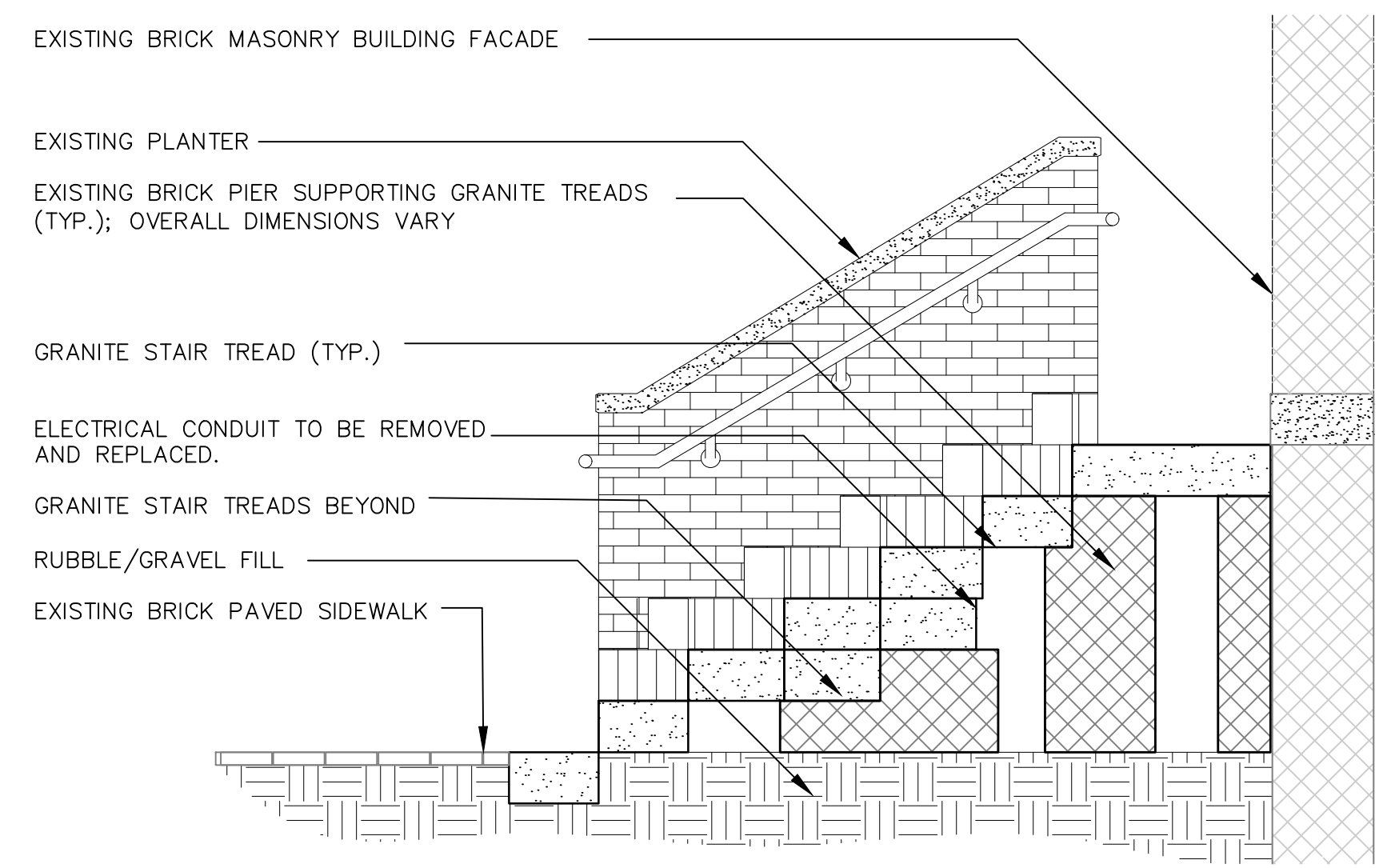
SPIRE DESIGN CRITERIA

Scale: AS NOTED	Stamp
File Name	
Drawn By: KPBEWMSM	Checked By: MDFCMCGM
Job No.: 3704	Date: 9/22/2017
GALE Job No.: 832681	
	<b>S600</b>





**1** EXISTING CONDITIONS/ DEMOLITION GRANITE STAIRS ELEVATION  
SCALE: N.T.S.



**2** EXISTING GRANITE STAIR SECTION  
SCALE: 1/2"=1'-0"  
0 1' 2' 4'

**GENERAL NOTES**

1. THE INFORMATION SHOWN ON THIS PLAN HAS BEEN COMPILED FROM VARIOUS SOURCES AND INDICATES REPRESENTATIVE DEFECTS AND CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, AND QUANTITIES IN THE FIELD.
2. ANY CONDITION FOUND NOT DETAILED SHALL BE CONSTRUCTED IN A MANNER SIMILAR TO THAT OF THE TYPICAL DETAILS. IF CONDITIONS EXIST THAT PRECLUDE CONSTRUCTION SIMILAR TO TYPICAL DETAILS, THE CONTRACTOR SHALL INFORM THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
3. ALL DIMENSIONS AND LOCATIONS OF EXISTING FOUNDATION ELEMENTS ARE BASED UPON LIMITED VISUAL OBSERVATIONS AND ARE APPROXIMATE.
4. THE CONTRACTOR IS TO PERFORM AN INSTRUMENT FIELD SURVEY TO VERIFY EACH STAIR TREAD ELEVATION PRIOR TO DEMOLITION.
5. TO AVOID REMOVAL AND SHORING OF ADJACENT BRICK MASONRY AND ASSOCIATED STONE ELEMENTS AROUND THE ENTRY DOORS, THE UPPERMOST GRANITE TREADS MAY REMAIN IN PLACE WHILE EXISTING SUPPORTS ARE REPLACED WITH NEW PIER FOUNDATIONS. THE CONTRACTOR MUST PROVIDE ADEQUATE TEMPORARY SHORING AS REQUIRED.



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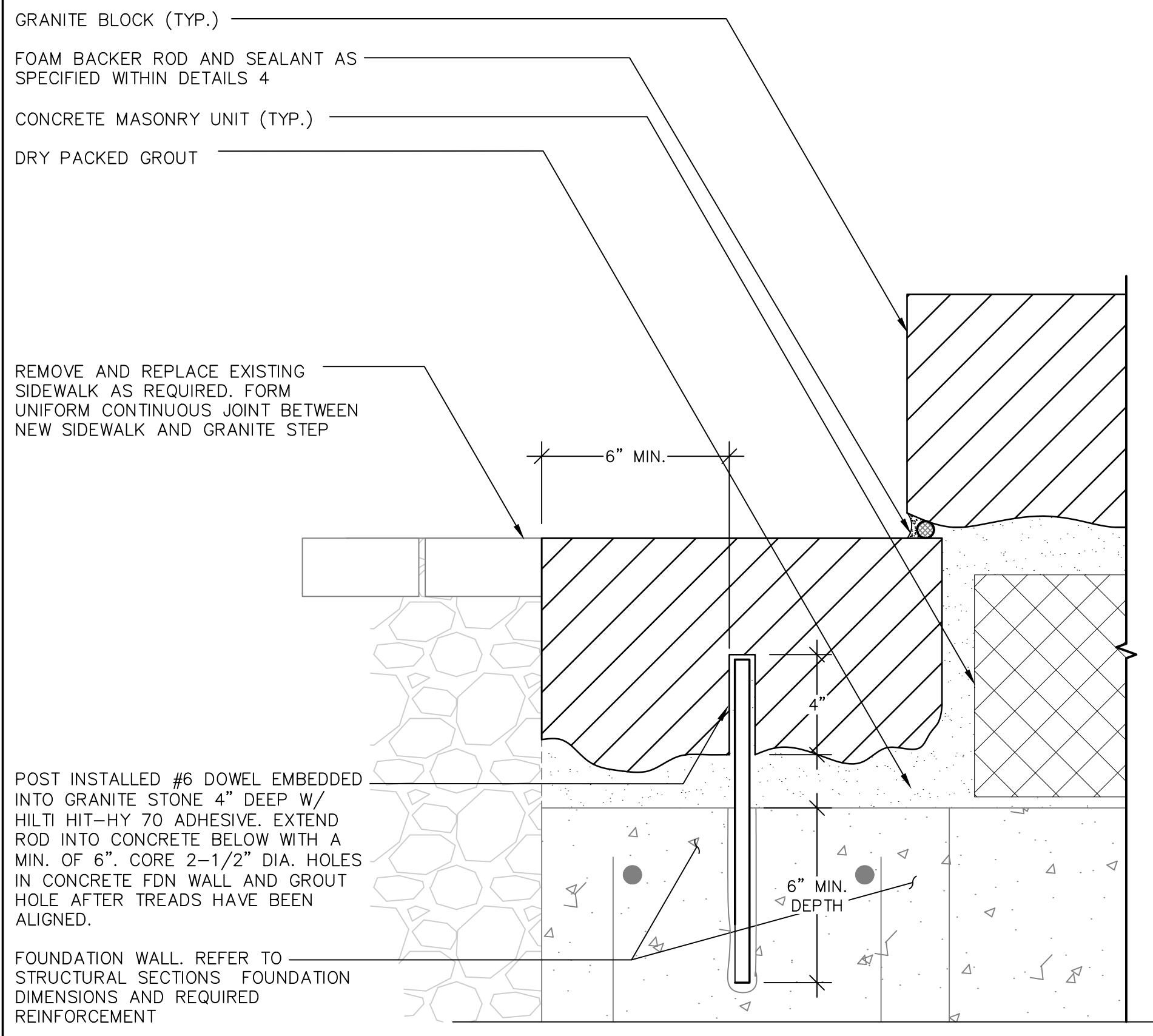
Title:  
**PROPOSED DEMOLITION  
AND EXISTING STAIR  
SECTION**

Scale	Stamp
File Name	
Drawn By LKPB EWM SMF	Drawing No.
Checked By MDF CM CGM	
Job No. 3704	
GALE Job No. 832681	
Date 9/22/2017	<b>S710</b>

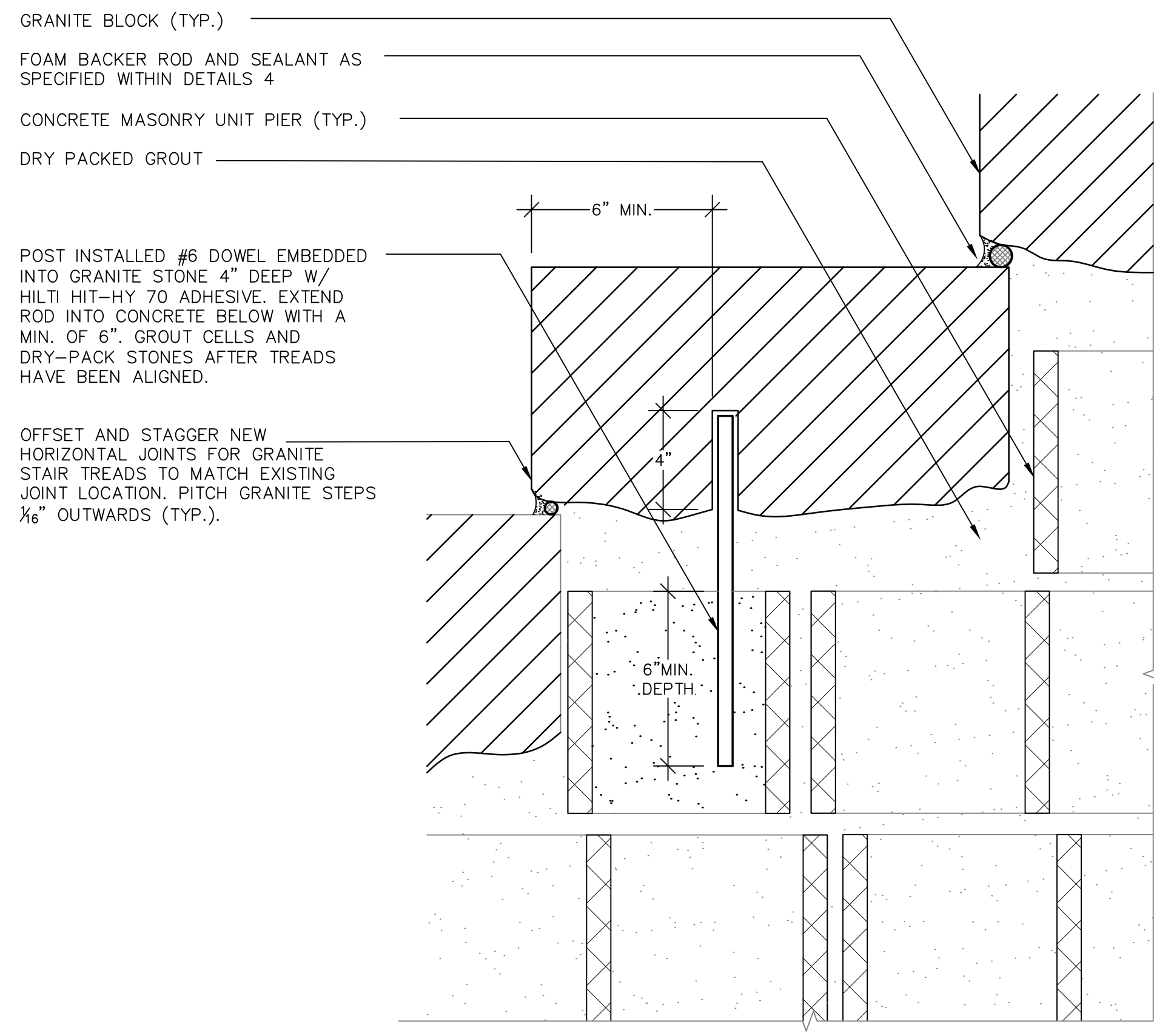




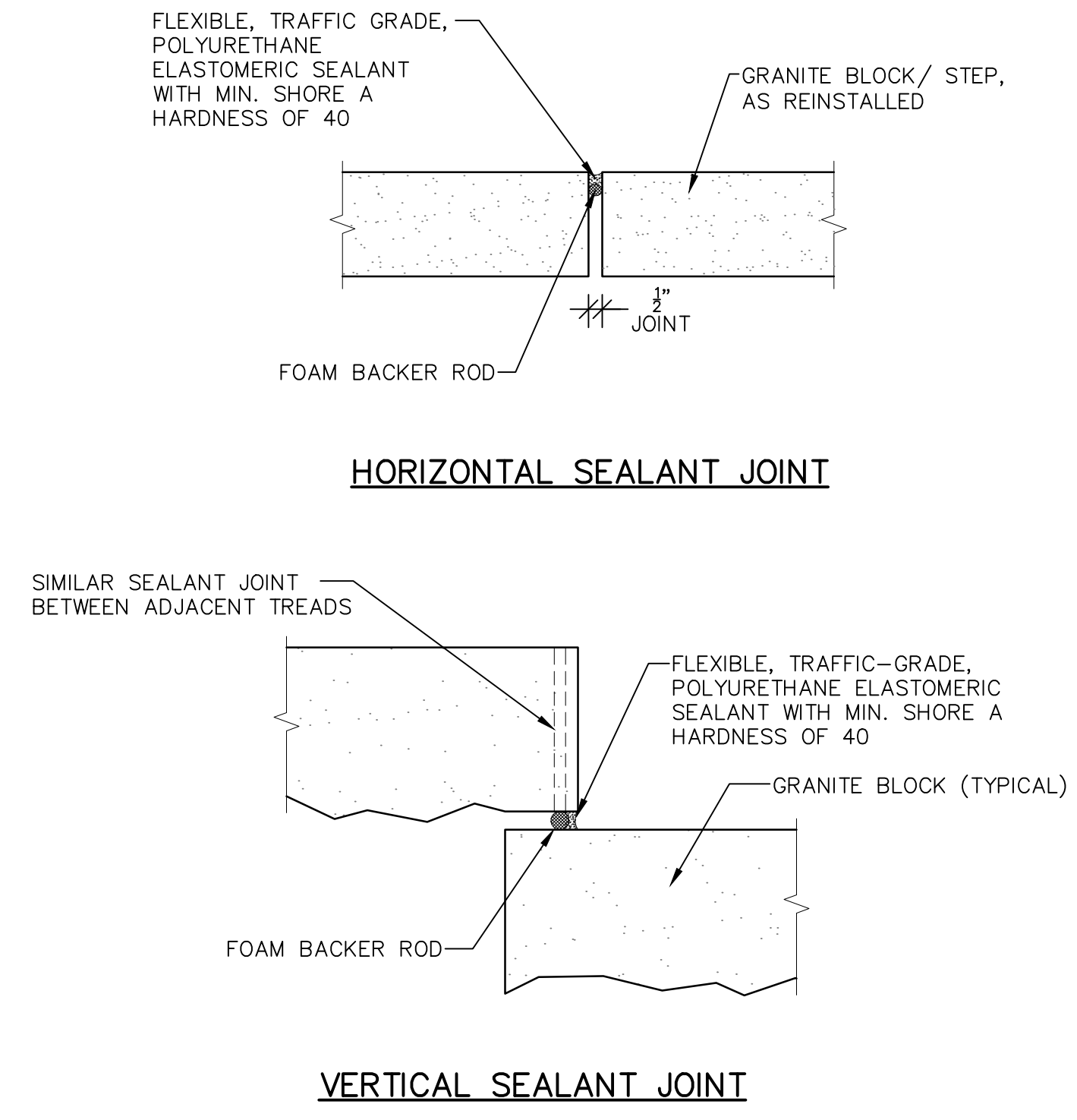




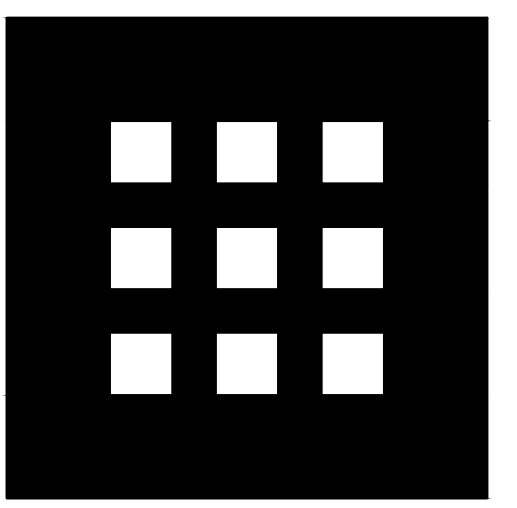
**1 TYP. BASE STONE ANCHOR PIN DETAIL**  
 SCALE: 3"=1'-0"  
 (ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**2 TYP. STONE TREAD ANCHOR PIN DETAIL**  
 SCALE: 3"=1'-0"  
 (ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



**3 TYP. STONE JOINT SEALANT DETAIL**  
 SCALE: 3"=1'-0"  
 (ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



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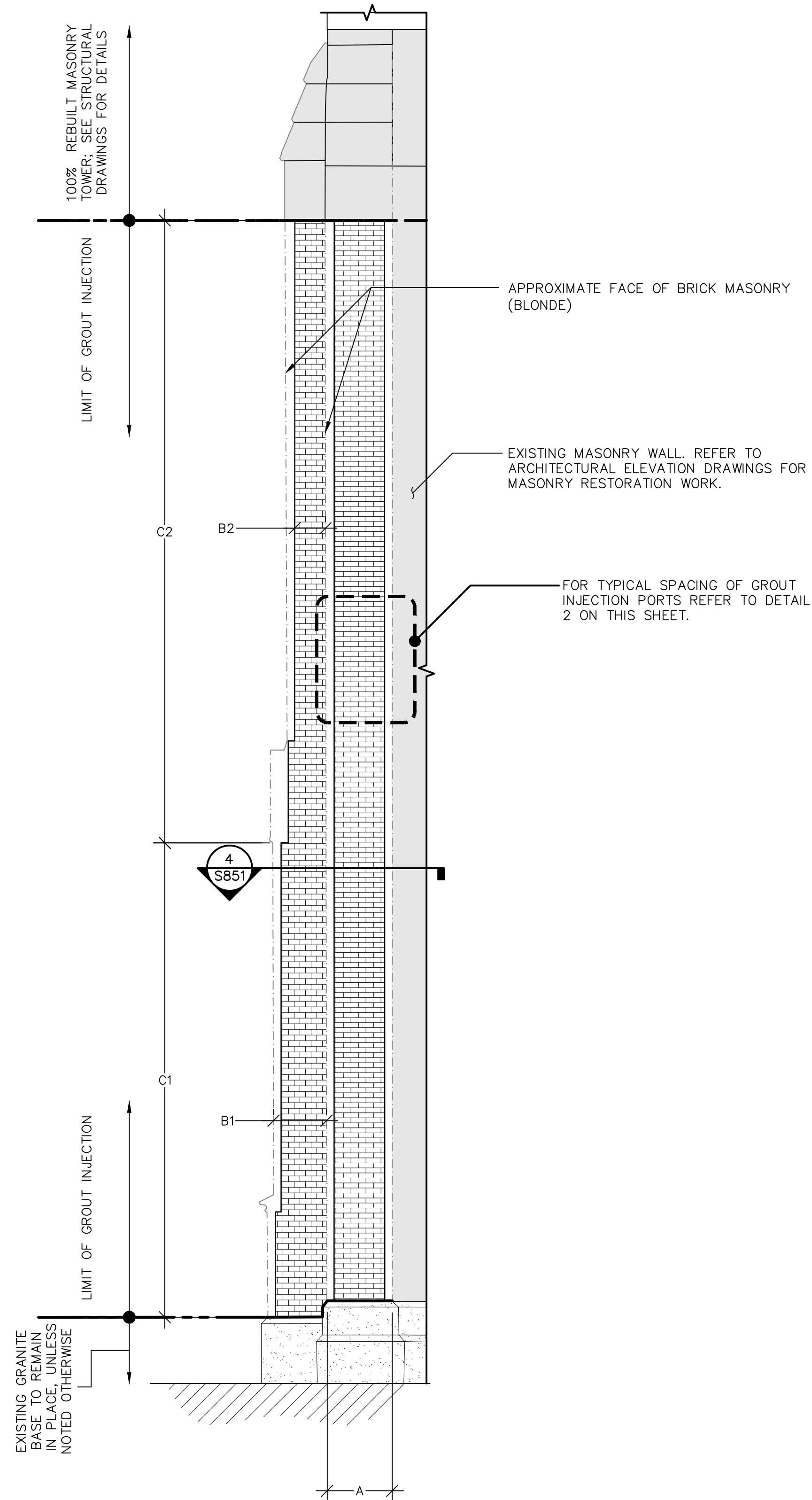
PHASE 1A  
 CONSTRUCTION DOCUMENTS

**TYPICAL STAIR DETAILS**

Scale	Stamp
File Name	
Drawn By KPB EWM SMF	Drawing No. <b>S750</b>
Checked By MDF CM CGM	
Job No. 3704	
GALE Job No. 832681	
Date 9/22/2017	



**NOTE:** DIMENSIONS PROVIDED ON THIS DETAIL ARE APPROXIMATE AND SHALL BE USED TO ESTIMATE THE QUANTITY OF RED BRICK BEHIND THE BLONDE BRICK EXTERIOR COURSE. REFER TO THE EXISTING BRICK MASONRY PILASTER SCHEDULE FOR THE INDICATED LETTERED DIMENSIONS.

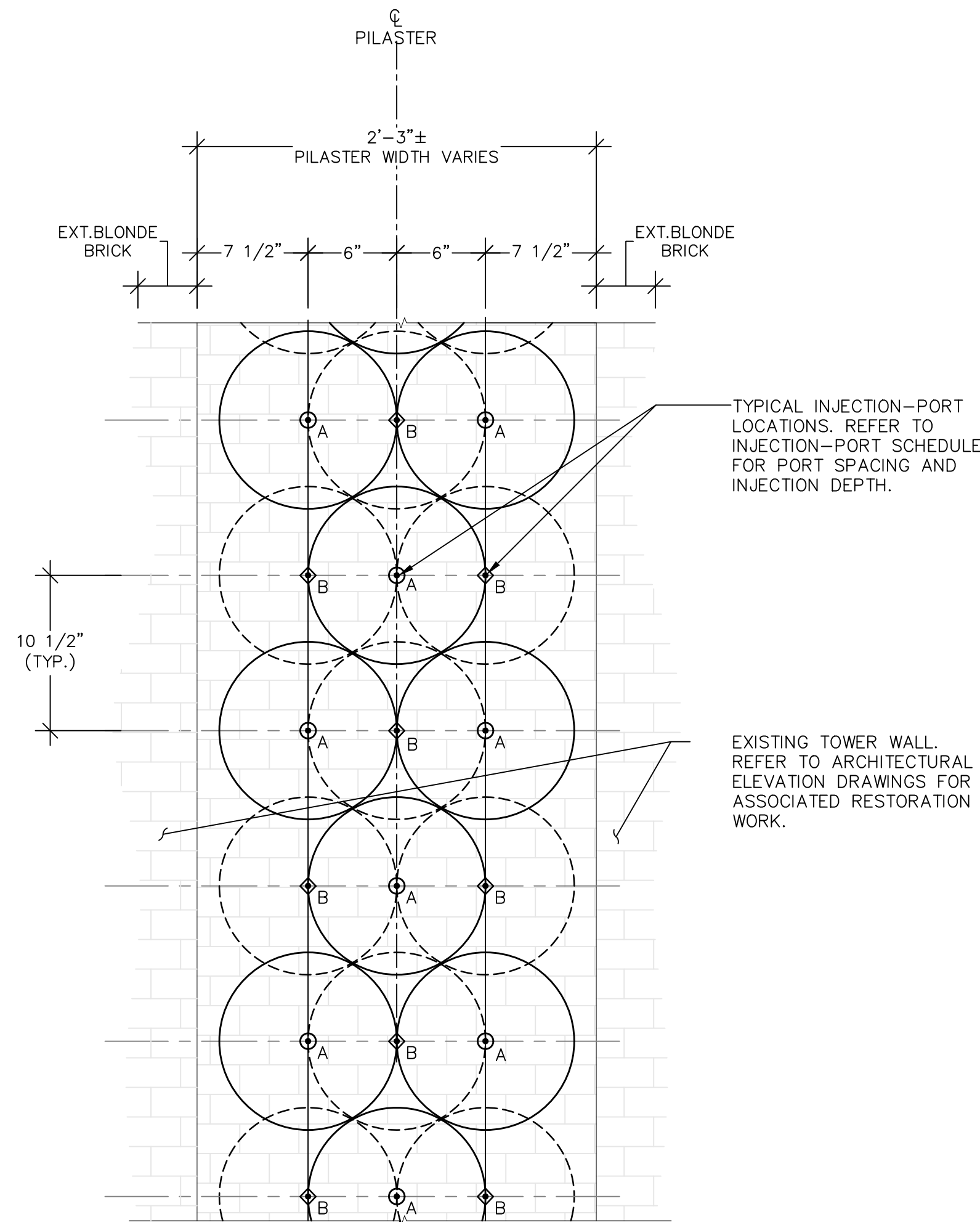


**1** TYPICAL PILASTER ELEVATION  
SCALE: 1/4"=1'-0"  
0 2' 4' 8'

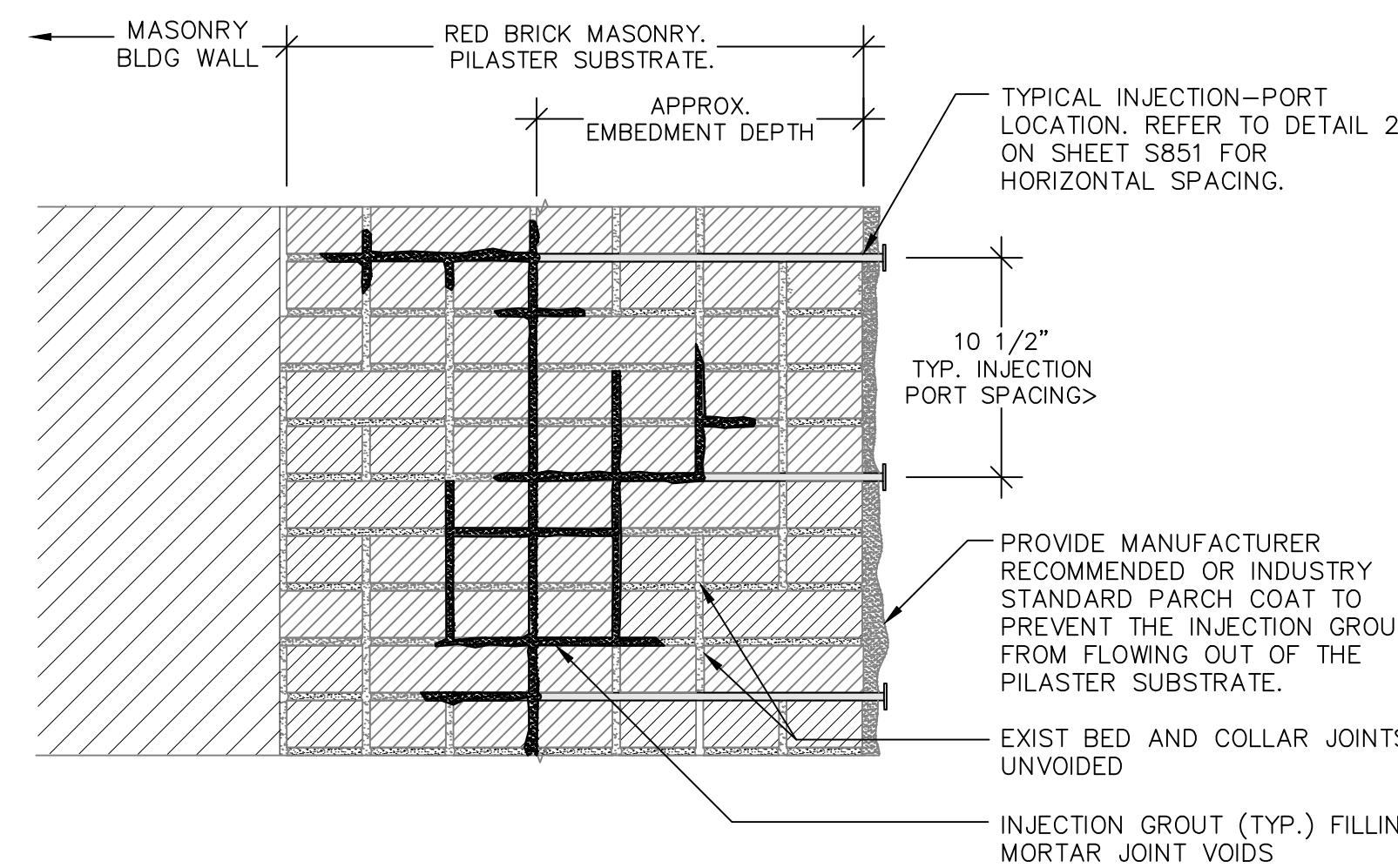
**INJECTION-PORT SCHEDULE**

- ⊙ A PORT 'A' 16" DEEP (EXTEND TO 4TH COLLAR JOINT)
- ⊙ B PORT 'B' 8" DEEP (EXTEND TO 2ND COLLAR JOINT)

**NOTE:** DEPENDING ON THE ABILITY OF THE GROUT TO FLOW LATERALLY THROUGH THE DEPTH OF THE PILASTER VIA OPEN HEAD JOINTS/ CRACKS, PORT 'B' MAY NOT BE NEEDED OR REQUIRE LESS NUMBERS. ENGINEER OF RECORD IS TO REVIEW AND APPROVE BY THE CONTRACTOR PREPARED MOCK-UP LOCATION AND PROVIDE FINAL RECOMMENDATION ON INJECTION PORT LAYOUT.



**2** TYP. GROUT INJECTION-PORT LAYOUT ELEVATION  
SCALE: 1-1/2"=1'-0"  
0 1/2' 1' 1 1/2'



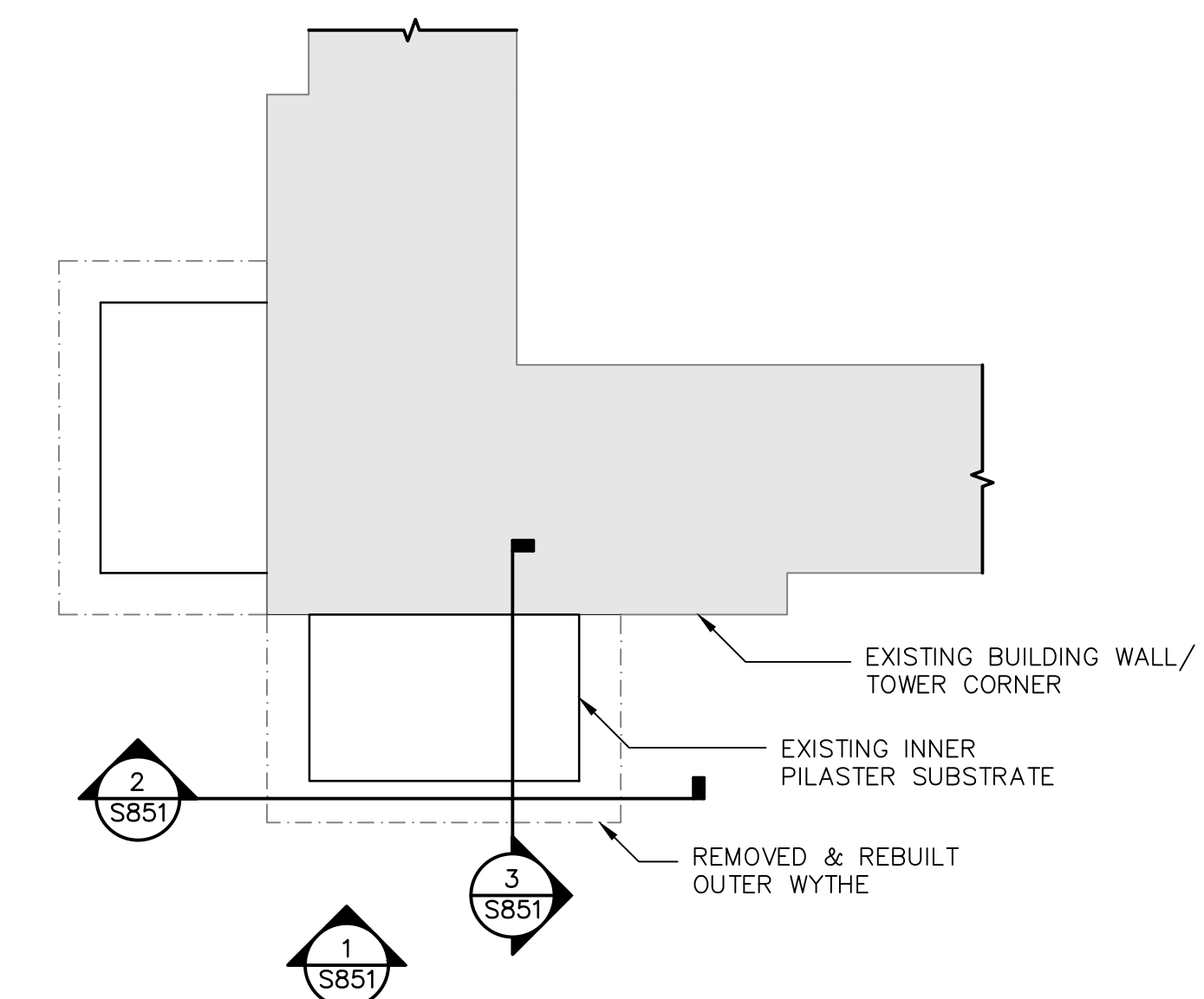
**3** TYP. GROUT INJECTION PILASTER SECTION  
SCALE: 1-1/2"=1'-0"  
0 1/2' 1' 1 1/2'

**EXISTING BRICK MASONRY PILASTER SCHEDULE (\*)**

PILASTER #	WIDTH (A)	DEPTH (B1)	DEPTH (B2)	HEIGHT (C1)	HEIGHT (C2)
P1	3'-2" ±	2'-5" ±	1'-10" ±	16'-1" ±	32'-6" ±
P2	0'-8" ±	2'-7" ±	1'-6" ±	20'-1" ±	32'-6" ±
	2'-10" ±(*)				
P3	2'-10" ±	2'-7" ±	1'-6" ±	20'-1" ±	32'-6" ±
P4	2'-10" ±	2'-8" ±	1'-8" ±	20'-1" ±	32'-6" ±
P5	2'-10" ±	2'-7" ±	1'-10" ±	20'-1" ±	32'-6" ±
P6	3'-2" ±	2'-3" ±	1'-6" ±	20'-1" ±	32'-6" ±
P7	2'-5" ±	2'-10" ±	2'-0" ±	7'-0" ±	9'-6" ±

\* PILASTER WIDTH VARIES THROUGHOUT THE PILASTER HEIGHT. PILASTER PARTIALLY EMBEDDED AND TERMINATED AT BLDG ROOF.

\*\* INDICATED MEASUREMENTS FOR BLOND BRICK WERE TAKEN ABOVE THE GRANITE PILASTER BASE. DIMENSIONS VARY BASED ON PILASTER ELEVATION. CONTRACTOR IS TO CATALOGUE AND VERIFY ALL PILASTER DIMENSION PRIOR TO COMMENCING WITH THE DEMOLITION.



**4** PILASTER PLAN VIEW  
SCALE: 3/4"=1'-0"  
0 1' 2' 3'



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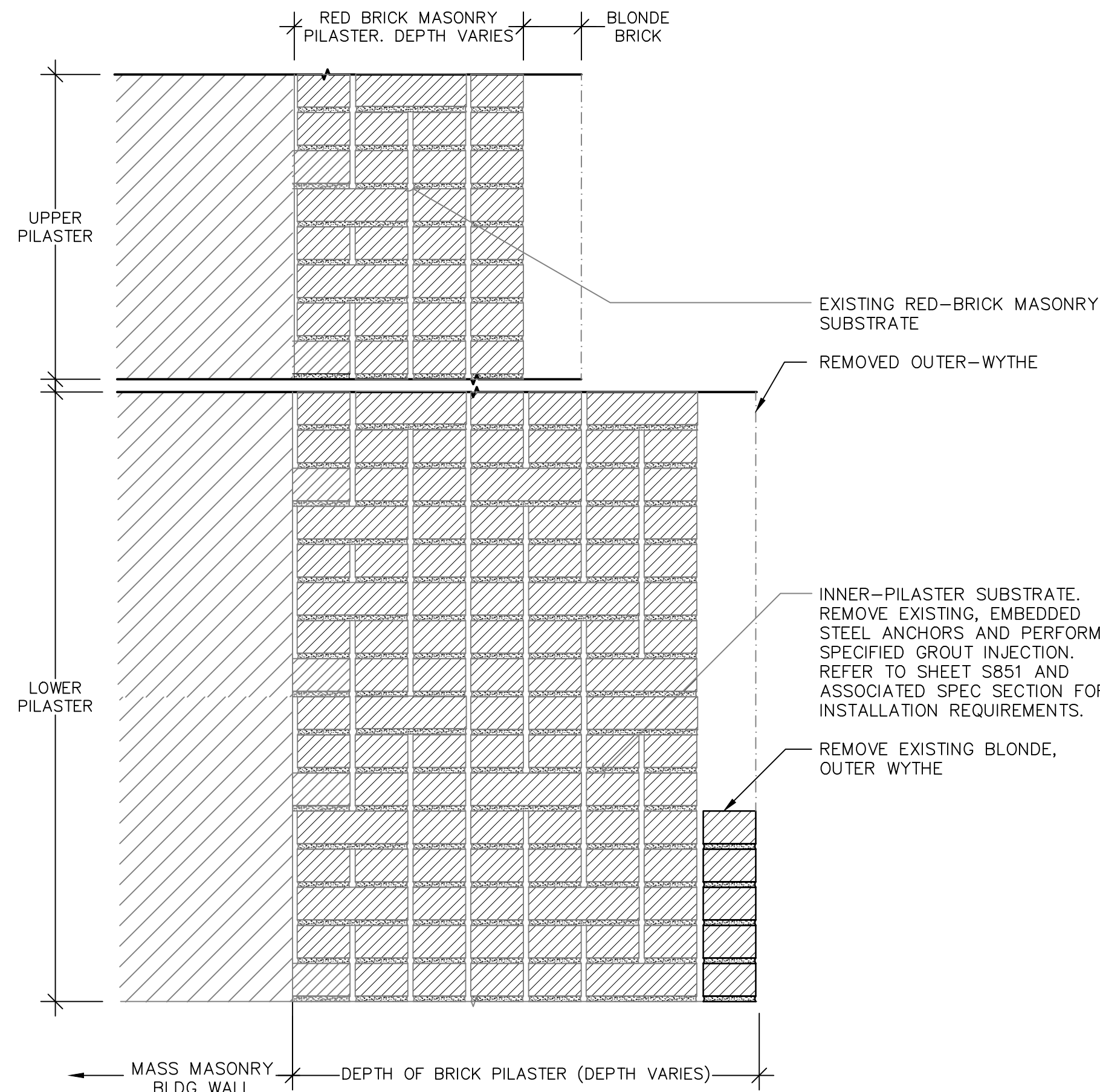
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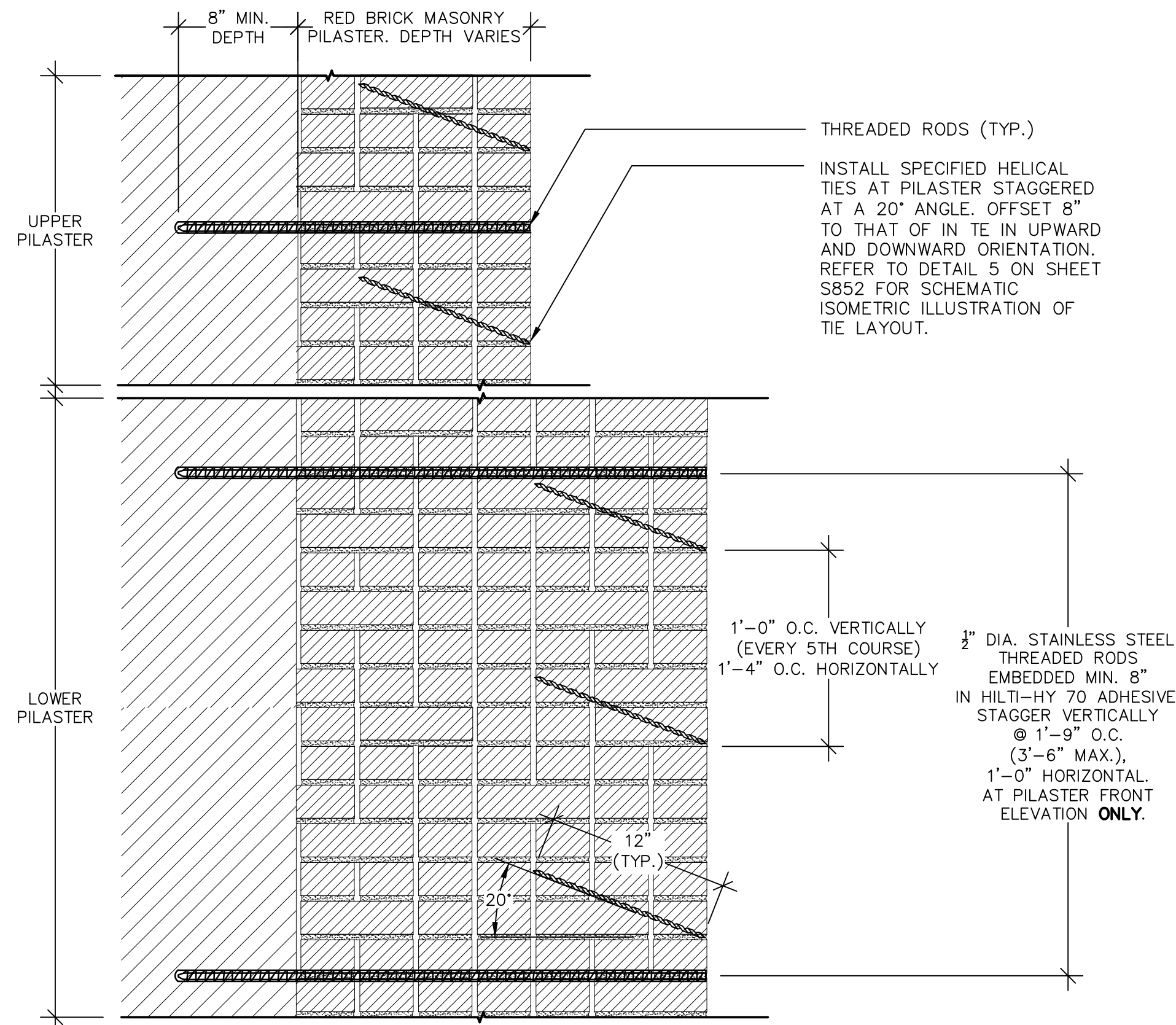
Title:  
**PILASTER GROUT-INJECTION  
SECTION & DETAILS**

Scale: AS NOTED  
Stamp: COREY G. MATTHEWS, STRUCTURAL No. 47568, REGISTERED PROFESSIONAL ENGINEER  
Drawn By: KPBEWMSMF  
Checked By: MDCF CM CGM  
Job No.: 3704  
GALE Job No.: 832681  
Date: 9/22/2017  
Drawing No.: S851

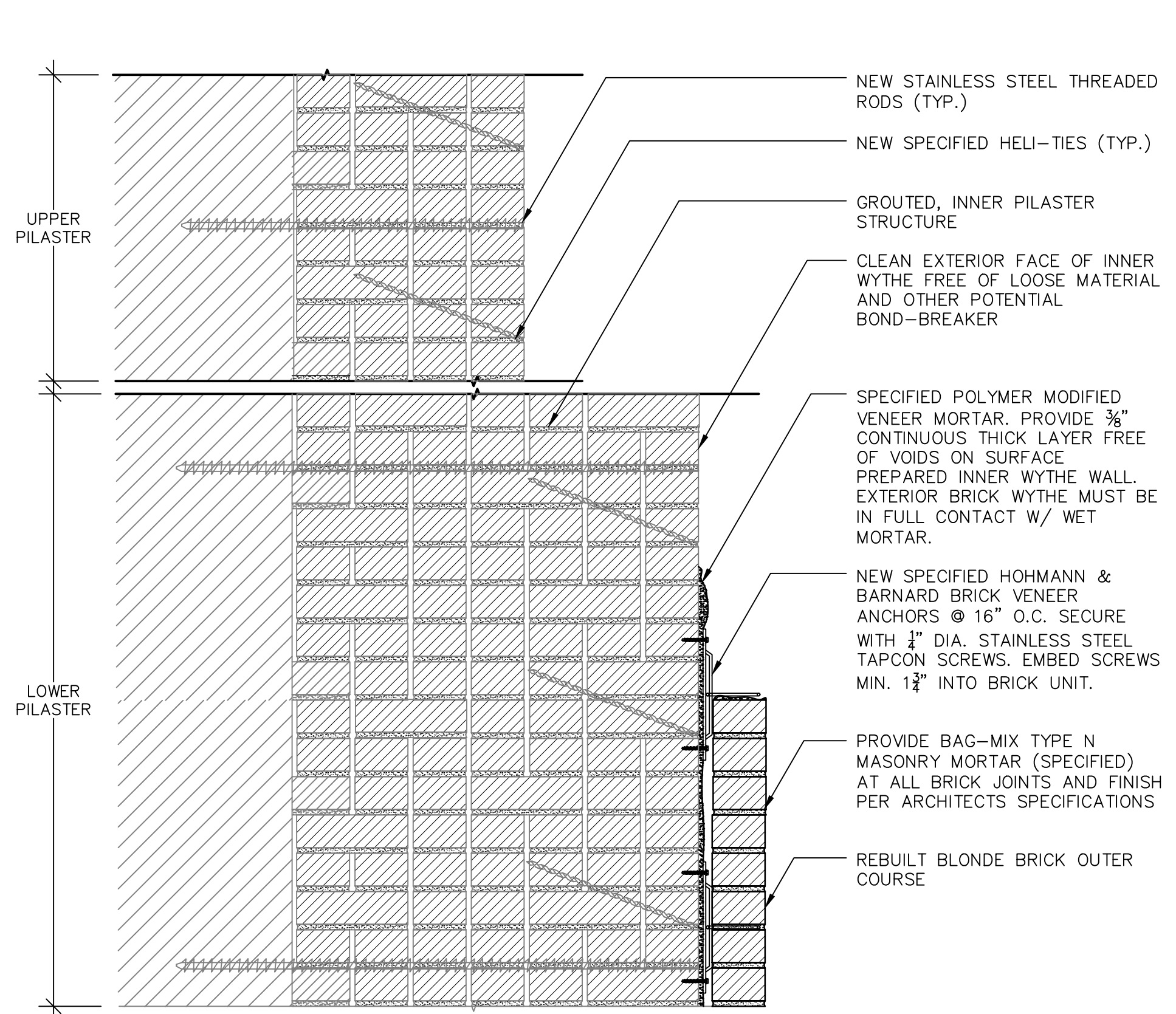




**1 STEP 1 - PILASTER RESTORATION: PARTIAL DEMOLITION AND GROUT INJECTION**  
SCALE: N.T.S.

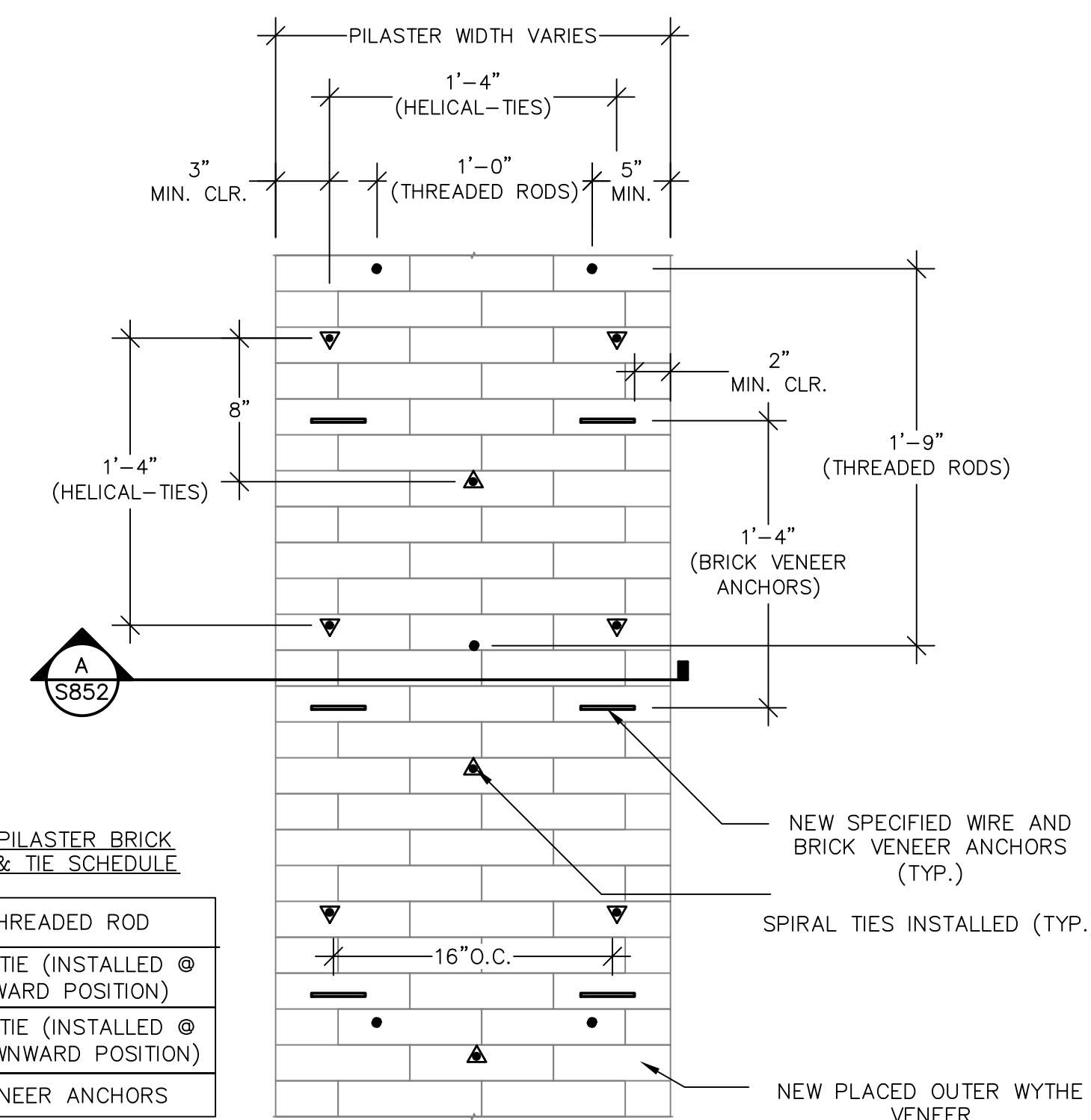


**2 STEP 2 - PILASTER RESTORATION: THREADED ROD & HELICAL-TIE INSTALLATION**  
SCALE: N.T.S.



**3 STEP 3 - PILASTER RESTORATION: BRICK-TIE INSTALLATION & OUTER WYTHE REBUILT**  
SCALE: N.T.S.

**TYPICAL PILASTER (FRONT) ELEVATION**

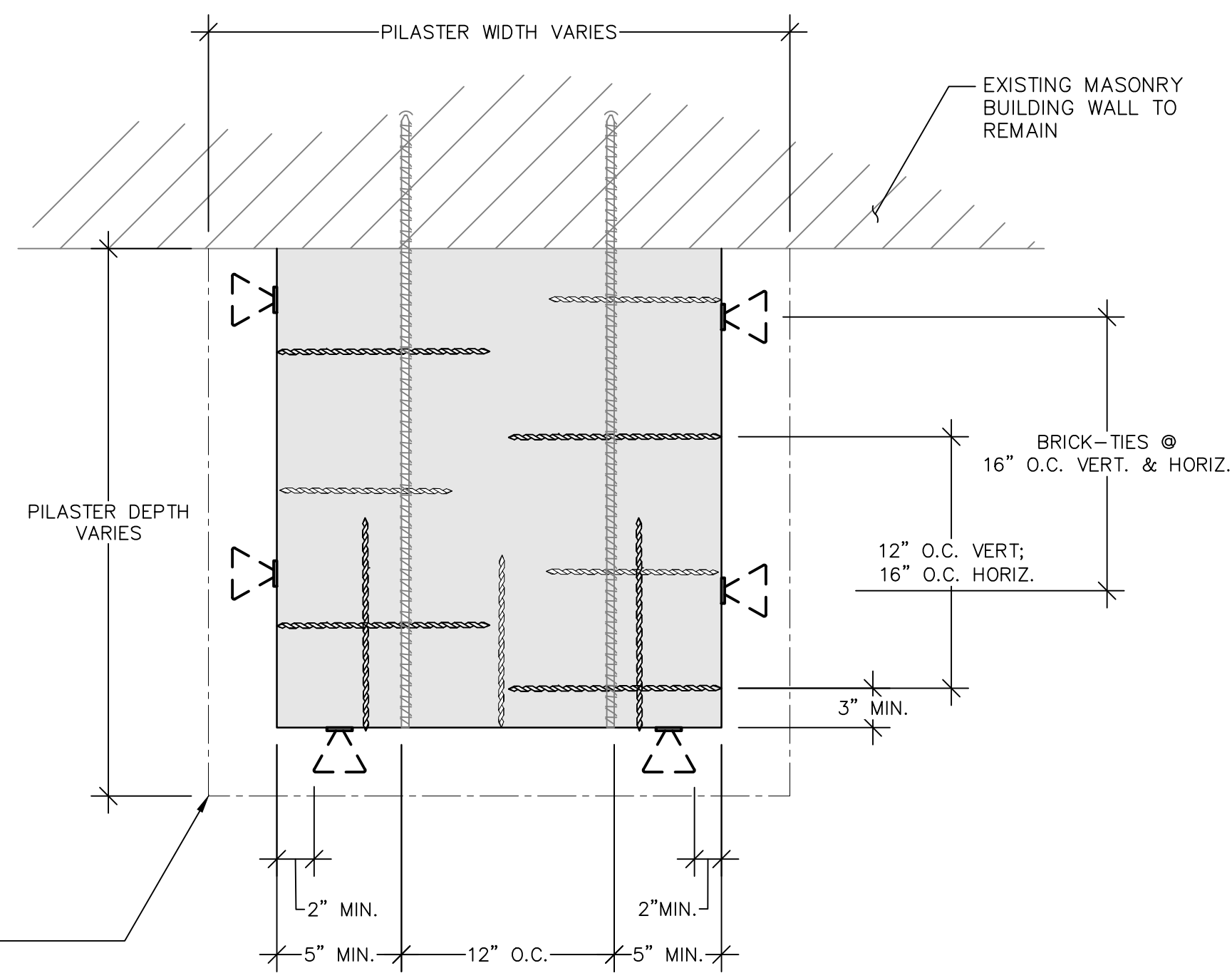


**TYPICAL PILASTER BRICK ANCHOR & TIE SCHEDULE**

- 1/2" DIA. THREADED ROD
- ▲ HELICAL-TIE (INSTALLED @ 20.0° UPWARD POSITION)
- ▼ HELICAL-TIE (INSTALLED @ 20.0° DOWNWARD POSITION)
- BRICK VENEER ANCHORS

**SECTION DETAIL 'A':**

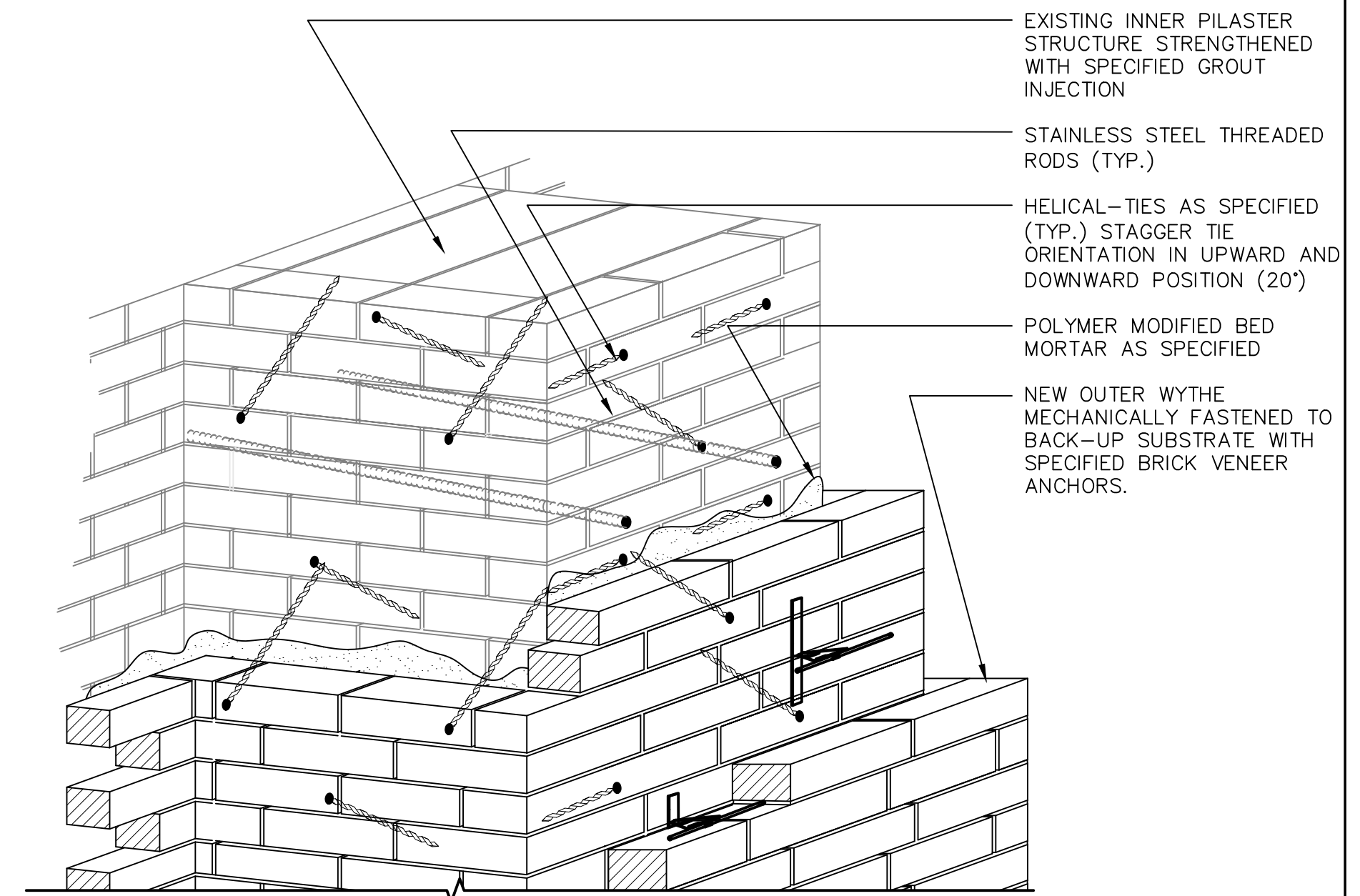
**PLAN VIEW OF TYPICAL PILASTER (SHOWN ONLY SCHEMATIC)**



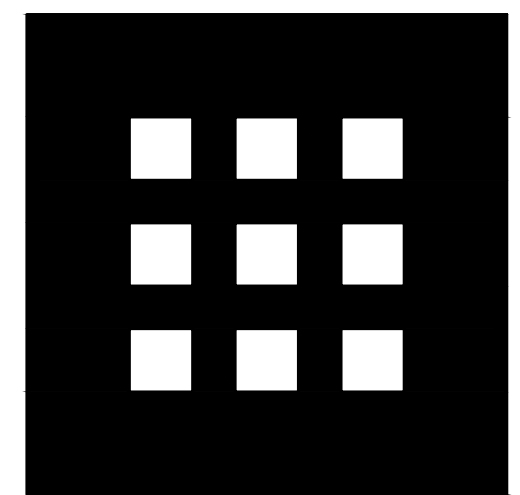
**4 TYPICAL TIE & PILASTER ANCHOR LAYOUT**  
SCALE: 1-1/2"=1'-0"

**GENERAL PILASTER STRENGTHENING NOTES**

1. CONTRACTOR MUST PROVIDE TEMPORARY SHORING FOR ALL REPAIR PHASES AS REQUIRED.
2. HELICAL AND BRICK VENEER TIE ANCHOR LAYOUT MAY VARY THROUGHOUT THE PILASTERS. CONTRACTOR IS TO ADJUST NUMBER AND POSITION OF ANCHORS TO PROVIDE THE SPECIFIED MINIMUM CLEARANCES.



**5 FINAL VIEW OF TIE AND PILASTER ANCHOR INSTALLATION**  
SCALE: N.T.S.



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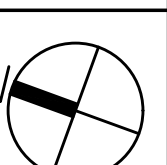
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Title:  
**PILASTER STRENGTHENING & REBUILT**

Scale: AS NOTED



File Name:

Drawn By:

KPB EWM SMF

Checked By:

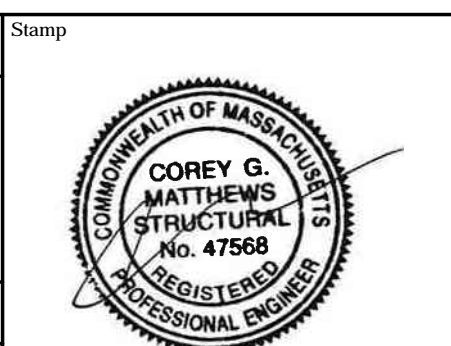
MDF CM CGM

Job No.:

3704

Date:

9/22/2017



Drawing No.:

**S852**