Purchase College
STATE UNIVERSITY OF NEW YORK
735 Anderson Hill Road
Purchase, NY 10577-1402
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Procurement Department
IFB: Masonry Repairs of Campus Underpass (Lincoln Ave)
Project SU-082324

Addendum #02 * July 3, 2025
52 Pages

To: Prospective Bidders

SUNY Purchase hereby issues this Addendum for the above referenced IFB, to provide the following clarifications which are hereby incorporated into the bidding documents:

Item 1. Q & A

Item 2. Revisions to Drawings:
T002.01 – Scope of Work has been added to the drawing.
A201.01 – Scope of Work has been removed.
Dimensions have been added as noted. Section reference has been added.
Existing signage anchor has been indicated.
A301.01 – Thru-wall flashing revised to improve design.
A302.01 – Note has been added.
A303.01 – Call outs have been revised.
A304.01 – Sections have been redrawn.
A305.01 – Section detail 1/A305 has been redrawn.
Notes have been revised.
A306.01 – Detail 2/A306 has been redrawn.
A307.01 – Detail 1/A307 has been redrawn.
A308.01 – Notes have been revised. Weep joints have been shifted one brick course above the finished level to prevent blockage from dust and debris. Detail at North Arcade 2/A308 has been added.

Item 3. Specification – 07272
FLUID-APPLIED MEMBRANE AIR BARRIER, VAPOR RETARDING

Item 4. Specification – 07600
FLASHING AND SHEET METAL

Item 5. Campus Map

Please be sure to sign THIS ADDENDUM (as acknowledgment that your firm received it) and submit it with your bid package, which is due **July 16, 2025, at 3 p.m**.

Respectfully,

Sheli Taylor, Associate Director
Procurement and Accounts Payable

Acknowledgement of ADDENDUM #02

_____
Signature Date

_____
Typed printed name and title

_____
Company name

Purchase College
STATE UNIVERSITY OF NEW YORK

Capital Facilities Planning

Addendum 3

To: All Bidders

From: Sayim Malik
Project Manager, Capital Facilities Planning

Re: MASONRY REPAIRS OF CAMPUS UNDERPASS (LINCOLN AVE) Project SU-082324

DATE: JULY 3RD 2025.

Question 1:
Detail 1/A302
Provided drawings do not show any location for this repair and even the "summary of work" in page T-02 do not highlight this repair work.
Answer 1:
Section reference corrected in Addendum drawing detail 1/ A201. General Photo Attached for reference only.

Question 2:
Section 1/A304
This wall section does not reflect the existing condition for the parapet designated in the dwg A-201 since the existing parapet at overpass is 5'-01" H (as shown in section 1/A303) which is a lot less than 6'-10" specified in this section 1/A304.

- Please refer to attached pictures of existing condition 1461 & 1464.
- Please revise and/or clarify.

Answer 2:
Refer to the Addendum drawings. Section Details 1/A304 and 2/A304 have been annotated as "Field Determine."

Question 3:
Section 1/A305

- Please specify the location (s) for this section at the work areas.
  This elevation shows removal of face brick at the plaza at the level of existing waterproofing & metal flashing.

- Please specify the existing waterproofing we must remove from the wall as well as the new waterproofing & metal flashing to be installed.

Answer 3:
Refer to the Addendum drawings. Details 1/A201 and 2/A306 have been annotated as "Field Determine."

Question 4:
Light Post on Pedestal

- Do we have to replace the face brick around all (3) light post pedestals?
- Do we have to remove & reinstall granite coping at all(3) light post pedestals?
- Do we have to remove & reinstall the (3) light posts? If so, please provide electrical drawings to properly quantify this electrical work or establish a monetary allowance for this electrical work.

Answer 4:
Light posts are to remain in place unless their removal is required. The contractor shall submit proposed means and methods for approval prior to any removal. The contractor is responsible to remove it if needed. Refer to Notes added on Drawing A201.01.

However, the existing signage post shall be carefully removed and securely stored for reinstallation following the completion of the new brick masonry.

Question 5:
Stairs Elevation 2/A306
Elevation 2/A306 shows only (26) steps & (1) landing while the existing stairs have (39) steps & (1) landing as shown in attached pictures #5920 & 5927.

- The overall field dimensions for this elevation are 63.83’ long & 20.5’ high instead of the 42.33’ long x 16.08’ high obtained from drawings.
- Please revise mentioned elevation and/or clarify.

Answer 5:
Detail 2/A306 has been redrawn. Notes have been added on Drawing A306.01.

Question 6:
Stairs Elevation 1/A307
Elevation 1/A307 shows only (26) steps & (1) landing while the existing stairs have (39) steps & (1) landing as shown in attached pictures #5920 & 5927.

- The overall field dimensions for this elevation are 64.83’ long & 20.5’ high instead of the 43.67’ long x 16.08’ high obtained from drawings.
- Please revise mentioned elevation and/or clarify.

Answer 6:
Detail 1/A307 has been redrawn. Refer to drawing A307.01.

Question 7:
Section 1/A308
Provided section shows a kind of flashing secured to the wall back-up at the sidewalk level without any legend. See attached Sketch 1, partial view of this section.

- Please specify the type of material & thickness for this additional masonry material.

Answer 7:
Refer to revised detail 4/A301.
Detail 1/A308 has been revised. Notes have been added on Drawing A308.01.

Question 8:
Phasing
Can we close one line of the underpass to perform the proposed work in (2) phases?
Answer 8:
One side can be closed. The underpass has to be open at all times. If we close one side contractor will be responsible for traffic control during closure. Overhead protection is required while working at the underpass and all work areas to keep pedestrians safe.

Question 9:
Alternates 1 & 2

- Please provide detail(s) and locations for this alternate masonry work since all the brick walls in the designated work areas (parapet walls & stair walls) are included in the base bid scope of work. Campus
- Please provide locations for these alternates so we can quantify the additional rigging & protection required for this work.
- Can we use steel angle instead of iron angle?
- Please provide details & sections for these alternates showing size, thickness for the new angles as well as any complementary masonry material to be used in this alternate work.

Answer 9:
Section Detail 2/A308 has been added on Drawing A308.01. However, any unforeseen field conditions encountered during construction shall be reported immediately.
Over head protection is required while working above in this area at all times and traffic control is responsibility of the contractor. See attached Photos of North and south Entrance work area.

North side Entrance

South Side Entrance.

Question 10:

As we are not allowed to store materials on the plaza, please provide the logistics plan, material storage locations, and 1. pathways for transporting materials to the site.

Answer 10:

Plaza Deck is structural Deck with pavers on it and has a load capacity of 150 psf. No heavy material exceeding this load can be stored on the plaza deck. No vehicles allowed exceeding this load can be used on the plaza.

See attached campus map for staging location.

Question 11:

As per the parapet detail, we are required to remove and reset the existing coping stone. During the pre-bid meeting, we observed that light poles are anchored on top of the coping stone. Please advise on the removal process and the required electrical coordination. Will any temporary lighting be needed during construction?

Answer 11:

G.C. to notify light poles that require temporary removal and storage. In addition, G.C. is required to provide temporary lighting. Westchester County electrician is required to disconnect and reconnect all outlets and power if needed.

Question 12:
Please provide contact information for the brick supplier, as we understand there is a sole supplier who can match the existing color.

Answer 12:
Belden Brick (Tri State Building Materials)

Question 13:
Regarding stair access, please advise if one side of the stairs must remain accessible during construction

Answer 13:
G.C. shall plan construction work to keep part of the stairs safe for pedestrian use.

Question 14:
As the site is in close proximity to the library and student building, please confirm whether demolition and other noisy work must be performed after hours.

Answer 14:
The work may be performed during regular hours. If noise levels become excessive, a second shift may be considered as needed. No work shall be performed during exam week; allow for approximately 10 non-working days in the contract schedule.

Question 15:
Please provide the working hours of the library and student building.

Answer 15:
8:00 am to 4:00pm summer. Regular semester 8:30 am to 4:30 pm

Question 16:
Please confirm the salvage location for the coping stone so we can determine the necessary workforce and time required for removal, storage, and reinstallation

Answer 16:
A staging area will be provided adjacent to the nearest ground-level area behind the Student Services Building, approximately 600 to 800 feet away. See attached photo for location. See attached Campus Map

Staging Area

Question 17:
Does any of the flashing contain ACM (Asbestos-Containing Material)? If so, please provide the asbestos testing reports
Answer 17.

There is no ACM as per campus knowledge. A testing result will be provided to the qualified bidder before the work commences.

MASONRY REPAIRS OF CAMPUS UNDERPASS (LINCOLN AVE.)

PROJECT # SU-082324

SUNY PURCHASE COLLEGE

735 ANDERSON HILL ROAD
PURCHASE NY 10577

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GENERAL NOTES

1. ALL WORK OF THIS CONTRACT SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF NEW YORK STATE BUILDING CODE, AND REGULATIONS OF OTHER AGENCIES HAVING JURISDICTION ON THE WORK OF THIS CONTRACT.

2. WHERE DIMENSIONS ARE INDICATED, DIMENSIONS GOVERN OVER SCALE. ALL DIMENSIONS AND CONDITIONS SHOWN AND ASSUMED ON THE DRAWINGS MUST BE VERIFIED AT THE SITE BY THE CONTRACTOR PRIOR TO ORDERING ANY MATERIAL OR COMMENCING ANY WORK. ANY DISCREPANCIES IN THE DRAWINGS AND SPECIFICATIONS SHALL BE REPORTED TO THE EIC. NO CHANGE IN DRAWINGS OR SPECIFICATIONS IS ACCEPTED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT/ENGINEER. NO WORK SHALL PROCEED UNTIL SUCH DISCREPANCY HAS BEEN RECTIFIED.

3. ALL WORK ON THESE DRAWINGS SHALL BE CONSIDERED NEW WORK WHETHER STATED OR NOT EXCEPT WHERE SPECIFICALLY NOTED AS "EXISTING TO REMAIN".

4. COORDINATION OF ALL WORK UNDER THIS CONTRACT SHALL BE MAINTAINED TO ENSURE THE QUALITY AND TIMELY COMPLETION OF THE WORK/PROJECT.

5. THE CONTRACTOR SHALL DISCONNECT AND/OR REMOVE ANY EXISTING PLUMBING, ELECTRICAL FIXTURES, WIRE CONDUITS, OR OTHER WORK WHICH MIGHT INTERFERE WITH THE WORK OF THIS CONTRACT. AFTER NEW WORK IS COMPLETED, THE DISCONNECTED OR REMOVED ITEMS SHALL BE REINSTALLED BY THE CONTRACTOR AT THE SAME LOCATION OR AT NEW LOCATION AS DIRECTED. FURNISH ALL NECESSARY NEW MATERIALS/HARDWARE FOR COMPLETION OF WORK.

6. THE CONTRACTOR SHALL PATCH AND REPAIR ALL DAMAGED OR EXPOSED SURFACES DUE TO CONTRACT WORK. ALL NEWLY INSTALLED, PATCHED WORK AND ALL AFFECTED AREAS SHALL BE PAINTED. ALL PAINTING WORK SHALL BE PERFORMED TO COVER THE ENTIRE HORIZONTAL OR VERTICAL SURFACE TO THE CLOSEST CORNER IN ALL FOUR DIRECTIONS. COLOR TO MATCH EXISTING CONDITIONS.

7. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW MATERIALS AT NO ADDITIONAL COST TO SUNY PURCHASE, ON THE FOLLOWING CONDITIONS:

   a) ANY EXISTING WORK THAT HAS BEEN REMOVED OR DAMAGED IN ORDER TO PERFORM THE CONTRACT WORK.

   b) TO FURNISH THE WORK OF THIS CONTRACT IN WORKMANLIKE MANNER.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTIONS AND OFF ALIGNMENTS ACCORDING TO CODES AND STANDARDS OF GOOD PRACTICE.

9. THE CONTRACTOR SHALL INCLUDE ALL PREPARATORY AND ASSOCIATED SUPPLEMENTARY WORK TO PROVIDE A COMPLETE AND FINISHED INSTALLATION.

10. WHERE MANUFACTURER'S NAMES AND PRODUCT NUMBERS ARE INDICATED ON DRAWINGS, IT SHALL BE CONSTRUED TO MEAN THE ESTABLISHMENT OF QUALITY AND PERFORMANCE STANDARDS OF SUCH ITEMS. ALL OTHER PRODUCTS MUST BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE THEY SHALL BE DEEMED EQUAL.

11. SIZE OF MASONRY UNITS ON SECTIONS ARE SHOWN AS NOMINAL SIZE.

13. PROVIDE GUARDS, RAILS, BARRICADES, FENCES, SIDEWALK SHEDS, CATCH PLATFORMS, DECKING, NIGHT LIGHTING, ETC., AS REQUIRED BY THE NEW YORK STATE BUILDING CODE, SECTION 3302 AND 3306 AS REQUIRED TO PROVIDE ADEQUATE PROTECTION.

14. THE CONTRACTOR SHALL KEEP WORK SITE FREE FROM DEBRIS AND ACCUMULATED REFUSE, AND SHALL HAVE SOLE RESPONSIBILITY FOR PROTECTING ALL DANGEROUS AREAS FROM ENTRY BY UNAUTHORIZED PARTIES. SITE SHALL BE LEFT BROOM CLEAN AT THE END OF EACH WORKING DAY.

15. THE CONTRACTOR SHALL MAINTAIN FREE AND UNOBSTRUCTED ACCESS FROM ALL ADJACENT SPACES INTO THE EXISTING FIRE STAIRS TO OUTSIDE OF THE BUILDING AT ALL TIMES.

16. THE CONTRACTOR SHALL, UNLESS OTHERWISE PROVIDED IN THE CONTRACT DOCUMENTS, SECURE AND PAY FOR REQUIRED INSPECTIONS, PERMIT(S), FEES, LICENSE AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.

18. THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD ALL EXISTING AND GIVEN CONDITIONS AND DIMENSIONS WITH THOSE SHOWN ON THE CONTRACT DOCUMENTS. IF THE FIELD CONDITIONS AND DIMENSIONS DIFFER FROM THOSE SHOWN ON THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER. ALL FIELD CONDITIONS AND DIMENSIONS SHALL BE SO NOTED ON THE DRAWINGS AND SUBMITTED FOR APPROVAL.

19. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT, DUE TO THE NATURE OF THIS PROJECT, THE EXACT EXTENT OF WORK CAN NOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT OF THE WORK. THE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTION AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH THE FIELD CONDITIONS AND AS ORDERED BY THE ENGINEER.

20. ALL BIDDERS SHALL INSPECT THE PROJECT SITE PRIOR TO SUBMITTING BIDS TO VERIFY THE FIELD CONDITIONS WHICH MAY BE ENCOUNTERED AND THE NATURE OF THE WORK TO BE DONE UNDER THIS CONTRACT. NO COMPENSATION WILL BE ALLOWED TO THE BIDDER FOR FAILURE TO INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT COSTS NECESSARY TO COMPLETE THE WORK.

21. THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS THAT ARE TO REMAIN IN PLACE, OR THAT ARE TO BE REMOVED AND REMAIN THE PROPERTY OF THE COLLEGE, WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS THAT ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE COLLEGE, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE PARK MANAGER AT THE EXPENSE OF THE CONTRACTOR.

22. THE CONTRACTOR SHALL BE REQUIRED TO PROTECT HIS/HER WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REGULATIONS.

23. THE USE OF POWER DEVICES SUCH AS ELECTRIC HAMMERS OR OTHER PNEUMATIC TOOLS WILL NOT BE ALLOWED UNLESS APPROVED BY THE CAMPUS PROJECT REPRESENTATIVE. NO POWER-ACTUATED DEVICES MAY BE USED TO ATTACH STUDS TO EXISTING FLOORS, CEILINGS OR WALLS UNLESS A LIST OF PROPOSED TOOLS IS SUBMITTED AND APPROVED BY THE CAMPUS PROJECT REPRESENTATIVE. POWER-ACTUATED DEVICES MAY NOT BE UTILIZED WITHOUT PRIOR CONSENT FROM THE BOARD, AS PER THE ALTERATION AGREEMENT.

24. CONTRACTOR TO PROVIDE FOR PAINT, DUST, DEBRIS AND NOISE CONTAINMENT AS DIRECTED BY THE CAMPUS PROJECT REPRESENTATIVE. ALL VENTS AND EXHAUSTS MUST BE FULLY SEALED TO PREVENT INFILTRATION OF DUST AND DIRT.

25. ANY CHANGES TO THE SCOPE OF WORK MUST BE SUBMITTED TO THE CLIENT AND THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO THE COMMENCEMENT OF THAT WORK.

26. CONTRACTOR SHALL SCHEDULE AND SEQUENCE WORK SO AS NOT TO INTERFERE WITH OTHER ONGOING OR SCHEDULED WORK, OR WITH ACTIVITIES OF THE OWNER. COORDINATE WITH OWNER'S REPRESENTATIVE.

27. CONSTRUCTION WORK SHALL NOT IMPACT THE ADJOINING OCCUPIED APARTMENTS.

28. DO NOT SCALE DRAWINGS. DETAILS, NOTES, AND THE LIKE ARE TYPICAL AND APPLY IN GENERAL TO SIMILAR CONDITIONS.

SUMMARY OF WORK

THE WORK SHALL BE AS SHOWN AND CALLED FOR IN THE CONTRACT DOCUMENTS AND SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING GENERAL ITEMS OF WORK:

REMOVAL AND STORAGE OF EXISTING HANDRAIL AND COPING STONE FOR REINSTALLATION.

REMOVAL OF EXIST. FACE BRICK MASONRY AND SUPPORT SYSTEM.

INSTALL NEW FACE BRICK MASONRY AND SUPPORT SYSTEM.

INSTALLATION OF NEW WATERPROOFING AND REPLACEMENT OF PARAPET WALL FACE BRICK MASONRY IN KIND.

SEQUENCE OF FACE BRICK REPLACEMENT AND ANCHORAGE

1. START FACE BRICK REMOVAL FROM TOP, GOING DOWN.
2. REMOVE FACE BRICK MASONRY AND SUPPORT SYSTEM.
3. PREPARE BACKUP MASONRY OR CONCRETE PARAPET FOR NEW WATERPROOFING AND FACE BRICK MASONRY.
4. INSTALL LIQUID APPLIED VAPOR PERMEABLE MEMBRANE PER ARCHITECTURAL DRAWINGS/ SPECS.
5. START FACE BRICK INSTALLATION FROM BOTTOM GOING UP.
6. INSTALL HANDRAIL AND COPING STONE IN KIND, PER ARCHITECTURAL DRAWINGS/ SPECS.
7. SEE ARCHITECTURAL DRAWINGS FOR FLASHING DETAILS.

ABBREVIATIONS

A

AB	– ABOVE
A.D	– ACCESS DOOR
ADJ.	– ADJACENT
ALUM.A.	– ALUMINUM
AOR	– ARCHITECT OF RECORD
APP'D.	– APPROVED
AAPR.B.	– APPROXIMATELY
ARCH.	– ARCHITECT
ASPH.	– ASPHALT
AUX.	– AUXILIARY
&	– AND
∟	– ANGLE
@	– AT

B

BR	– BRICK
B.O.	– BASE OF
B.A.	– BRICK COURSE
B.L.	– BUILDING LINE
BLDG.	– BUILDING
BLK	– BLOCK
BM.	– BEAM
B.S.	– BLUE STONE
B.S.&A.	– BOARD OF STANDARDS AND APPEAL
B.U.R	– BUILT-UP ROOF

C

C.	– CASEMENT
CAB'T.	– CABINET
CL	– CENTER LINE
C.J.	– CONTROL JOINT
CL'G	– CEILING
COL.	– COLUMN
CONT.	– CONTINUOUS
CONC.	– CONCRETE
C.R.	– CLASSROOM
CU.YD.	– CUBIC YARD

D

DEPT.	– DEPARTMENT
DET.	– DETAIL
D.H.	– DOUBLE HUNG
DIA.	– DIAMETER
DIM.	– DIMENSION
DN.	– DOWN
DO.	– DITTO
DR.	– DOOR
DWG.	– DRAWING
D.C.	– DIAGONAL CRACK

E

EG.	– EXTERIOR WIRE
EIC	– ENGINEER IN CHARGE
E.J.	– EXPANSION JOINT
EL.	– ELEVATION
EMG.	– EXPANDED METAL GUARD
E.L.	– EXISTING LEADER
ENT.	– ENTRANCE
EOR	– ENGINEER OF RECORD
EQ.	– EQUAL
EQUIP.	– EQUIPMENT
EXP.	– EXPANSION
EXIST.	– EXISTING
EXT.	– EXTERIOR
E.C.	– ELECTRICAL CONDUIT

F

F.B.	– FACE BRICK
FD	– FLOOR DRAIN
FIN.	– FINISH
FL.	– FLOOR
F.A.I.	– FRESH AIR INTAKE
F.P.	– FIREPROOFING
FR.	– FRAME

G

GA.	– GAUGE
GALV.	– GALVANIZED
G.B.W.	– GLASS BLOCK WINDOW
G.C.	– GENERAL CONTRACTOR
G.I.	– GALVANIZED IRON
GL.	– GLASS
GRNT.	– GRANITE

H

H.C.	– HORIZONTAL CRACK
HDCP	– HANDICAPPED
HGT.	– HEIGHT
H.M.	– HOLLOW METAL
HORIZ.	– HORIZONTAL

I

INT.	– INTERIOR
INSTR.	– INSTRUCTOR
INSUL.	– INSULATION

L

L.S.	– LIMESTONE
LT.	– LIGHT
L.F.	– LINEAR FOOT

M

MAT.	– MATERIAL
MAX.	– MAXIMUM
MECH.	– MECHANICAL
M.H.	– MANHOLE
MIN.	– MINIMUM
M.I.S.	– METAL INSECT SCREEN
MT'D	– MOUNTED
M.O.	– MASONRY OPENING
M.S.	– MINERAL SURFACED

N

N.D.	– NOMINAL DIAMETER
NEC.	– NECESSARY
N.I.C. CONTRACT	– NOT IN
NO.	– NUMBER
N.T.S.	– NOT TO SCALE

O

O.C.	– ON CENTER
O.D.	– OUTSIDE DIAMETER
O.G.	– OBSCURE GLAZING

P

PAV.	– PAVEMENT
P&D	– PLUMBING AND DRAINAGE
PL.	– PLASTER

R

R.	– RADIUS
RAIL'G	– RAILING
RAD	– RADIATOR
R.D.	– ROOF DRAIN
REF.	– REFERENCE
REINF.	– REINFORCEMENT
RET.	– RETAINING
RM.	– ROOM

S

S.S.	– STAINLESS STEEL
SPEC.	– SPECIFICATION
S.F.	– SQUARE FEET
STD.	– STANDARD
ST. PL.	– STEEL PLATE
ST. DET.	– STANDARD DETAIL
S.Y.	– SQUARE YARD
SFT	– STRUCTURAL FACING TILE

T

TBD	– TO BE DECIDED
TH.	– THICKNESS
T.O.S.	– TOP OF SLAB
TYP.	– TYPICAL
T.C.	– TERRA COTTA

V

VENT.	– VENTILATOR
VERT.	– VERTICAL
V.I.F.	– VERIFY IN FIELD
V.	– VENT
V.C.	– VERTICAL CRACK

W

W/	– WITH
W.F.	– WIDE FLANGE
W.H.	– WEEP HOLE
W.I.	– WROUGHT IRON
W.M.	– WIRE MESH
W.P.	– WATERPROOFING
WT.	– WEIGHT

DRAWING LIST

SCOPE OF WORK

1. REMOVAL AND REPLACEMENT OF EXIST. PARAPET FACE BRICK MASONRY AND WATERPROOFING OF BACKUP WALL.
2. REMOVAL AND REPLACEMENT OF EXIST. FACE BRICK FROM THE STAIRCASE CHEEK WALL.
3. REMOVAL AND REPLACEMENT OF EXIST. FACE BRICK FROM STAIRCASE SIDE WALL.
4. CONCRETE SLAB REPAIRS AT THE UNDERSIDE OF PARAPET WALL.
5. REMOVAL, STORAGE, AND REINSTALLATION OF SIGNAGE/POLES THAT ARE ANCHORED THROUGH EXIST. FACE BRICK MASONRY OR GRANITE TOP.
6. REMOVAL, STORAGE, AND REINSTALLATION OF ANY ADDITIONAL ITEMS WITHIN THE PROJECT AREA THAT MUST BE TEMPORARILY REMOVED TO ENSURE SMOOTH EXECUTION OF THE WORK.

SU-082324

No.	Date	Revision
1	07/02/2025	REVISED AS NOTED, ADDENDUM-1

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aafridi@afridiassociates.com

Designer:	AKBER AFRIDI, P.E.
Drawn by:	AZHER MALIK
Checked by:	AKBER AFRIDI, P.E.

Project:
MASONRY REPAIRS OF CAMPUS UNDERPASS (LINCOLN AVE.)

Address:
735 Anderson Hill Road
Purchase NY 10577

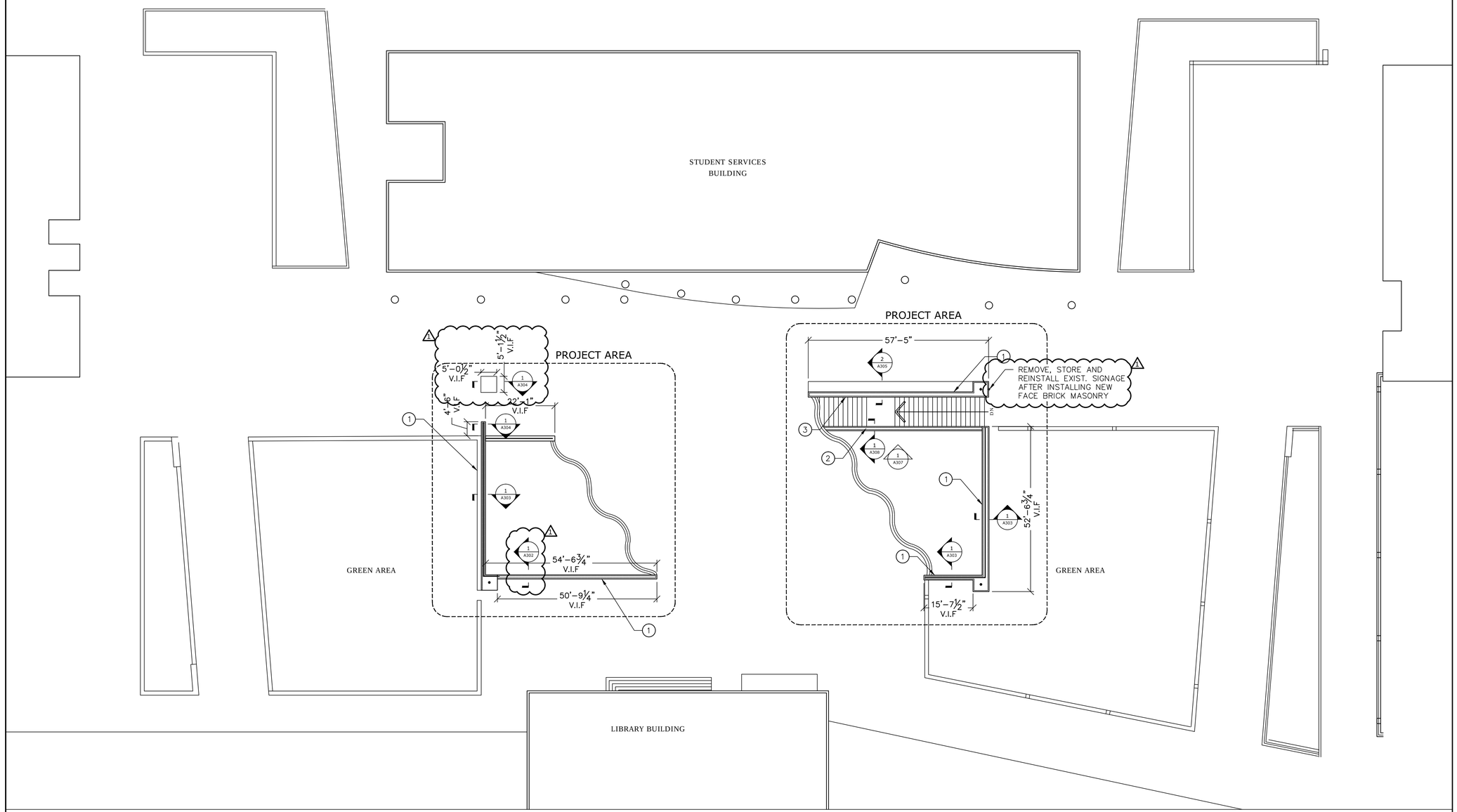
Drawing Title:
GENERAL NOTES, SUMMARY OF WORKS, & MISCELLANOUS INFO.

Drawing No.: T002.01

Scale: AS NOTED

Date: 05/12/2025

AFRIDI# 2205



1 A201 PARTIAL SITE PLAN

0 4' 8' 16' 32'

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

NOTES:

1. EXIST. LIGHT POLES SHALL BE PROTECTED DURING CONSTRUCTION.
2. GEN. CONTRACTOR SHALL PROVIDE DETAILS FOR THE REMOVAL, STORAGE AND REINSTALLATION OF EXIST. ELECTRICAL POLES IF REQUIRED.
3. REMOVE AND STORE GRANITE TREADS AND GRANITE COPING PRIOR TO INSTALLING MASONRY WHERE NEEDED.
4. REMOVE STAINLESS STEEL HANDRAIL AND REINSTALL IN KIND, AFTER INSTALLING THE BRICK MASONRY.
5. REMOVE, STORE AND REINSTALL EXIST. SIGNAGE FOLLOWING THE INSTALLATION OF NEW FACE BRICK MASONRY

SU-082324

No.	Date	Revision
1	07/02/2025	REVISED AS NOTED, ADDENDUM-1

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Designer:	AKBER AFRIDI, P.E.
Drawn by:	AZHER MALIK
Checked by:	AKBER AFRIDI, P.E.

Project:
MASONRY REPAIRS OF CAMPUS UNDERPASS (LINCOLN AVE.)

Address:
735 Anderson Hill Road
Purchase NY 10577

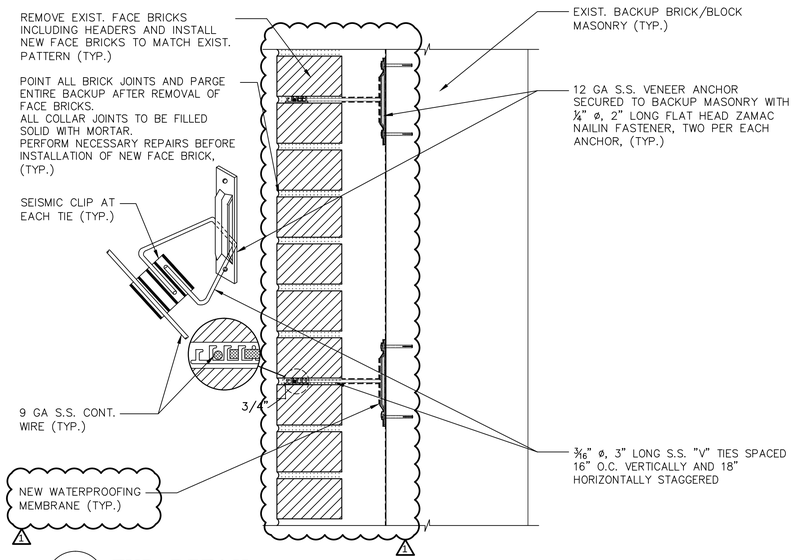
Drawing Title:
SITE PLAN

Drawing No.: A201.01

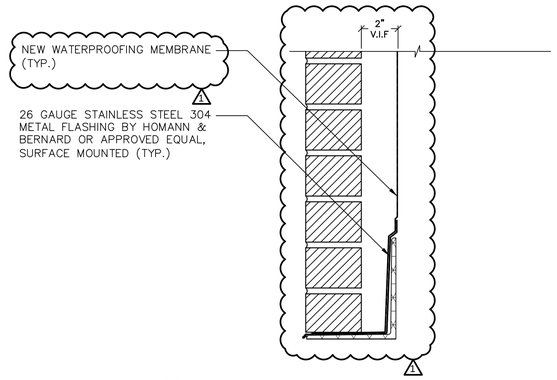
Scale: AS NOTED

Date: 05/12/2025

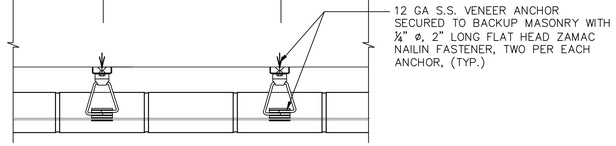
AFRIDI# 2205



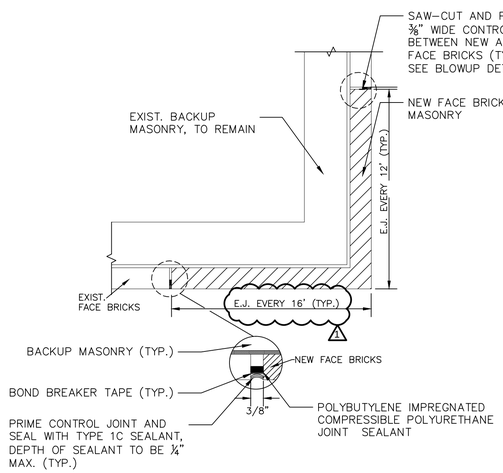
1 / A301 TYP. DETAIL
FACE BRICK SEISMIC TIES
SCALE: N.T.S.



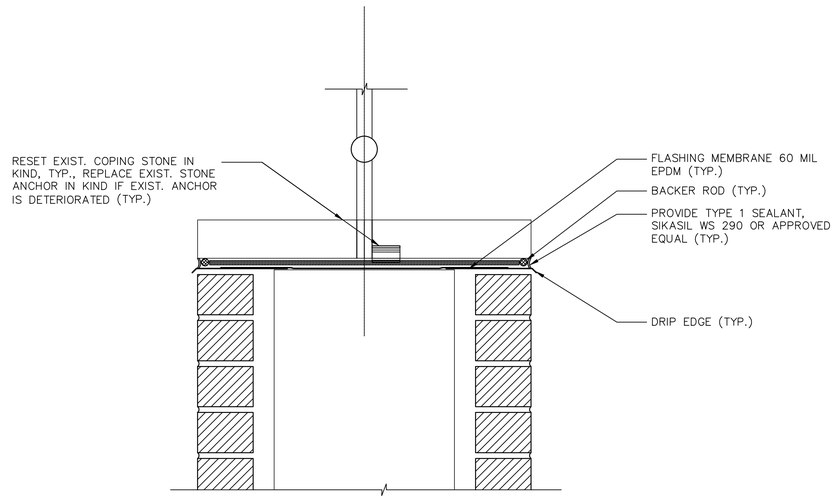
4 / A301 TYP. DETAIL - METAL FLASHING
SCALE: N.T.S.



2 / A301 TYP. DETAIL - SEISMIC TIES
SCALE: N.T.S.



3 / A301 TYP. DETAIL
FACE BRICK CONTROL JOINT
SCALE: N.T.S.



5 / A301 TYP. DETAIL
REINSTALLATION OF EXIST. COPING STONE
SCALE: N.T.S.

CONCRETE REPAIR NOTES:

1. WHERE DETERIORATED OR LOOSE, REINFORCEMENT BARS ARE EXPOSED THEY MUST BE CUT AND REMOVED SAFELY.
2. CONTRACTOR TO CHIP AWAY ANY LOOSE CONCRETE, WIRE BRUSH CLEAN THE REMAINING REINFORCEMENT.
3. PATCH AND REPAIR EXIST. CONC. BY EPOXY INJECTION AS SHOWN ON DWGS.

LEGEND:

- REPLACE EXISTING BRICK W/ NEW TO MATCH
- EXISTING BRICK TO REMAIN
- EXISTING BRICK TO REMOVE
- MACHINE TOOL CLEAN TO SPC-SP3 SURFACE PREP. PRIME AND PAINT EXISTING STEEL MEMBER

NOTES:

1. NOTIFY E.O.R. FOR ANY DISCREPANCY FOUND BETWEEN DRAWINGS AND FIELD CONDITIONS.
2. GROUT SHALL BE SIKA GROUT 212 CEMENTATIOUS HIGH PERFORMANCE OR APPROVED EQUAL.
3. CONTRACTOR TO FIELD VERIFY THE LOCATION OF EXISTING STONE AND MASONRY ANCHORS USED FOR THE INSTALLATION OF BRICK MASONRY AND COPING STONE.
4. FOR EXPANSION JOINTS AND JOINTS BETWEEN DIFFERENT MATERIALS FOLLOW "JOINT SEALERS SPECS.
5. CONTRACTOR TO PROVIDE A COMPLETE PHOTOGAPHIC DOCUMENTATION OF EXIST. FIELD CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
6. G.C. TO FOLLOW MANUFACTURER'S INSTRUCTIONS FOR SURFACE PREPARATION AND GROUT APPLICATION.
7. BOND PATTERN SHOWN IN DETAIL IS FOR ILLUSTRATION PURPOSES ONLY. ACTUAL BOND PATTERN SHALL BE MATCHING TO EXIST.
8. EXIST. ROOFING TO BE PROTECTED DURING REPLACEMENT OF PARAPETS WATERPROOFING AND FACE BRICK. DO NOT REMOVE BRICK BELOW PLAZA LEVEL (TYP.).

No.	Date	Revision
1	07/02/2025	REVISED AS NOTED, ADDENDUM-1

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Checked by:	AKBER AFRIDI, P.E.

Project:
MASONRY REPAIRS OF CAMPUS UNDERPASS (LINCOLN AVE.)

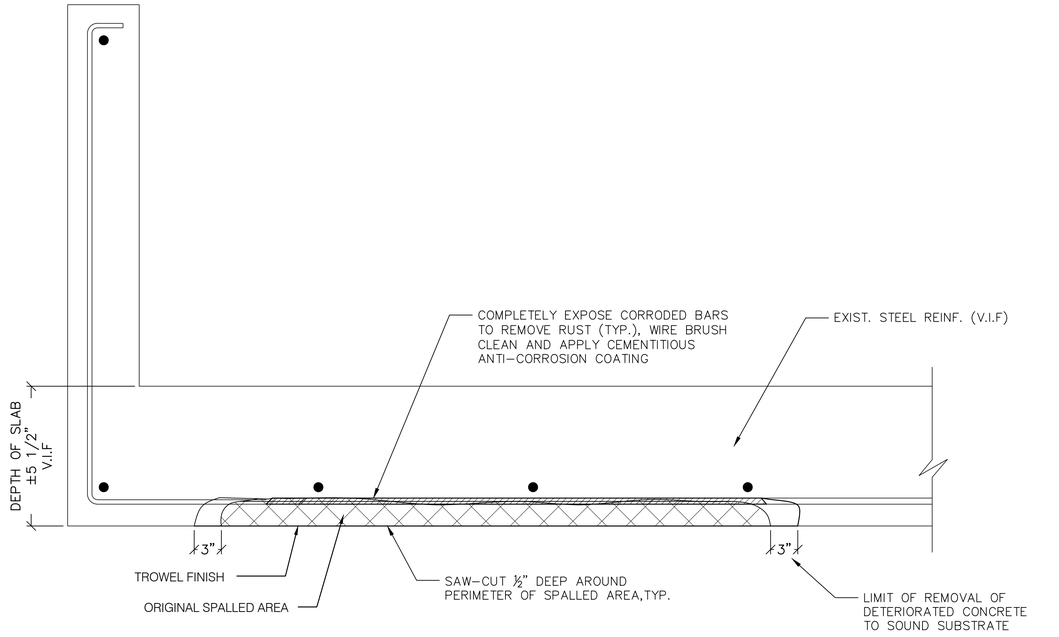
Address:
735 Anderson Hill Road
Purchase NY 10577

Drawing Title:
TYPICAL DETAILS
INSTALLATION OF FACE BRICK MASONRY

Drawing No.: A301.01
Scale: AS NOTED
Date: 05/12/2025

SU-082324

AFRIDI# 2205



1 / A302 EXIST. CONC. SLAB / PARAPET WALL SECTION

SCALE: 1 1/2" = 1'-0"

G.C. TO PROVIDE PHOTOGRAPHIC RECORD OF ALL DETERIORATED CONCRETE PATCHES PRIOR TO COMMENCEMENT OF WORK. ⚠1

EXIST. CONCRETE SLAB REPAIR

1. SOUND CONCRETE AREA WITH 3 LBS. SOUNDING HAMMER. REMOVE ALL LOOSE AND DETERIORATED CONCRETE BY HAMMER AND HAND-HELD POINTED TOOLS UNTIL SOUND CONCRETE SURFACE IS EXPOSED.
2. CLEAN ALL AREAS TO BE PATCHED INCLUDING REINFORCEMENT BARS USING WIRE BRUSH.
3. VACUUM CLEAN AND PREPARE THE CAVITY AS PER PATCHING COMPOUND MANUFACTURER'S INSTRUCTIONS.
4. PAINT ALL CLEANED STEEL REINFORCEMENT BARS WITH CEMENTITIOUS ANTI-CORROSION COATING IMMEDIATELY AFTER CLEANING.
5. APPLY BONDING AGENT TO THE AREAS TO BE PATCHED AS PER MANUFACTURER'S INSTRUCTIONS.
6. TROWEL THE PATCHING COMPOUND ONTO THE CONCRETE AREA TO BE RECONSTRUCTED IN LAYERS AS PER MANUFACTURER'S RECOMMENDATIONS. THE NUMBER OF LAYERS AND THICKNESS SHALL VARY ACCORDING TO THE DEPTH AND EXTENT OF THE CAVITY TO BE RECONSTRUCTED. THE FINAL LAYER SHALL BE CAREFULLY TOOLED FLUSH AND SMOOTH WITH THE ADJACENT EXISTING SURFACES.
7. CURE REPAIRED SURFACES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
8. APPLY TWO COATS OF ACRYLIC MODIFIED CEMENTITIOUS COATING OVER THE CONCRETE SURFACES AS PER MANUFACTURER'S RECOMMENDATIONS.

No.	Date	Revision
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Address:
735 Anderson Hill Road
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Drawing Title:
CONCRETE REPAIR DETAILS

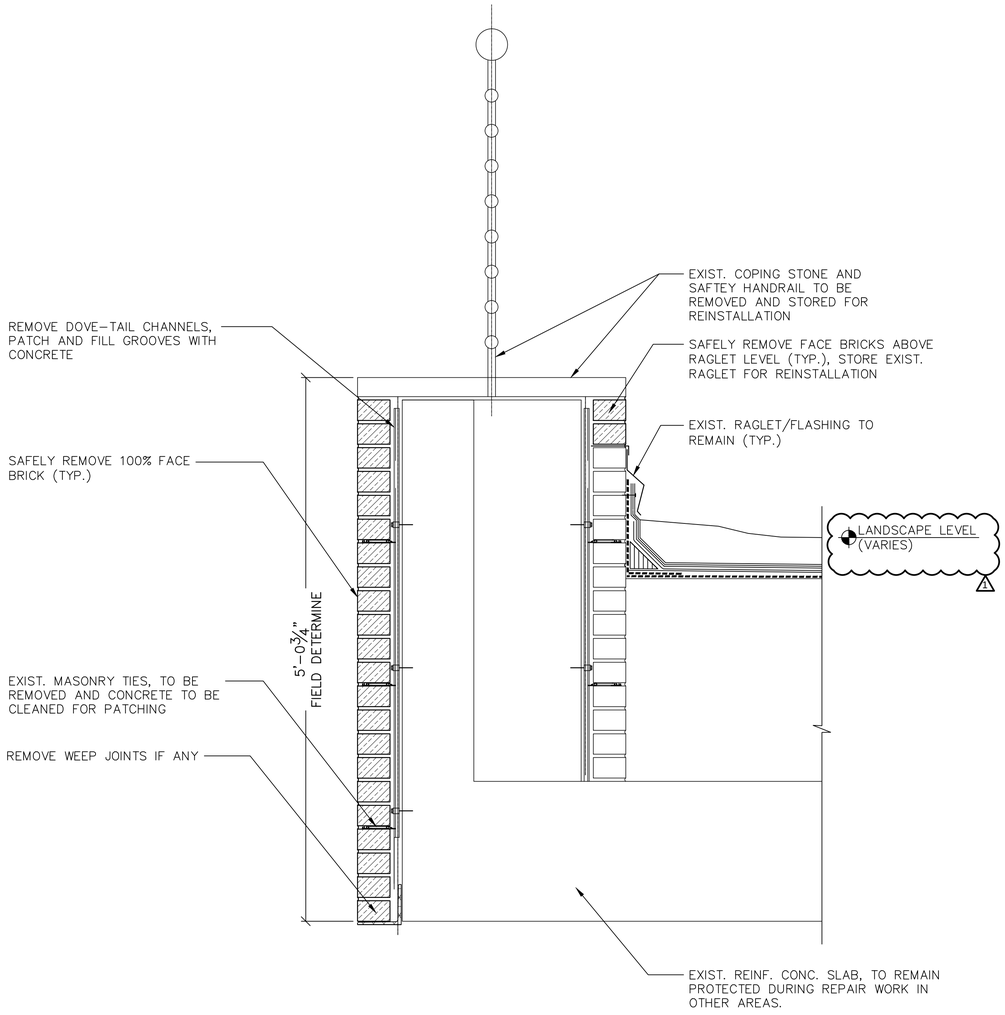
Drawing No.: A302.01

Scale: AS NOTED

Date: 05/12/2025

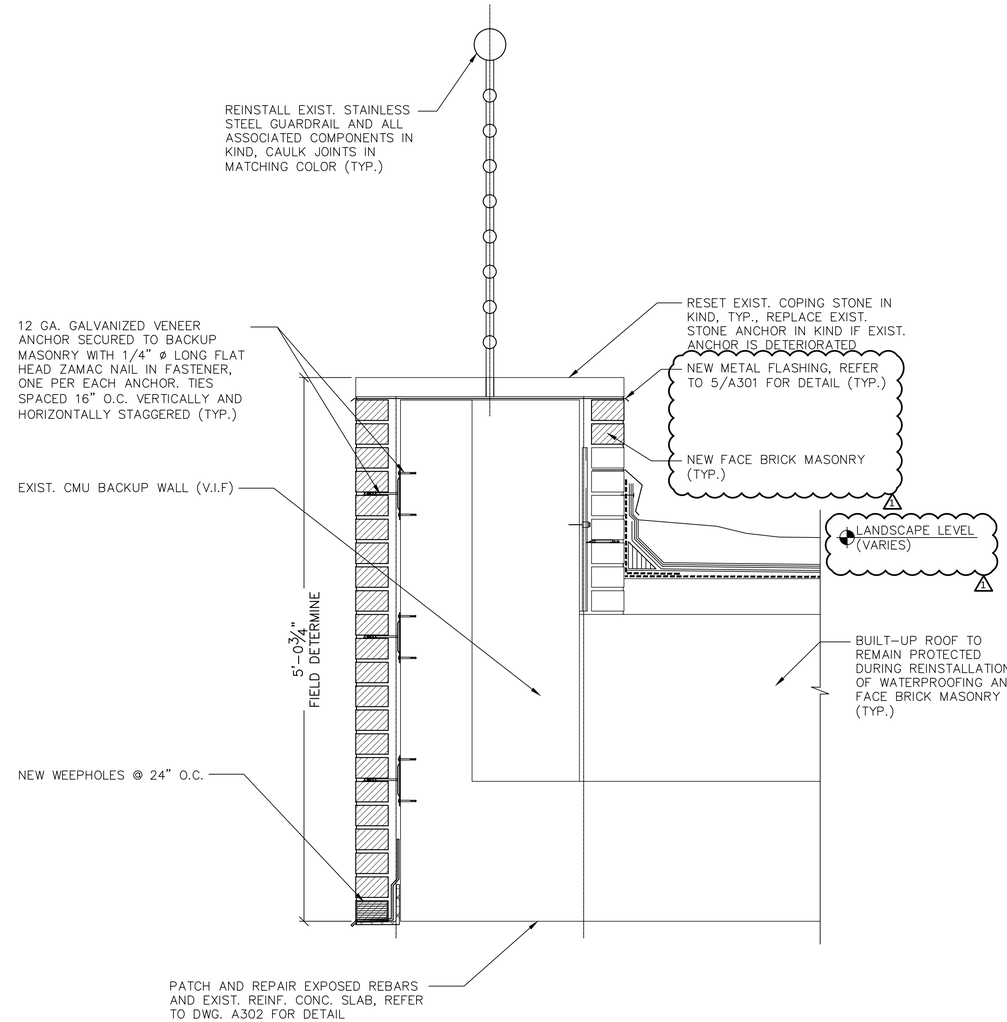
SU-082324

AFRIDI# 2205



1 A303 EXIST. PARAPET WALL SECTION

SCALE: 1 1/2" = 1'-0"



2 A303 PROP. PARAPET WALL SECTION

SCALE: 1 1/2" = 1'-0"

NOTES:

1. EXIST. ELECTRICAL OUTLETS TO BE SAFELY REMOVED AND REINSTALLED AFTER INSTALLING NEW FACE BRICK MASONRY.
2. DO NOT REMOVE BRICK BELOW PLAZA LEVEL (TYP.).
3. DO NOT REMOVE EXIST. WATERPROOFING OF ROOF THAT CONTINUES ON EXIST. FACE BRICK MASONRY.
4. WHERE NECESSARY, OVERLAP EXIST. WATERPROOFING WITH WATERPROOFING INSTALLED BEHIND NEW FACE BRICK MASONRY.
5. FOR WATERPROOFING FOLLOW DETAIL PROVIDED IN SECTION DETAIL 1/S308.
6. FOR ADDITIONAL WATERPROOFING DETAILS REFER TO DETAIL 1/A301 AND 4/A301.

No.	Date	Revision
1	07/02/2025	REVISED AS NOTED, ADDENDUM-1

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Address:
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Drawing Title:
PARAPET WALL SECTION
DETAIL - 1

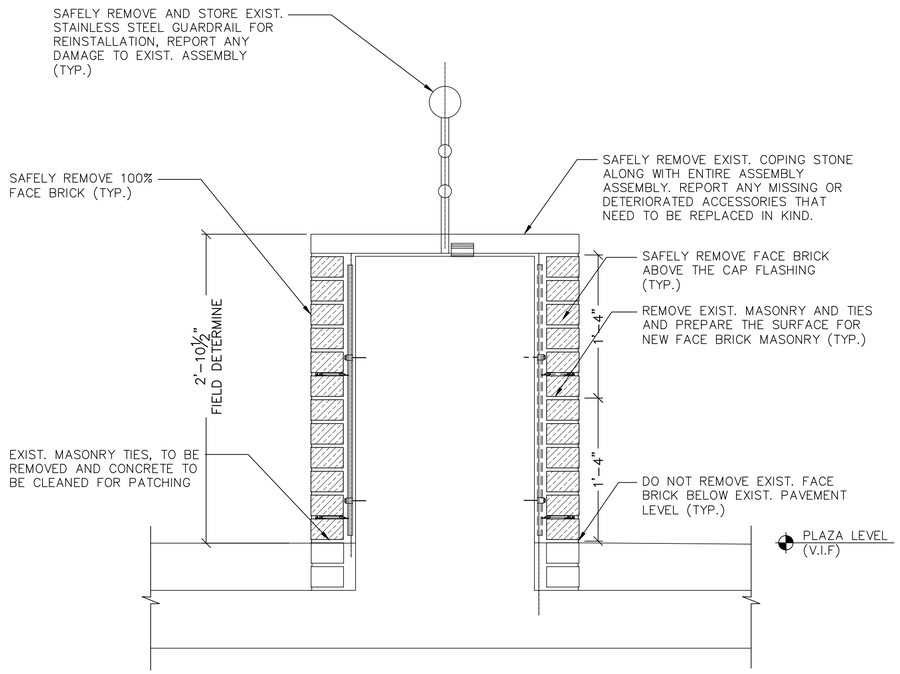
Drawing No.: A303.01

Scale: AS NOTED

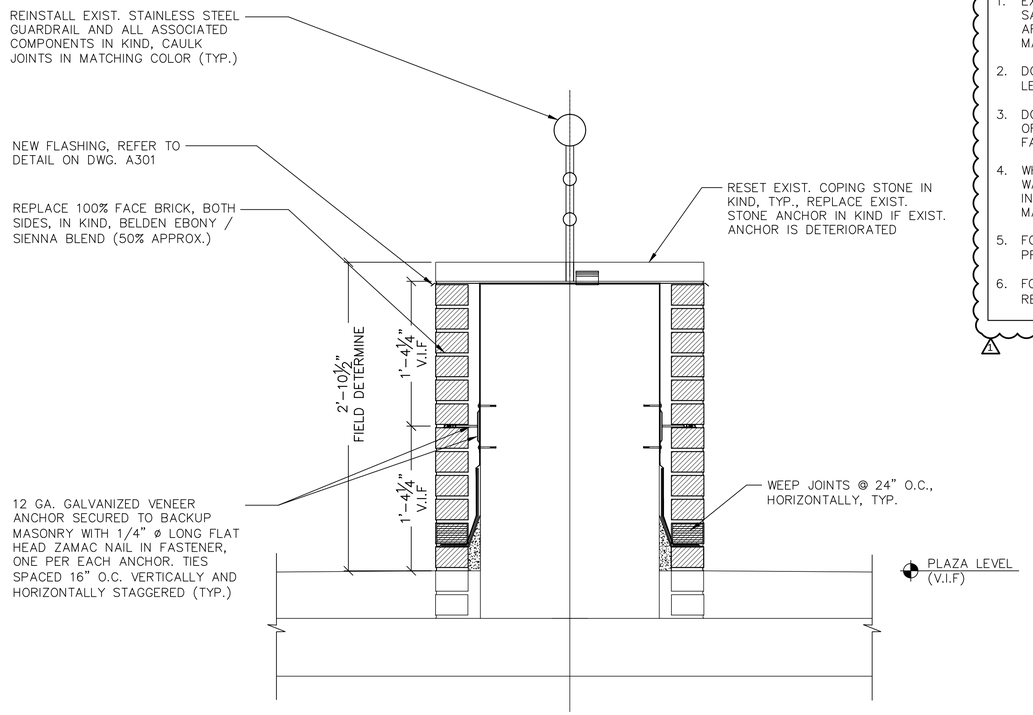
Date: 05/12/2025

SU-082324

AFRIDI# 2205



1 EXIST. PARAPET WALL SECTION (EXIST.)
A304
SCALE: 1 1/2" = 1'-0"



2 TYP. PARAPET WALL SECTION (PROP.)
A304
SCALE: 1 1/2" = 1'-0"

NOTES:

1. EXIST. ELECTRICAL OUTLETS TO BE SAFELY REMOVED AND REINSTALLED AFTER INSTALLING NEW FACE BRICK MASONRY.
2. DO NOT REMOVE BRICK BELOW PLAZA LEVEL (TYP.).
3. DO NOT REMOVE EXIST. WATERPROOFING OF ROOF THAT CONTINUES ON EXIST. FACE BRICK MASONRY.
4. WHERE NECESSARY, OVERLAP EXIST. WATERPROOFING WITH WATERPROOFING INSTALLED BEHIND NEW FACE BRICK MASONRY.
5. FOR WATERPROOFING FOLLOW DETAIL PROVIDED IN SECTION DETAIL 1/S308.
6. FOR ADDITIONAL WATERPROOFING DETAILS REFER TO DETAIL 1/A301 AND 4/A301.

No.	Date	Revision
1	07/02/2025	REVISED AS NOTED, ADDENDUM-1

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Project:
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Address:
735 Anderson Hill Road
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Drawing Title:
PARAPET WALL SECTION DETAIL - 2

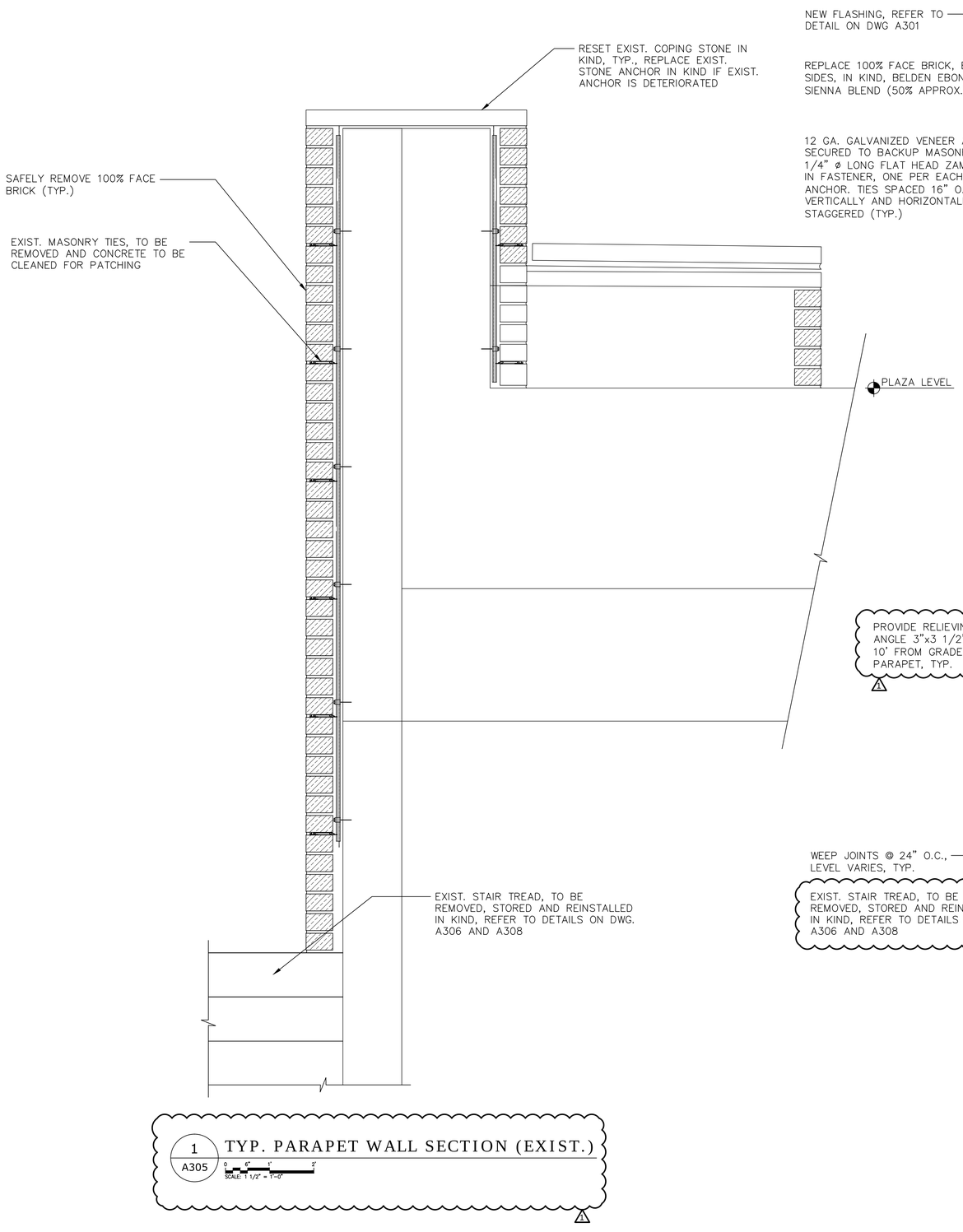
Drawing No.: A304.01

Scale: AS NOTED

Date: 05/12/2025

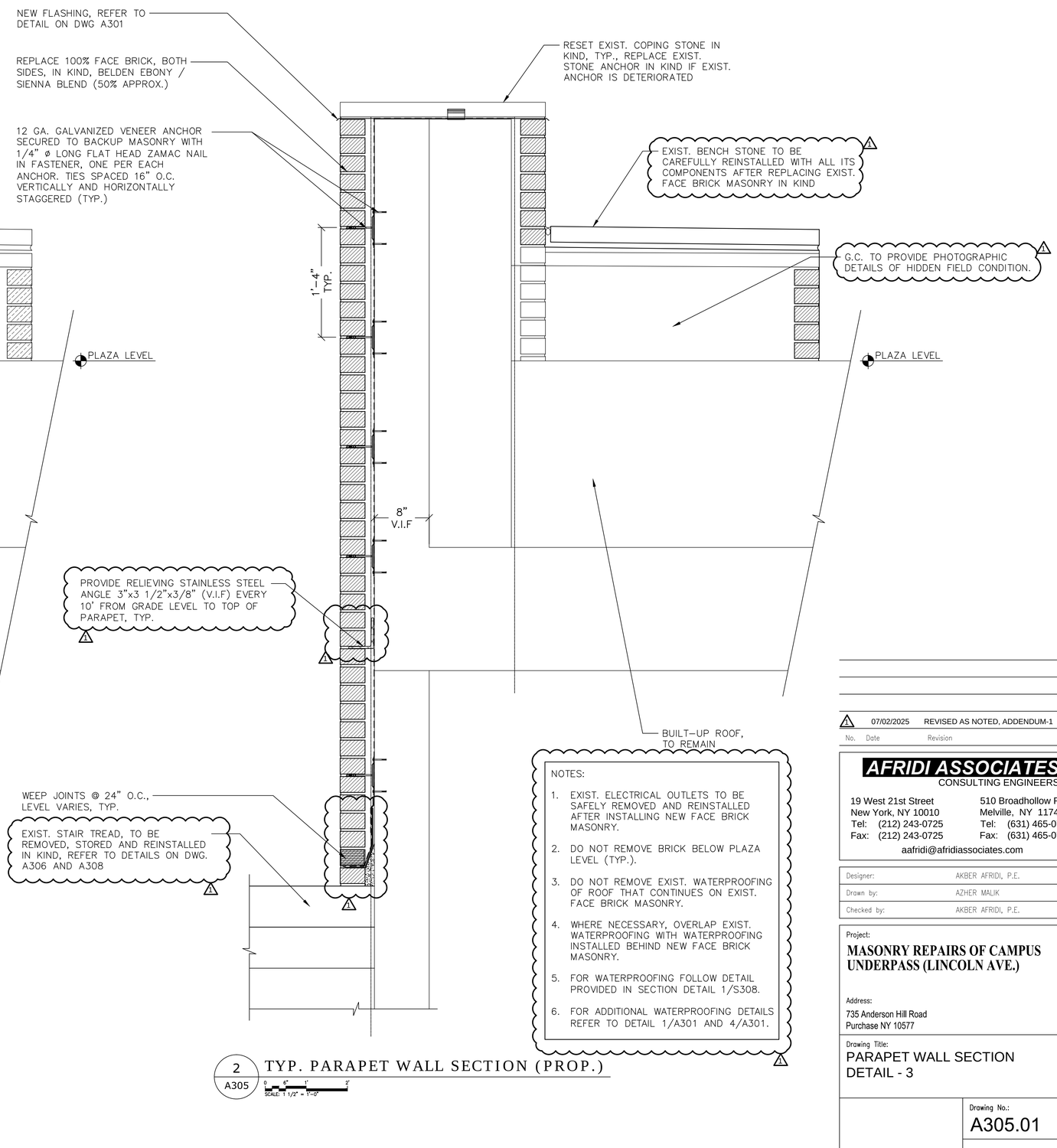
SU-082324

AFRIDI# 2205



1 / A305 TYP. PARAPET WALL SECTION (EXIST.)

SCALE: 1 1/2" = 1'-0"



NOTES:

1. EXIST. ELECTRICAL OUTLETS TO BE SAFELY REMOVED AND REINSTALLED AFTER INSTALLING NEW FACE BRICK MASONRY.
2. DO NOT REMOVE BRICK BELOW PLAZA LEVEL (TYP.).
3. DO NOT REMOVE EXIST. WATERPROOFING OF ROOF THAT CONTINUES ON EXIST. FACE BRICK MASONRY.
4. WHERE NECESSARY, OVERLAP EXIST. WATERPROOFING WITH WATERPROOFING INSTALLED BEHIND NEW FACE BRICK MASONRY.
5. FOR WATERPROOFING FOLLOW DETAIL PROVIDED IN SECTION DETAIL 1/S308.
6. FOR ADDITIONAL WATERPROOFING DETAILS REFER TO DETAIL 1/A301 AND 4/A301.

2 / A305 TYP. PARAPET WALL SECTION (PROP.)

SCALE: 1 1/2" = 1'-0"

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No.	Date	Revision
1	07/02/2025	REVISED AS NOTED, ADDENDUM-1

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Address:
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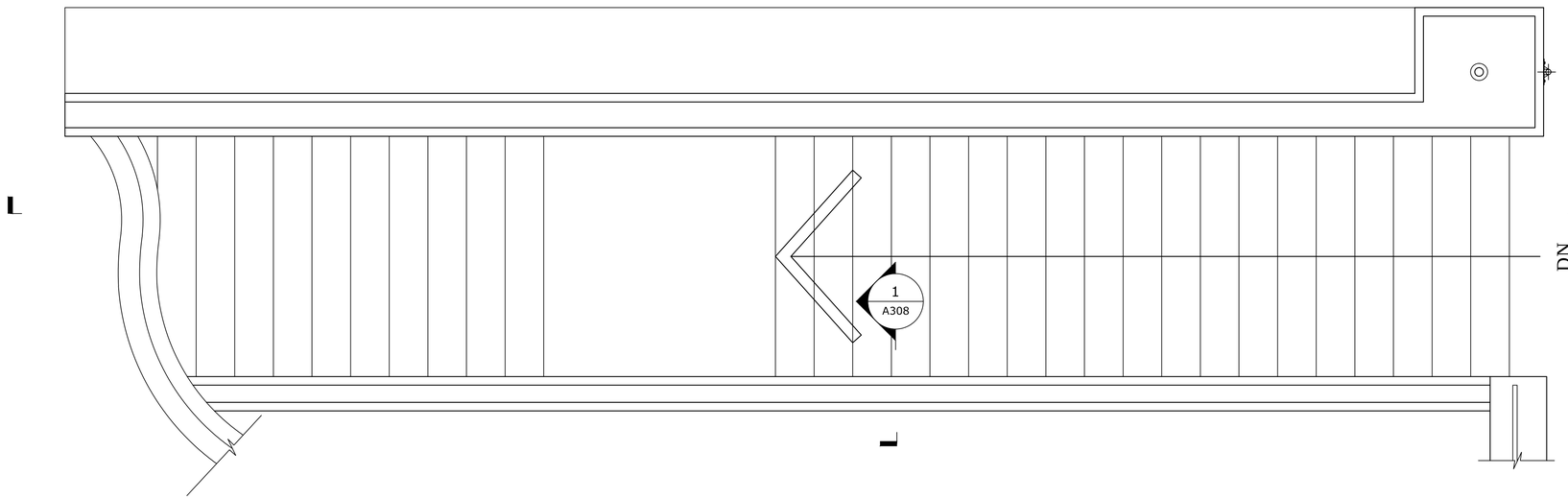
Drawing Title:
PARAPET WALL SECTION DETAIL - 3

Drawing No.: A305.01

Scale: AS NOTED

Date: 05/12/2025

AFRIDI# 2205



1 A306 **PARTIAL PLAN - STAIRCASE**

SCALE: 3/8" = 1'-0"

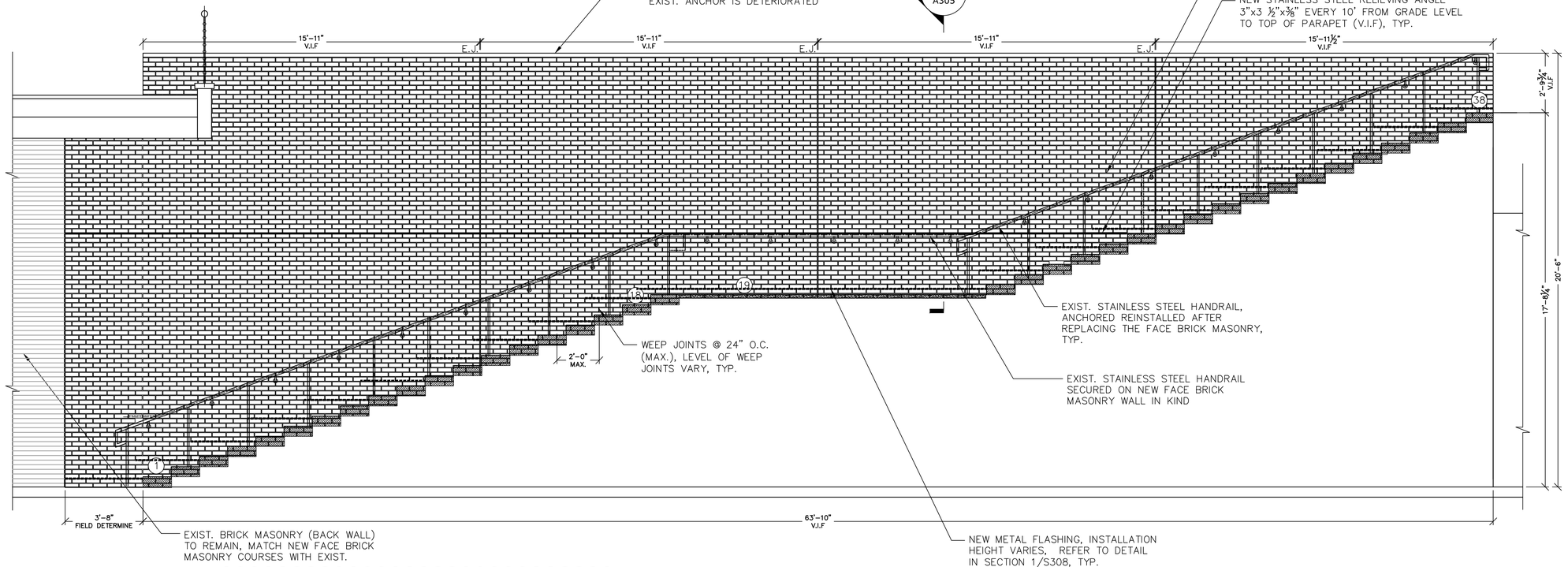
NOTES:

1. NEW BRICK MASONRY TO MATCH EXIST.
2. EXIST. ELECTRICAL OUTLETS TO BE SAFELY REMOVED AND REINSTALLED AFTER INSTALLING NEW FACE BRICK MASONRY.
3. DO NOT REMOVE BRICK BELOW PLAZA LEVEL (TYP.).
4. DO NOT REMOVE EXIST. WATERPROOFING OF ROOF THAT CONTINUES ON EXIST. FACE BRICK MASONRY.
5. WHERE NECESSARY, OVERLAP EXIST. WATERPROOFING WITH WATERPROOFING INSTALLED BEHIND NEW FACE BRICK MASONRY.
6. DOUBLE WRAP ALL PENETRATIONS (TYP.). NEW RESIN-BASED TARGET FLASHING AT ALL FLASHING PENETRATIONS. MINIMUM DISTRIBUTION TO BE 2 SF OF FACE BRICK, TYP.
7. FOR WATERPROOFING FOLLOW DETAIL PROVIDED IN SECTION DETAIL 1/S308.
8. FOR ADDITIONAL WATERPROOFING DETAILS REFER TO DETAIL 1/A301 AND 4/A301.

NOTE:

EXIT. GRANITE TREAD

EXIT. PAVING TILE, TO BE REPLACED IN KIND



2 A306 **PARTIAL ELEVATION - STAIRCASE**

SCALE: 3/8" = 1'-0"

SU-082324

No.	Date	Revision
1	07/02/2025	REVISED AS NOTED, ADDENDUM-1

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Project:
MASONRY REPAIRS OF CAMPUS UNDERPASS (LINCOLN AVE.)

Address:
735 Anderson Hill Road
Purchase NY 10577

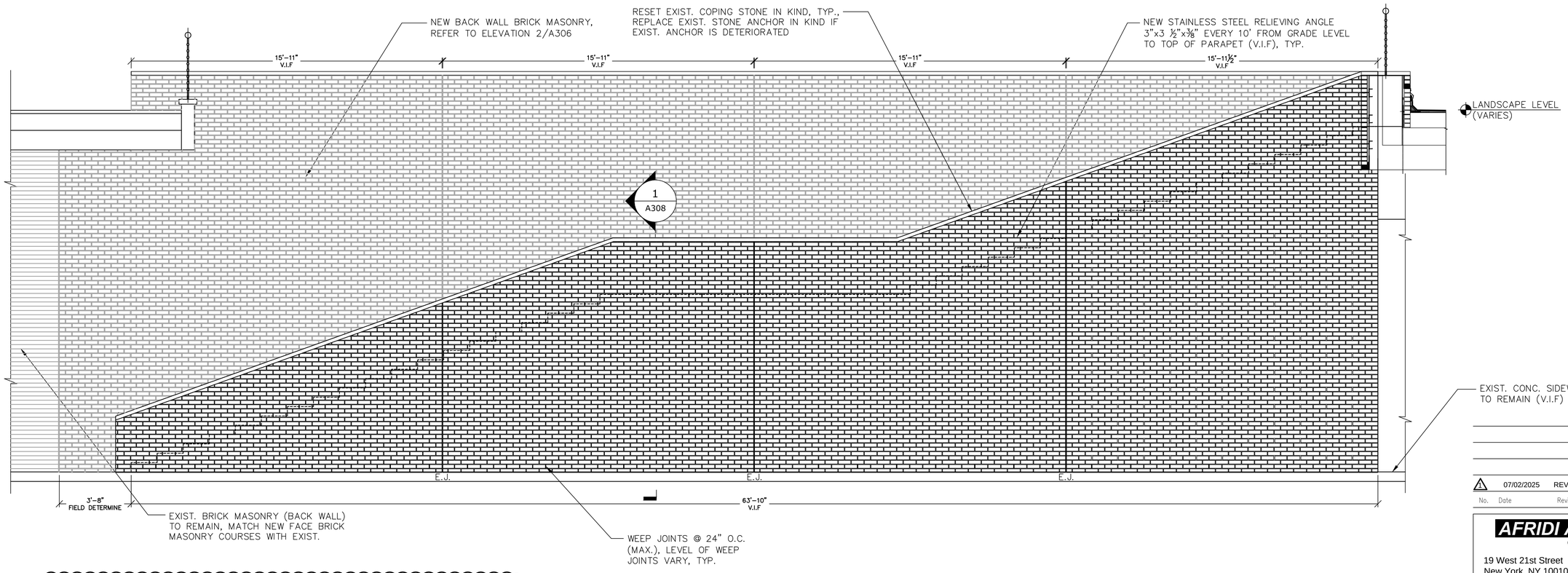
Drawing Title:
STAIRS WALL - PLAN AND ELEVATION

Drawing No.: A306.01

Scale: AS NOTED

Date: 05/12/2025

AFRIDI# 2205



1 A307 PARTIAL ELEVATION - STAIRCASE CHEEK WALL

0 2' 4' 8'

SCALE: 3/8" = 1'-0"

SU-082324

No.	Date	Revision
1	07/02/2025	REVISED AS NOTED, ADDENDUM-1

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Project:
MASONRY REPAIRS OF CAMPUS UNDERPASS (LINCOLN AVE.)

Address:
735 Anderson Hill Road
Purchase NY 10577

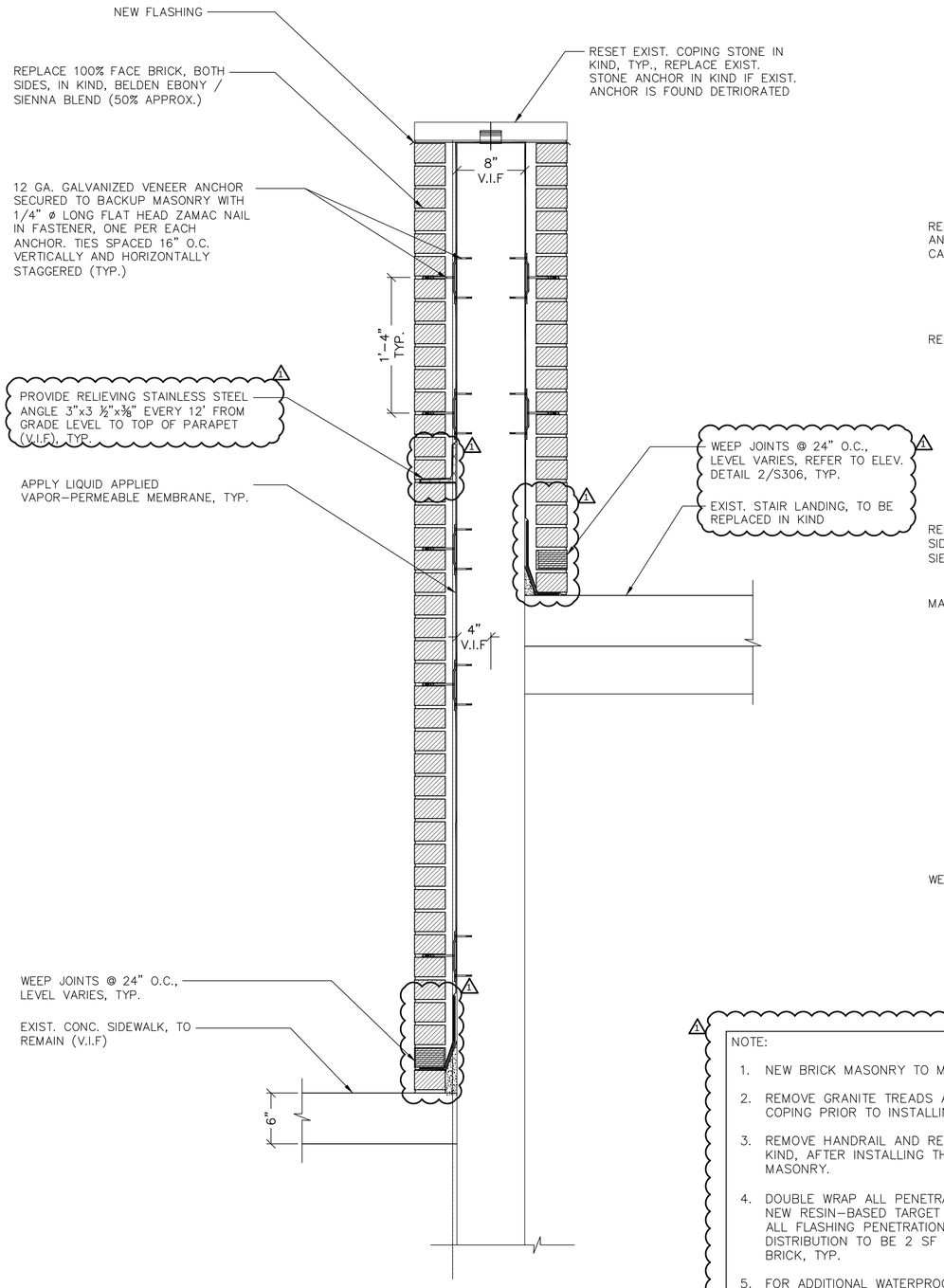
Drawing Title:
STAIRS WALL - ELEVATION

Drawing No.: A307.01

Scale: AS NOTED

Date: 05/12/2025

AFRIDI# 2305

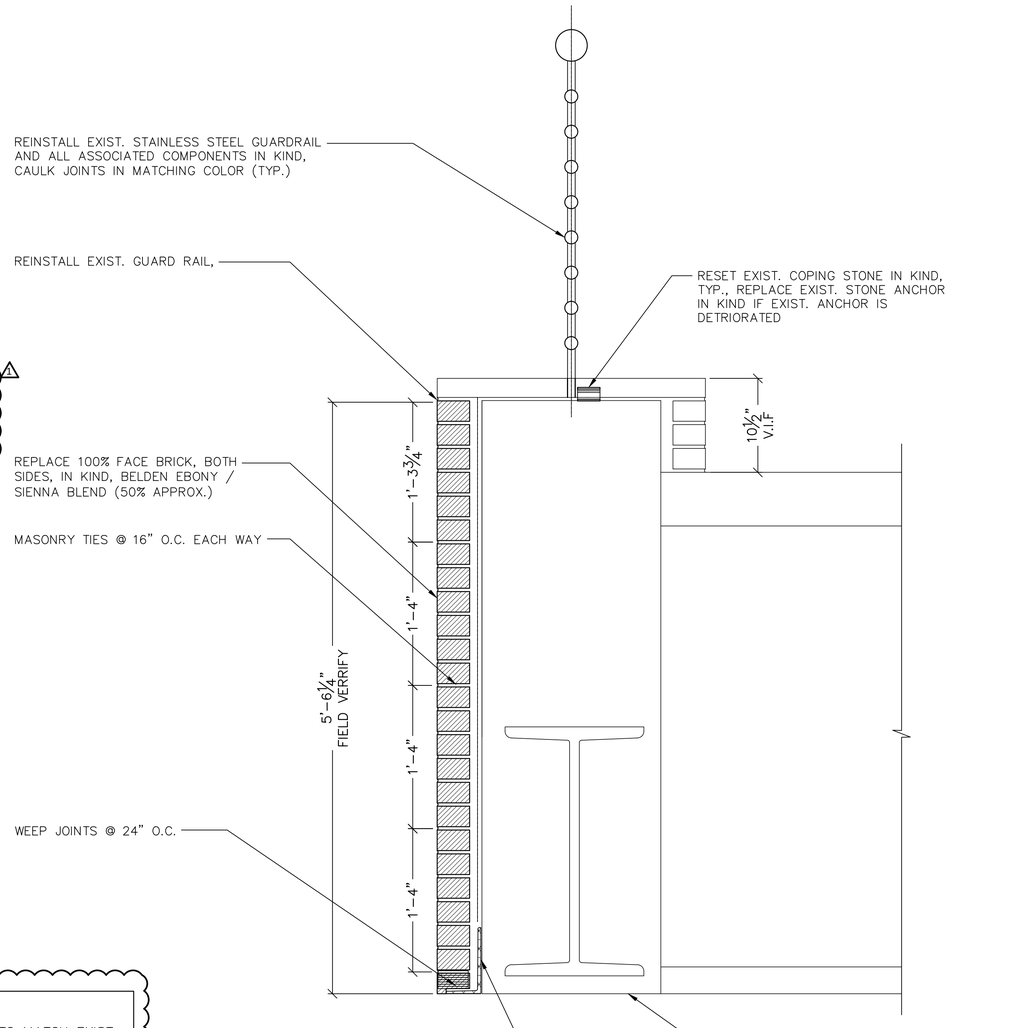


1 A308 TYP. PARAPET WALL SECTION (PROP.)

SCALE: 1 1/2" = 1'-0"

NOTE:

1. NEW BRICK MASONRY TO MATCH EXIST.
2. REMOVE GRANITE TREADS AND GRANITE COPING PRIOR TO INSTALLING MASONRY.
3. REMOVE HANDRAIL AND REINSTALL IN KIND, AFTER INSTALLING THE BRICK MASONRY.
4. DOUBLE WRAP ALL PENETRATIONS (TYP.). NEW RESIN-BASED TARGET FLASHING AT ALL FLASHING PENETRATIONS. MINIMUM DISTRIBUTION TO BE 2 SF OF FACE BRICK, TYP.
5. FOR ADDITIONAL WATERPROOFING DETAILS REFER TO DETAIL 1/A301 AND 3/A401.



2 A308 PROP. PARAPET SECTION AT NORTH ARCADE

SCALE: 1 1/2" = 1'-0"

SU-082324

No.	Date	Revision
1	07/02/2025	REVISED AS NOTED, ADDENDUM-1

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Project:
MASONRY REPAIRS OF CAMPUS UNDERPASS (LINCOLN AVE.)

Address:
735 Anderson Hill Road
Purchase NY 10577

Drawing Title:
STAIRS WALL - SECTION DETAIL

Drawing No.: A308.01

Scale: AS NOTED

Date: 05/12/2025

AFRIDI# 2205

SECTION 07272
FLUID-APPLIED MEMBRANE AIR BARRIER, VAPOR RETARDING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. This Section includes but is not limited to the following:

1. Provide a vapor-retarding fluid-applied membrane air barrier system at all exterior masonry cavity walls.

2. Provide all accessory components required for a complete installation, including transitions to maintain continuity of the air barrier to adjacent construction.

3. Engage a testing agency to perform specified field testing and inspections.

B. Related Sections include but are not limited to the following:

1. Division 4 Section “Unit Masonry” for unit masonry and cavity insulation.

2. Division 7 Section “Flashing and Sheet Metal” for through-wall flashings. Through wall flashings shall be metal.

1.02 REFERENCES

References and industry standards listed in this Section are applicable to the Work. Unless more restrictive criteria or differing requirements are explicitly stated in the Specifications, or mandated by governing codes or regulations, the recommendations, suggestions, and requirements described in the referenced standards shall be deemed mandatory and applicable to the Work.

A. ASTM International (ASTM)

B. National Institute of Standards and Technology (NIST)

C. Code of Federal Regulations (CFR)

1.03 DEFINITIONS

A. Air Barrier: The collection of vapor retarding air barrier materials and auxiliary materials applied to an opaque wall, including joints and junctions to abutting construction, to control movement of air and water vapor through the wall.

1.04 SUBMITTALS

A. Product Data

Include manufacturer's written instructions for evaluating, preparing, and treating substrate; technical data; and tested physical and performance properties of air barrier. Include curing requirements for all substrates and membrane materials. Include installation instructions for all materials. Installation instructions shall take into account the sequence of installation of adjacent construction materials.

B. Shop Drawings

1. Show locations and extent of air barrier. Include details for substrate joints and cracks, counterflashing strip, penetrations, inside and outside corners, terminations, and tie-ins with adjoining construction. Details shall include all conditions and auxiliary materials required for the provision of an air barrier continuous with other elements of the building envelope, whether or not these are indicated explicitly on the contract Drawings.

3. Details shall indicate conditions specific to the Project. Manufacturer’s typical details that do not reflect the actual Project conditions are insufficient. Details shall allow for proper sequence of installation of all components of the building envelope.

4. Include details of mockups.

C. Product Certificates

For air barriers, certify compatibility of air barrier and accessory materials with Project materials that connect to or that come in contact with the barrier.

Contacted materials shall include, but not be limited to, masonry, masonry reinforcement, concrete, steel members, insulation, copper/fabric flashing, stainless steel flashing, flashing termination bar, termination bar sealant, door and window frames.

D. Guarantee and Warranty

Submit Contractor's Guarantee and manufacturer's Warranty.

E. Mock-up

Provide mock-up as indicated under Quality Assurance.

F. Qualification Data

1. For applicator/installer.

2. For membrane manufacturer.

1.05 QUALITY ASSURANCE

A. Qualifications

1. Applicator Qualifications: A firm experienced in applying air barrier materials similar in material, design, and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance.

2. Membrane Manufacturer Qualifications: A company manufacturing air barrier materials of types indicated for this Project, that have resulted in applications with a record of successful in-service performance for a period of at least five years.

B. Comply with applicable regulations regarding use and application of products that contain volatile organic compounds (VOC).

C. Mockups

Before beginning installation of air barrier, build mockups of exterior wall assembly, at least 150 sq. ft. of each assembly type, incorporating backup wall construction, relieving angle, window or window receptor, door frame and sill, brick ties, insulation, and flashing to demonstrate surface preparation, sequence of installation, crack and joint treatment, and sealing of gaps, terminations, transitions, and penetrations of air barrier membrane.

1. Coordinate construction of mockup to permit access for inspection by testing agency of air barrier before masonry veneer is installed.

2. Include parapet condition, building corner condition, and foundation wall intersection.

3. If the Authority's representative determines that mockups do not comply with requirements, reconstruct mockups and apply air barrier until mockups are approved.

4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.06 PERFORMANCE REQUIREMENTS

A. General: Air barrier shall perform as a continuous vapor-retarding air barrier and as a liquid-water drainage plane flashed to discharge to the exterior incidental condensation or water penetration. Air barrier assemblies shall accommodate substrate movement and seal substrate expansion and control joints, construction material changes, and transitions at perimeter conditions without deterioration and air leakage exceeding specified limits. Air barrier shall withstand positive and negative air pressure without damage or displacement. Air barrier shall pass preconstruction testing and field quality control testing and inspection as specified.

B. All air barrier work shall be of material by a single manufacturer.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Store liquid materials in their original undamaged packages in a clean, dry, protected location and within temperature range required by air barrier manufacturer.

B. Remove and replace liquid materials that cannot be applied within their stated shelf life.

C. Store rolls according to manufacturer's written instructions.

D. Protect stored materials from direct sunlight.

1.08 ENVIRONMENTAL REQUIREMENTS

A. Apply air barrier within the range of ambient and substrate temperatures recommended by air barrier manufacturer. Protect substrates from environmental conditions that affect performance of air barrier. Do not apply air barrier to a damp or wet substrate or during snow, rain, fog, or mist.

1.9 GUARANTEE AND WARRANTY

A. Contractor’s Guarantee

Submit two-year written guarantee covering defects in materials and workmanship, including primary air barrier and auxiliary materials which fail to achieve an airtight and watertight seal, exhibit loss of adhesion or cohesion, or do not cure properly. Time of guarantee shall commence with approval of the substantial completion payment for the Work, or the final payment for the work if no substantial completion payment is made. Should any defects develop during the period of guarantee, such defects shall at once be remedied without cost or expense to the Authority. Contractor shall be responsible for removal and replacement of Work of other Sections as required for access to the Work of this Section.

B. Manufacturer’s Warranty

In addition to the Contractor’s Guarantee submit manufacturer’s two-year Warranty that air barrier and accessories are free of defects and are manufactured to meet manufacturer’s published properties and the

requirements of this Specification. Manufacturer shall promptly replace defective materials without cost or expense to the Authority.

PART 2 - PRODUCTS

2.01 FLUID-APPLIED MEMBRANE AIR BARRIER, VAPOR RETARDING

A. Fluid-Applied, Vapor-Retarding Membrane Air Barrier, synthetic polymer membrane. The manufacturers and systems listed below are acceptable subject to compliance with specified requirements.

1. Henry Company; "Air-Bloc 16MR".

2. W. R. Grace & Co.; "Perm-A-Barrier NPL 10"; for application above 40°F.

3. Carlisle Coatings & Waterproofing, Inc.; "Fire Resist Barritech NP"; for application above 40°F. "Fire Resist Barritech LT"; for application above 20°F.

4. Hohmann & Barnard, Inc.; Enviro-Barrier 60, for application above 40°F.

5. WR Meadows; Air-Shield LSR, for application above 20°F.

6. Tremco; Exoair 130, for application above 40°F.

B. Physical and Performance Properties

1. Membrane Air Permeance: Not to exceed 0.004 cfm x sq. ft. of surface area at 1.57-lbf/sq. ft. pressure difference; ASTM E2178.

2. Membrane Vapor Permeance: Not to exceed 1 perm; ASTM E96 Method B.

3. Aging - Long Term Flexibility: No fracturing; CGSB 71-GP-24M, or

   Extensibility over 1/4" crack with heat aging: Pass; ASTM C836 or C1522.

4. Low temperature flexibility and crack bridging: Pass testing under CGSB 37-GP-56M test procedures, at 23˚F, or

   Low temperature flexibility and crack bridging: Pass testing with no cracking under ASTM C1305 test procedures. 1/8" crack cycling, minimum 10 cycles at minus 15˚F.

5. Pull adhesion to concrete block: 35 psi minimum; ASTM D4541.

6. Thickness: Not less than 50-mil (1.25-mm) dry film thickness. Thickness shall be greater as required by membrane manufacturer if necessary to meet performance requirements. The material shall be of uniform composition throughout the full thickness.

2.02 AUXILIARY MATERIALS

A. General: Auxiliary materials recommended by air barrier manufacturer for intended use and compatible with air barrier membrane. Provide auxiliary materials required for the provision of an air barrier continuous with other elements of the building envelope, whether or not these materials are indicated explicitly in the Contract Documents.

B. Modified Bituminous Transition Strip: Vapor-retarding, 40-mil-thick, smooth-surfaced, self-adhering; consisting of 36 mils of rubberized asphalt laminated to a 4-mil-thick polyethylene film with release liner backing. Where appropriate, the manufacturer’s liquid-applied transition membrane may be used where coordinated with the manufacturer. Liquid membrane shall have elongation at least equal to membrane. To be applied at 40 mils thickness.

C. Counterflashing Strip: Modified bituminous, 40-mil-thick, self-adhering sheet consisting of 32 mils of rubberized asphalt laminated to an 8-mil-thick, crosslaminated polyethylene film with release liner backing.

D. Modified Bituminous Strip: Vapor-retarding, 40-mil-thick, smooth-surfaced, self-adhering; consisting of 36

mils of rubberized asphalt laminated to a 4-mil-thick polyethylene film with release liner backing.

E. Joint Reinforcing Strip: Air barrier manufacturer's glass-fiber-mesh tape.

F. Substrate Patching Membrane: Air barrier manufacturer's standard trowel-grade substrate filler.

G. Adhesive and Tape: Air barrier manufacturer's standard adhesive and pressure-sensitive adhesive tape.

H. Stainless-Steel Sheet: ASTM A240/A240M, Type 304, 0.0250-inch thick, and Series 300 stainless-steel fasteners.

I. Sprayed Polyurethane Foam Sealant: 1- or 2-component, foamed-in-place, polyurethane foam sealant, 1.5 to 2.0 lb/cu. ft. density; flame spread index of 25 or less according to ASTM E162; prepare substrate with non-corrosive materials as recommended by foam sealant manufacturer. Air barrier manufacturer shall confirm compatibility.

J. Transition membrane primer: Adhesive recommended for transition strip substrates by manufacturer of air barrier material.

K. Joint Sealant: ASTM C920, single-component, neutral-curing silicone; Class 100/50 (low-modulus) or Class 35 as recommended by manufacturer, Grade NS, Use NT related to exposure, and, as applicable to joint substrates indicated, Use O. Air barrier manufacturer shall confirm compatibility with this and all other joint sealants that contact air barrier system materials.

2.03 PRE-INSTALLATION CONFERENCE

A. Conduct a conference at the Project site prior to construction. Attendees are to include representatives of the Contractor, installer, Contractor’s testing firm, the Designer of Record, and the Authority’s Construction Inspection Division Inspector and Construction Manager.

1. Include installers of other construction connecting to air barrier, including but not limited to

waterproofing, masonry, sealants, flashing, windows, doorframes, and roofing as applicable.

2. Review air barrier requirements including surface preparation, substrate condition and pretreatment, minimum substrate curing period, forecasted weather conditions, special details and flashings, mockups, installation procedures, sequence of installation, testing and inspecting procedures, and protection and repairs.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with requirements and other conditions affecting performance.

1. Verify that substrates are sound and free of oil, grease, dirt, excess mortar, or other contaminants.

2. Verify that concrete has cured and aged for minimum time period recommended by air barrier manufacturer.

3. Verify that concrete is visibly dry and free of moisture. Test for capillary moisture by plastic sheet method according to ASTM D4263.

4. Verify that masonry joints are flush and completely filled with mortar.

5. Verify that sealants have cured for minimum time period recommended by sealant manufacturer.

6. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 SURFACE PREPARATION

A. Clean, prepare, treat, and seal substrate according to manufacturer's written instructions. Provide clean, dust-free, and dry substrate for air barrier application.

B. Mask off adjoining surfaces not covered by air barrier to prevent spillage and overspray affecting other construction.

C. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, and other penetrating contaminants, or film-forming coatings from concrete.

D. Remove fins, ridges, mortar, and other projections, and fill honeycomb, aggregate pockets, holes, and other voids in concrete with substrate patching material recommended by air barrier manufacturer.

E. Remove excess mortar from masonry ties, shelf angles, and other obstructions.

F. At changes in substrate plane, apply sealant or termination mastic beads at sharp corners and edges to form a smooth transition from one plane to another.

G. Cover gaps in substrate plane and form a smooth transition from one substrate plane to another with stainless-steel sheet mechanically fastened to structural framing to provide continuous support for air barrier.

3.03 JOINT TREATMENT

A. Concrete and Masonry: Prepare, treat, rout, and fill joints and cracks in substrate according to ASTM C1193 and air barrier manufacturer's written instructions. Remove dust and dirt from joints and cracks complying with ASTM D4258 before coating surfaces.

1. Prepare substrate and apply a single thickness of preparation coat strip extending a minimum of 3 inches along each side of joints and cracks. Apply a double thickness of air barrier membrane and embed a joint reinforcing strip in preparation coat.

3.04 INSTALLATION OF TRANSITION STRIPS AND OTHER AUXILIARY MATERIALS

A. Install strips, transition strips, and auxiliary materials according to air barrier manufacturer's written instructions to form a seal with adjacent construction

and maintain a continuous air barrier meeting all performance requirements.

1. Coordinate the installation of air barrier with installation of roofing membrane and parapet flashing to ensure continuity of air barrier.

2. Coordinate the installation of the air barrier to allow for proper sequence of installation of all components of the building envelope.

B. Apply adhesive primer to substrates at required rate. Cover with air barrier strips in accordance with manufacturer’s instructions.

C. Align and position transition membrane, remove protective film and press firmly into place. Ensure minimum 2-inch overlap at all end and side laps.

D. Connect and seal exterior wall air barrier membrane continuously to concrete below-grade structures, floor-to floor construction, parapet/roof construction, exterior glazing and window systems, exterior louvers, exterior door frames, other construction used in exterior wall openings, moving joints, and the interface of dissimilar materials, using strips and auxiliary materials. Provide a continuous air-tight covering over all surfaces, transitions and around penetrations. Allow for relative movement of different assemblies. Promptly roll all laps and membrane with a countertop roller to effect seal.

E. A continuous air barrier shall be installed, sealing all seams, joints, openings, and penetrations, maintaining the integrity of the air barrier. Sealing materials spanning joints between construction materials shall allow for expansion, contraction, and other movement of the materials. Provide sealed connections between all transitions in planes and changes in materials. Provide flexible seals where necessary to accommodate relative movement of adjacent components.

F. At the end of each working day, seal top edge of strips and transition strips to substrate with termination mastic.

G. Apply joint sealants forming part of air barrier assembly within manufacturer's recommended application temperature

ranges. Consult air barrier and sealant manufacturers for equivalent alternative when specified sealant cannot be applied within these temperature ranges.

H. Wall Openings and Envelope Corners: Apply adhesive primer to concealed perimeter frame surfaces of windows, doors, and curtain wall systems, masonry envelope corners. Apply modified bituminous transition strip so that a minimum of 3 inches of coverage is achieved over both substrates. Maintain 3 inches of full contact over firm bearing to perimeter frames. Roll transition strip firmly to enhance adhesion.

I. Fill gaps in perimeter frame surfaces of windows, doors, curtain wall systems, and miscellaneous penetrations of air barrier membrane with foam sealant. Ensure that foam sealant does not interfere with drainage or cause deflection of frames or other adverse affects.

J. Seal strips and transition strips around penetrations with termination mastic.

K. Seal top of through-wall flashings and termination bars to air barrier with an additional 6-inch-wide counterflashing strip, or with additional overlapping air barrier membrane material, as recommended by the membrane manufacturer. Use material compatible with copper/fabric flashing, termination bar, and sealant bead at top of termination bar.

L. Seal exposed edges of strips at seams, cuts, penetrations, and terminations not concealed by metal counterflashings or ending in reglets with termination mastic.

M. Repair punctures, voids, and deficient lapped seams in strips and transition strips. Slit and flatten fishmouths and blisters. Patch with transition strips extending 6 inches beyond repaired areas in strip direction.

3.05 AIR BARRIER MEMBRANE INSTALLATION

A. Apply air barrier membrane to the exterior side of concrete block back-up wall and other substrates, in conjunction with and sealed to strips and transition strips, to achieve a continuous, fully adhered air

barrier system meeting all performance requirements. Installation shall be in accordance with air barrier manufacturer's written instructions. Seal all leakage pathways.

B. Apply air barrier membrane within manufacturer's recommended application temperature ranges.

C. Apply a continuous unbroken air barrier to substrates according to the following minimum thickness. Apply membrane in full contact around protrusions and penetrations, such as masonry ties.

1. Vapor-Retarding Membrane Air Barrier: 50-mil (1.25-mm) dry film thickness. Increase thickness where necessary to conform to required properties.

a. Wet film thickness varies for different product compositions and substrate textures. The final dry, cured thickness shall be as verified by field testing.

D. Strips and air membrane shall overlap a minimum of 3”, or in accordance with air barrier manufacturer's written instructions.

E. Provide access to the air barrier for testing and inspection by the testing agency and by the Authority’s representatives. Do not cover air barrier until the completion of a curing period and testing. Do not leave air barrier exposed longer than recommended by manufacturer.

F. Correct deficiencies in or remove air barrier that does not comply with requirements; repair substrates and reapply air barrier components.

G. Cover air barrier using methods of adhesive attachment of cavity insulation described in Section 04200-Unit Masonry, Article titled “Insulation”.

3.06 FIELD QUALITY CONTROL

A. Testing Agency: Contractor is to engage a qualified testing agency, acceptable to the Authority, to perform tests and inspections and to prepare test reports and inspection reports for submission to the Authority.

Where required by the 2020 NYC Energy Code, inspection shall utilize the Air Barrier Continuity Plan

3.07 JOB COMPLETION

A. A representative of the air barrier manufacturer (Company Field Advisor) shall inspect the Work periodically and notify the contractor of any defects. All defects must be corrected. The representative shall submit written certification to the Authority that representative has consulted on and inspected the work and that the materials and installation are in conformance with the manufacturer's published physical properties and installation recommendations and with the Contract Documents.

B. Cleaning and Protection

1. Protect air barrier system from damage during application and remainder of construction period. Comply with manufacturer's instructions.

   a. Protect air barrier from exposure to UV light and harmful weather exposure as required by manufacturer. Remove and replace air barrier exposed for more than 30 days or longer than recommended by the manufacturer.

   b. Protect air barrier from contact with creosote, uncured coal-tar products, sealants not approved by air barrier manufacturer, and other non-compatible materials.

   c. Protect air barrier from mechanical damage.

2. Clean spills, stains, and soiling from construction that would be exposed in the completed work using cleaning agents and procedures recommended by manufacturer of affected construction.

3. Remove masking materials after installation.

END OF SECTION

LIST OF SUBMITTALS

SUBMITTAL	DATE SUBMITTED	DATE APPROVED
Product Data:	_____	_
1. Air barrier		
Shop Drawings:	_____	_____
1. Air barrier		
Product Certificates:	_____	_____
1. Compatibility		
Contractor Guarantee:	_____	_____
1. Air barrier		
Manufacturer Warranty:	_____	_____
1. Air barrier		
Mockup	_____	_____
1. Air barrier		
Qualification Data	_____	_____
1. Installer 2. Manufacturer		

* * *

SECTION 07600
FLASHING AND SHEET METAL

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. Provide all flashing, trim and sheet metal Work as indicated on the Drawings, as required for the completed Work, and as specified herein. The Work shall include, but shall not be limited to, the following:

1. Wall Flashings (various types)

1.02 REFERENCES

A. References and industry standards listed in this Section are applicable to the Work. Unless more restrictive criteria or differing requirements are explicitly stated in the Specifications, or mandated by governing codes or regulations, the recommendations, suggestions, and requirements described in the referenced standards shall be deemed mandatory and applicable to the Work.

B. Sheet Metal and Air Conditioning Contractors National Association (SMACNA).

C. Copper Development Association (CDA).

D. American Society for Testing and Materials (ASTM).

1.03 SUBMITTALS

A. Shop Drawings

1. Show the manner of forming, jointing, and securing the metal flashings, trim, and other specified sheet metal items. Include expansion joint connections, and the method of forming waterproof connections to adjoining construction.

2. Submit roof plan indicating layout and spacing of snow guards as recommended by the snow guard manufacturer. Include half-full size detail of snow guard type and method of attachment.

B. Product Data

1. Catalog sheets, specifications, installation instructions for each item specified except for shop or job formed items, solder and flux.

2. Manufacturer's recommendations for installation and spacing of snow guards.

C. Samples

1. Materials for Flashings: One 6" sq piece, for each type material specified.

2. Anchors: Two, each type required.

3. Cap Flashings: Full section, 6" long.

D. Guarantee

E. Certificates of qualifications as specified under Article titled “Quality Assurance”.

F. Product Certificates

Certify that materials of this Section, such as copper/fabric flashing, sealants, termination bar, and fasteners, are compatible with all components of the air barrier system and other Project materials that contact them.

1.04 QUALITY ASSURANCE

A. Except as otherwise shown or specified, comply with applicable recommendations, details, and standards of CDA, and SMACNA.

B. All metal Work shall be ink-stamped at intervals, identifying

Manufacturer, type metal, and gauge or thickness.

C. Manufacturer's Recommendations

For factory fabricated items, follow the manufacturer's recommendations and installation instructions unless specifically shown or specified otherwise.

D. Materials containing asbestos are prohibited.

E. Project Foreman Qualifications

1. Successful completion of a formal instructional and training program for the installation of the specified roofing/flashing systems, as evidenced by:

a. A certificate of journeyman roofer as issued under a union apprenticeship-journeyman training program duly registered with the New York State Department of Labor (or other State Labor Department); or

b. A certificate or diploma issued by a vocational training school or national roofing manufacturer attesting to successful completion of an equivalent formal training program. (Submit copy of certificate for above).

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products of this Section in such manner to protect them from damage.

1.06 PROJECT CONDITIONS

A. Do not execute the Work of this Section unless the Authority's Representative is present, unless otherwise directed.

B. Make the roof and all uncompleted flashings watertight at the end of each workday.

1.07 GUARANTEE

A. The Contractor shall provide a two (2) year written guarantee, covering the flashing and sheet metal materials and workmanship. Should any defects occur during the stated period, they shall be corrected immediately, and all damage caused by such defects shall be corrected; all corrective Work shall be at the Contractor's expense.

PART 2 - PRODUCTS

2.01 MATERIALS FOR FLASHING FABRICATION

A. Plain Copper Sheet

Cold rolled copper, ASTM B370.

B. Lead Coated copper Sheet

Cold rolled copper, ASTM B370. Lead coating; ASTM B101, Type 1 weighing 0.06 to 0.07 lbs per sq ft applied to each side.

C. Stainless Steel Sheet

Dead soft fully annealed stainless steel sheet, ASTM A240, Type 304 or Type 316, sulfur content .030% or less, 2D dull finish.

D. Sheet Lead

ASTM B29. Minimum Wgt. 4 lbs per sq ft.

2.02 MANUFACTURED MATERIALS

A. Copper/fabric flashing: consisting of a full sheet of copper, weight of copper core not less than 5 ounces per square foot, permanently bonded with rubber-based adhesive to and between 2 layers of fiberglass or polymer fabric. Each layer of fabric shall be 0.3 oz. per sq. ft. minimum weight, with minimum 10x20 threads per inch. Flashing shall be compatible with air barrier system, sealants, adhesives, and other adjacent materials.

1. Manufacturers/Products

a. York Manufacturing, Inc., Sanford, ME: Multi-Flash 500 Copper Fabric Flashing

b. Hohmann & Barnard, Inc., Hauppauge, NY: Copper NA Asphalt Free Copper Fabric Flashing

c. Wire-Bond, Inc. Charlotte, NC: 4140 Copper Seal Flashing

2.03 FASTENERS

A. Nails

"Stronghold" type large flat head roofing nail.

1. For Copper: Hardened copper.

2. For Stainless Steel: Stainless steel.

B. Screws, Bolts, and other Fastening Accessories

1. For Copper: Copper or brass.

2. For Stainless Steel: Stainless steel type 316.

C. Anchors

Provide one of the following types:

1. Hammer driven anchors, consisting of a stainless steel drive pin and a corrosion resistant metal expansion shield inserted thru a stainless steel disc with an EPDM sealing washer.

2. Self-tapping, corrosion resistant, concrete and masonry screw inserted thru a stainless steel disc with an EPDM sealing washer.

D. Fasteners for Through-Wall Flashing Termination Bar

1. Tapcon Concrete Screw: stainless steel.

2.04 MISCELLANEOUS MATERIALS

A. Solder

Composition of block tin/pig lead of proportion recommended by the metal manufacturer, stamped either 50/50 or 60/40 "Warranted".

B. Flux

Paste or acid type as recommended by the metal manufacturer.

C. Type 3 Sealant (For concealed sealant joints of thru-wall cap receivers and other areas which require concealed sealant).
One part butyl rubber sealant; Pecora BC-158, PTI 707, or Woodmont chem-Calk 300.

D. Termination Bar (For thru-wall copper/fabric flashing)

Provide material compatible with the air barrier system.
1. Plastic: York Manufacturing Co., Sanford, ME

2. Stainless Steel: Wire-Bond, Inc. Charlotte, NC or Hohmann & Barnard, Inc., Hauppauge, NY

E. Flashing Sealants and Adhesives

Provide products recommended in writing by the flashing manufacturer, and compatible with all adjacent materials, including components of the air barrier system. Materials containing asbestos are prohibited. Asphalt mastics and other asphaltic materials shall not be used.

1. Where low modulus silicone sealant is indicated provide ASTM C 920, single-component, neutral-curing silicone; Class 100/50, Grade NS, Use NT, Use O.

2.05 FABRICATION

A. General: Where practicable, form and fabricate sheet metal Work in the factory or shop. Produce bends and profiles accurately to the indicated shapes. Where not indicated or specified, follow the applicable requirements of the reference standards listed in PART 1. All corners to be factory prefabricated. Hem exposed sheet metal to eliminate all sharp edges and corners.

B. Cap Flashing (one-piece): Fabricated to be spring-tight against wall/base flashing. All corners shall be factory prefabricated: mitered and lapped approximately 1” at corner, and fully soldered or welded. At expansion joints, provide v-notch splice joint with 6” lap each side.

1. Copper: 16 oz.

2. Lead Coated copper: 16 oz.

3. Stainless Steel: 26 ga (0.018").

C. Cap Flashing (two-piece) with In-Wall, Thru-Wall, or Coping Cap Receiver; All corners of coping flashing and of cap receivers shall be factory prefabricated: mitered and lapped approximately 1" at corner, and fully soldered or welded. At expansion joints, provide v-notch splice joint with 6" lap matching three-way fabrication each side of joint. Cap flashing fabricated to be spring tight against wall/base flashing.

1. Cap Flashing: three-way mortar bond type receiver with snap fit cap flashing.

   Acceptable manufacturers/products:

   a. Keystone Flashing Co., 5119 N. Second Street, Philadelphia, PA. "Keystone Two-Piece cap Flashing".

   b. Cheney Flashing Co., 623 Prospect St., Trenton, NJ. "Cheney Prefabricated Snap Lock Cap Flashing".

   c. LITSCO, Long Island Tinsmith Supply Corp., 76-11 88th St., Glendale, NY. Two-piece snap fit cap flashing; with 3-way mortar bond receiver.

   d. B & B Sheet Metal, 25-40 50th Ave. Long Island City, NY. Two-piece snap fit cap flashing; with 3-way mortar bond receiver.

   e. WG Sheet Metal Corporation, 341 Amber Street Brooklyn, NY. Cap Flashing with 3-way mortar bond receiver.

   f. New Castle Building Products, 48-49 33rd Street, L.I.C., NY. Two-Piece snap fit cap flashing, with 3-way mortar bond receiver.

2. Thru-wall Coping Flashing, with and without receiver: Three-way mortar bond flashing, with snap fit cap flashing for flashing with receiver. Allow for 1/2" extension of flashing beyond masonry face below stone prior to the bend for the drip to allow

for raking and sealing of mortar joint below flashing for faces without receiver.

Acceptable manufacturers/products:

a. Keystone Flashing Co., 5119 North Second Street, Philadelphia, PA. "Keystone Thru-wall Flashing".

b. Cheney Flashing Co., 623 Prospect St., Trenton, NJ. “Cheney 3-way Sawtooth Thru-Wall Flashing"

c. LITSCO, Long Island Tinsmith Supply Corp., 76-11 88th St., Glendale, NY. Thru-wall coping flashing; with 3-way mortar bond.

d. B & B Sheet Metal, 25-40 50th Ave. Long Island City, NY. Thru-wall coping flashing; with 3-way mortar bond.

e. WG Sheet Metal Corporation, 341 Amber Street Brooklyn, NY. Thru-wall coping flashing; with 3-way mortar bond.

f. New Castle Building Products, 48-49 33rd Street, L.I.C., NY. Thru-Wall Coping Flashing, with 3-way mortar bond.

3. Materials

a. Copper: 16 oz.

b. Lead Coated copper: 16 oz.

c. Stainless Steel: 26 ga (0.018").

D. Cap Flashing with Concrete Reglet

1. Reglet with 45-degree slot, and snap fit cap flashing. Hooked edge of cap flashing shall lock into reglet. Acceptable products: “Cheney Type-A Snap Lock Concrete Reglet”; and “Keystone Concrete Reglet”.

2. Materials

a. Copper: 16 oz.

b. Lead Coated copper: 16 oz.

c. Stainless Steel: 26 ga (0.018").

E. Base Flashing

Note: This base flashing is not to be used for roofs; refer to Roofing Sections for roof base flashing.

1. Copper: 20 oz.

2. Lead Coated copper: 20 oz.

3. Stainless Steel: 24 ga (0.025").

F. Metal Expansion Joint Cover

1. Copper 20 oz.

2. Lead Coated Copper: 20 oz.

3. Stainless Steel 24 ga (0.025").

G. Roof Drain Flashing

Sheet lead, 6 lbs per sq. ft.

H. Thru-Wall Flashing

1. Manufactured copper/fiberglass fabric flashing.

I. Sealant Edge Flashing

1. Stainless Steel: 26-gauge, hemmed edge.

2.06 MISCELLANEOUS FABRICATED SHEET METAL ITEMS

A. Metal Linings

Metal-lined cabinets and clay trucks: 22gauge aluminum sheet-ASTM B209, 3003-H14 alloy, standard mill finish.

B. Loudspeaker Enclosure (Refer to Section 05700)
Provide sheet metal enclosure and sound-absorbing blanket as indicated on Drawing Details.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Coordinate the work of this Section with other Work for the correct sequencing of items that make up the entire system of weatherproofing or waterproofing.

3.02 PREPARATION

A. Do not install the Work of this Section unless all necessary nailers, blocking and other supporting components have been provided.

B. Do not install the Work of this Section unless all substrates are clean and dry. Do not cover air barrier membrane until the completion of a curing period if recommended by the membrane manufacturer.

3.03 INSTALLATION

A. Isolation

Separate dissimilar metals from each other with a dielectric coating to prevent galvanic action. Coating shall be synthetic material as required for compatibility with adjacent materials.

B. Tinning and Soldering

1. Use soldering irons (heavy coppers) as Industry Standard. Torch soldering is not acceptable.

2. Clean, flux and tin all surfaces to be soldered.

3. Sweat solder thoroughly into seams, completely filling the seam for the full width.

4. Upon completion of soldering, remove all traces of flux residue, and if required, apply a neutralizing wash followed by a clean water wash.

C. Installing In-Wall and Thru-Wall Cap Flashing Receivers, In-Wall/Through-Wall Flashing and Thru-Wall Coping (with or without receiver) Flashing

1. Set the flashing so there is mortar above and below the built-in portion. Bonding ribs shall be completely filled with mortar.

2. Do not mallet, bend or deform the exposed portion.

3. Lap all end joints so they interlock at the first raised rib. Apply Type 3 sealant between the mating surfaces of the built-in portion of the flashing before interlocking end joints.

4. All corners shall be factory prefabricated: mitered and lapped approximately 1” at corner, and fully soldered or welded by the manufacturer.

5. Provide splice plate at all expansion joints, 12” wide, with 6” lap each side and v-notch in center of joint.

6. Flashings that end at vertical surfaces, into windows, cavities shall be turned up 2” to form a pan.

D. Installing Concrete Reglet

1. Furnish reglet for installation with formwork, complete with fasteners and filler.

E. Installing Cap Flashing

1. General: Form and install the cap to provide a spring tight fit against the base flashing. Lap all end joints a minimum of 6” and base flashing a minimum of 4". Extend the cap continuously around corners or provide lock seams. Install waterstop flashing at expansion joints.

2. Cap Flashing for Installation in Reglets:

a. Extend the cap flashing into the reglet, applying pressure to securely lock it into position along its entire length.

b. Pack the reglet with lead wool to within 1/4” of the reglet opening, then fill with sealant and tool to a slightly concave surface.

3. Surface Mounted Cap Flashing:

a. Form the top portion of the cap flashing which comes in contact with the wall surface with a 1" wide bearing surface. Form a 45-degree x 1/4" wide stiffener and calking flange along the top edge.

b. Apply Type 2 sealant on the backside of the bearing surface.

c. Secure the cap flashing to the wall with fasteners spaced 12" oc thru the bearing surface.

d. Apply Type 2 sealant along the calking flange.

4. In-Wall Cap Flashing (New Masonry Construction):

a. Extend the built-in portion of the cap a minimum of 4" into the wall. Form the edge of the built-in portion with a 1/4" hook dam.

b. Set the cap so there is mortar above and below the built-in portion.

c. Lap all seams a minimum 6” and apply Type 3 sealant between the mating surfaces of the built-in portion of the flashing.

5. Provide a cap flashing at roof terminations at roof curbs such as at mechanical equipment.

6. Cap flashing For Installation in Receivers: Insert the cap flashing into the receiver locking slot. Apply upward pressure along the entire length of the cap flashing so that it is securely locked into position. Nail 1” wide strap of same material as flashing at 32” o.c. prior to inserting cap in receiver. After cap installation, bend strap over edge of flashing by 1/2” to prevent flashing from coming out of receiver.

7. Pre-tin and solder with soldering irons (heavy coppers) all inside and outside corners. Install a separate reinforced mitered corner lapping the flashing 4” each side soldered at the receiver and sown the sides.

8. Where applicable, release existing soldered lap with soldering iron, install base flashing, dress down and re-solder existing lap.

F. Dressing Down Existing Cap Flashing

1. Turn up all cap flashings as required to perform the Work. Upon completion of the Work, dress down all disturbed cap flashings so they lie flat against the base flashing.

2. Secure the cap flashing to the wall surface with fasteners spaced 18" oc.

3. Install matching metal patches at corners of cap flashings which have been cut to perform the Work. Lap the patches a minimum of 1" on each side of the cap flashing.

   a. Secure the patch by pop-riveting or by soldering.

G. Installing Base Flashings

1. Form the base flashing with locked and soldered joints into lengths not more than 24'-0" oc.

2. Provide expansion joints a maximum of 24'-0" oc on straight runs and a maximum of 4' from corners. Form expansion joints with a 3" loose locked seam filled with Type 3 Sealant.

   a. Expansion Joint: slit the cross folded portion of the flashing where it is bent at a right angle. Solder a patch over the slit to avoid binding at the cross fold.

3. Extend the vertical portion of the base flashing a minimum of 3" up behind the cap flashing.

a. Where shown on the Drawings, lock the base flashing to the cap flashing with a minimum 3/4" loose lock joint.

4. Extend the horizontal portion of the base flashing a minimum of 4" and terminate in a 1/2" folded edge. Secure with nails spaced 3" oc staggered.

H. Installing Thru Wall Scupper

1. Form the scupper with 4" wide flashing flanges.

2. Where protected membrane roofing is provided, scuppers shall be equipped with grilles with opening size not greater than the size of stone ballast used on the roof.

3. Lock and solder, or rivet and solder all construction joints of the scupper.

I. Installing Formed Metal Coping

1. Form the coping into lengths not exceeding 8'-0".

2. Join coping sections with 1-1/2" loose locked seams filled with Type 3 sealant.

3. Hook the front and back edges of the coping over continuous metal edge strips. Nail the edge strip 6" oc.

J. Installing Factory Fabricated Formed Metal Coping

Install in accordance with the manufacturer's written instructions unless shown or specified otherwise.

K. Installing Expansion Joint Cover

1. Install combination edge strip and cap flashing over the base flashing. Secure the edge strip along the top of the curb and lap the base flashing a minimum of 4". Lap each individual length a minimum of 6".

2. Form the expansion joint cover with standing seam joints not to exceed 10'-0" oc.

3. Turn the edges of the cover over the edge strip. Allow clearance of one half the width of the expansion joint between all edges of cover and edge strip.

L. Roof Drain Flashing (New Drains)

Install 30" square lead flashing over the roofing membrane. Turn flashing into drain body.

M. Reflashing Existing Drains

Remove the existing dome strainer, clamping ring and lead flashing from existing roof drains. Install 34" square lead flashing turned into drain body and reinstall clamping ring and strainer. If necessary, tap existing clamping ring bolt holes and install new clamping ring bolts.

N. Installing manufactured copper/fiberglass fabric flashing.

1. Thruwall: Start flashing cut flush with the outside face of wall. Lay flashing on masonry in a fresh bed of mortar above and below. Extend flashing up thru the wall turning up at the inside not less than 2", or provide continuous termination bar as indicated on the Drawings to seal flashing to backup masonry or concrete after air barrier membrane is applied. Fasten bar to substrate 8” on center, with stainless steel fasteners anchored into pre-drilled pilot holes. Provide a continuous bead of low modulus silicone sealant along top of termination bar to completely seal the bar and flashing to the substrate. Confirm that all materials are compatible with the air barrier system. Where flashings end at vertical surfaces, into windows, cavities, etc., turn flashing up 2” high, fully soldered, to form a pan.

2. Joints: Lap joints at least 6”, coating the contacting surfaces with sealant recommended by flashing manufacturer.

O. Sealant Edge

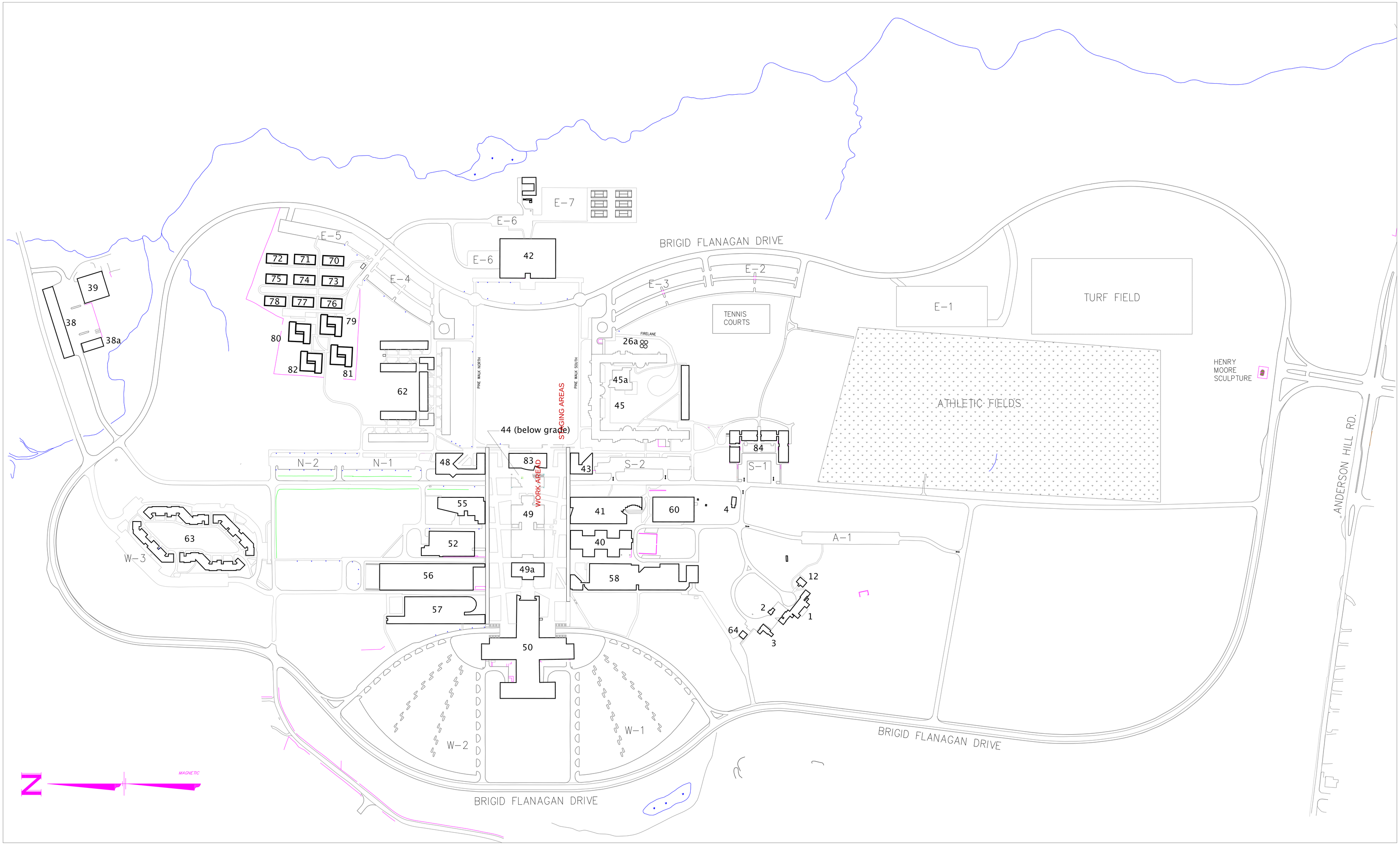
Provide stainless steel sealant edge flashing on relieving angles as indicated on the Drawings and wherever else indicated. Form flashing as required to suit lipped brick or other configuration. Adhere to relieving angle with a full coat of low modulus silicone sealant. Seal joints with sealant. Provide factory prefabricated corners and lap pieces a minimum of 4”, with a full coat of low modulus silicone. Edge shall be hemmed.

END OF SECTION

LIST OF SUBMITTALS

SUBMITTAL	DATE SUBMITTED	DATE APPROVED
Shop Drawings:	_____	_____
1. Flashing, trim, and other specified sheet metal items		
Product Data:	_____	_____
1. Catalog sheets 2. Specifications 3. Installation instructions		
Samples:	_____	_____
1. Flashing 2. Anchors 3. Coping 4. Gutters		
Project Closeout:	_____	_____
1. Guarantee		
Quality Assurance:	_____	_____
1. Training Certificate		
Product Certificates:	_____	_____
1. Compatibility		

* * *


BRIGID FLANAGAN DRIVE
E-1
E-2
E-3
E-4
E-5
E-6
E-6
E-7
TURF FIELD
TENNIS COURTS
ATHLETIC FIELDS
HENRY MOORE SCULPTURE
ANDERSON HILL RD.
FIRELANE
PINE WALK NORTH
PINE WALK SOUTH
STAGING AREAS
WORK AREAS
44 (below grade)
42
39
38
38a
72
71
70
75
74
73
78
77
76
79
80
82
81
62
26a
45a
45
48
83
43
S-2
84
S-1
N-2
N-1
55
49
41
60
4
52
40
A-1
63
W-3
56
49a
58
12
2
1
64
3
57
50
W-2
W-1
BRIGID FLANAGAN DRIVE
BRIGID FLANAGAN DRIVE
MAGNETIC