

2. ADDITIONAL INFORMATION

The following additional information describes the rationale behind the scope of work for this project.

1. Membrane Roofing (Johnson Building):

The existing roofing is currently leaking and beyond its life expectancy. The roofing needs to be replaced to keep the building water tight.

2. Clay Tile (McKim Building):

Small portions of the existing clay tile will be removed and reinstalled where it intersects the existing PVC membrane roof of the Johnson Building. This will not have a visual impact on the McKim Building.

3. Slate Shingles (Johnson Building):

Many of the existing slate shingles are damaged and in need of replacement. Slate will be salvaged from the two existing mechanical screen walls to be reused on the rest of the roof. This will ensure an accurate matching slate at all the other roof areas. The screen walls are not visible from the street.

4. Mechanical Screen Walls (Johnson Building):

The slate from the existing screen walls will be salvaged and reused elsewhere on the sloping roof areas. The walls will be re-clad with metal panels or new slate. The screen walls are not visible from the street.

5. Skylights (Johnson Building):

The nine existing skylights are leaking, have cracked glass, and are not thermally efficient. The new skylights will replicate the look, but the glass will be insulated and more thermally efficient.

6. Roof Stair (Johnson Building):

The existing roof is difficult to access for maintenance and repairs. The Boston Public Library proposes a new stair to reach the highest level of the roof from "Roof Areal L". See plans for location. The stair will be painted black and partially visible from the street.

7. Miscellaneous Repairs (Johnson Building):

Other repairs will be made on the roof, but do not have a visual impact. They include new doors, roof hatches, roof drains, lightning protection, metal flashing, and sealant.

3. PHOTO KEY PLAN

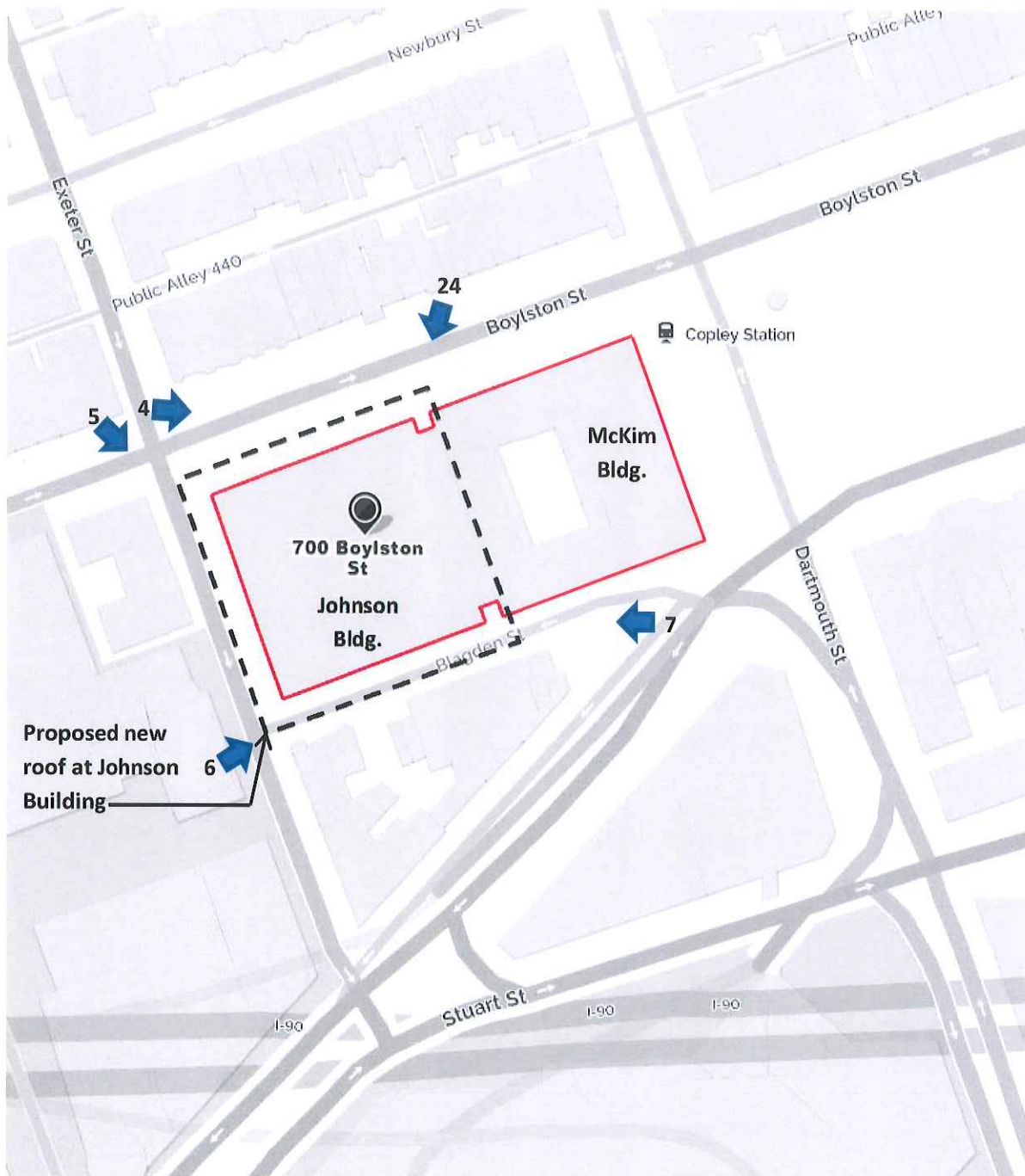


Figure 01: Site Map

4. PHOTOGRAPHS OF EXISTING CONDITIONS



Figure 02: Aerial View

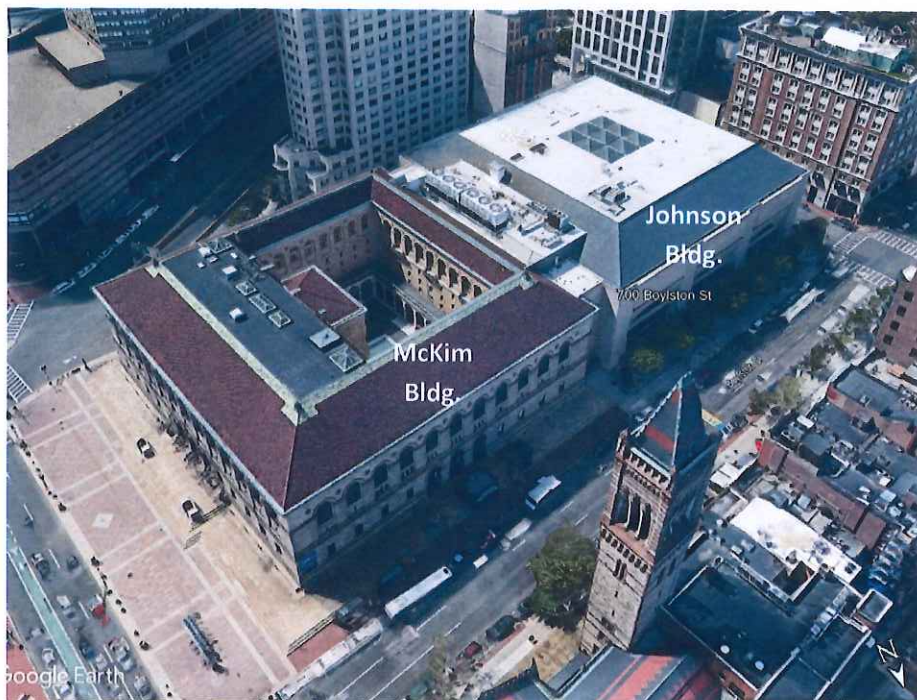


Figure 03: Aerial View



Figure 04: McKim & Johnson Buildings – Boylston Street

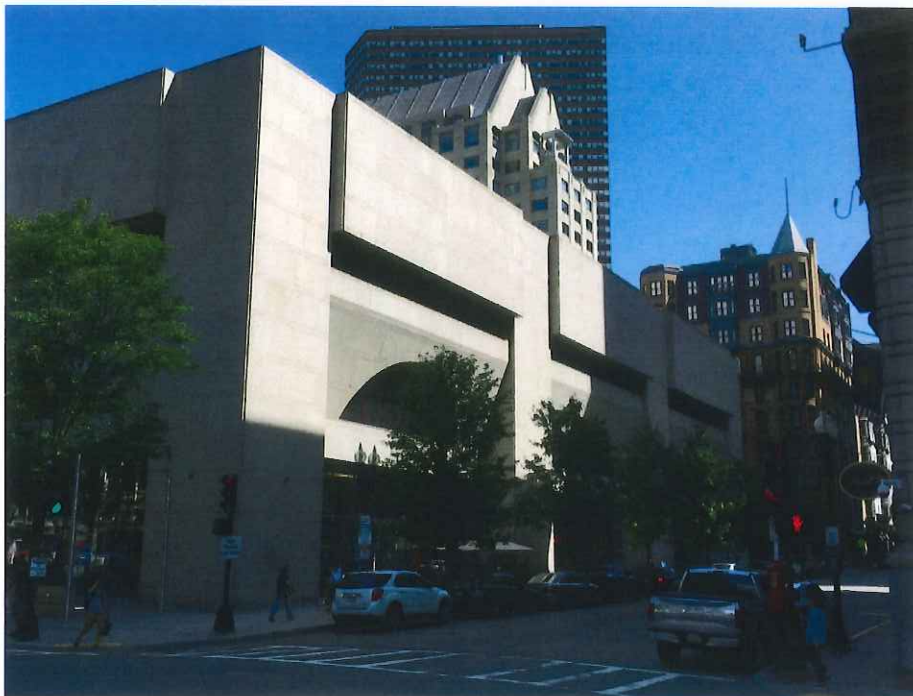


Figure 05: Johnson Building – Exeter Street



Figure 6: Johnson Building – Blagden Street



Figure7: McKim & Johnson Buildings – Blagden Street



Figure 8: Johnson Building – Skylights



Figure 9: Johnson Building – Skylights



Figure 10: Johnson Building – Skylights



Figure 11: Johnson Building – Skylights at Interior Atrium



Figure 12: Johnson Building – Slate Roof



Figure 13: Johnson Building – Slate Roof



Figure 14: Johnson Building – Slate Screen Wall



Figure 15: Johnson Building – Slate Roof



Figure 16: McKim Building – Tile and PVC Roof Intersection



Figure 17: McKim Building – Tile and PVC Roof Intersection



Figure 18: Johnson Building – Mechanical Equipment to be replaced by separate project.



Figure 19: Johnson Building – Mechanical Equipment to remain



Figure 20: Johnson Building – PVC Roof



Figure 21: Johnson Building – PVC Roof



Figure 22: Johnson Building – Granite Coping



Figure 23: Johnson Building – Granite Coping

5. PROPOSED STAIR



Figure 24: Proposed Stair Location



Figure 25: Proposed Stair



Figure 26: Proposed Stair Location

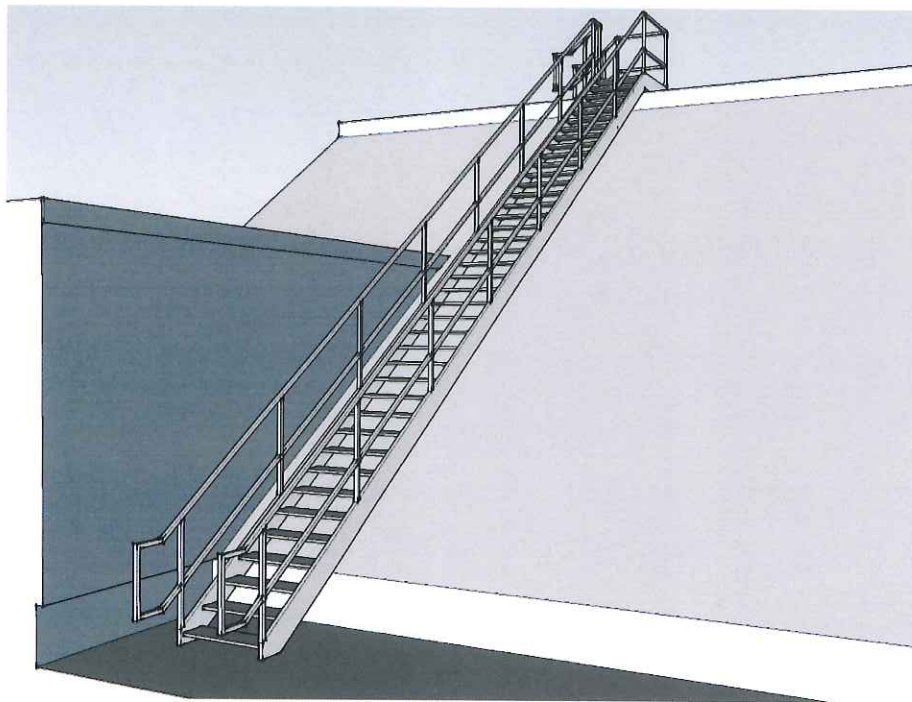


Figure 27: Proposed Stair

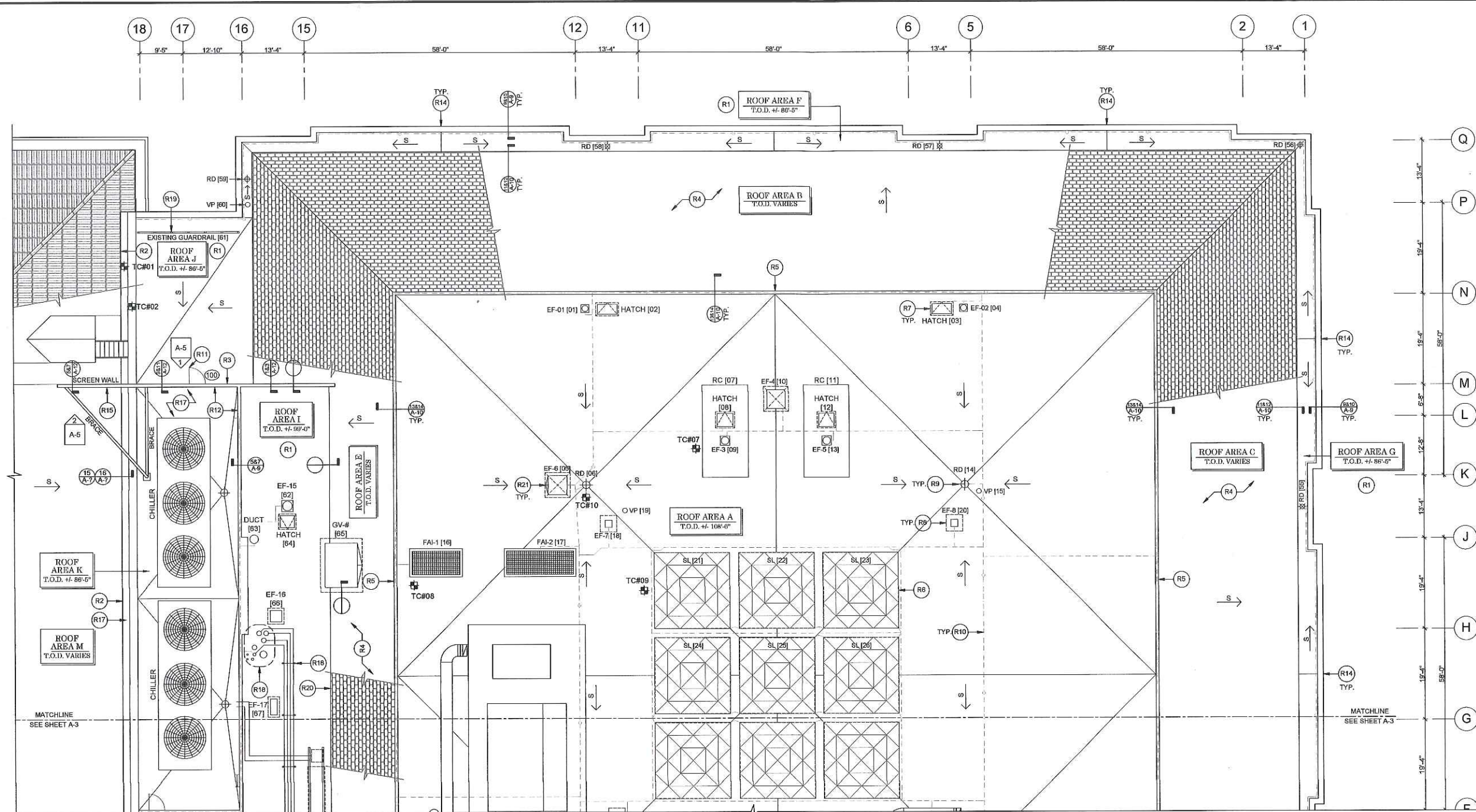
CGKV Architects, Inc.
204A Hampshire Street
Cambridge, MA 02139
Tel. 617-504-8196
Fax. 617-812-6364
cgkvarchitects.com

CITY OF BOSTON
Public Facilities Department
26 Court Street, 10th Floor
Boston, MA 02108

Roof Replacement at:
BOSTON PUBLIC LIBRARY
JOHNSON BUILDING
700 Boylston Street
Boston, MA 02116

SCALE: AS NOTED
DATE: OCTOBER 31, 2018
REVISIONS:

DRAWN BY: EZ
ENLARGED
ROOF PLAN - SOUTH



- GENERAL PROJECT NOTES:**
- ALL WORK IS TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
 - CONTRACTOR IS RESPONSIBLE FOR FIELD MEASURING EXISTING CONDITIONS PRIOR TO CONSTRUCTION. VERIFY ALL EXISTING CONDITIONS IN THE FIELD. DISCREPANCIES NOTED BY THE CONTRACTOR MUST BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO CONSTRUCTION. DIMENSIONS INDICATED IN THESE DRAWINGS ARE APPROXIMATE.
 - PROPERLY PROTECT EXISTING COMPONENTS FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR RESTORING MATERIALS DAMAGED DURING DEMOLITION AND CONSTRUCTION.
 - PROVIDE TEMPORARY OVERHEAD PROTECTION AT ALL ENTRANCES, EXITS, AND ATRIUM BELOW WORK AREAS.
 - THE CONTRACTOR SHALL CONSIDER THE BUILDING TO BE OCCUPIED DURING DEMOLITION AND CONSTRUCTION. COORDINATE WITH THE OWNER TO AVOID CONFLICTS WITH AND PROTECT THE SAFETY OF BUILDING OCCUPANTS. REFER TO THE SPECIFICATIONS FOR ACCEPTABLE HOURS OF CONSTRUCTION.
 - DUMPSTERS AND ALL OTHER CONSTRUCTION EQUIPMENT & STORAGE LOCATIONS SHALL BE COORDINATED WITH AND ACCEPTABLE TO THE OWNER. PROPERLY PROTECT PAVING, LANDSCAPE, AND OTHER SURROUNDING MATERIALS FROM DAMAGE DURING CONSTRUCTION.
 - ROOF SHALL BE WEATHERTIGHT AT THE END OF EACH WORK DAY.
 - ALL MATERIALS ARE NEW UNLESS OTHERWISE NOTED AS EXISTING.
 - AREAS OF NEW ROOFING SHALL BE CORRECTED WHERE PONING WATER IS EVIDENT.

- ROOF PLAN NOTES:**
- (R1) PROVIDE NEW FULLY ADHERED 60 MIL PVC MEMBRANE WITH 5" OF POLYISOCYANURATE INSULATION AND 1/2" HIGH DENSITY COVER BOARD AT ROOF AREAS A, I, J, AND L. PROVIDE NEW MEMBRANE AT ROOF AREA M (ORIGINAL EAVE ONLY, SEE PLAN). PROVIDE SELF ADHERED MEMBRANE VAPOR BARRIER OVER EXISTING HOT MAPPED VAPOR BARRIER. SYSTEM TO BE DESIGNED PER FM GLOBAL STANDARDS. PROVIDE WALKING PADS FROM ROOF HATCHES TO MECHANICAL EQUIPMENT.
 - (R2) REMOVE AND REINSTALL 3 COURSES OF EXISTING HISTORIC CLAY ROOF TILE AT ROOF AREA M TO INSTALL NEW PVC MEMBRANE UNDERNEATH.
 - (R3) REMOVE AND SALVAGE EXISTING SLATE FROM VERTICAL WALL AT ROOF AREA J AND L. CLAD WALL WITH FLAT SEAM METAL PANELS.
 - (R4) REPAIR EXISTING BROKEN OR MISMATCHED SLATE AT ROOF AREAS B, C, D, AND E (+/-200 SLATE). REUSE SLATE FROM VERTICAL WALL AT ROOF AREA J AND L. ADJUST SLATE LENGTH AS REQUIRED TO MATCH EXISTING.
 - (R5) REPLACE ENTIRE TOP COURSE OF BROKEN SLATE AT ROOF AREAS B, C, D, AND E. ENTIRE PERIMETER.
 - (R6) REMOVE NINE EXISTING SKYLIGHTS (TYP.) AT ROOF AREA A AND PROVIDE NEW SKYLIGHTS.
 - (R7) REMOVE EIGHT EXISTING ROOF HATCH ASSEMBLIES AND PROVIDE NEW HATCHES.
 - (R8) REMOVE AND REINSTALL EXISTING MECHANICAL EQUIPMENT AS REQUIRED FOR NEW ROOFING; RAISE EXISTING CURBS TO 12" ABOVE FINISH ROOF. MIN. SEE ALSO MECHANICAL & ELECTRICAL DRAWINGS (TYP.).

- (R9) PROVIDE NEW CAST IRON DRAIN BOWLS. SNAKE EXISTING DRAINS DOWN T LOWEST ACCESSIBLE POINT, (TYP.).
- (R10) PROVIDE NEW LIGHTNING PROTECTION SYSTEM, (TYP.).
- (R11) REPLACE THREE DOORS TO ROOF (INCLUDE AS DESIGN ALTERNATE).
- (R12) REPLACE EXISTING COUNTERFLASHING (INCLUDE AS DESIGN ALTERNATE).
- (R13) PROVIDE NEW METAL STAIR (INCLUDE AS DESIGN ALTERNATE).
- (R14) REMOVE EXISTING CAULKING AT GRANITE COPING; ENTIRE PERIMETER OF ADDITION. JOINTS ARE APPROXIMATELY 21" O.C. PROVIDE NEW MORTAR, BACKER ROD, AND SEALANT.
- (R15) REMOVE PVC AND EXISTING PLYWOOD SHEATHING AND REPLACE WITH 1/2" PLYWOOD AND NEW PVC MEMBRANE.
- (R16) MECHANICAL EQUIPMENT TO BE REPLACED AS PART OF SIMULTANEOUS RARE BOOKS PROJECT. SEE DRAWINGS BY OTHERS.
- (R17) EXISTING PVC MEMBRANE BELOW CHILLERS AT ROOF AREA K TO REMAIN. PVC MEMBRANE AT INTERSECTION OF CLAY ROOF TILES TO BE REPLACED.
- (R18) EXISTING PIPING AND SUPPORT PENETRATIONS; NOT ALL SHOWN. CONFIRM SIZES AND PROVIDE FLASHING AND RAIN COLLAR, SEE DETAIL.
- (R19) PROVIDE PVC FLASHING AND CLAMPING RING AT GUARDRAIL PENETRATIONS (TYP.). SEE DETAIL.

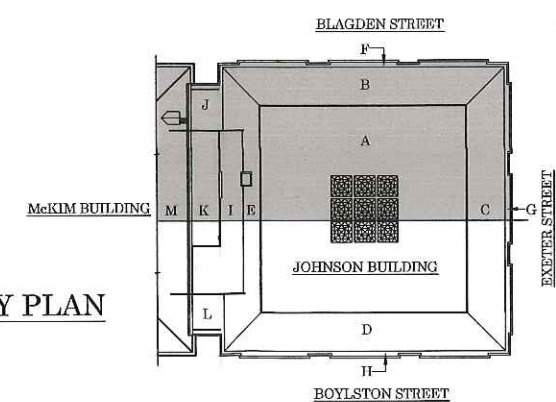
- (R20) REMOVE AND REINSTALL 3 COURSES OF SLATE AND EVERY OTHER SLATE ON THE FOURTH COURSE TO INSTALL NEW PVC MEMBRANE BELOW EXISTING SLATE.
- (R21) PROVIDE CRICKETS AT ALL ROOF CURBS.



PARTIAL ROOF PLAN
SCALE: 3/32"=1'-0"



KEY PLAN
NTS



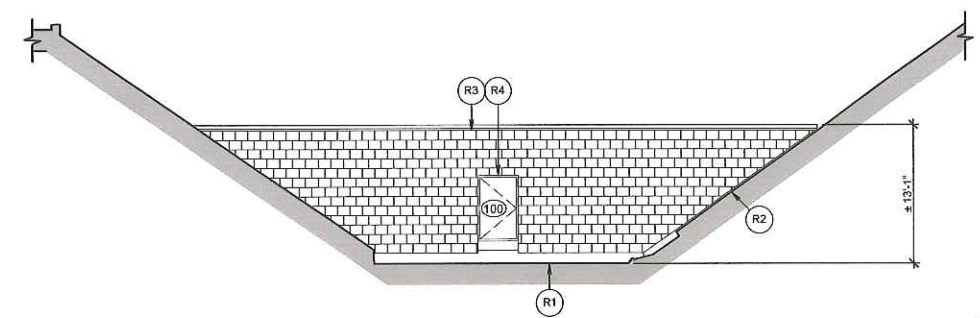
ESSEX STREET

BLAGDEN STREET

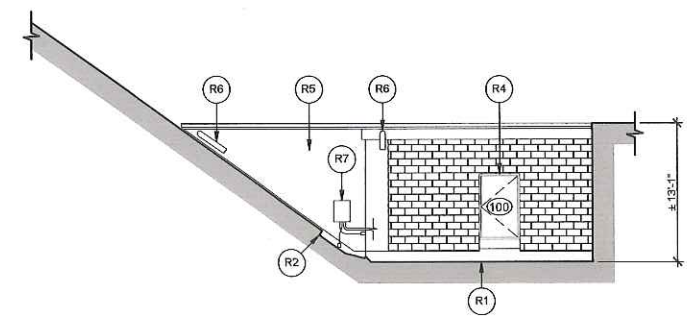
BOYLSTON STREET

McKIM BUILDING

JOHNSON BUILDING

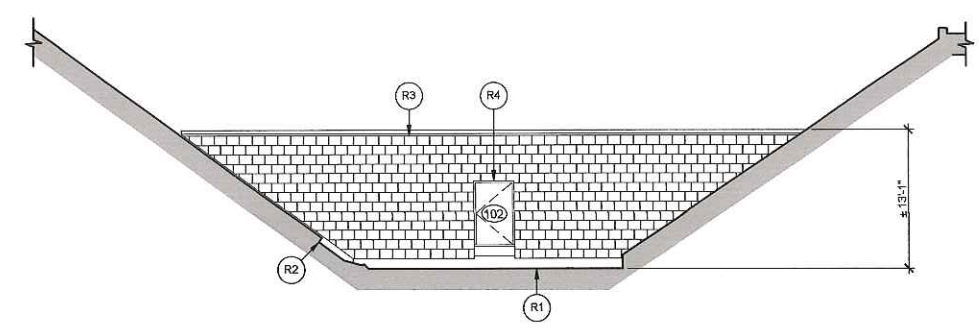


1 SCREEN WALL ELEVATION
 SCALE: 1/8"=1'-0"

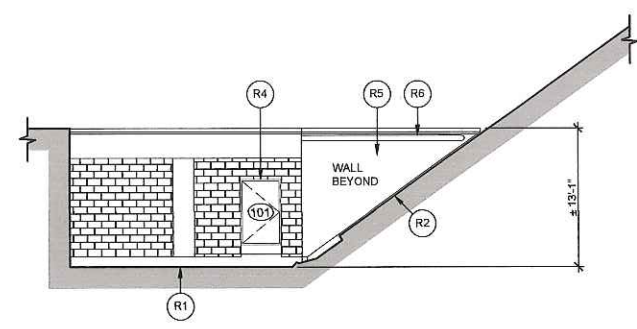


2 SCREEN WALL ELEVATION
 SCALE: 1/8"=1'-0"

- ROOF PLAN NOTES:
- (R1) PROVIDE NEW FULLY ADHERED 60 MIL PVC MEMBRANE WITH 5" OF POLYISOCYANURATE INSULATION AND 1/2" HIGH DENSITY COVER BOARD AT ROOF AREAS A, F, G, H, I, J, AND L. PROVIDE NEW MEMBRANE AT ROOF AREA M (ORIGINAL EAVE ONLY, SEE PLAN). PROVIDE SELF ADHERED MEMBRANE VAPOR BARRIER OVER EXISTING HOT MOPPED VAPOR BARRIER. SYSTEM TO BE DESIGNED PER FM GLOBAL STANDARDS. PROVIDE WALKING PADS FROM ROOF HATCHES TO MECHANICAL EQUIPMENT.
 - (R2) REMOVE AND REINSTALL 3 COURSES OF EXISTING HISTORIC CLAY ROOF TILE AT ROOF AREA M TO INSTALL NEW PVC MEMBRANE UNDERNEATH.
 - (R3) REMOVE AND SALVAGE EXISTING SLATE FROM VERTICAL WALL AT ROOF AREA J AND L. CLAD WALL WITH FLAT SEAM METAL PANELS WITH SIMILAR SHINGLE PATTERN.
 - (R4) REPLACE THREE DOORS TO ROOF (INCLUDE AS DESIGN ALTERNATE).
 - (R5) REMOVE PVC AND EXISTING PLYWOOD SHEATHING AND REPLACE WITH 1/2" PLYWOOD AND NEW PVC MEMBRANE.
 - (R6) EXISTING STRUCTURAL BRACING.
 - (R7) REMOVE AND REINSTALL EXISTING ELECTRICAL ITEMS MOUNTED TO WALL. VERIFY ALL ITEMS IN FIELD.



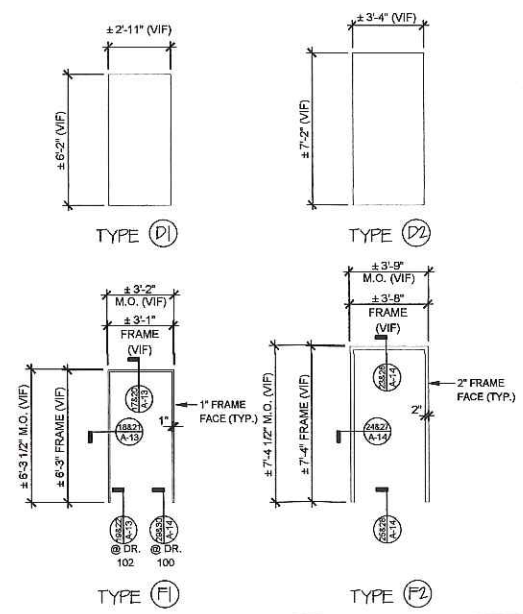
3 SCREEN WALL ELEVATION
 SCALE: 1/8"=1'-0"



4 SCREEN WALL ELEVATION
 SCALE: 1/8"=1'-0"

DOOR SCHEDULE									
DOOR NUMBER	DOOR					FRAME		MISC.	COMMENTS
	TYPE	MATERIAL	WIDTH	HEIGHT	THICKNESS	TYPE	DEPTH	MATERIAL	
100	D1	FRP	2'-11"	6'-2"	1 3/4"	F1	5 3/4"	HM	
101	D2	FRP	3'-4"	7'-2"	1 3/4"	F2	5 3/4"	HM	
102	D1	FRP	2'-11"	6'-2"	1 3/4"	F1	5 3/4"	HM	

- TYPICAL NOTES:**
- PROVIDE NEW FRP DOORS, HOLLOW METAL FRAMES; DOOR HARDWARE, BLOCKING, AND RELATED ITEMS. (TYP.)
 - REFER TO FLOOR PLANS FOR DOOR LOCATIONS. (TYP.)
 - VERIFY ALL DIMENSIONS AND CONFIGURATIONS IN THE FIELD. (TYP.)



DOOR AND FRAME ELEVATIONS
 SCALE: 1/4"=1'-0"

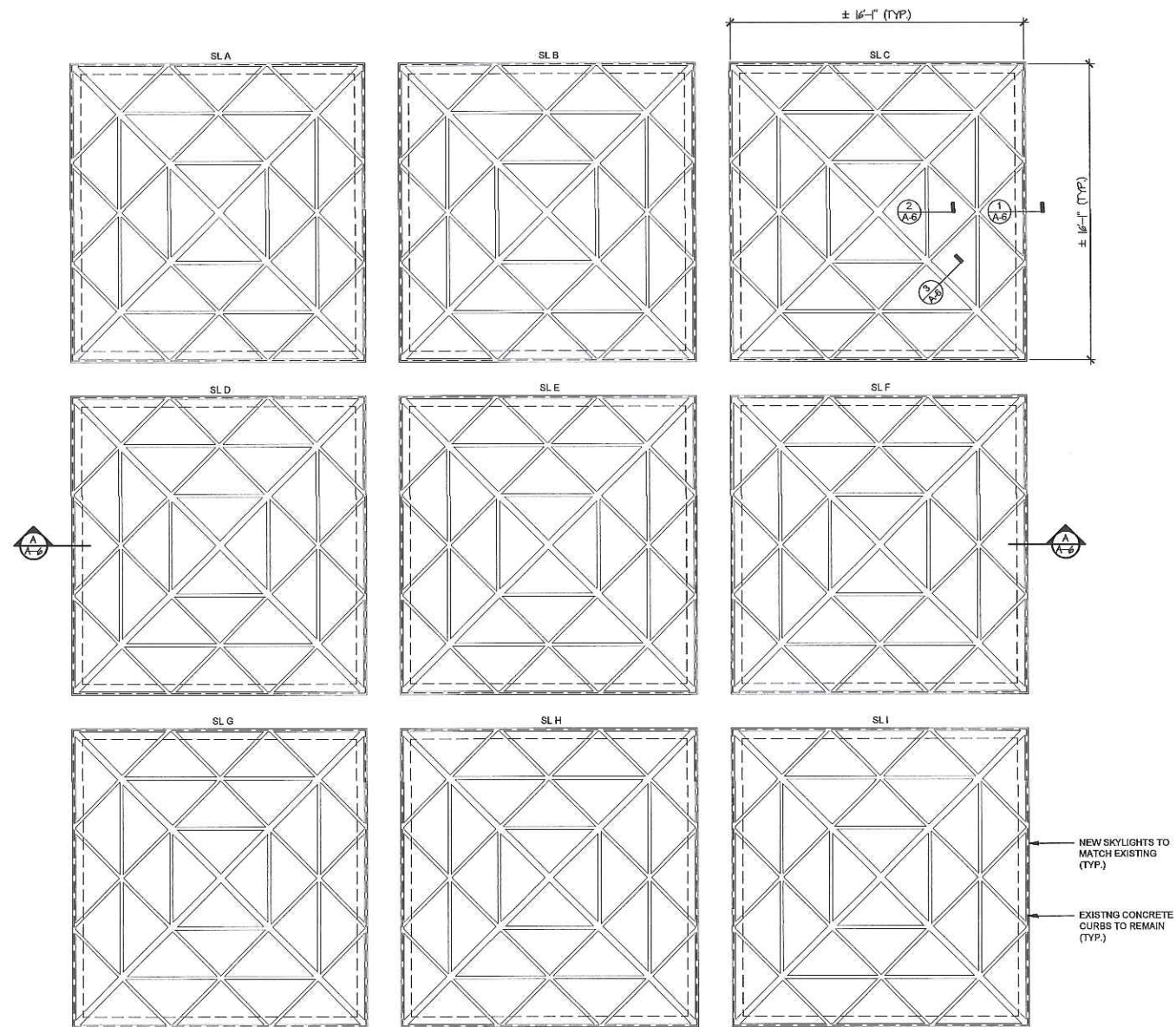
CGKV Architects, Inc.
 204A Hampshire Street
 Cambridge, MA 02139
 Tel. 617-504-8196
 Fax. 617-812-6364
 cgkvorchitects.com

CITY OF BOSTON
 Public Facilities Department
 26 Court Street, 10th Floor
 Boston, MA 02108

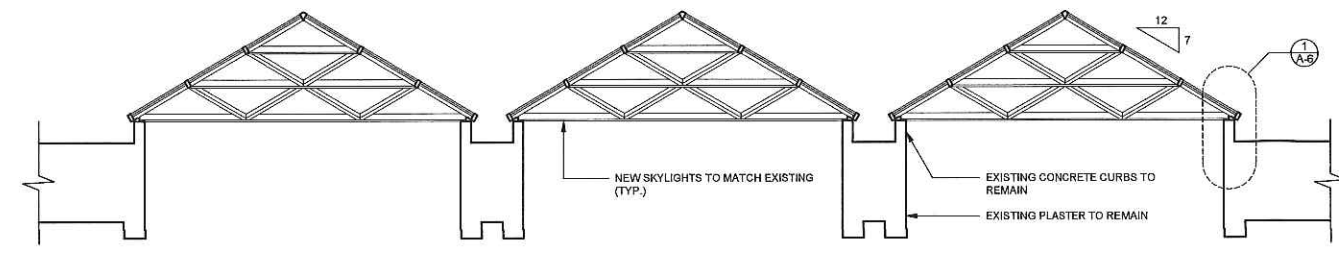
Roof Replacement at:
 BOSTON PUBLIC LIBRARY
 JOHNSON BUILDING
 700 Boylston Street
 Boston, MA 02116

SCALE: AS NOTED
 DATE: OCTOBER 31, 2018
 REVISIONS:

DRAWN BY: EV
 MECHANICAL
 SCREEN WALLS /
 DOOR SCHEDULE

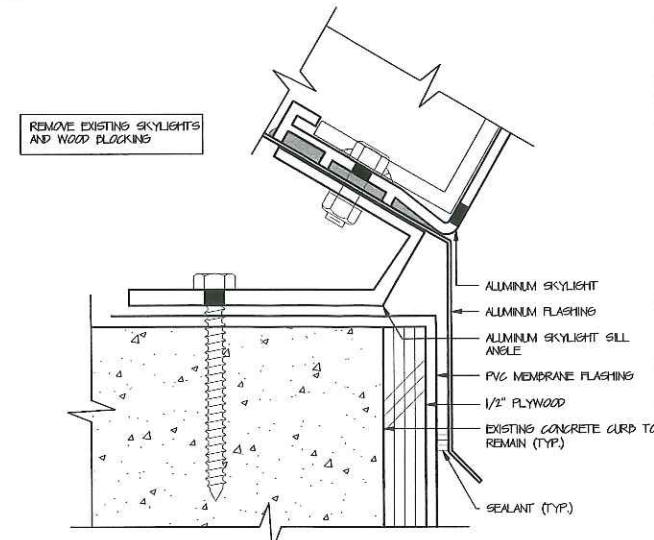


ENLARGED SKYLIGHT FLOOR PLAN
SCALE: 1/4"=1'-0"

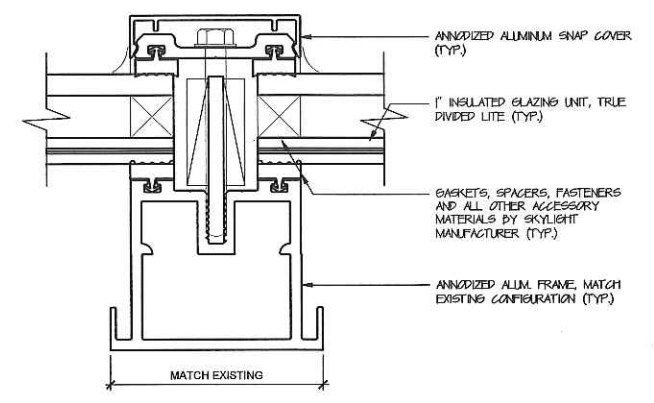


SKYLIGHT SECTION 'A-A'
SCALE: 1/4"=1'-0"

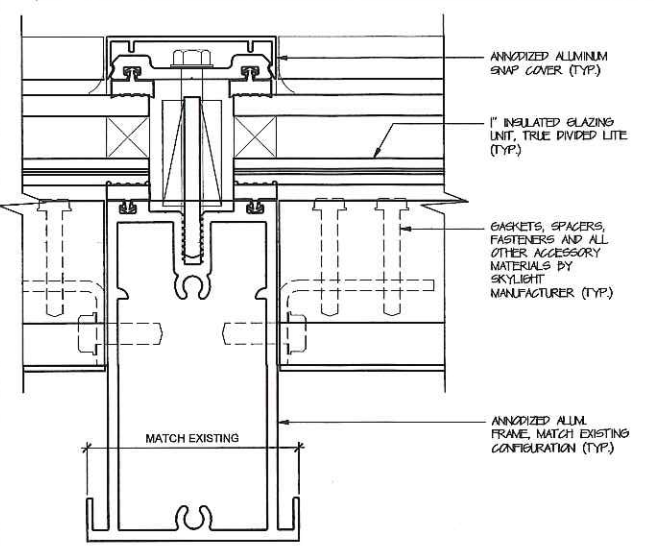
NOTES:
1 PROVIDE OVERHEAD PROTECTION AT ATRIUM DURING CONSTRUCTION OF SKYLIGHTS, TYPICAL. ATRIUM SPACE IS TO BE FULLY OPERATIONAL DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY PRECAUTIONS. SUBMIT SAFETY PLAN FOR APPROVAL PRIOR TO CONSTRUCTION.



1 TYPICAL SKYLIGHT SILL
SCALE: 1" = 1"



2 TYPICAL SKYLIGHT MUNTIN
SCALE: 1" = 1"



3 TYPICAL SKYLIGHT HIP
SCALE: 1" = 1"

PFD PROJECT NO. 7132
DESIGN DEVELOPMENT

CGKV Architects, Inc.
204A Hampshire Street
Cambridge, MA 02139
Tel. 617-504-8196
Fax. 617-812-6364
cgkvarchitects.com

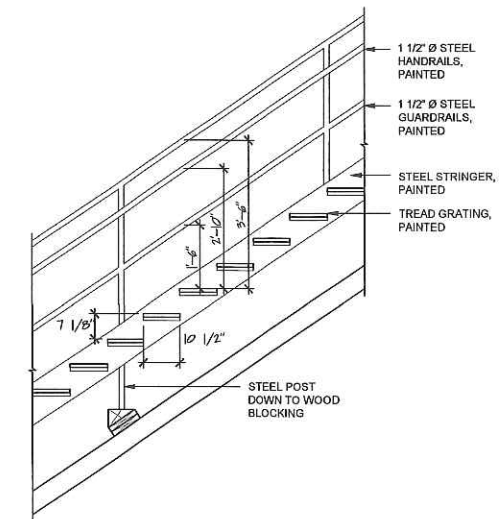
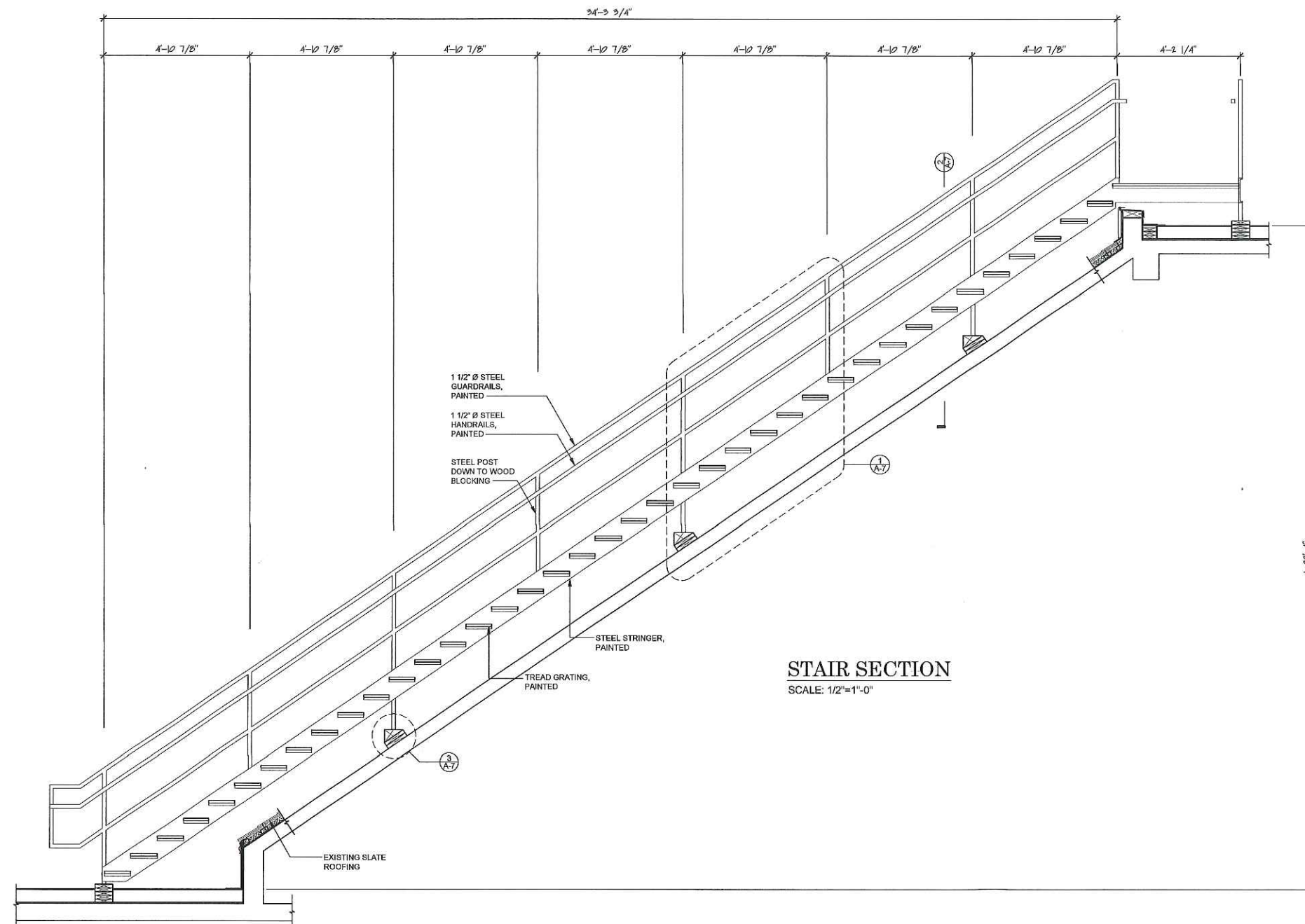
CITY OF BOSTON
Public Facilities Department
26 Court Street, 10th Floor
Boston, MA 02108

Roof Replacement at:
BOSTON PUBLIC LIBRARY JOHNSON BUILDING
700 Boylston Street
Boston, MA 02116

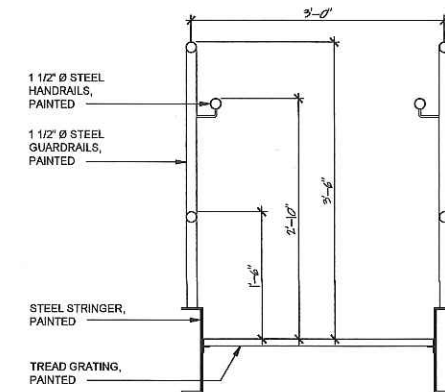
SCALE: AS NOTED
DATE: OCTOBER 31, 2018
REVISIONS:

DRAWN BY: EV

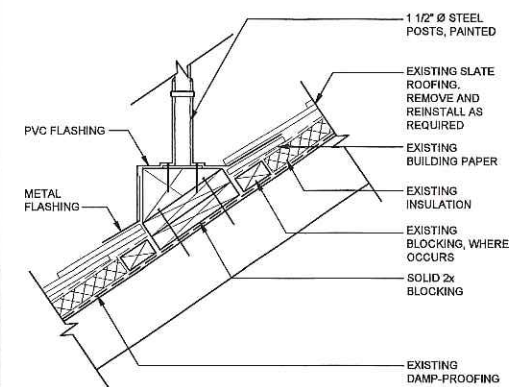
SKYLIGHTS



1 TYPICAL ROOF STAIR HEIGHTS
SCALE: 1/2" = 1'-0"



2 TYPICAL ROOF STAIR SECTION
SCALE: 1" = 1'-0"



3 TYPICAL ROOF STAIR CONNECTION
SCALE: 1 1/2" = 1'-0"

PFD PROJECT NO. 7132
DESIGN DEVELOPMENT

CGKV Architects, Inc.
204A Hampshire Street
Cambridge, MA 02139
Tel. 617-504-8196
Fax. 617-812-6364
cgkvarchitects.com

CITY OF BOSTON
Public Facilities Department
26 Court Street, 10th Floor
Boston, MA 02108

Roof Replacement at:
BOSTON PUBLIC LIBRARY
JOHNSON BUILDING
700 Boylston Street
Boston, MA 02116

SCALE: AS NOTED
DATE: OCTOBER 31, 2018
REVISIONS:

DRAWN BY: EV
ROOF STAIR

AUBURN® ENGINEERED SKYLIGHTS

Auburn® Features & Benefits

With its wide range of glazing options and features, Auburn® Engineered skylights give owners flexibility and durability in daylighting. Every Auburn® skylight is the product of hundreds of years of combined daylighting expertise. From quote and specification, to engineering and beyond, you can be confident that Auburn® is the right choice.



Army Reserve, Green Bay, WI - RSP Architects Ltd.

1. **Integral screw races** are standard, providing superior anchorage and uniform load transfer.
2. **Integral guttering** on all structural members allows for water and condensation control.
3. Structural framing members are optimized for **L/175 or L/240 deflection limits** which lowers cost and weight for most skylights.
4. **Universal “slope adapters”** fit all standard rafters, creating precise slope control regardless of product geometry.
5. **Tubular rafters**, which frequently eliminate the need for support tubes, are standard and provide a finished look.
6. All Auburn® skylights are engineered and manufactured using state-of-the-art technology which **shortens overall lead times** and guarantees correct dimensions in a level and plumb environment.

Mahone Middle School, Kenosha, WI - Bray Associates



FINISHER OF CHOICE!™



Clear ANO-215 or ANO-204 AE



Champagne ANO-300 AE



Light Bronze ANO-301 AE



Medium Bronze ANO-302 AE



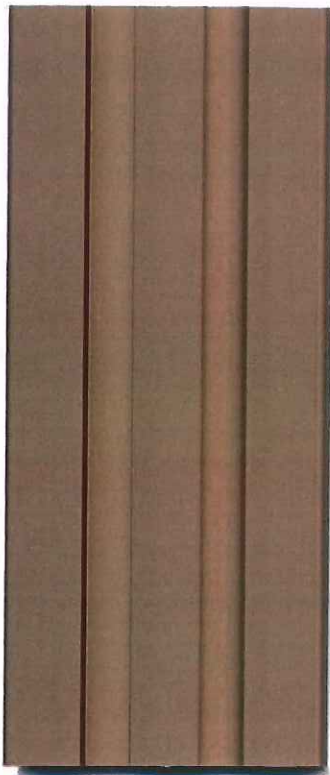
Dark Bronze ANO-303 AE



Extra-Dark Bronze ANO-304 AE



Black ANO-305 AE



Copper Anodize ANO-630 AE

Proposed skylight color.

Linetec anodize finishes meet the AAMA-611 specification.

PRODUCT DATA SHEET

SARNAFIL® G 410 ROOF MEMBRANE

__60__72__80__FELTBACK

Sarnafil G 410 Roof Membrane is a PVC thermoplastic membrane produced with an integral fiberglass mat reinforcement for excellent dimensional stability, guaranteed for thickness, with heat-weldable seams, and a unique lacquer coating applied to the top of the membrane to reduce dirt pick up.

PRODUCT INFORMATION**USES**

Sarnafil G 410 Roof Membrane is used in adhered applications with various adhesives over various substrates.

AREAS OF APPLICATION

- New Roofs
- Reroofs
- Flashings

FEATURES / BENEFITS

- Excellent dimensional stability
- Factory applied lacquer coated to reduce dirt pick up
- Hot-air welded seams for long-term performance
- Proven membrane performance
- Guaranteed thickness
- Superior fire resistance

TEST**CODES / APPROVALS**

- FM Global
- Underwriters Laboratories
- Underwriters Laboratories of Canada
- ICC Code Compliance – ESR 1157
- Miami-Dade County
- Florida Building Code
- NSF/ANSI 347: Platinum Certified

PRODUCT DATA

FORM

COMPOSITION

High-quality, PVC membrane containing ultraviolet light stabilizers, flame retardant, and fiberglass reinforcement with a unique lacquer coating on the top surface.

COLOR*

- Top: Copper Brown, Evergreen, and Lead Gray
- Bottom: Gray

PACKAGING

- **60 mil (1.5 mm) Membrane**
 - Bareback: 6.56 ft x 65.6 ft (2 m x 20 m) roll, 168 lbs (76 kg) per roll, 19 rolls per pallet
 - Coverstrip: 8 in x 100 ft (20 cm x 30 m) roll, 25 lbs (11 kg) per roll, 25 rolls per pallet
 - Feltback: 6.56 ft x 65.6 ft (2 m x 20 m) roll, 190 lbs (86 kg) per roll, 10 rolls per pallet
- **72 mil (1.8 mm) Membrane**
 - Bareback: 6.56 ft x 49.2 ft (2 m x 15 m) rolls, 159 lbs (72 kg) per roll, 19 rolls per pallet
 - Feltback: 6.56 ft x 49.2 ft (2 m x 15 m) rolls, 177 lbs (80 kg) per roll, 10 rolls per pallet
- **80 mil (2.0 mm) Membrane**
 - Bareback: 6.56 ft x 49.2 ft (2 m x 15 m) rolls, 175 lbs (79 kg) per roll, 19 rolls per pallet
 - Feltback: 6.56 ft x 49.2 ft (2 m x 15 m) rolls, 193 lbs (88 kg) per roll, 10 rolls per pallet

STORAGE

STORAGE CONDITIONS

Store rolls on pallets and fully protected from the weather with clean canvas tarpaulins. Unvented polyethylene tarpaulins are unacceptable due to the accumulation of moisture beneath the tarpaulin in certain weather conditions that may affect membrane weldability.



TRUMPF Sachsen GmbH, Neukirch, Germany



Terrace-shaped building, Oswaldgasse, Vienna, Austria

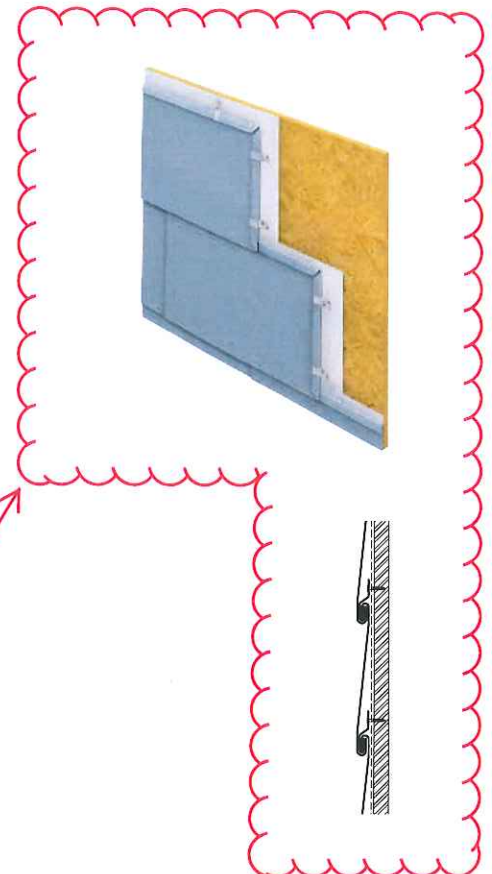


New Lecture Hall, Victoria University, Werribee Campus, Werribee, Australia

RHEINZINK-Flat-Lock Tiles

The flat overlapping seams of the Flat Lock Tile System provide a subtle gridded look to simple, complex rectilinear or curvilinear facades. By using various sized tiles and changing the layout of the seam lines, the planner has many design options.

- Individual tile sizes
- Perfect for curvilinear surfaces
- Little or no maintenance



Proposed panel system. Not visible from street level.

Fig. Cover Page: Operations Building, Montegrano, Italy

Fig. Left: Observation Tower, Haenam Gun, Jeon-Nam Province, Korea

**BOSTON LANDMARKS COMMISSION APPLICATION
TABLE OF CONTENTS**

October 31, 2018

1. Application Form
2. Additional Information
3. Photo Key Plan
4. Photographs of Existing Conditions
5. Proposed Stair
6. Drawings
 - a. A-2: Enlarged Roof Plan – South
 - b. A-3: Enlarged Roof Plan – North
 - c. A-5: Mechanical Screen Walls / Door Schedule
 - d. A-6: Skylights
 - e. A-7: Roof Stair
7. Proposed Product Information
 - a. Skylight Manufacturer Brochure
 - b. Skylight Color
 - c. PVC Membrane
 - d. Metal Cladding