

# Roof Replacement 1 Water Street

## Boston Landmarks Commission Hearing Nov. 26, 2019



Building Envelope Technologies, Inc.  
417 Purchase Street S. Easton, MA 02375  
[www.buildingenvelopetech.com](http://www.buildingenvelopetech.com)

# Project Scope

- Replace low-slope membrane roof system at main roof and penthouse roof.
- Cover three sides of penthouse with new standing seam copper cladding.
- Replace deteriorated metal stair to elevator penthouse.
- Add safety access ladder to penthouse roof.
- Eliminate acrylic dome skylight.

# Construction Drawings

# BET

BRIDGE ENGINEERING TECHNOLOGIES INC.  
 105 STATE STREET  
 BOSTON, MASSACHUSETTS 02109  
 TEL: 617.552.1100  
 WWW.BET-ENGINEERING.COM

OWNER:  
 PROLET INVESTMENTS  
 BOSTON, MA

PROJECT TITLE:  
 ROOF REPLACEMENT AND  
 RELATED WORK  
 7 WATER STREET  
 BOSTON, MA

OWNER'S REPRESENTATIVE:  
 JAMES LANGS LASALLE  
 300 SEAPORT BLDG, ZIL  
 BOSTON, MA 02210

## ROOF PLAN

PROJECT NO: 19001  
 DRAWN BY: DAN  
 CHECKED BY: JEF  
 FILE NAME: 19001-roofplan.dwg  
 SCALE: 1/8" = 1'-0"  
 DATE: 5/7/2019

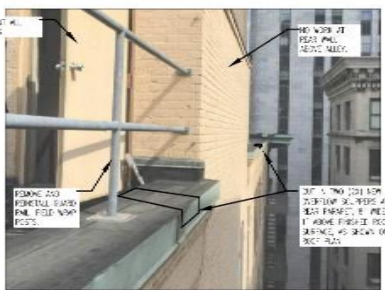
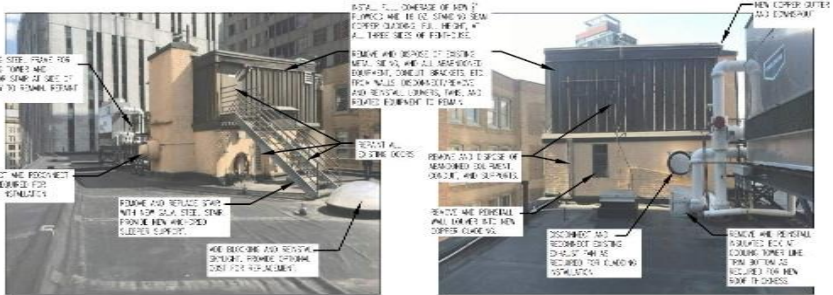
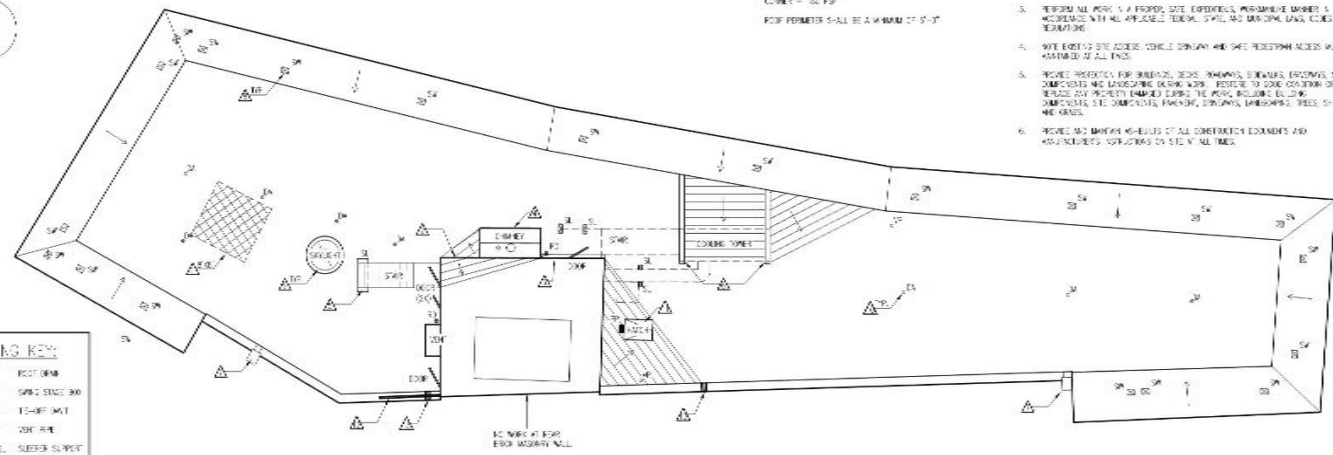
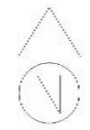
DRAWING NUMBER:

# A-100

**WIND UPLIFT PARAMETERS**  
 ALL WORK TO CONFORM TO BUILDING CODE AND  
 RESIST WIND LOADS AS SPECIFIED BY THE UPLIFT  
 RESISTANCE AS REQUIRED.  
 FILE = 13.FP  
 PREPARED - 1/28.FP  
 10/2019 - 102.FP  
 ROOF PERIMETER SHALL BE A MINIMUM OF 5'-0"

- GENERAL NOTES:**
1. ROOF SHALL BE REMOVED AND RE-INSTALLED USING EXISTING ROOF STRUCTURE. ALL EXISTING ROOFING, INSULATION, AND MEMBRANE SHALL BE REMOVED. ALL ROOFING SHALL BE INSTALLED TO THE UNDERLayment PER THE MANUFACTURER'S INSTRUCTIONS.
  2. VERIFY ALL NECESSARY PERMITS PRIOR TO COMMENCING WORK.
  3. REMOVE ALL WORK IN A PROPER MANNER. EXISTING MEMBRANE SHALL BE REMOVED WITH ALL APPLICABLE TIEBACKS, STRAPS, AND BRACKETS. BRACKETS AND TIEBACKS SHALL BE REMOVED FROM THE ROOF SURFACE.
  4. SITE EXISTING SITE ACCESS, VEHICLE DRIVEWAY AND SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
  5. PROVIDE PROTECTIVE FENCING, BARRIERS, SIGNAGE, LIGHTING, AND SAFETY TO THE WORK AREA. ALL PROTECTIVE FENCING SHALL BE MAINTAINED THROUGHOUT THE PROJECT. ALL PROTECTIVE FENCING SHALL BE MAINTAINED THROUGHOUT THE PROJECT. ALL PROTECTIVE FENCING SHALL BE MAINTAINED THROUGHOUT THE PROJECT.
  6. PROVIDE AND MAINTAIN ACCESS TO ALL EXISTING UTILITIES AND ADJACENT AREAS THROUGHOUT THE PROJECT.

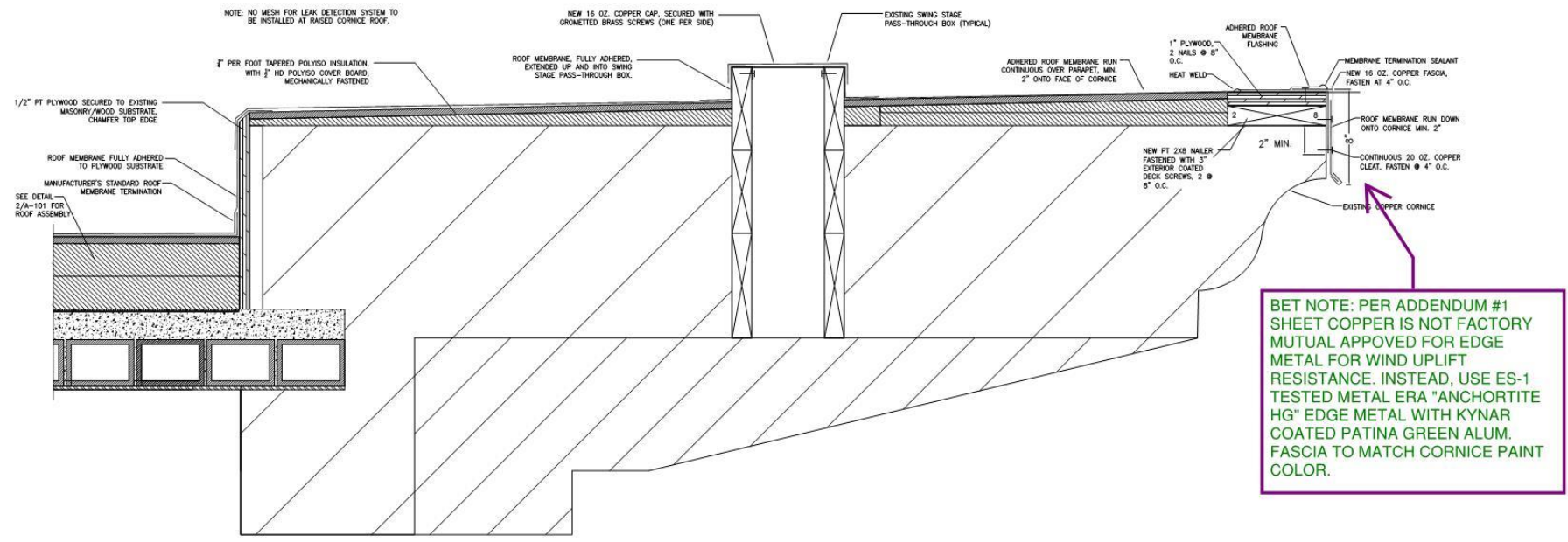
- WORK NOTES:**
1. REMOVE EXISTING ROOFING AND INSULATION TO THE UNDERLayment PER THE MANUFACTURER'S INSTRUCTIONS.
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  7. REMOVE EXISTING ROOFING AND INSULATION TO THE UNDERLayment PER THE MANUFACTURER'S INSTRUCTIONS.
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  10. REMOVE EXISTING ROOFING AND INSULATION TO THE UNDERLayment PER THE MANUFACTURER'S INSTRUCTIONS.
  11. REMOVE EXISTING ROOFING AND INSULATION TO THE UNDERLayment PER THE MANUFACTURER'S INSTRUCTIONS.
  12. REMOVE EXISTING ROOFING AND INSULATION TO THE UNDERLayment PER THE MANUFACTURER'S INSTRUCTIONS.



OWNER:  
FIDELITY INVESTMENTS  
BOSTON, MA

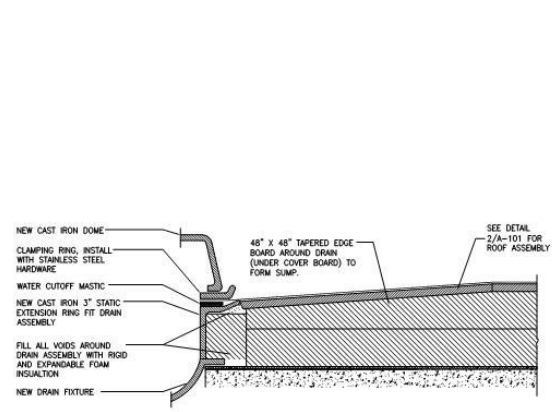
PROJECT TITLE:  
ROOF REPLACEMENT AND  
RELATED WORK  
7 WATER STREET  
BOSTON, MA

OWNERS REPRESENTATIVE:  
JONES LANG LASALLE  
200 SEAPORT BLVD, 21L  
BOSTON, MA 02210

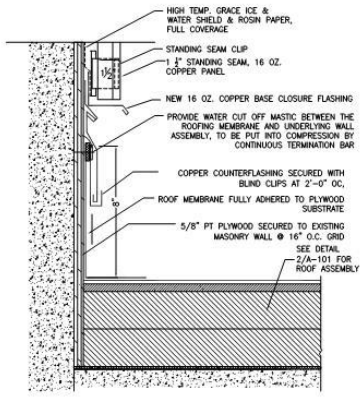


**BET NOTE: PER ADDENDUM #1 SHEET COPPER IS NOT FACTORY MUTUAL APPROVED FOR EDGE METAL FOR WIND UPLIFT RESISTANCE. INSTEAD, USE ES-1 TESTED METAL ERA "ANCHORTITE HG" EDGE METAL WITH KYNAR COATED PATINA GREEN ALUM. FASCIA TO MATCH CORNICE PAINT COLOR.**

**5 RAISED CORNICE ROOF SECTION – EDGE FLASHING, BASE FLASHING, AND SWING STAGE PASS-THROUGH BOX FLASHING**  
SCALE: 3" = 1'-0"

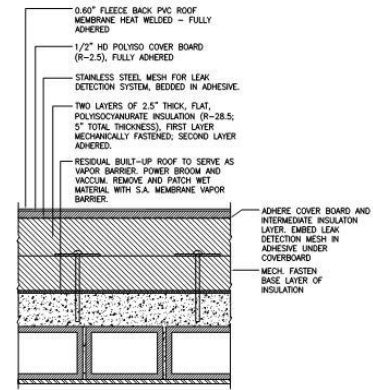


**4 ROOF DRAIN**  
SCALE: 3" = 1'-0"



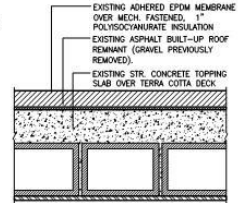
**3 PENTHOUSE WALL BASE FLASHING**  
SCALE: 3" = 1'-0"

NOTES: AT DOORS, TERMINATE FIELD MEMBRANE TO MASONRY WALL UNDER EXISTING DOOR PAN. COUNTER FLASH FIELD SHEET TERMINATION WITH FLUID APPLIED WATERPROOFING MEMBRANE PER ROOF MFR. REQUIREMENTS.



**2 NEW ROOF ASSEMBLY**  
SCALE: 3" = 1'-0"

NOTES: UPPER PENTHOUSE ROOF TO BE SAME AS MAIN ROOF ASSEMBLY. SEE DETAIL 4 FOR RAISED PERIMETER CORNICE ROOF ASSEMBLY.



**1 EXISTING ROOF ASSEMBLY**  
SCALE: 3" = 1'-0"

NOTES: ROOF HAS BEEN LEAKING, AND SUBSTRATE IS EXPECTED TO BE WET. ALL WET SURF MATERIAL SHALL BE CUT OUT AND PATCHED WITH SELF ADHERED MEMBRANE VAPOR BARRIER PRIOR TO NEW ROOF INSTALLATION.

DRAWING TITLE:

**ROOF DETAILS**

PROJECT NO: 19021  
DRAWN BY: DAH  
CHECKED BY: LER  
FILE NAME: 19021-roofplans.dwg  
SCALE: 3 IN. = 1 FT.  
DATE: 5/10/2019

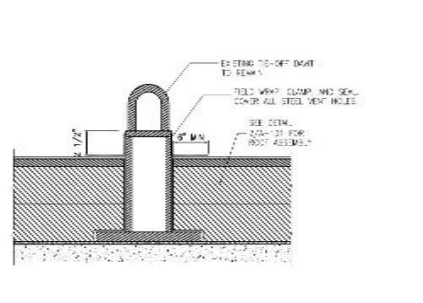
DRAWING NUMBER:

**BET**  
 BUILDING ENGINEERING TECHNOLOGIES, INC.  
 115 PROSPECT STREET  
 SOUTH BOSTON, MASSACHUSETTS  
 02127-1001  
 P: 617-267-0111  
 WWW.BETBUILDINGTECH.COM

OWNER:  
 PROJECT INVESTMENTS  
 BOSTON, MA

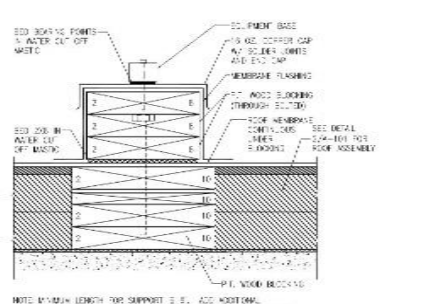
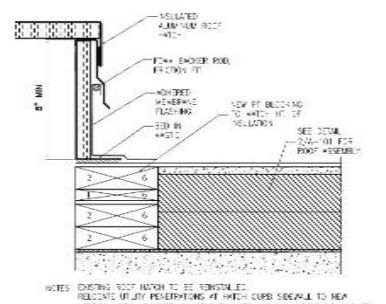
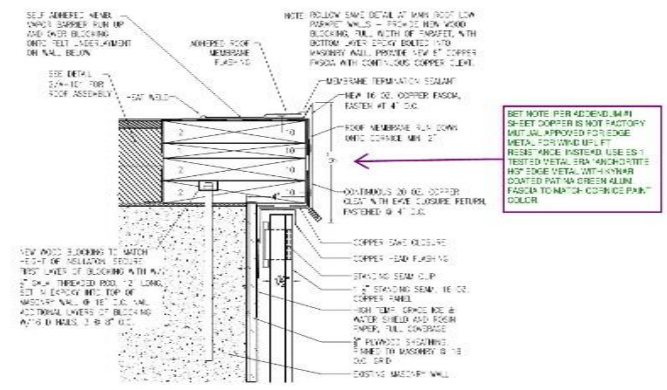
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OWNER'S REPRESENTATIVE:  
 JONES LANG LASALLE  
 300 SEAPORT BLVD, 21L  
 BOSTON, MA 02202



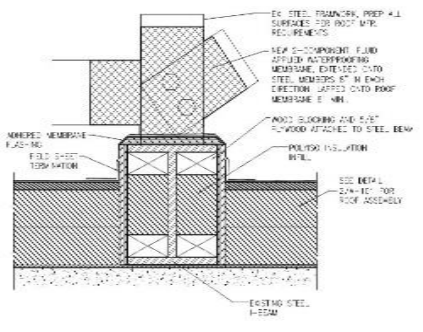
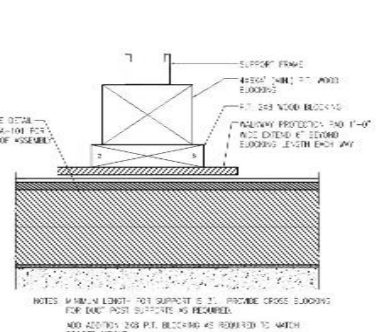
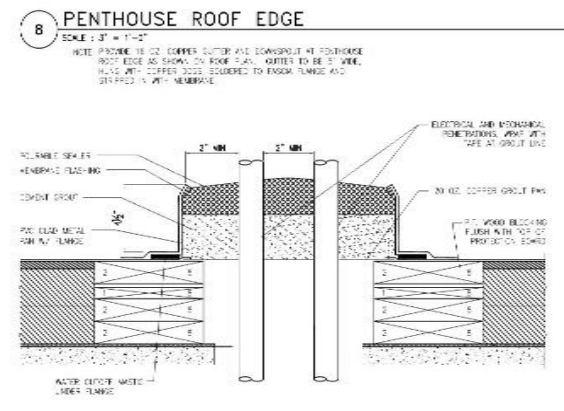
6 VENT PIPE FLASHING  
 SCALE: 3" = 1'-0"

3 EXIST. TIE-OFF DAVIT  
 SCALE: 3" = 1'-0"



5 ROOF HATCH  
 SCALE: 3" = 1'-0"

2 STAIR/EQUIPMENT SUPPORT  
 SCALE: 3" = 1'-0"



4 SLEEPER SUPPORT  
 SCALE: 3" = 1'-0"

1 STEEL BEAM FLASHING  
 SCALE: 3" = 1'-0"

7 POURABLE SEALER POCKET  
 SCALE: 3" = 1'-0"

SEE NOTE PER ALUMINUM SHEET DORPER IS NOT FACTORY METAL APPROVED FOR SOME METAL. FOR WOODEN FLT REINS WOOD INSTEAD USE SS17 TREATED METAL. STAIN ANTI-CORROSION HOT EDGE METAL WITH AN ANTI-CORROSION COATED WITH A GREEN ALUMINUM FLASHING TO MATCH CORNICE PAINT COLOR

NOTES: EXISTING ROOF HATCH TO BE REINSTALLED. RELOCATE UTILITY PENETRATIONS AT HIGH CURB SIDEWALK TO NEW APPOINT PITCH. PROVIDE ADJUST TO MATCH CURB ALL DISCONTINUED UTILITIES. SEE DETAIL.

NOTE: MINIMUM LENGTH FOR SUPPORT IS 3'. ADD ADDITIONAL BLOCKING AS REQUIRED TO PROVIDE PROPER SUPPORT HEIGHT.

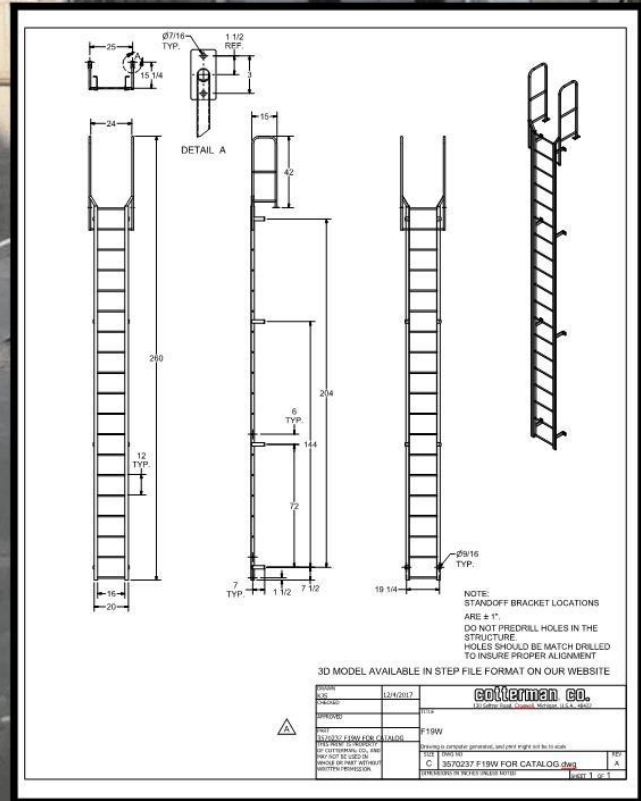
NOTES: MINIMUM LENGTH FOR SUPPORT IS 3'. PROVIDE CROSS BLOCKING FOR EACH POST SUPPORTS AS REQUIRED. ADD ADDITIONAL POST SUPPORTS AS REQUIRED TO MATCH PROPER HEIGHT.

DRAWING TITLE:  
**ROOF DETAILS**

PROJECT NO: 19061  
 DRAWN BY: DAN  
 CHECKED BY: JER  
 FILE NAME: 19061-roof.dwg  
 SCALE: 3/16" = 1' FT.  
 DATE: 5/7/2019

DRAWING NUMBER:

**A-102**



PROVIDE NEW 19-RUNG HOT DIPPED GALVANIZED STEEL FIXED LADDER WITH WALK THROUGH HAND RAILS; MODEL "F19W" BY COTTERMAN, OR APPROVED EQUAL. TOTAL HEIGHT IS APPROX. 18 1/2 FEET. CONTRACTOR TO VERIFY ALL DIMENSIONS.

INSTALL LADDER AFTER NEW ROOF AND NEW COPPER WALL PANELS ARE INSTALLED. SECURE INTO MASONRY WALLS OVER NEW COPPER PANELS USING 5/8" x 6" HOT DIPPED GALVANIZED WEDGE EXPANSION ANCHORS. BED ATTACHMENT POINTS IN SILICONE SEALANT.

AT UPPER ROOF, PROVIDE SOLID WOOD BLOCKING SAME HEIGHT AS ROOF INSULATION FOR HAND RAIL BASE PLATE SECUREMENT. LAG BASE PLATES INTO WOOD BLOCKING AND BED FASTENERS IN APPROVED WATER CUTOFF. PROVIDE ROOF WALKPADS AT TOP AND BOTTOM OF NEW LADDER.

PROJECT:	12/4/2017	<b>COTTERMAN CO.</b> 1000 State Street, Lowell, MA 01854
DRAWN:		
PROJECT:		
MODEL:	F19W	
DESCRIPTION:	19 RUNG GALVANIZED STEEL LADDER WITH WALK THROUGH HAND RAILS	
DATE:	7/29/2019	
SCALE:	AS SHOWN	
REVISIONS:	C C 1 20200237 F19W FOR CATALOG.dwg	

Existing Conditions





9 Water St,  
Boston, MA 02109













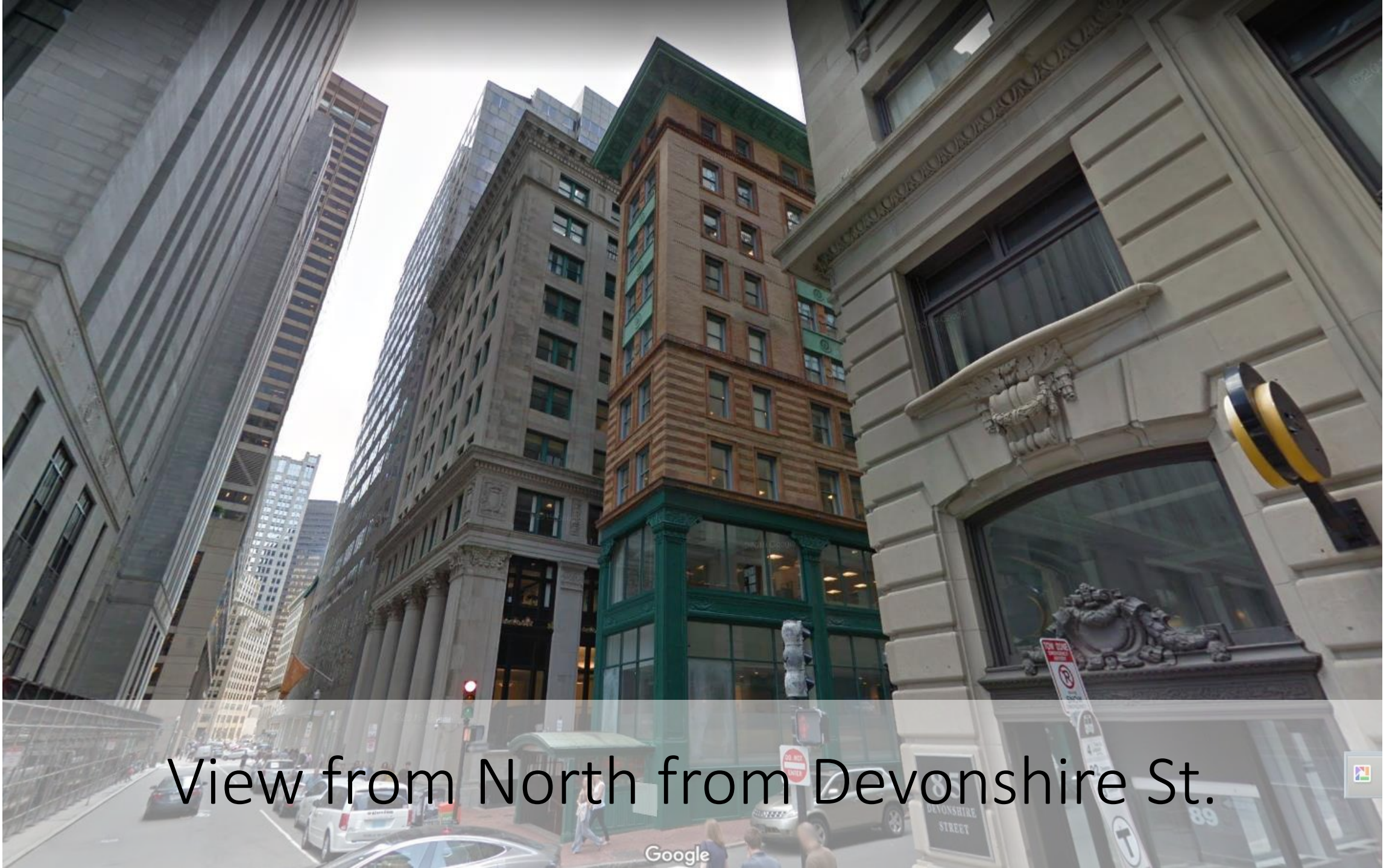








Street views



View from North from Devonshire St.



View from South from Devonshire St.



View from South from Washington Street



View from North from Washington Street



View from East from Congress Street



View from West from School Street