HDC

ADMINISTRATIVE APPROVALS

June 02, 2021

1. **379 New Castle Avenue (LUHD-341) - Recommended Approval**
2. **33 Johnson Court (LUHD-330) - Recommended Approval**
3. **14 Mechanic Street (LUHD-338) - Recommended Approval**
4. **254 South Street (LUHD-305) - Recommended Approval**
5. **241 South Street (LUHD-344) - Recommended Approval**
6. **205 Market Street (LUHD-342) - Recommended Approval**
7. **100 Market Street (LUHD-345) - Recommended Approval**
8. **66 Marcy Street (LUHD-346) - Recommended Approval**

1. 379 New Castle Avenue - Recommended Approval

Background: The applicant is seeking approval for the construction of a small roof with support brackets over the front door, to replace garage window and doors, and relocate heat pump to the rear of the garage with a fence on street side.

Staff Comment: Recommended Approval

Stipulations:

1. _____
2. _____
3. _____

City of Portsmouth, NH

05/25/2021

LUHD-341

Historic District Commission Work Session or Administrative Approval Application

Status: Active

Date Created: May 14, 2021

Applicant

Anne Whitney
archwhit@aol.com
9 Sheafe St
Portsmouth, NH 03801
603-427-2832

Location

379 NEW CASTLE AVE
Portsmouth, NH 03801

Owner:

PETERS TODD & PETERS JAN
379 NEW CASTLE AVE PORTSMOUTH, NH 03801

Application Type

Please select application type from the drop down menu below

Administrative Approval

Project Information

Brief Description of Proposed Work

As part of LU-20-56:
- Add roof supported by brackets to Front Door Surround.
- At Existing Garage, replace windows & doors
- Locate heat pump at Rear of Garage with fence at street side

Description of Proposed Work (Planning Staff)

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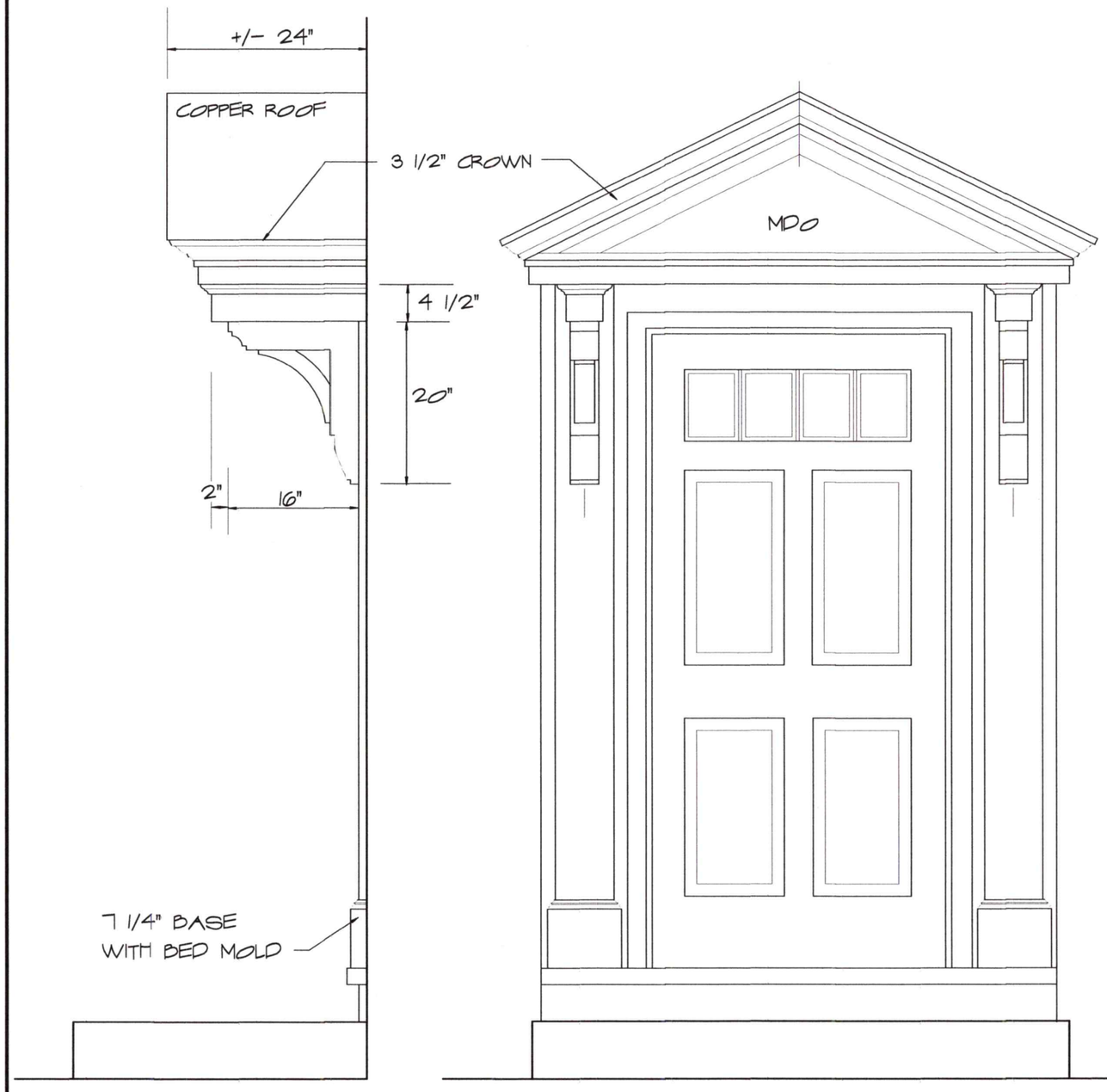
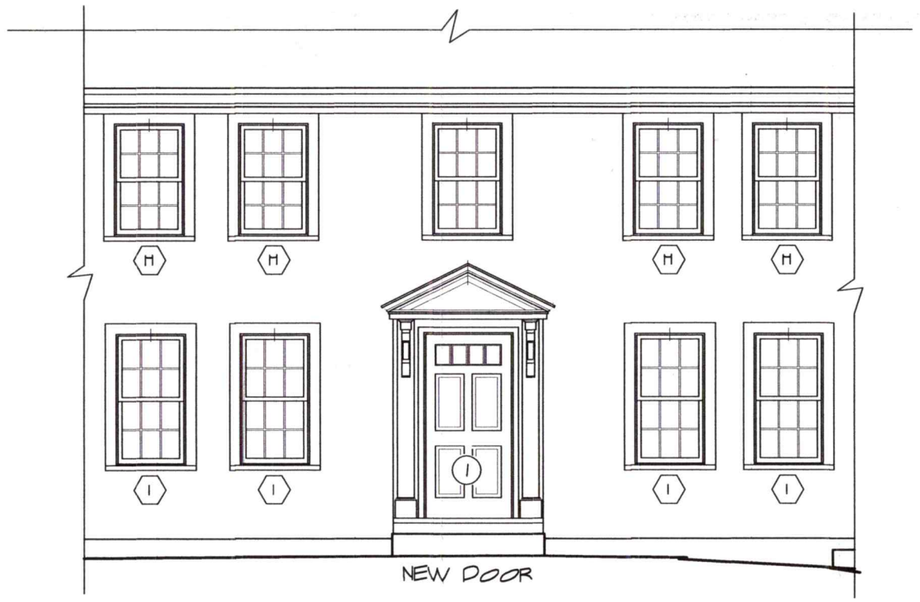
Acknowledgement

I certify that the information given is true and correct to the best of my knowledge.

☑



ENTRY SURROUND WITH ROOF
SCALE : 3/4" = 1'-0"



EAST ENTRY ELEVATION
SCALE : 3/16" = 1'-0"

PAINTED CEDAR BRACKET 16" X 20"
PROWOOD MARKET # 10T5

9 Sheafe Street
Portsmouth
NH 03801
603-427-2832

ANNE WHITNEY ARCHITECT

ENTRY DOOR
SURROUND CHANGE

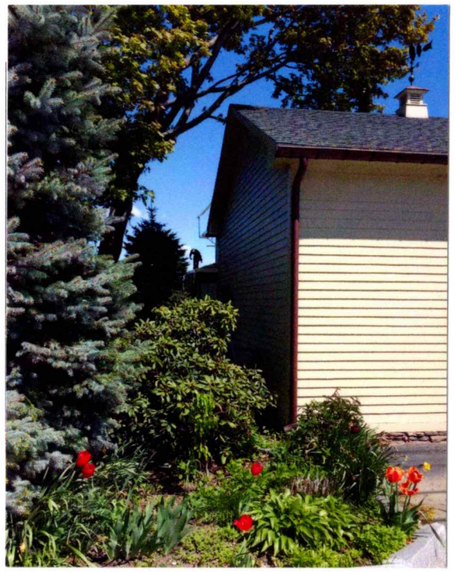
RENOVATIONS, PETERS RESIDENCE

379 NEW CASTLE AVE. PORTSMOUTH, NH

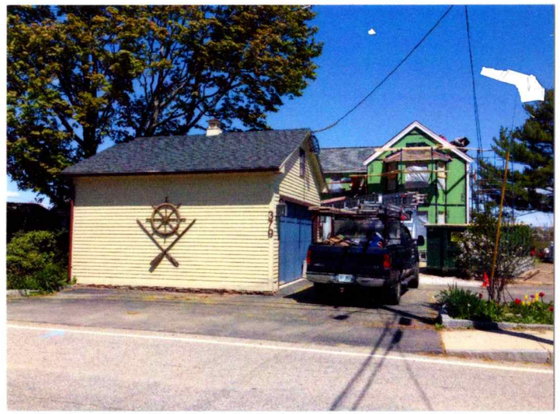
Project: #1910

Revisions:

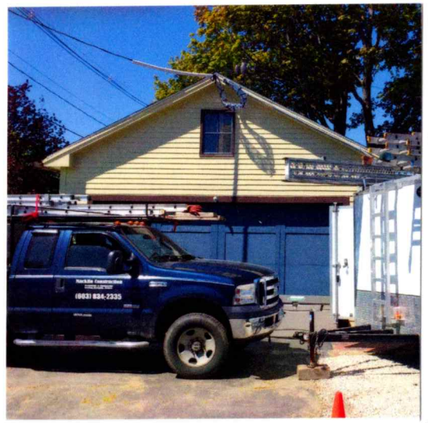
Date: 5/14/21



VIEW OF REAR WALL



GARAGE FROM STREET

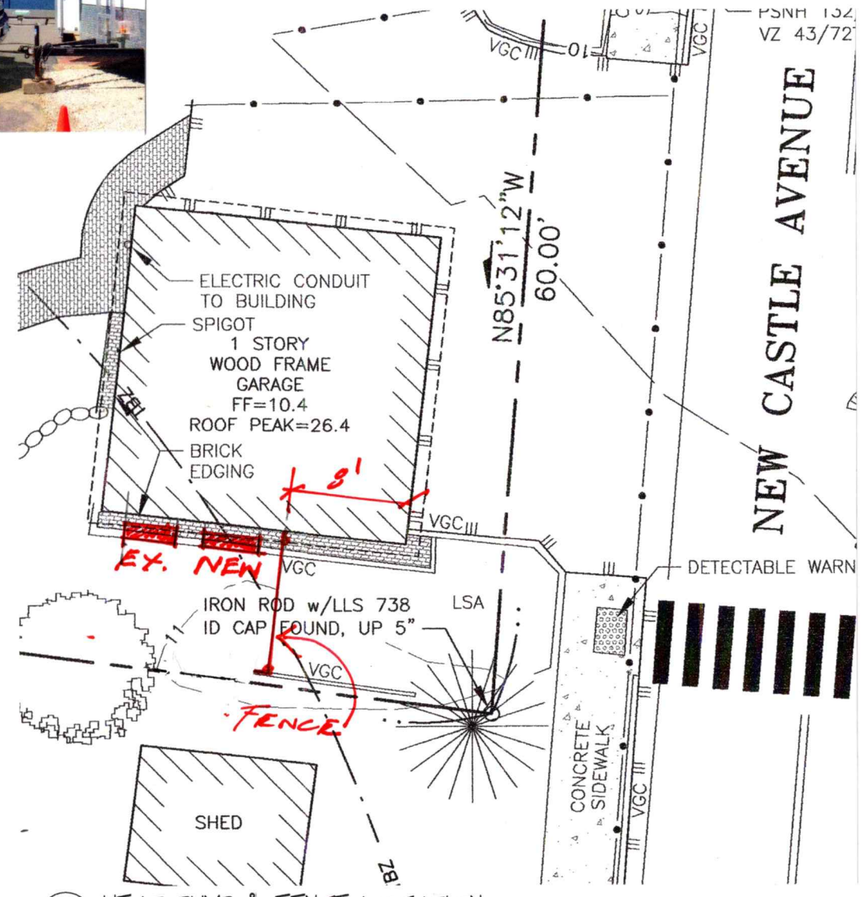


GARAGE FRONT

- NEW GABLE WINDOW IN EXIST OPENING
  MARVIN ELEVATE, ELCAP 2531, STONE WHITE
  RO = 25" X 31 5/8"
- NEW GARAGE DOOR IN EXIST OPENING
  GENERAL DOOR CORP., CAMBRIDGE SERIES
  12 LITE & 4 PANEL, INSULATED DOOR WITH
  COMPOSITE OVERLAY PAINTED, 16' WIDE X 8' HIGH

HEAT PUMP LOCATION

FENCE STYLE



HEAT PUMP & FENCE LOCATION
SCALE : 1" = 10'-0"

- NEW D-HUNG WINDOW IN EXIST OPENING, MARVIN ELEVATE, ELDH 2644, STONE WHITE
  RO = 26 1/2" X 44 1/4"

DOOR TO BE REPLACE

EXIST GARAGE & HEAT PUMP LOCATION

9 Sheafe Street
Portsmouth
NH 03801
603-427-2832

ANNE WHITNEY ARCHITECT

RENOVATIONS, PETERS RESIDENCE

379 NEW CASTLE AVE. PORTSMOUTH, NH

Project: #1910

Revisions:

Date: 5/14/21

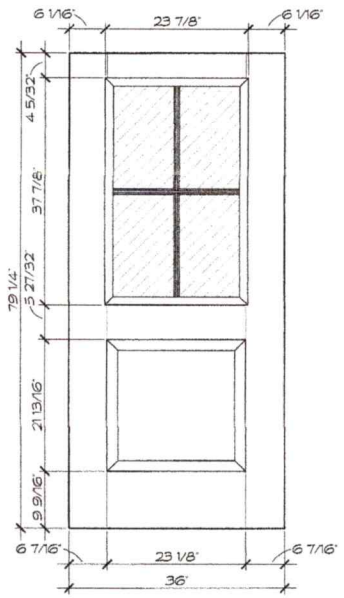
MARVIN ELEVATE™ COLLECTION

DOUBLE HUNG

MO (mm)	1-10 (559)	2-2 (660)	2-6 (762)
RO (mm)	1-10 1/2 (572)	2-2 1/2 (673)	2-6 1/2 (775)
FS (mm)	1-9 1/2 (546)	2-1 1/2 (648)	2-5 1/2 (749)
DLO (mm)	1-3 11/16 (398)	1-7 11/16 (500)	1-11 11/16 (602)

3-0 (914) / 3-0 1/4 (921) / 2-11 3/4 (908) / 1-1 11/16 (348)	(S.O. 1-8 x 2-10)	ELDH2236	(S.O. 2-0 x 2-10)	ELDH2636	(S.O. 2-4 x 2-10)	ELDH3036
3-4 (1016) / 3-4 1/4 (1022) / 3-3 3/4 (1010) / 1-3 11/16 (398)	(S.O. 1-8 x 3-2)	ELDH2240	(S.O. 2-0 x 3-2)	ELDH2640	(S.O. 2-4 x 3-2)	ELDH3040
3-8 (1176) / 3-8 1/4 (1124) / 3-7 3/4 (1111) / 1-5 11/16 (449)	(S.O. 1-8 x 3-6)	ELDH2244	(S.O. 2-0 x 3-6)	ELDH2644	(S.O. 2-4 x 3-6)	ELDH3044
4-0 (1219) / 4-0 1/4 (1226) / 3-11 3/4 (1213) / 1-7 11/16 (500)	(S.O. 1-8 x 3-10)	ELDH2248	(S.O. 2-0 x 3-10)	ELDH2648	(S.O. 2-4 x 3-10)	ELDH3048
4-4 (1321) / 4-4 1/4 (1327) / 4-3 3/4 (1314) / 1-9 11/16 (551)	(S.O. 1-8 x 4-2)	ELDH2252	(S.O. 2-0 x 4-2)	ELDH2652	(S.O. 2-4 x 4-2)	ELDH3052

SIDE WINDOW



DOOR DETAIL

SCALE: 3/4" = 1'-0"

APPROVED DATE

WHEN PLACING ORDERS, PLEASE SIGN BOTH QUOTE AND ALL SUPPLIED DRAWINGS TO PREVENT DELAYS IN ORDER PROCESSING.

SIDE DOOR

NOTE:
DRAWING DEPICTED AS VIEWED FROM EXTERIOR
STICKING IS NOT INCLUDED IN STILE & RAIL DIMENSIONS
DRAWINGS ARE FOR GENERAL REFERENCE ONLY AND MAY NOT BE BUILT TO THE EXACT DETAIL SHOWN

DOOR 8802I

THERMA-TRU DOORS

QUOTE #15577300 / LINE 3

PROPOSED DOOR UNIT FOR
SELECTWOOD
275 CONSTITUTION AVENUE
PORTSMOUTH, NH 03801
JOB:

DWG. #15577300
DATE 1/13/2016
DRAWN: K. CECI

REEB

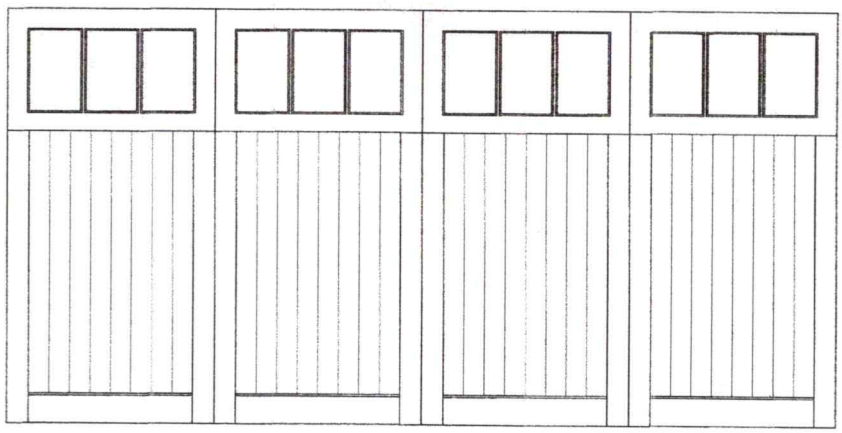
600 BRIGHTON STREET, BETHLEHEM, PA 18015
OFFICE 610-867-6160 · WEB WWW.REEB.COM

CASEMENT PICTURE

MO (mm)	1-4 1/2 (419)	1-8 1/2 (521)	2-0 1/2 (622)
RO (mm)	1-5 (432)	1-9 (533)	2-1 (635)
FS (mm)	1-4 (406)	1-8 (508)	2-0 (610)
DLO (mm)	0-10 25/32 (274)	1-2 25/32 (376)	1-6 25/32 (477)

1-7 3/8 (492) / 1-7 5/8 (498) / 1-7 1/8 (486) / 1-1 29/32 (353)	ELCAP1719	ELCAP2119	ELCAP2519
1-11 3/8 (594) / 1-11 5/8 (600) / 1-11 1/8 (587) / 1-5 29/32 (455)	ELCAP1723	ELCAP2123	ELCAP2523
2-3 3/8 (695) / 2-3 5/8 (702) / 2-3 1/8 (689) / 1-9 25/32 (557)	ELCAP1727	ELCAP2127	ELCAP2527
2-7 3/8 (797) / 2-7 5/8 (803) / 2-7 1/8 (791) / 2-1 29/32 (658)	ELCAP1731	ELCAP2131	ELCAP2531

GARAGE WINDOW



Concept Drawing Only, Not To Scale Section Heights and Number of Sections May Vary

GENERAL DOORS Corporation
Manufacturers of Overhead Doors
1 Monroe Street • PO Box 225 • Bristol, PA 19007-0225
215.788.9277 • Fax 215.788.9450

Type/Model: Cambridge		Drawn By: S. Heyser	Drawing Date: 2 / 28 / 17
Customer:	Job Name:		Revision No:
Approved By:	Size:	Order No:	Order Date:

Page 11

- NEW GARAGE DOOR IN EXIST OPENING
  GENERAL DOOR CORP., CAMBRIDGE SERIES
  12 LITE & 4 PANEL, INSULATED DOOR WITH
  COMPOSITE OVERLAY PAINTED, 16' WIDE X 8' HIGH

5/13/21

379 NEW CASTLE AVE.

2. 33 Johnson Court - Recommended Approval

Background: The applicant is seeking approval for the replacement of an existing kitchen window with a new larger window.

Staff Comment: Recommended Approval

Stipulations:

1. _____
2. _____
3. _____

City of Portsmouth, NH

05/25/2021

LUHD-330

Historic District Commission Work Session or Administrative Approval Application

Status: Active

Date Created: Apr 23, 2021

Applicant

Justin Heald
kimberlee@healdbuilders.com
120 Ham Road
Barrington, NH 03825
603-664-5040

Location

33 JOHNSON CT
Portsmouth, NH 03801

Owner:

MORALES FAMILY 2020 TRUST & MORALES ALBERT R & KRISTIN M TTEES
33 JOHNSON CT PORTSMOUTH, NH 03801

Application Type

Please select application type from the drop down menu below

Administrative Approval

Project Information

Brief Description of Proposed Work

We will be completing a kitchen remodel on this property and we plan to change out the kitchen window to a larger unit. We would like to obtain any permissions necessary to complete the work in this historic district home. Work is expected to begin September of this year.

Description of Proposed Work (Planning Staff)

the replacement of an existing kitchen window with a new window of a larger size

Project Representatives

Relationship to Project

Owner

If you selected "Other", please state relationship to project.

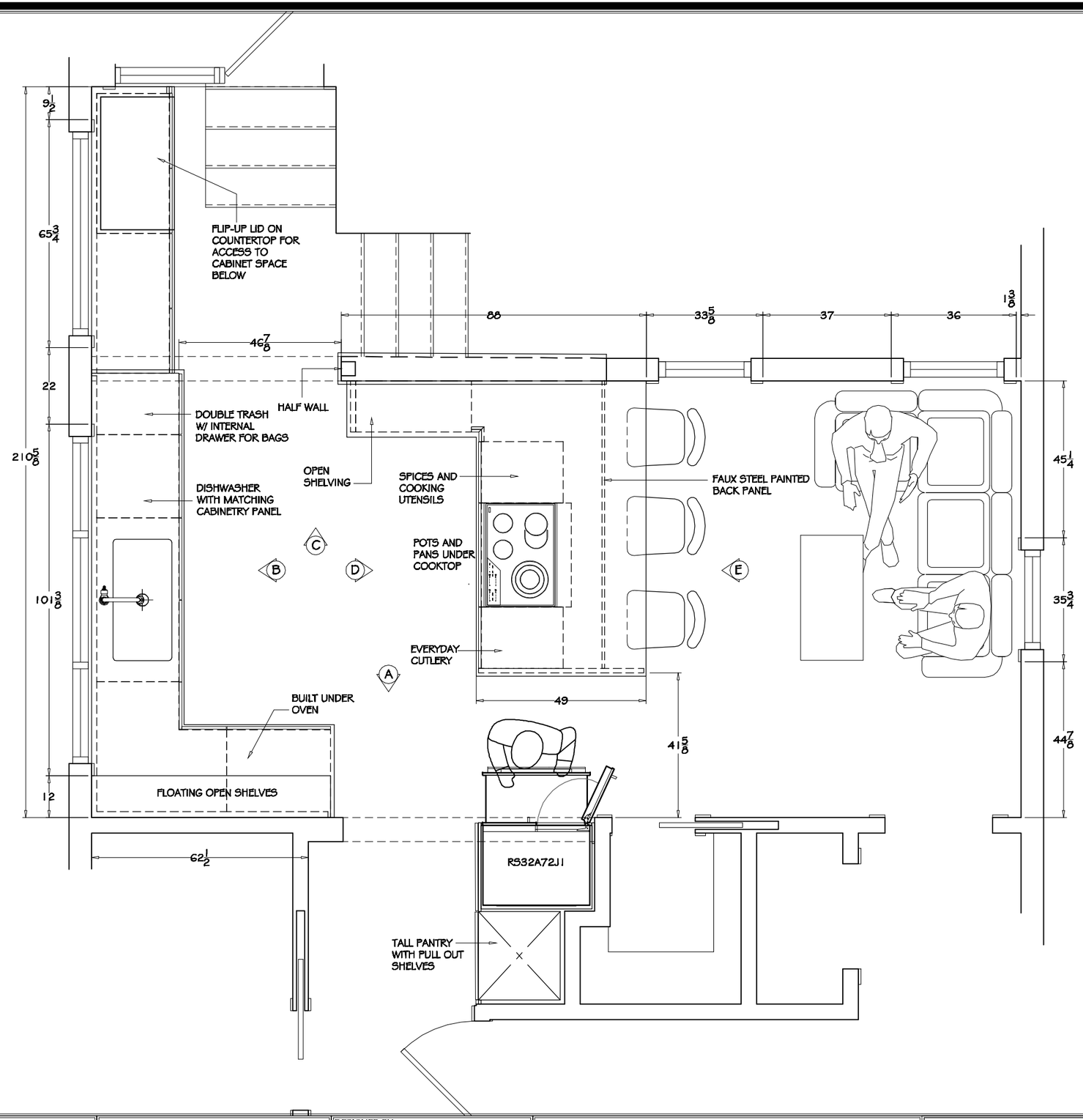
Al and Kristin Morales -- 33 Johnson Court, Portsmouth NH 03801
kmillermorales@gmail.com; albert.raul.morales@gmail.com -- 603-867-0721 – Kristin's cell

Background info about the house

Original portion of house from 1920s. Garage, room above garage ("Rec room") and bump-outs added ~2000. Gas heat. Forced hot air in main portion of home; radiant in rec room and space next to it (landing at top of garage stairs). Central air in main portion of house. Located in the Portsmouth Historic District. House is within 15 feet or so of the water (South Mill Pond). Basement is easily accessible. We are working with Mari Woods.

Kitchen renovation – principal items

- Peninsula
  - Remove existing
  - Build new attached to the wall adjoining garage stairs
  - New countertop, new cabinets
  - Will have range or cooktop/stove
- Remove door to pantry and replace with a pocket door
- Relocate refrigerator into wall space next to current peninsula
  - Will be integrated, with panels matching cabinets
  - Can fit 36" fridge, or need to stick with 33"?
  - Would like to understand if can easily open up the doorway into the powder room hallway
- Counter/wall with sink:
  - Remove cabinets
  - Add one more window; increase all to the next size up (or can just do a big single window all the way across? Note we're in historic district)
  - New countertop; new cabinets underneath
  - Wall on left will just have floating shelves
  - Plan to keep existing dishwasher
- Landing
  - Replace banister with new
  - Install built-in storage unit next to stairs up to rec room
- Wall/doors separating landing/stairs from kitchen:
  - Remove sliding doors and open up the wall as much as possible (within reason). We'd like to understand what architectural/engineering limitations exist.
- Floors
  - Replace the pergo floors that are currently in the kitchen, landing, garage stairs and rec room with new wood floors. (note that there is radiant heat in the landing and rec room)
  - Refinish existing wood floors in remainder of the ground floor to match new floors.
  - Floors in living room are sloping/uneven. We'd like to understand what can be done to improve (within reason). Also, thresholds between room are bulky. Can streamline?
- Lighting: pendants over island; replace recessed cans with smaller; replace light over table



ALL DIMENSIONS AND SIZE DESIGNATIONS GIVEN ARE SUBJECT TO VERIFICATION ON JOB SITE AND ADJUSTMENT TO FIT JOB CONDITIONS

MARIWOODS
KITCHEN • BATH • HOME

DESIGNED FOR:
MORALES KITCHEN
33 JOHNSON COURT
PORTSMOUTH, NH 03801

DESIGNED BY: MARI WOODS

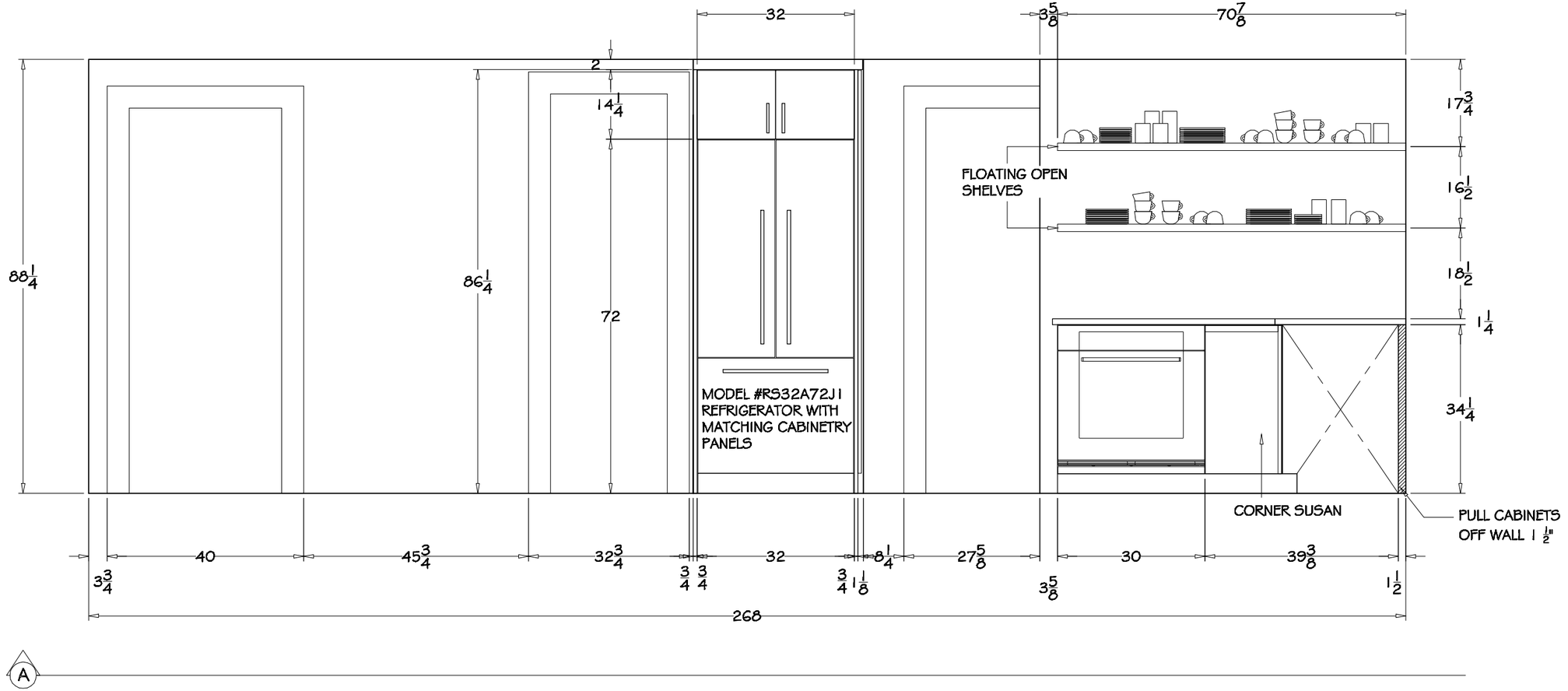
SCALE: 3/8" = 1'-0"

APPROVED BY:

DATE:

DESIGN PLANS ARE PROVIDED FOR THE FAIR USE BY THE CLIENT OR HIS/HER AGENT IN COMPLETING THE PROJECT AS LISTED WITHIN THIS CONTRACT. DESIGN PLANS REMAIN THE PROPERTY OF THIS FIRM AND CAN NOT BE USED OR REUSED WITHOUT PERMISSION.

	DATE	BY
DRAWN	09.24.20	MFW
REVISED	11.04.20	MFW



ALL DIMENSIONS AND SIZE DESIGNATIONS GIVEN ARE SUBJECT TO VERIFICATION ON JOB SITE AND ADJUSTMENT TO FIT JOB CONDITIONS	MARIWOODS KITCHEN • BATH • HOME	DESIGNED FOR: MORALES KITCHEN 33 JOHNSON COURT PORTSMOUTH, NH 03801	DESIGNED BY: MARI WOODS SCALE: ½" = 1'-0"	APPROVED BY: DATE:	DESIGN PLANS ARE PROVIDED FOR THE FAIR USE BY THE CLIENT OR HIS/HER AGENT IN COMPLETING THE PROJECT AS LISTED WITHIN THIS CONTRACT. DESIGN PLANS REMAIN THE PROPERTY OF THIS FIRM AND CAN NOT BE USED OR REUSED WITHOUT PERMISSION.	PAGE# 2 OF 7

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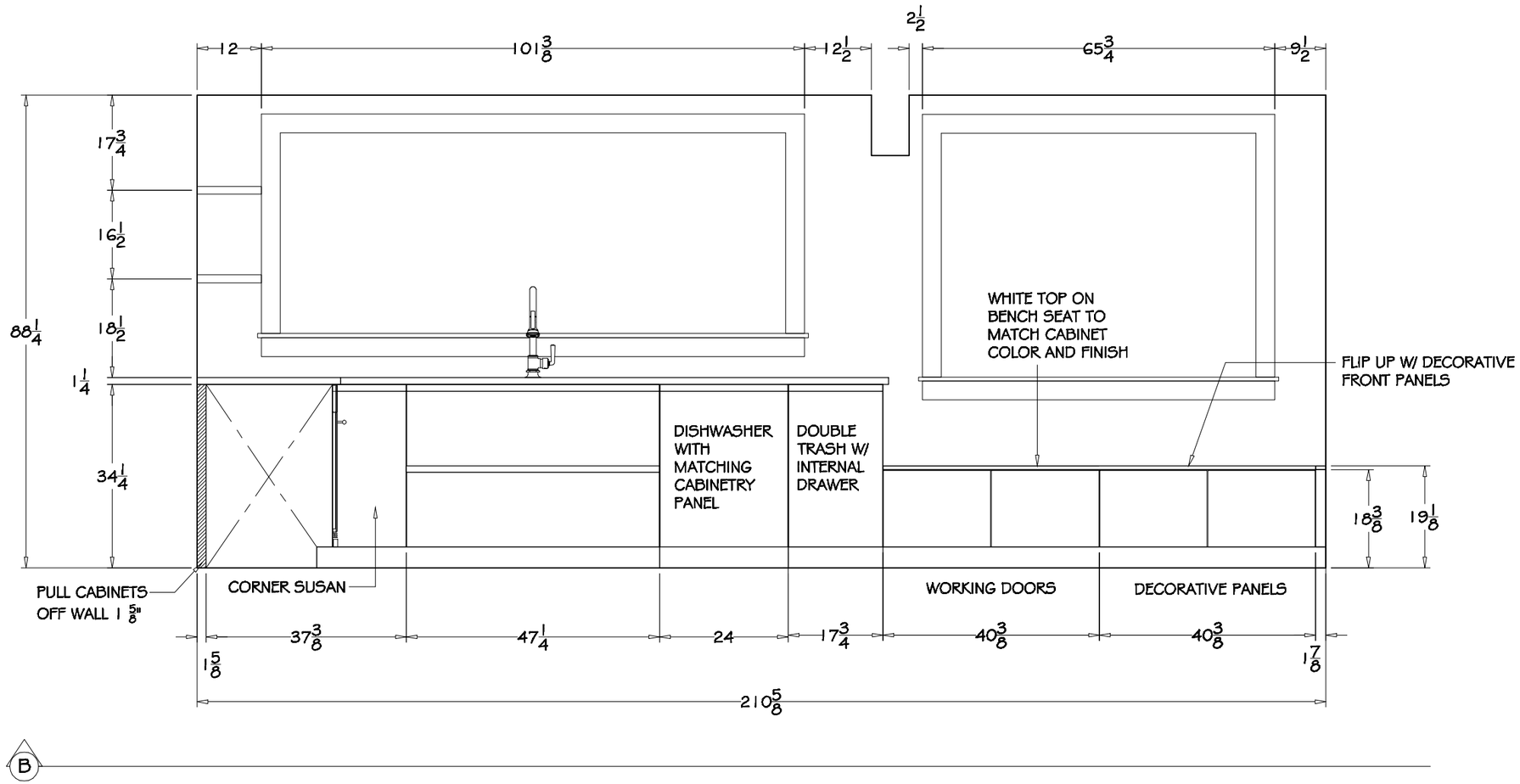
REVISED	11.04.20	MFW



ALL DIMENSIONS AND SIZE DESIGNATIONS GIVEN ARE SUBJECT TO VERIFICATION ON JOB SITE AND ADJUSTMENT TO FIT JOB CONDITIONS

MARIWOODS
KITCHEN • BATH • HOME

DESIGNED FOR:
MORALES KITCHEN
33 JOHNSON COURT
PORTSMOUTH, NH 03801

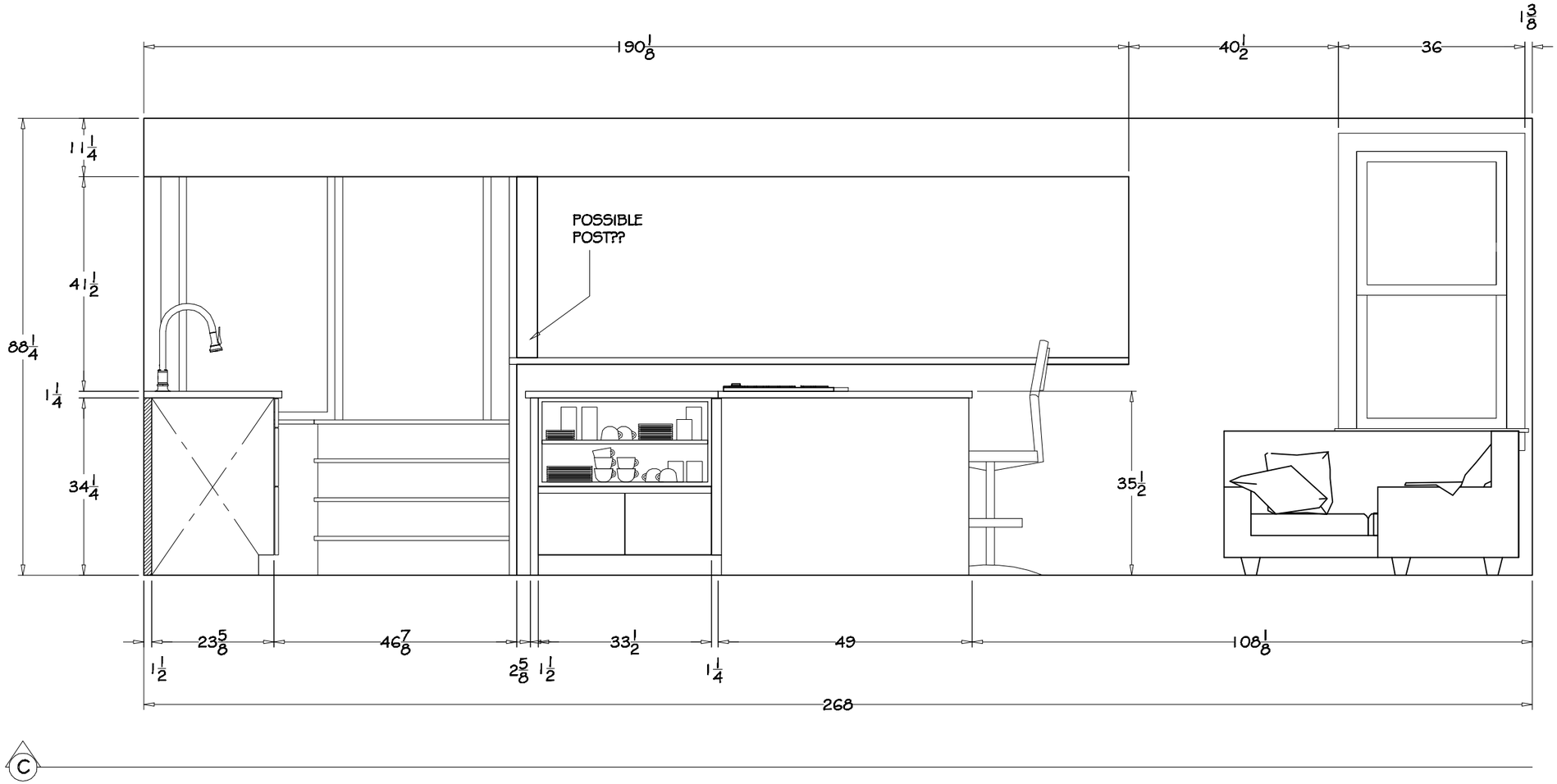
DESIGNED BY: MARI WOODS

SCALE: ½" = 1'-0"

APPROVED BY:

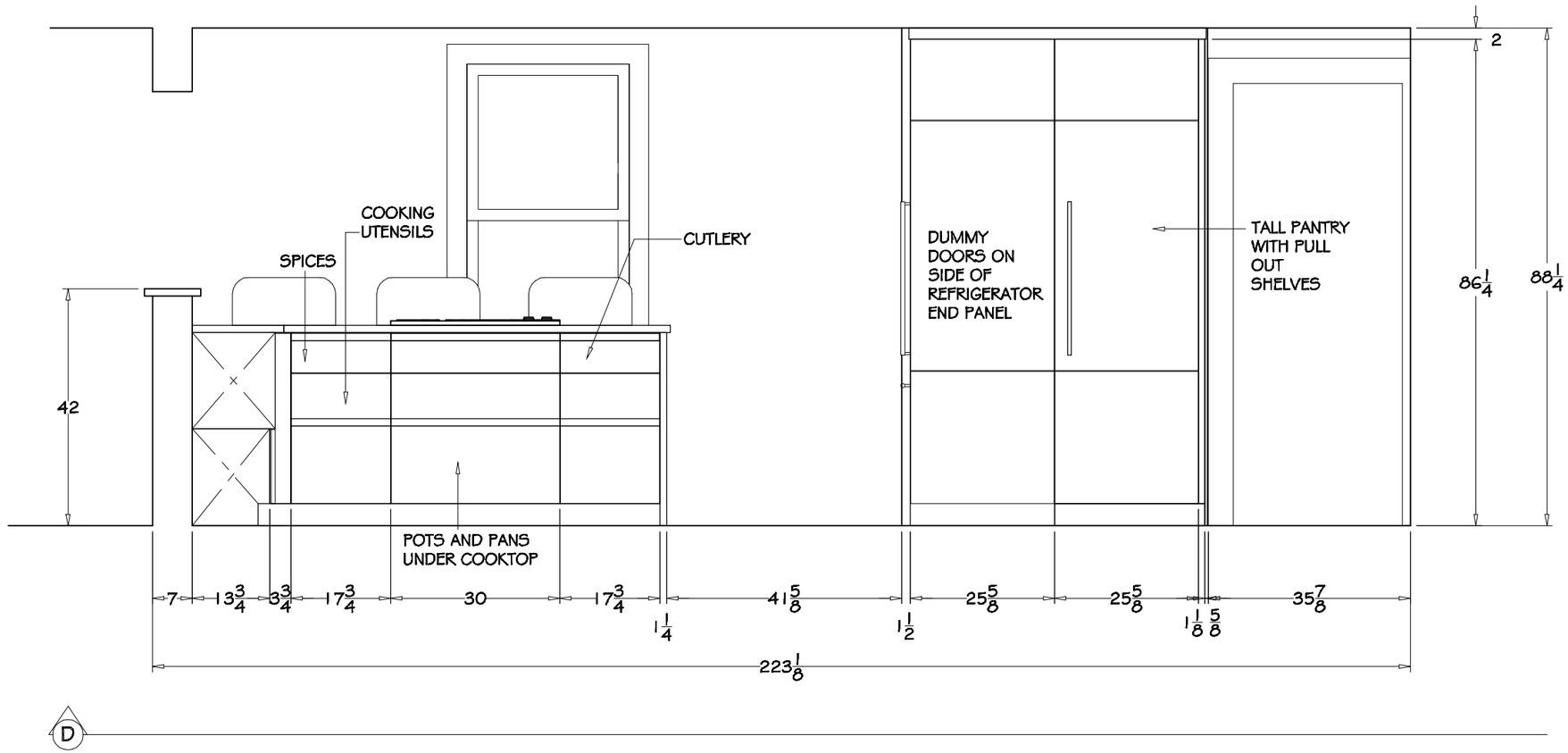
DATE:

	DATE	BY
DRAWN	09.24.20	MFW
REVISED	11.04.20	MFW



ALL DIMENSIONS AND SIZE DESIGNATIONS GIVEN ARE SUBJECT TO VERIFICATION ON JOB SITE AND ADJUSTMENT TO FIT JOB CONDITIONS	MARIWOODS KITCHEN • BATH • HOME	DESIGNED FOR: MORALES KITCHEN 33 JOHNSON COURT PORTSMOUTH, NH 03801	DESIGNED BY: MARI WOODS SCALE: ½" = 1'-0"	APPROVED BY: DATE:	DESIGN PLANS ARE PROVIDED FOR THE FAIR USE BY THE CLIENT OR HIS/HER AGENT IN COMPLETING THE PROJECT AS LISTED WITHIN THIS CONTRACT. DESIGN PLANS REMAIN THE PROPERTY OF THIS FIRM AND CAN NOT BE USED OR REUSED WITHOUT PERMISSION.		PAGE# 4 OF 7

	DATE	BY
DRAWN	09.24.20	MFW
REVISED	11.04.20	MFW



ALL DIMENSIONS AND SIZE DESIGNATIONS GIVEN ARE SUBJECT TO VERIFICATION ON JOB SITE AND ADJUSTMENT TO FIT JOB CONDITIONS	MARIWOODS KITCHEN • BATH • HOME	DESIGNED FOR: MORALES KITCHEN 33 JOHNSON COURT PORTSMOUTH, NH 03801	DESIGNED BY: MARI WOODS SCALE: ½" = 1'-0"	APPROVED BY: DATE:	DESIGN PLANS ARE PROVIDED FOR THE FAIR USE BY THE CLIENT OR HIS/HER AGENT IN COMPLETING THE PROJECT AS LISTED WITHIN THIS CONTRACT. DESIGN PLANS REMAIN THE PROPERTY OF THIS FIRM AND CAN NOT BE USED OR REUSED WITHOUT PERMISSION.		PAGE# 6 OF 7

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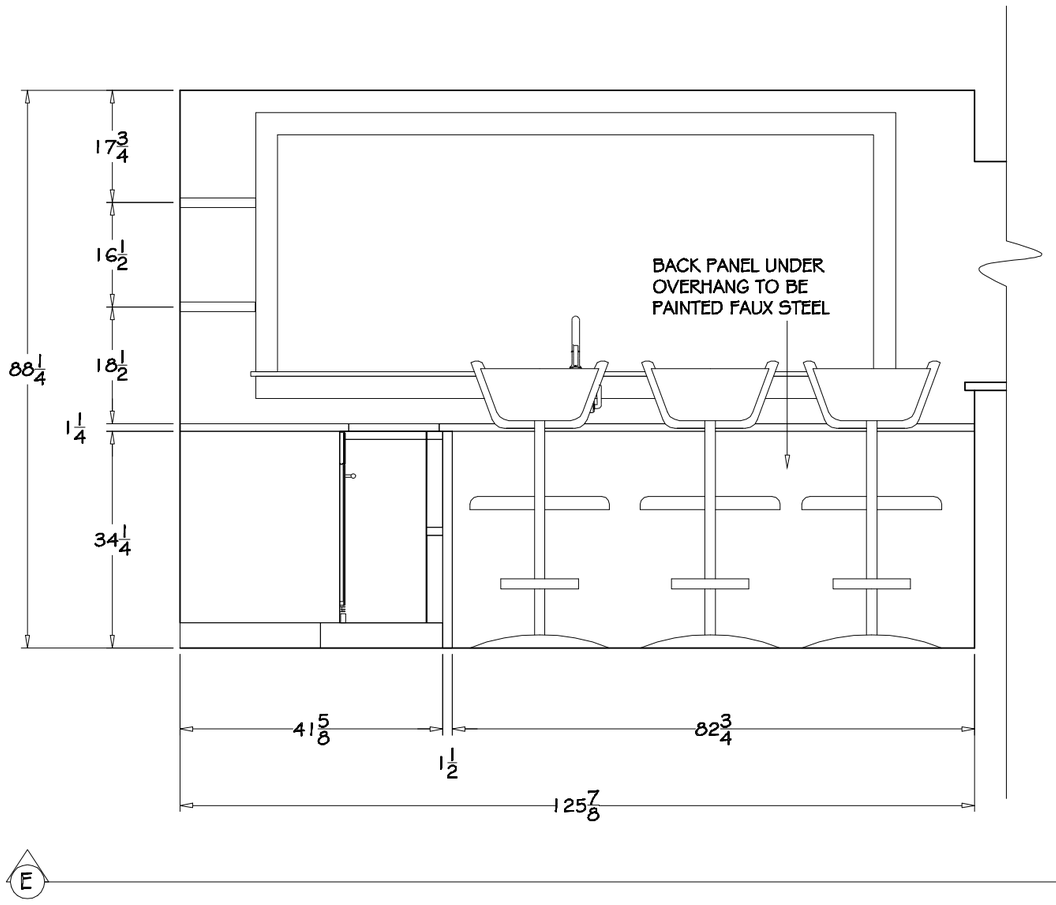
REVISED	11.04.20	MFW



ALL DIMENSIONS AND SIZE DESIGNATIONS GIVEN ARE SUBJECT TO VERIFICATION ON JOB SITE AND ADJUSTMENT TO FIT JOB CONDITIONS

MARIWOODS
KITCHEN • BATH • HOME

DESIGNED FOR:
MORALES KITCHEN
33 JOHNSON COURT
PORTSMOUTH, NH 03801

DESIGNED BY: MARI WOODS

SCALE: ½" = 1'-0"

APPROVED BY:

DATE:

	DATE	BY
DRAWN	09.24.20	MFW
REVISED	11.04.20	MFW

Property Information

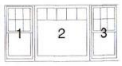
Property ID	0110-0012-0000
Location	33 JOHNSON CT
Owner	MORALES FAMILY 2020 TRUST

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Portsmouth, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 4/1/2019
Data updated 7/17/2019

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

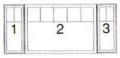
	Item	Qty	Item Size (Operation)	Location	Unit Price	Ext. Price
	0002	1	TW20-DHP310310-20 (AA-F-AA)	OPTION #2 STAT CENTER UNIT OPERATING FLANKER UNITS PLEASE NOTE HEIGHT ON THIS UNIT	$ 2372.99	$ 2372.99

RO Size = 8' 3 3/8" W x 4' 0 7/8" H Unit Size = 8' 2 13/16" W x 4' 0 7/8" H

Viewed from Exterior

400 Series
Composite Unit, White/Pre-finished White, High Performance Low-E4 Top/Bottom*High Performance Low-E4*High Performance Low-E4 Top/Bottom Glass, Divided Light with Spacer Top*No Grille(s) Bottom*Divided Light with Spacer*Divided Light with Spacer Top*No Grille(s) Bottom, Mulling Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical
Insect Screen, White

Unit	U-Factor	SHGC
1	0.31	0.28
2	0.31	0.30
3	0.31	0.28

	0006	1	CR135-P5035-CR135 (S-F-S)	OPTION #3 ALL STATIONARY UNITS	$ 1889.20	$ 1889.20

RO Size = 7' 10 5/8" W x 3' 5 3/8" H Unit Size = 7' 10 1/8" W x 3' 4 13/16" H

Viewed from Exterior

400 Series
Composite Unit, White/White - Factory Painted, High Performance Low-E4 Glass, Divided Light with Spacer, Mulling Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical

Unit	U-Factor	SHGC
1	0.29	0.29
2	0.28	0.31
3	0.29	0.29

3. 14 Mechanic Street - Recommended Approval

Background: The applicant is seeking approval to install wrought iron railing systems- (1) at the front entry and (1) at the rear master balcony.

Staff Comment: Recommended Approval

Stipulations:

1. _____
2. _____
3. _____

City of Portsmouth, NH

05/25/2021

LUHD-338

Historic District Commission Work Session or Administrative Approval Application

Status: Active

Date Created: May 12, 2021

Applicant

Joshua Butkus
kscannell@destefanomaugel.com
22 ladd st
portsmouth, NH 03801
2034000802

Location

14 MECHANIC ST
Portsmouth, NH 03801

Owner:

ROESE JOHN J REVOCABLE TRUST OF 2016 &
ROESE JOHN JOSEPH TRUSTEE
55 ELM ST EFFINGHAM, NH 03882

Application Type

Please select application type from the drop down menu below

Administrative Approval

Project Information

Brief Description of Proposed Work

We are seeking approval for two new wrought iron railing systems at the front entry and rear master balcony.

Description of Proposed Work (Planning Staff)

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Project Representatives

Relationship to Project

Architect

If you selected "Other", please state relationship to project.

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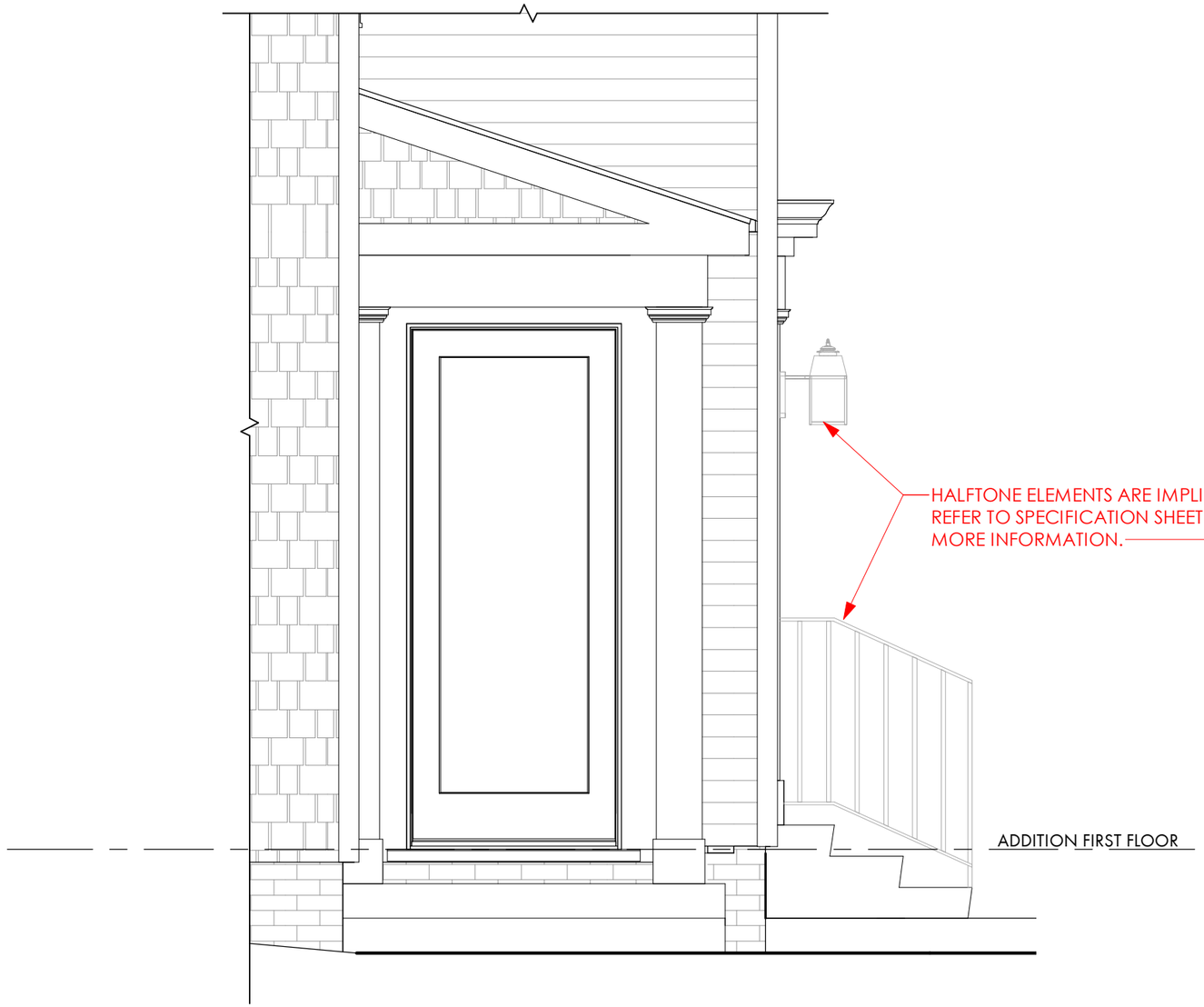
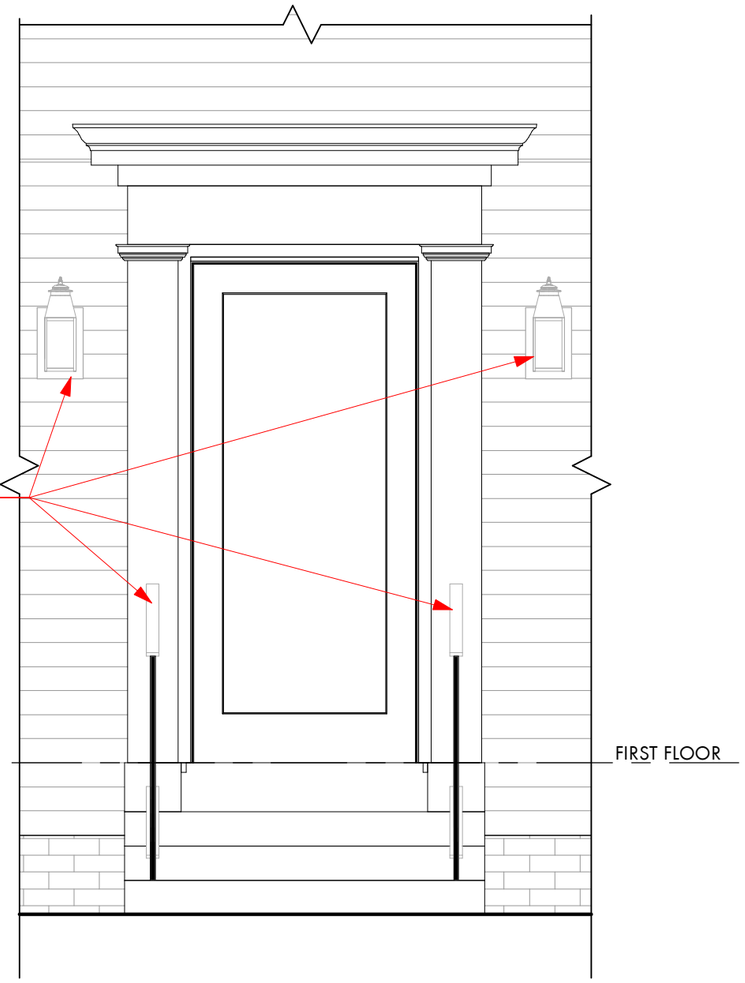


PROPOSED SIDE ENTRY 2
1/2" = 1'-0"

HALFTONE ELEMENTS ARE IMPLIED, REFER TO SPECIFICATION SHEET FOR MORE INFORMATION.



PROPOSED FRONT ENTRY 1
1/2" = 1'-0"

COPELAND RESIDENCE

14 MECHANIC STREET
PORTSMOUTH, NH

PROPOSED FRONT AND SIDE ENTRY
1/2" = 1'-0"

SHEET 1 OF 3
JUNE 2, 2021

201911

DMA
DESTEFANO MAUGEL
ARCHITECTS

PROPOSED ELEVATION AT MASTER BALCONY 1

1/4" = 1'-0"

201911

COPELAND RESIDENCE

14 MECHANIC STREET
PORTSMOUTH, NH

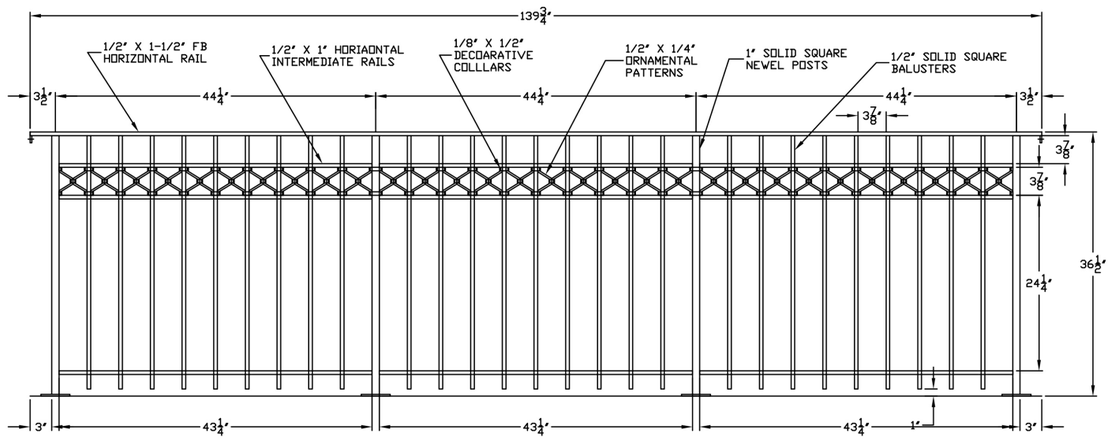
PROPOSED ELEVATION AT MASTER BALCONY

1/4" = 1'-0"

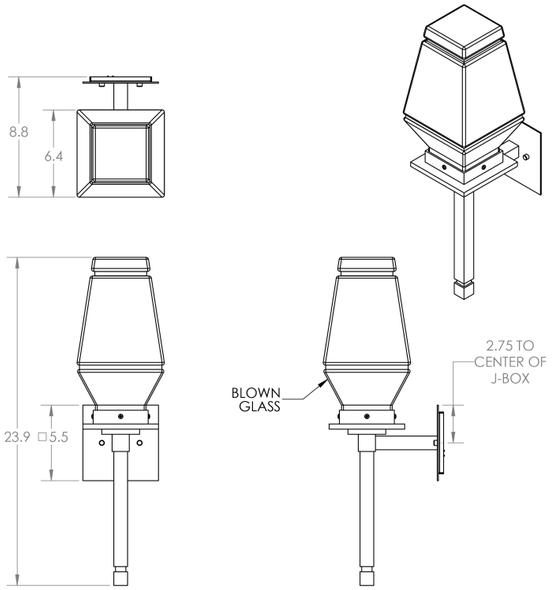
SHEET **2** OF 3

JUNE 2, 2021

D|M|A
DESTEFANO MAUGEL
ARCHITECTS



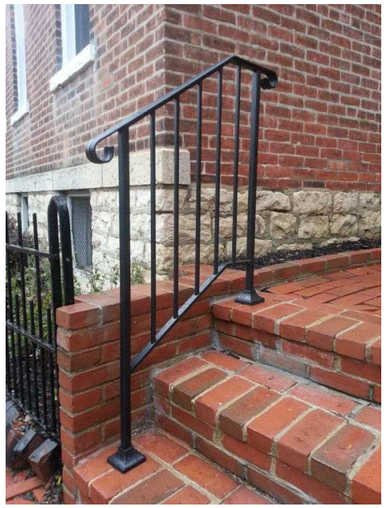
WROUGHT IRON RAILING AT MASTER BALCONY



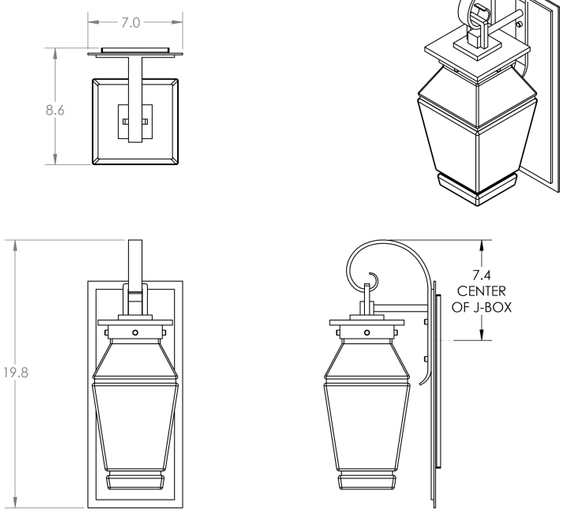
SIDE ENTRY SCONCE : TO BE LOCATED ON THE RIGHT SIDE OF THE SIDE ENTRY DOOR.

STANDARD CASSIDY BROS. FORGE
HAND-FORGED RAILING TERMINTATIONS

"VOLUTE"



WROUGHT IRON RAILING AT FRONT ENTRY



FRONT ENTRY SCONCE : TO BE LOCATED ON EITHER SIDE OF THE FRONT ENTRY DOOR.

201911

COPELAND RESIDENCE

14 MECHANIC STREET
PORTSMOUTH, NH

SPECIFICATION SHEET

SHEET **3** OF 3

JUNE 2, 2021

D|M|A
DESTEFANO MAUGEL
ARCHITECTS

4. 254 South Street - Recommended Approval

Background: The applicant is seeking approval for a change in design for a previously approved Administrative Approval (change condenser surround design).

Staff Comment: Recommended Approval

Stipulations:

1. _____
2. _____
3. _____

City of Portsmouth, NH

05/25/2021

LUHD-305

Historic District Commission Work Session or Administrative Approval Application

Status: Complete

Date Created: Apr 02, 2021

Applicant

Denise Todd
dentodd@gmail.com
254 South St
South St
Portsmouth, NH 03801
6039785329

Location

254 SOUTH ST
Portsmouth, NH 03801

Owner:

Denise Todd
254 254 SOUTH ST Portsmouth, NH 03801-4527

Application Type

Please select application type from the drop down menu below

Administrative Approval

Project Information

Brief Description of Proposed Work

Requesting permission to install a Mitsubishi AC Pump Unit on the exterior wall on the west, driveway, side of the property. The unit will provide ac to the upstairs bedrooms on this side of the property. All specs and dimensions of the unit are attached in this application. There will be a 5' x 3-4' fence installed in front of the unit to hide it from the street view. The fence will match the existing rear fence as close as possible.

Description of Proposed Work (Planning Staff)

the installation of mechanical equipment (A/C condenser with screening)

Project Representatives

Relationship to Project

Owner

Historic Committee for permission to install an outdoor Cooling Unit with a fence
Consideration of Zoning Ordinance Section 10.233

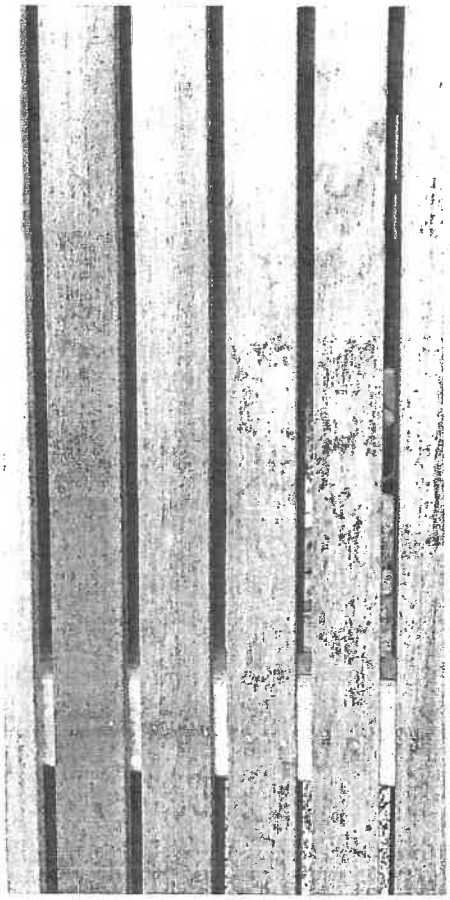
Thank you for the meeting last night and the request for us to add more fencing around the outdoor cooling unit for this property.
I contacted the AC installer this morning who advised not to have a full block fence along all 3 sides of the this type of unit. The Mitsubishi unit has a fan on the front of the unit not the top, requiring a certain amount of air flow to the fan. If we install a full 3 sides of full block fencing it will great diminish the efficiency of the unit and it will have the potential to fail much sooner.
We would like to ask permission to install a two sided vertical cedar fence with 2" gaps between each plank for the airflow, leaving the rear without a fence. I have attached a photo of the this type of fence around our lower deck area. The gaps would need to be bigger (2") than shown for the air flow. The top of each post will be capped to match the rear fence, photo attached.
The only other solution is to have the whole fence as a lattice and I think the unit would be more visible that way.
We do not have neighbors at the rear who can see any of this unit. We already have a dividing fence between the yard for next door.
The fence would still be 3'6"deep x 4'6"high. We do not want to make the fence any bigger or bring it out from the property any more than this as it would detract your eye from the nice bay window we have on the side to the large boxed in unit which would end up deeper than the bay window. This would look unsightly from the street.
It is difficult to get the fence company over as they are running 8-12 weeks behind so if we can go ahead with the install while we come up with a better fence solution this would help.
Thank you again for your consideration.

Todd

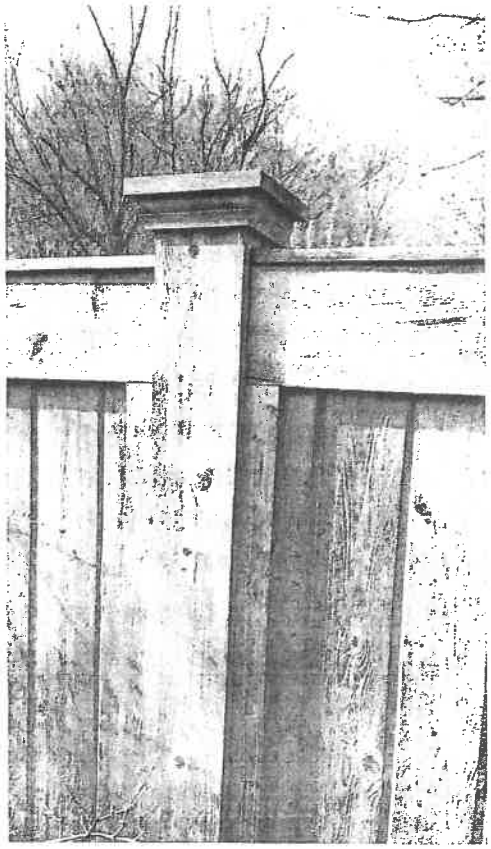
Denise & Michael Todd - Owners

254 SOUTH ST. – FENCING PROPOSAL FOR AC UNIT SURROUND

Left/below is under our deck
Spacing giving unit airflow required



Right/below is between properties
CAP for posts as shown



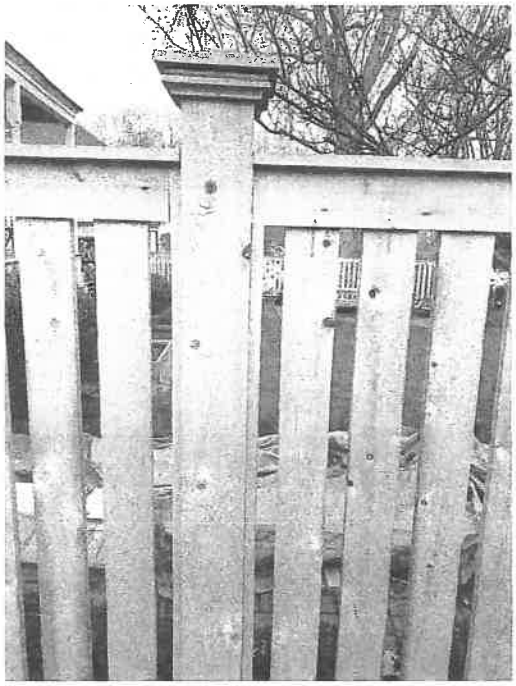
THE SIDE FACING THE STREET WOULD LOOK LIKE THIS WITH 3/4" GAPS. THE FRONT (in front of the fan, facing next door) WOULD HAVE 2" GAPS FOR THE AIRFLOW, these would not be very visible from the street as they'd be on a side angle.

CAP FOR POSTS

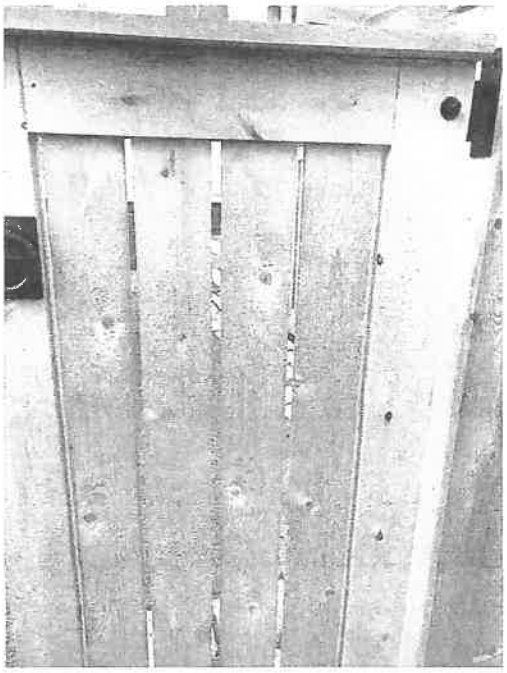
254 SOUTH ST

Proposed 2 Sided fence (actual on next page) to surround A/C

These photos show a neighbors fence 5 houses down from ours in the Historic District. The fence surrounds a garden and a trash bin area.
As shown on the previous page we have very similar fencing under our deck.



This style with 2" gaps would be in Front of the cooling unit facing Side (neighbor) where the fan needs Ventilation.



This style with ½"narrow gaps would be placed on the side of the cooling unit facing the street

This shows the fence from a side & would be our **street view.** The large gaps are not nearly as visible when viewed on a side angle.

5. 241 South Street - Recommended Approval

Background: The applicant is seeking approval for changes to a previously approved design (change approved garage doors to match existing side entry door, replace approved porch sliding windows with 2/1 double hung windows, and to replace an existing door with a window on the porch to match new proposed windows).

Staff Comment: Recommended Approval

Stipulations:

1. _____
2. _____
3. _____

City of Portsmouth, NH

05/25/2021

LUHD-344

Historic District Commission Work Session or Administrative Approval Application

Status: Active

Date Created: May 24, 2021

Applicant

Guy Spiers
spiersg48@gmail.com
241 South St
Portsmouth, NH 03801
1-804-575-0003

Location

241 SOUTH ST
Portsmouth, NH 03801

Owner:

3A TRUST & SPIERS GUY D AND ELIZABETH R TRUSTEES
241 SOUTH ST PORTSMOUTH, NH 03801

Application Type

Please select application type from the drop down menu below

Administrative Approval

Project Information

Brief Description of Proposed Work

Change two pedestrian doors in garage; change windows in porch; convert door in porch to a window.

Description of Proposed Work (Planning Staff)

--

Acknowledgement

I certify that the information given is true and correct to the best of my knowledge.

☑

By checking this box, I agree that this is equivalent to a handwritten signature and is binding for all purposes related to this transaction

☑

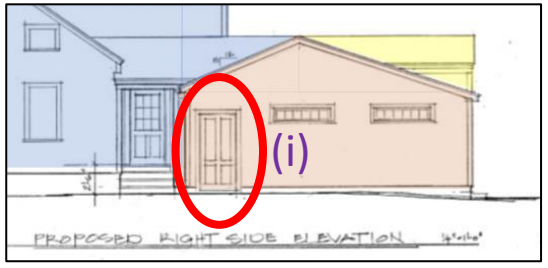
Portsmouth HDC Administrative Approval Application
241 South St
Changes to LU-20-96

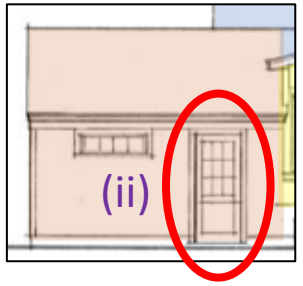
1. Different pedestrian doors for garage
2. Different windows for 3-season porch
3. Replace door in 3-season porch with a window (same window as in #2)

1. Different pedestrian doors for garage

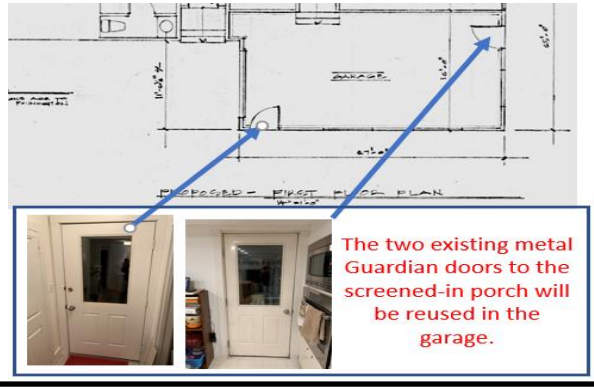
What the HDC approved in LU-20-96:

While the *drawings* in our presentation showed
(i) a 4-panel solid door on the right elevation side of the garage and
(ii) a 6-light door for the rear of the garage,





what we *actually requested* – and what the HDC approved –
was to **reuse two doors** being demo'd as part of the overall project:

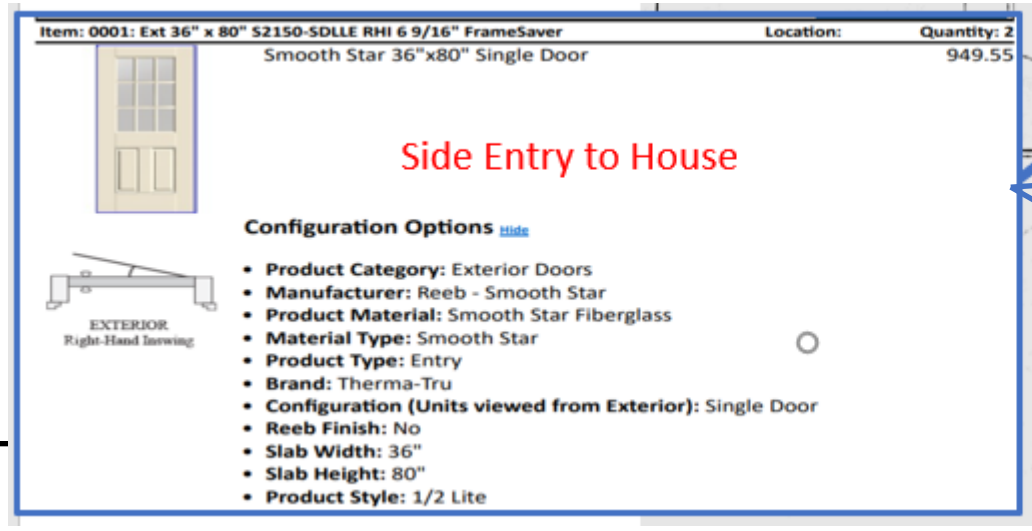


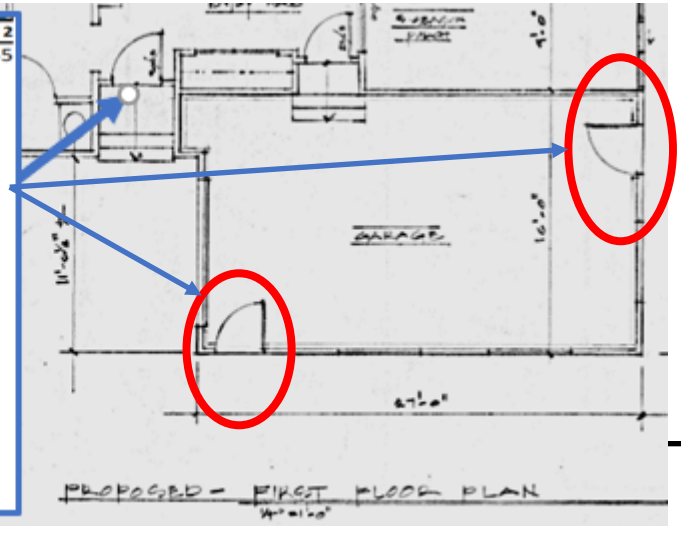
Motivation for change:

Our contractor pointed out that the demo doors cannot be reused because they are built for 2x4 framing, while our garage is being built with 2x6 framing.

Requested change:

The two garage doors will be the same as the approved side entry door:

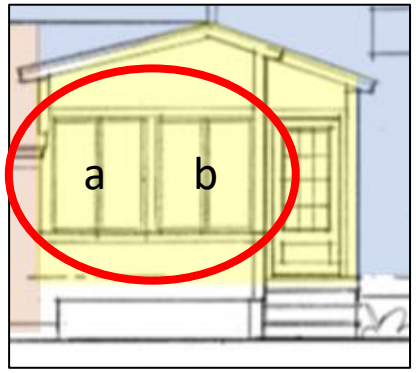


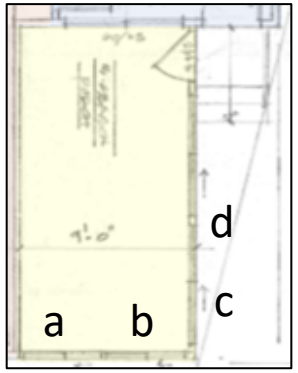


2. Different windows for 3-season porch

What the HDC approved in LU-20-96:

Four single-pane sliding windows (a to d) for the 3-season porch:





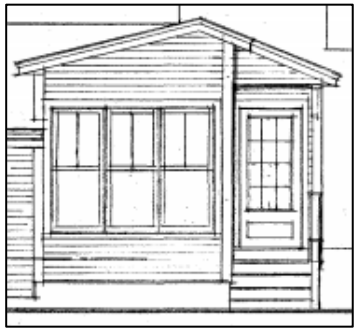
Motivation for change: Sliding windows are not as historically-accurate as double hung windows and they create areas along the porch walls with no ventilation.

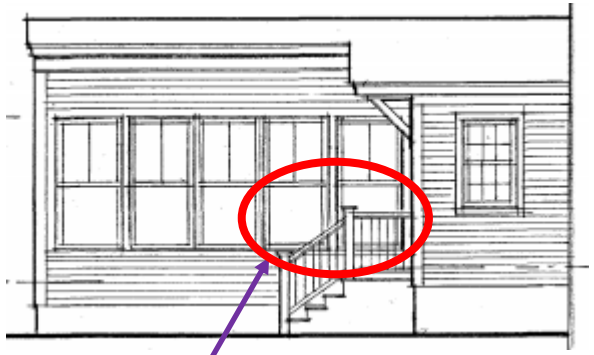
Requested change:

Replace sliders with 2/1 double-hungs

with exterior simulated divided lites

(trapezoid = historic putty muntin)





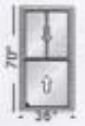
These two sashes have tempered glass

LINE #	QTY	SUB-LINES
100	1	2

MATHEWS BROTHERS
America's Oldest Window Manufacturer

LINE #	DESCRIPTION	QTY
100-1		1

Sanford Hills Dual Pane Double Hung
DH2830, Extruded White Interior, Extruded White Exterior, Dual Pane Low E Argon Top / Dual Pane Low E Tempered Bottom, PG50, 2/1 Lite 5/8" Trapezoid/GBG Contour, White Exterior Only Simulated Divided Lite w/Contoured Grille in Airspace, No Lift Rail, 30.68 X 30 Clear Opening, 6.39 SQFT, Hidden Tilt Latch, Dual White Robo-Tilt Lock, No Window Opening Control Device, Fiberglass Mesh White Full Screen Shipped Loose
6 9/16" Primed Finger Joint Jamb (Complete Unit), w/J-Channel Cover, No Exterior Casing, w/ Nailing Fin, 1/4" Added To Width and Height of Units With Extensions. See O.S.M. for dry dimensions.
Unit 1: UFactor: NR, SHG: NR, VLT: NR, CR: NR



Mathews Brothers' Windows specified with Tempered Glass cannot be canceled or modified once an order is placed. There will be no grace period provided for Windows specified with Tempered Glass as they will enter into a production schedule immediately. Please review the specifications for this Window with Tempered Glass carefully to ensure they are correct prior to ordering.

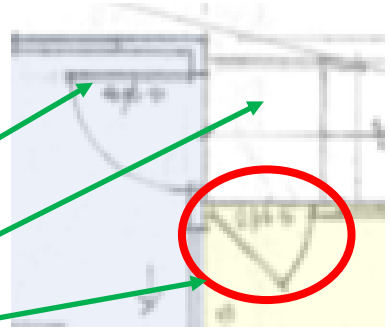
Opening: 36.75" X 70.75"
O.S.M.: 36.25" X 70.25"

Tag: Unit A-stair case

3. Replace 3-season porch door with a window (same as in change #2)

What the HDC approved in LU-20-96:

Door from porch to outside landing (note, door from house also leads to same landing).



Motivation for change: Don't need two doors in such close proximity.

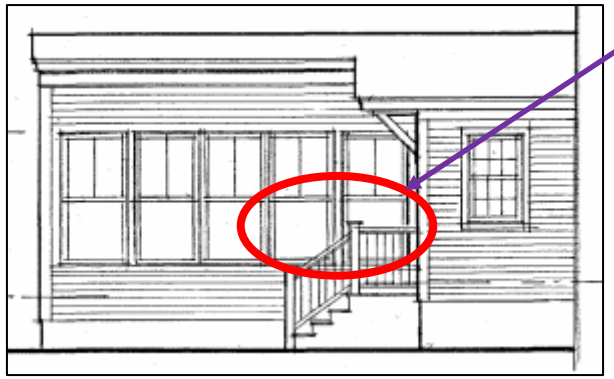
Requested change:

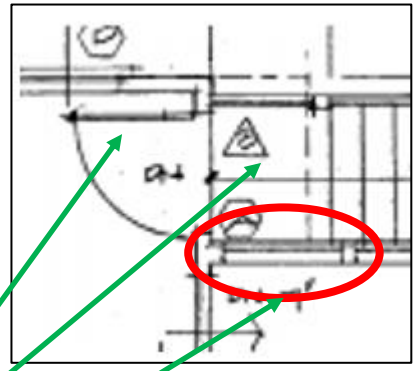
Replace porch door with another 2/1 double-hung

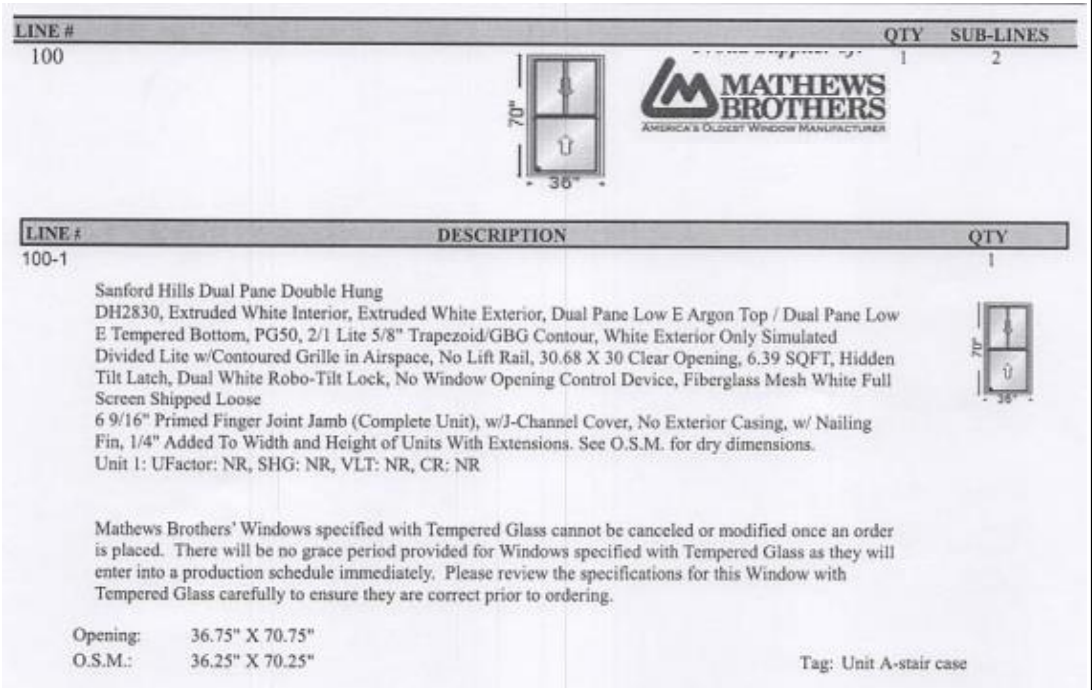
with exterior simulated divided lites

(trapezoid = historic putty muntin)

These two sashes have tempered glass







LINE #	QTY	SUB-LINES
100	1	2

MATHEWS BROTHERS
America's Oldest Window Manufacturer

LINE #	DESCRIPTION	QTY
100-1		1

Sanford Hills Dual Pane Double Hung
DH2830, Extruded White Interior, Extruded White Exterior, Dual Pane Low E Argon Top / Dual Pane Low E Tempered Bottom, PG50, 2/1 Lite 5/8" Trapezoid/GBG Contour, White Exterior Only Simulated Divided Lite w/Contoured Grille in Airspace, No Lift Rail, 30.68 X 30 Clear Opening, 6.39 SQFT, Hidden Tilt Latch, Dual White Robo-Tilt Lock, No Window Opening Control Device, Fiberglass Mesh White Full Screen Shipped Loose
6 9/16" Primed Finger Joint Jamb (Complete Unit), w/J-Channel Cover, No Exterior Casing, w/ Nailing Fin, 1/4" Added To Width and Height of Units With Extensions. See O.S.M. for dry dimensions.
Unit 1: UFactor: NR, SHG: NR, VLT: NR, CR: NR

Mathews Brothers' Windows specified with Tempered Glass cannot be canceled or modified once an order is placed. There will be no grace period provided for Windows specified with Tempered Glass as they will enter into a production schedule immediately. Please review the specifications for this Window with Tempered Glass carefully to ensure they are correct prior to ordering.

Opening: 36.75" X 70.75"
O.S.M.: 36.25" X 70.25"

Tag: Unit A-stair case

Entry/Garage Door Specs

Item: 0001: Ext 36" x 80" S2150-SDLLE RHI 6 9/16" FrameSaver **Location:**

Smooth Star 36"x80" Single Door

EXTERIOR
Right-Hand Inswing

Configuration Options Hide

- **Product Category:** Exterior Doors
- **Manufacturer:** Reeb - Smooth Star
- **Product Material:** Smooth Star Fiberglass
- **Material Type:** Smooth Star
- **Product Type:** Entry
- **Brand:** Therma-Tru
- **Configuration (Units viewed from Exterior):** Single Door
- **Reeb Finish:** No
- **Slab Width:** 36"
- **Slab Height:** 80"
- **Product Style:** 1/2 Lite

Porch Window Specs

LINE #	QTY	SUB-LINES
100	1	2

LINE #	DESCRIPTION	QTY
100-1		1

Sanford Hills Dual Pane Double Hung
DH2830, Extruded White Interior, Extruded White Exterior, Dual Pane Low E Argon Top / Dual Pane Low E Tempered Bottom, PG50, 2/1 Lite 5/8" Trapezoid/GBG Contour, White Exterior Only Simulated Divided Lite w/Contoured Grille in Airspace, No Lift Rail, 30.68 X 30 Clear Opening, 6.39 SQFT, Hidden Tilt Latch, Dual White Robo-Tilt Lock, No Window Opening Control Device, Fiberglass Mesh White Full Screen Shipped Loose
6 9/16" Primed Finger Joint Jamb (Complete Unit), w/J-Channel Cover, No Exterior Casing, w/ Nailing Fin, 1/4" Added To Width and Height of Units With Extensions. See O.S.M. for dry dimensions.
Unit 1: UFactor: NR, SHG: NR, VLT: NR, CR: NR

Mathews Brothers' Windows specified with Tempered Glass cannot be canceled or modified once an order is placed. There will be no grace period provided for Windows specified with Tempered Glass as they will enter into a production schedule immediately. Please review the specifications for this Window with Tempered Glass carefully to ensure they are correct prior to ordering.

Opening: 36.75" X 70.75"
O.S.M.: 36.25" X 70.25"

Tag: Unit A-stair case

6. 205 Market Street - Recommended Approval

Background: The applicant is seeking approval for 15 various exterior repairs and renovations: replace all existing storm windows, repair masonry, replace gutter and downspout, etc.

Staff Comment: Recommended Approval

Stipulations:

1. _____
2. _____
3. _____

City of Portsmouth, NH

05/25/2021

LUHD-342

Historic District Commission Work Session or Administrative Approval Application

Status: Active

Date Created: May 14, 2021

Applicant

Carla Goodknight
carla@cjarchitects.net
233 Vaughan Street
Suite 101
Portsmouth, NH 03801
6034312808

Location

205 MARKET ST
Portsmouth, NH 03801

Owner:

409 FRANKLIN PIERCE HIGHWAY LLC
PO BOX 399 NOTTINGHAM, NH 03290

Application Type

Please select application type from the drop down menu below

Administrative Approval

Project Information

Brief Description of Proposed Work

Minor repairs and renovation.

Description of Proposed Work (Planning Staff)

--

Project Representatives

Relationship to Project

Architect

If you selected "Other", please state relationship to project.

--

Full Name (First and Last)

Business Name (if applicable)

CJ ARCHITECTS

City of Portsmouth
Historic District Commission & Planning Department
1 Junkins Avenue
Portsmouth, NH 03801

June 2, 2021

205 Market Street - HDC Application for Administrative Approval

We respectfully submit this Application for Administrative Approval for the 205 Market Street minor repairs and renovations.

1) Replace all existing storm windows. Storm units will be custom fabricated to each opening and include white aluminum frames, sized to the application. The storm units will have triple tracks to house (2) single panes of glass and (1) operable half screen.
2) Addition of (4) 3/8" thick color galvanized metal storm shutters on the front elevation. (black)
3) Repair, sandblast, and color galvanize existing shutters at the front elevation. (black)
4) Existing Shutter dogs to be removed and reinstalled. New stainless steel anchors will be welded onto original historic iron "rat tail stay" for installation into brick.
5) Existing Pintels to remain in place due to extensive masonry demolition required for removal. Pintels to be cleaned, sealed, and painted to prevent further deterioration. Fixed metal support brackets to be installed behind and bolted to shutters for support.
6) Installation of new standing seam copper metal roofing and snow guards at the front elevation.
    - Metal standing seam roofing panels shall be fabricated out of 32 mil or 20 ounce cold rolled red river copper. Panels will be 18"x24" with a locking panel design and solder, standing seam.
    - Snow rail system shall be brass rail system that mechanically bolts on top of the rib of the copper standing seam panel.

7) Repair and restore loose masonry corbel detail at the front elevation.

8) Replace existing gutter with 6" K Style copper gutter at the front elevation.

    - Gutters shall be fabricated out of 22 mil or 16 ounce cold rolled red river copper.

9) Replace existing downspout with 3" smooth round copper downspout at the front elevation.

    - Downspouts shall be fabricated out of 22 mil or 16 ounce cold rolled red river copper.

10) Repair, clean, and re-point brick.

11) Paint all exterior woodwork on doors and windows.

    - Ben Moore Historic Colors: Black HC 190 (Door Panels)
    - Ben Moore Historic Colors: Decorators White PM-3 (Casing, Trim & Windows)

12) Repair, clean, and paint existing basement hopper windows at the front elevation.

13) Install 3" x 1.5" rectangular tube steel mounting bar to support (4) exterior light fixtures. Industrial style mounting bar to reduce installation impacts in historic brick. Existing exterior light receptacle to be used to power the new bar.

14) Install (2) new commercial signs at the front elevation. All signage subject to additional ordinance requirements.

15) Addition of (3) keypad deadbolts at entries on the front elevation. Installed in door stile.

Please refer to the attached drawings for more information on these proposed repairs and renovations and their locations.

Thank you for your consideration.
Sincerely,

Carla Goodknight, AIA
Principal, CJ Architects

Representing:
David Calkins (Owner's representative)

APPENDIX

A: MASONRY CONTRACTOR QUALIFICATIONS

B: HISTORIC MORTAR REPORT

C: BRICK RESTORATION CLEANER

D: STORM WINDOW SPECIFICATIONS

E: SNOW GUARD SPECIFICATIONS

F: EXISTING CONDITIONS PHOTOS

APPENDIX

A: MASONRY CONTRACTOR QUALIFICATIONS

409 Franklin Pierce Highway LLC
PO Box 399
Nottingham, NH 03290
603-679-1131

RE: 205 Market Street
Portsmouth, NH 03801

Masonry Contractor Bio and Qualifications Summary
Millstone Masonry
Barrington, NH 03825
603-942-8897

Millstone masonry is a family owned and operated business in Barrington NH. They have been operating for over 25 years in the greater seacoast area. They provide professional and detailed masonry services to the residential and commercial markets.

Millstone has experience dealing with historically sensitive properties and has become the Portsmouth Naval Shipyards preferred mason when dealing with restoration projects. They have been working with the shipyard since 2015 and have been involved in numerous projects. These projects range from repointing to partial replacement of wall sections. All of the historical work has been executed under the direction of Kerry Vautrot the historical consultant for the Naval Shipyard.

During these projects Millstone is required to provide mortar analysis reports and composition as well as brick selections for review. They also have been required to build mock wall sections to illustrate methodology, material selection, and detailed sections. All of the work has to be conducted in accordance with the Technical Preservation Services and preservation briefs.
https://www.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm

Millstone has also worked on projects under the supervision of Margaret Gaertner. Margaret is a historic building consultant through the NH Division of Historical Resources. Margaret was satisfied with Millstones procedures and installation practices on the projects they worked together.

Through the 25 plus years of experience and the work they have completed at the Naval Shipyard, Millstone Masonry is a qualified choice for the repair, repointing, and if needed restoration of the brick work at 205 Market Street.

APPENDIX

B: HISTORIC MORTAR REPORT

deGruchy's LIME WORKS.us™

Characterization of Historic Mortars:

205 Market Street,
Portsmouth, NH 03801

Prepared by:
Jyotsna Naga Aikens
Laboratory Consultant

Prepared for:
Spencer Conroy
Millstone Masonry

April 16, 2021

Table of Contents

Characterization of Historic Mortars and Plasters

Cover Image: Ward, Andrew M. "Multifamily Sold - New Hampshire: United States." COLLIERS INTERNATIONAL. Accessed April 15, 2021. https://www.colliers.com/en/properties/waterfront-mixed-use-building/usa-205-market-street-portsmouth-nh-03801/usa1082296.

Section 1.0: Purpose Statement

The purpose of a basic acid digestion mortar analysis is to determine the approximate proportions of three principal components of historic mortars—aggregate, binder, and fines. Certain additives may also be detected via this method, but their proportions may not be accurately determined. A basic mortar analysis is primarily used to help ascertain general details about composition of a mortar for the purpose of recreating a historic blend or as a prelude to further instrumental analysis. Thus, this test is most useful for identifying whether cement, lime, and sand are present and in what quantities. Acid digestion can be an important part in developing plans for repairing and maintaining historic structures. For further information on methodology, please see Section 4.0.

However, while this test protocol is useful for distinguishing general characteristics associated with different binders, it is important to note that the test is subjective, based on the interpretation of data and physical properties, rather than unequivocal. Interpretation relies not only on the data produced while testing, but also on observed physical characteristics such as color, texture, hardness, cohesiveness, and visual properties of aggregate. Additional clarification on specific properties or additives of a mortar, such as additional pigments, modifying additives, cement type, or mineralogy, would require further instrumental analysis (X-Ray Diffraction, SEM-XEDS, petrography, and other tests) which can be arranged at a client's request for fees to be determined on a case-by-case basis. It is important to note that testing cannot determine several other important factors in mortar which are difficult or impossible to accurately ascertain, including original water mix, mixing and pointing method, rate of drying, or original condition/origin of aggregate.

Lime*Works*.us personnel conduct these analyses with care to produce accurate results to the greatest degree possible. However, it is up to the client to confer with owners, conservators, masons, and/or installers to determine material appropriateness, installation methods, and performance testing of recommended products beyond data provided by the manufacturer. Lime*Works*.us staff will use information gathered during this test to recommend a compatible material from our products and any additional steps or services if necessary or requested. These recommendations can be found in Section 3.0.

Section 1.1: Background

Two samples were submitted from different parts of the building to Lime*Works*.us by Spencer Conroy of Millstone Masonry. Both the samples were bedding mortar sized between 1/4"-3/8". Sample one was extracted from the street side, above low window, near the salt pile. Sample two on the other hand was extracted from the parking lot corner, near the street. Both the samples were partially intact with some portions reduced to powder upon receipt.

The four-story, 8263 Sq Ft historic waterfront building was built in 1830.[1] Idyllically located in downtown Portsmouth, over-viewing the Piscataqua River, the property type is a mixed-use type with retail space on the first floor and six apartments on the others. The building was recently renovated in 2006. Proximity to a foundry and salt pile add a dimension of conservation concern unusual to most structures.

1 Ward, Andrew M. "Multifamily Sold - New Hampshire: United States." COLLIERS INTERNATIONAL. Accessed April 15, 2021. https://www.colliers.com/en/properties/waterfront-mixed-use-building/usa-205-market-street-portsmouth-nh-03801/usa1082296.

Section 1.2: Executive Summary

Because of the amount of samples submitted, the full details of this report are lengthy. As such, this executive summary section has been prepared in order to summarize the relevant conclusions and recommendations. Reading the full detailed report is highly recommended to understand these conclusions and recommendations to ensure accuracy and agreement with the goals of the project before proceeding.

In this section, "Test Results" summarizes the data from the mortar analysis, "Mix Recommendations" summarizes the kind of mix the client should look for in a replacement mortar, and "Lime*Works*.us Products" lists the products available through Lime*Works*.us that meet or are analog to the recommendations. Mixes and products are to be considered appropriate substitutes for the historic mortar. If the historic mortar needs to be precisely replicated, additional testing according to ASTM C1324 would be required.

It is the responsibility of the client to read this report in its entirety and, in consultation with stakeholders or other authorities, determine the suitability of recommended products.

	Test Result	Mix Recommendation	Lime*Works*.us Products
Sample 1	1 part lime to 2.5 parts fine aggregate by weight.	1 part St. Astier NHL 3.5 to 2.5 parts fine sand in accordance with ASTM C1713. Color with aggregate or UV/alkali-stable pigments.	Ecologic Mortar DGM SCG (F) Non-Pigmented
Sample 2	1 part lime to 2.5 parts fine aggregate by weight.	1 part St. Astier NHL 3.5 to 2.5 parts fine sand in accordance with ASTM C1713. Color with aggregate or UV/alkali-stable pigments.	Ecologic Mortar SCG (F) in 90% DGM 050/ 10% DGM 250 w/XF Slag Fleck

Section 2.0b: Analytical Summary (Sample 1)

The reactive and physical characteristics of this mortar sample suggest it contains a binder based on a mixture of lime and sand at a ratio of 1 part binder to 2.5 parts aggregate by weight. This conclusion was based on the following observations:

Photograph of the bulk sample before digestion (fluorescent light, color corrected).

Sample Composition:

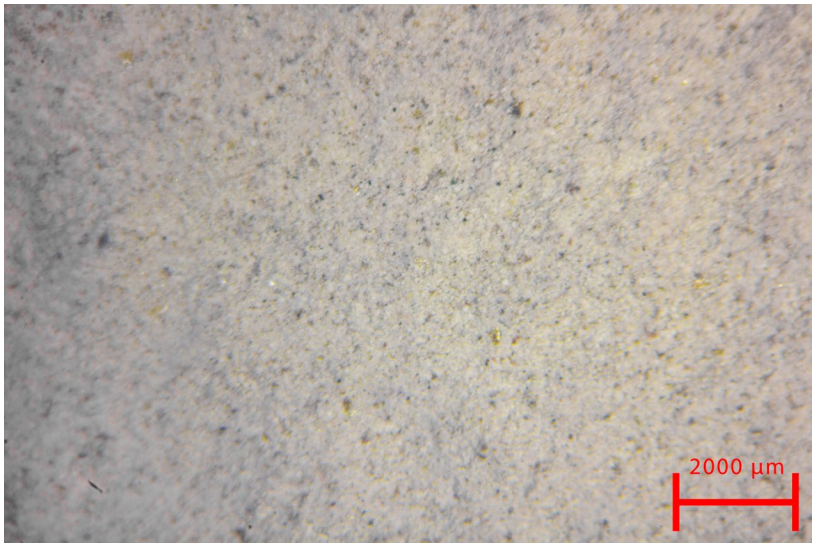
$CaCO_3$	~17.057%
$CaMg(CO_3)_2$	~4.310%
Solubles	~6.175%
Aggregate	~71.017%
Fines	~1.441%

Sample Observations:

- ***Layering:*** No layering was observed.
- ***Color:*** The clean break of the bulk sample corresponded to 7.5YR 8/1 *white*. This is consistent with a lime mortar.
- ***Hardness:*** The sample was cohesive and very easy to snap with a Mohs rating of 2.5, requiring low force to pulverize with a mortar and pestle. This is consistent with a lime mortar.
- ***Reactivity:*** The sample reacted vigorously with ample effervescence and a very little secondary reaction when exposed to a 14% dilution of hydrochloric acid. Mortars with high cement content tend to react less vigorously than mortars high in lime. Limes high in dolomite ($CaMg(CO_3)_2$) will have a secondary reaction after the primary calcium carbonate reaction ($CaCO_3$). Calcium carbonate, such as that found in lime mortars and calcareous aggregates, evolves a large amount of CO_2 when exposed to acid, while pure cement-based mortars release very little during acid digestion. The sample's reaction suggests a lime-rich mortar.
- ***Solubles*:** The low amount of solubles and high carbonate in this mortar suggests a low dolomitic lime mixture with the possibility of a very small amount of clay or other acid soluble material present. Calcium carbonate, such as that found in lime mortars and calcareous aggregates, evolves a large amount of CO_2 when exposed to acid, while cement-based mortars release very little during acid digestion. A mortar with very little carbonate and high solubles suggests the presence of a cement, while a mortar high in carbonates with few solubles is likely lime-based.
- ***Aggregate:*** Aggregates extracted from the mortar were various shades of pinkish gray with an overall average color of 7.5YR 6/2 *gray*, while extracted fines were 7.5YR 7/1 *light gray*. The surviving aggregate fell within the modern mortar aggregate grading standards found in ASTM C144. Overall, this aggregate can be characterized as well-graded and sharp. For more information on extracted aggregates please see Section 2.1.
- ***Fines:*** This mortar aggregate was very clean, with under 2% total weight in fines.

Section 2.1b: Characterization of Extracted Aggregate (Sample 1)

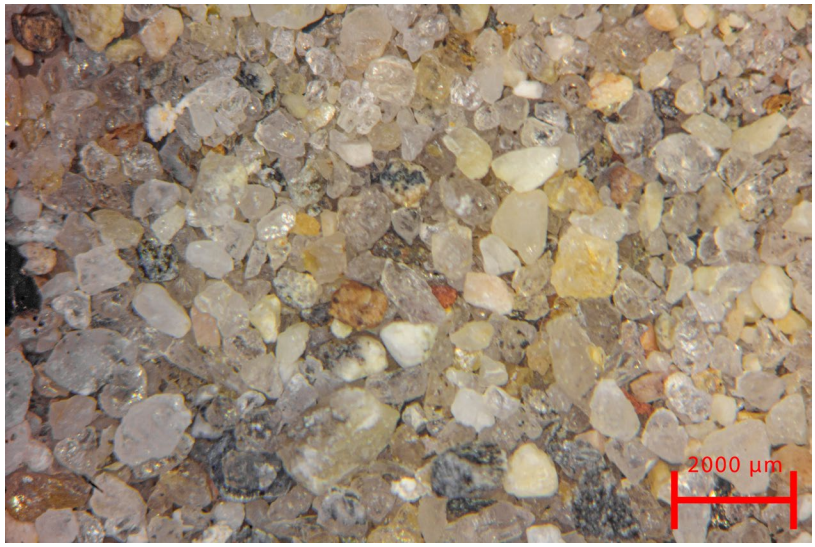
Because aggregate is an important portion of mortar, helping not only to determine material performance, but also in simulating historic color and texture, this mortar analysis includes a careful examination of aggregates extracted following the acid digestion of the sample. Analysis included a visual analysis and evaluation of particle size. This data can be used to both simulate a historic mortar and/or assess the potential properties imparted by an aggregate blend. It is important to note that certain portions potentially present in aggregate (such as crushed limestone, marble, and certain silicas) are fully or partially soluble in acid. These are included within a broad category of "solubles." Solubles would require further instrumental analysis to accurately characterize.



Photomicrograph of the weathered face of the bulk sample before digestion (incident daylight-balanced light, 10x magnification).

Individual grains of sand were generally shades of gray to pinkish gray with some other colors sporadically mixed in. As a result, the average color of sieved particles ranged almost entirely between 7.5YR 5/1 *gray* to 10YR 7/2 *pinkish gray* hue range, with some variation in value and chroma.

The aggregate particles varied widely in shape and roundness from very angular to subrounded in roundness and equant to very elongate in sphericity. The majority of material was captured by the #30 and #50 sieves. The fineness modulus of this aggregate was 1.962, indicating moderately coarse sand. The sand met ASTM C144's specifications for a masonry sand. For detailed definitions of these terms, please see section 5.0.

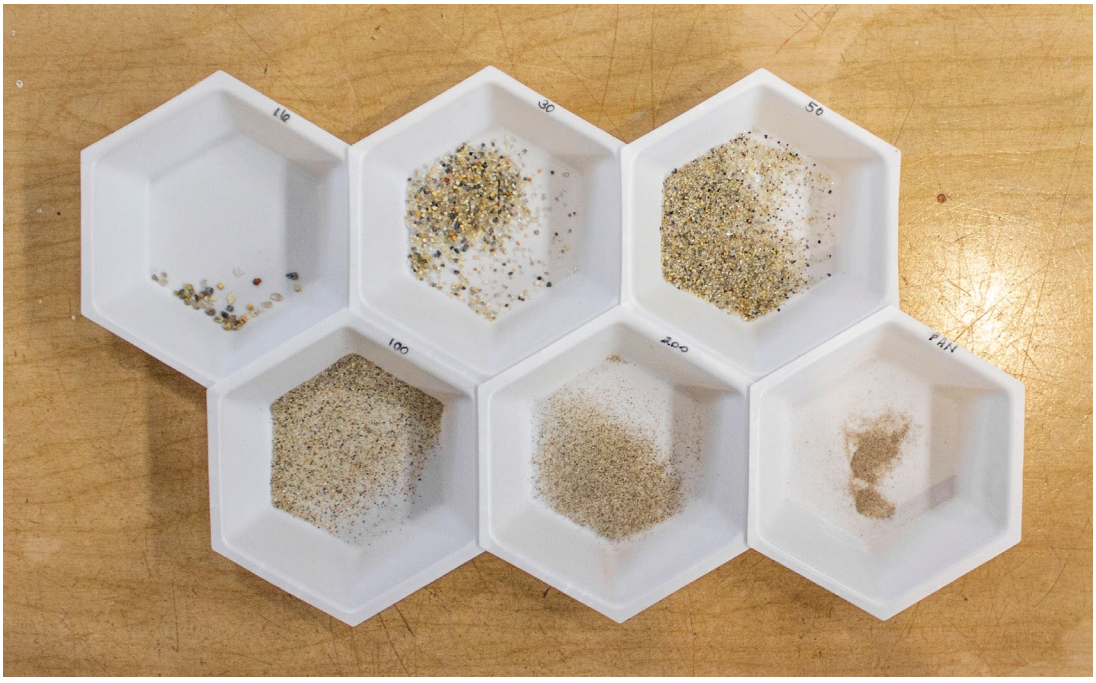


Photomicrograph of the extracted aggregate before sieving, note (incident daylight-balanced light, 10x magnification).

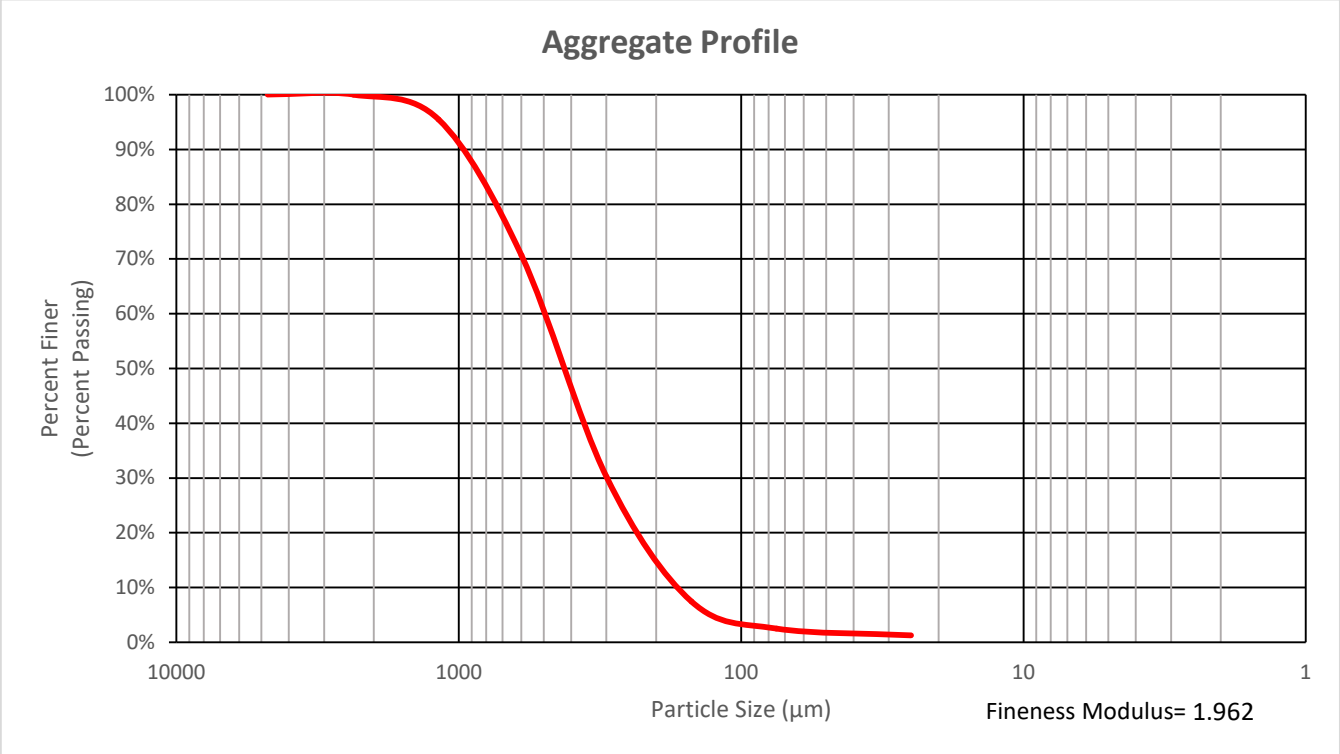
Extracted aggregates were sieved according to ASTM C136. Material was passed through a US Standard Sieve Stack (as governed in ASTM E11) and material retained on each mesh was recorded by weight and expressed as a percentage of the whole to determine approximate grading of the aggregate. Results are as follows:

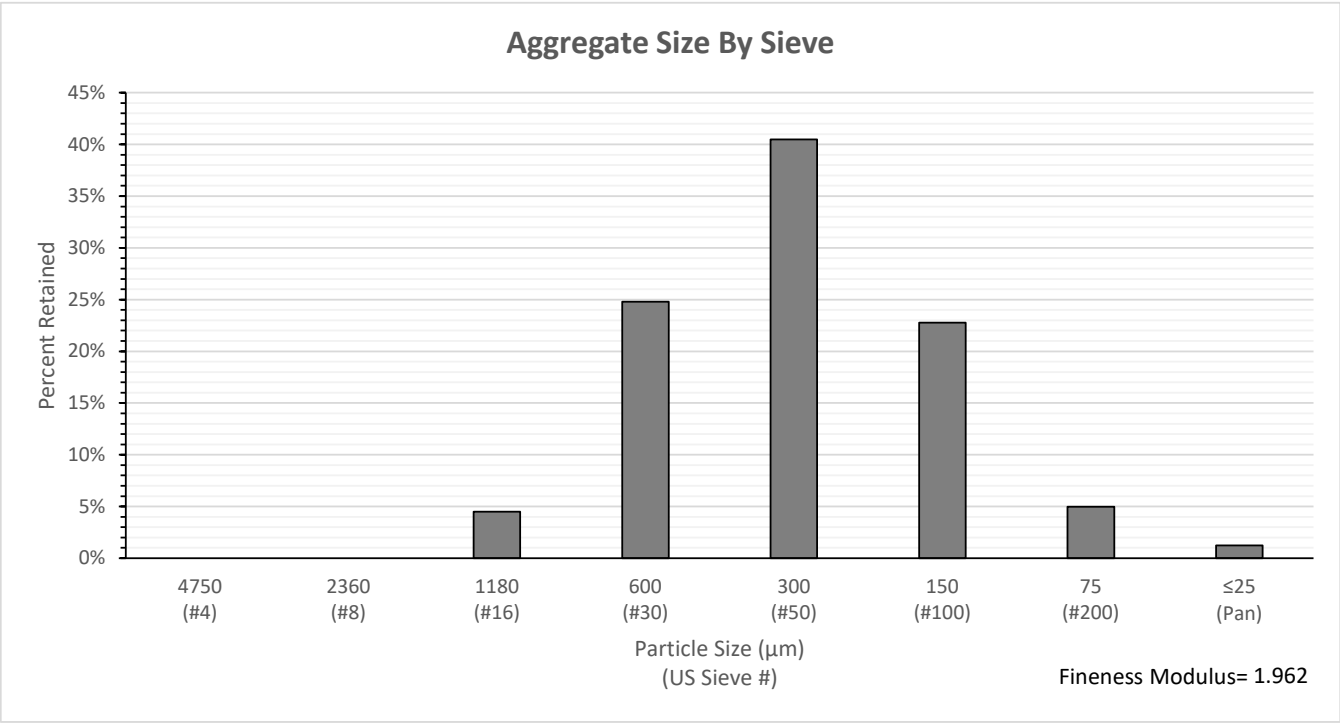
Aggregate Grading:

Sieve Number	#4	#8	#16	#30	#50	#100	#200	Pan
Screen Size	4750µm	2360µm	1180µm	600µm	300µm	150µm	75µm	≥25µm
Aggregate Retained	0.000%	0.000%	4.510%	24.803%	40.474%	22.773%	4.961%	1.240%



Washed and sieved sands sorted according to sieve size (color corrected fluorescent light)


Aggregate Profile
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percent Finer
(Percent Passing)
10000
1000
100
10
1
Particle Size (µm)
Fineness Modulus= 1.962


Aggregate Size By Sieve
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Percent Retained
4750
(#4)
2360
(#8)
1180
(#16)
600
(#30)
300
(#50)
150
(#100)
75
(#200)
≤25
(Pan)
Particle Size (µm)
(US Sieve #)
Fineness Modulus= 1.962

Section 2.0c: Analytical Summary (Sample 2)

The reactive and physical characteristics of this mortar sample suggest it contains a binder based on a mixture of lime and sand at a ratio of 1 part binder to 2.5 parts aggregate by weight. This conclusion was based on the following observations:

Photograph of the bulk sample before digestion (fluorescent light, color corrected).

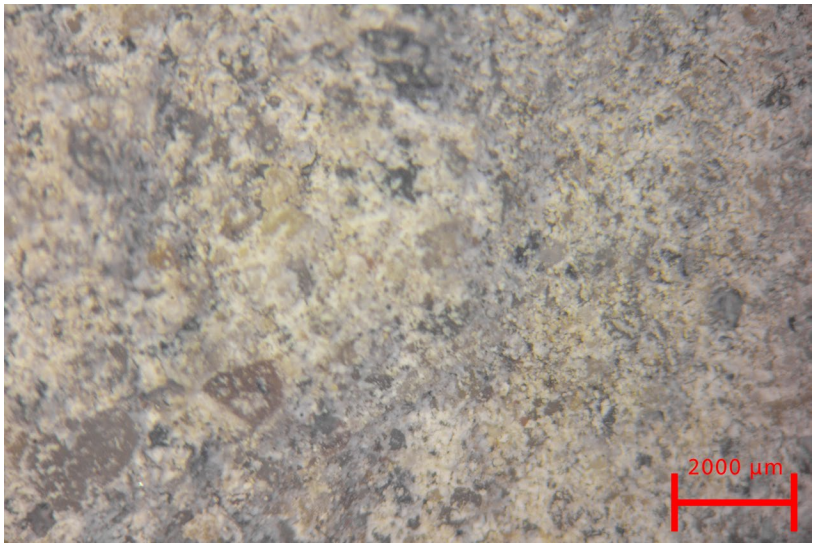
Sample Composition:

$CaCO_3$	~13.982%
$CaMg(CO_3)_2$	~2.897%
Solubles	~11.314%
Aggregate	~70.652%
Fines	~1.155%

Sample Observations:

- ***Layering:*** No layering was observed.
- ***Color:*** The clean break of the bulk sample corresponded to 10YR 8/1 *white*. This is consistent with a lime mortar.
- ***Hardness:*** The sample was cohesive and very easy to snap with a Mohs rating of 3, requiring low force to pulverize with a mortar and pestle. This is consistent with a lime mortar.
- ***Reactivity:*** The sample reacted vigorously with ample effervescence and a very little secondary reaction when exposed to a 14% dilution of hydrochloric acid. Mortars with high cement content tend to react less vigorously than mortars high in lime. Limes high in dolomite ($CaMg(CO_3)_2$) will have a secondary reaction after the primary calcium carbonate reaction ($CaCO_3$). Calcium carbonate, such as that found in lime mortars and calcareous aggregates, evolves a large amount of CO_2 when exposed to acid, while pure cement-based mortars release very little during acid digestion. The sample's reaction suggests a lime rich mortar.
- ***Solubles*:** The moderate amount of solubles and high carbonate in this mortar suggests a mixture with clay or other soluble material added. However, the other properties of this mortar seem to suggest that the soluble material is not cement or pozzolanic additives. Calcium carbonate, such as that found in lime mortars and calcareous aggregates, evolves a large amount of CO_2 when exposed to acid, while cement-based mortars release very little during acid digestion. A mortar with very little carbonate and high solubles suggests the presence of a cement, while a mortar high in carbonates with few solubles is likely lime-based.
- ***Aggregate:*** Aggregates extracted from the mortar were various shades of bluish gray-light brownish gray with an overall average color of 10YR 7/1 *light gray*, while extracted fines were also 10YR 7/1 *light gray*. The surviving aggregate fell within the modern mortar aggregate grading standards found in ASTM C144. Overall, this aggregate can be characterized as well-graded and sharp. For more information on extracted aggregates please see Section 2.1.
- ***Fines:*** This mortar aggregate was very clean, with under 2% total weight in fines.

Section 2.1c: Characterization of Extracted Aggregate (Sample 2)



Photomicrograph of the weathered face of the bulk sample before digestion (incident daylight-balanced light, 10x magnification).

Because aggregate is an important portion of mortar, helping not only to determine material performance, but also in simulating historic color and texture, this mortar analysis includes a careful examination of aggregates extracted following the acid digestion of the sample. Analysis included a visual analysis and evaluation of particle size. This data can be used to both simulate a historic mortar and/or assess the potential properties imparted by an aggregate blend. It is important to note that certain portions potentially present in aggregate (such as crushed limestone, marble, and certain silicas) are fully or partially soluble in acid. These are included within a broad category of "solubles." Solubles would require further instrumental analysis to accurately characterize.

Photomicrograph of the extracted aggregate before sieving (incident day-light-balanced light, 10x magnification).

Individual grains of sand were generally shades of light gray to light brownish gray with some other colors sporadically mixed in. As a result, the average color of sieved particles ranged almost entirely in the 10YR hue range, with individual sieve colors ranging in value and chroma from 5/1 *gray* to 7/2 *light gray*.

The aggregate particles varied widely in shape and roundness from very angular to rounded in roundness and very elongate to equant in sphericity. The majority of material was captured by the #30 & #50 sieve. The fineness modulus of this aggregate was 2.045, indicating moderately coarse sand. The sand met ASTM C144's specifications for a masonry sand. For detailed definitions of these terms, please see section 5.0.

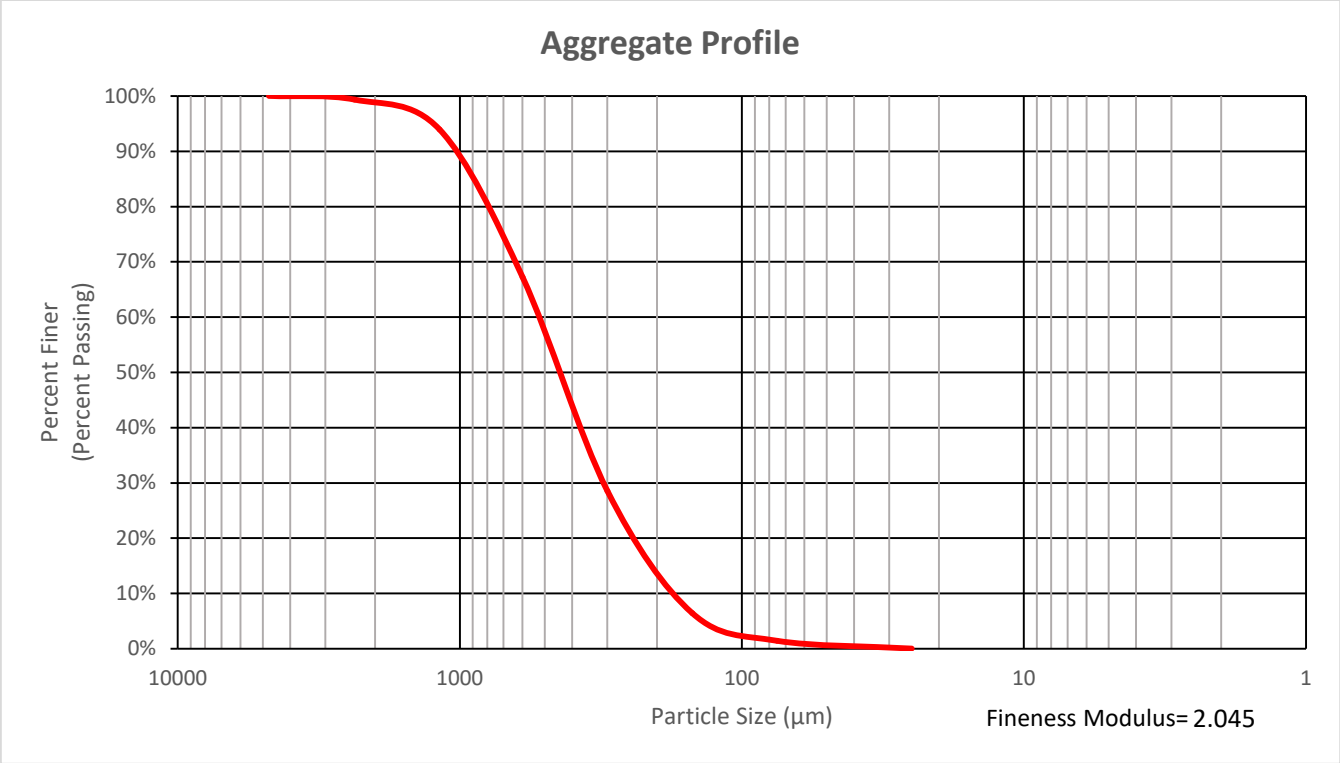
This material cannot be positively identified in this test but was weakly magnetic suggesting it may be an iron oxide pigment, iron fines, or material introduced into the mortar from its industrial location. Whether or not these are natural parts of the aggregate, introduced by the binder, is not known. In order to learn more, this mortar is a strong candidate for further instrumental analysis according to ASTM C1324.

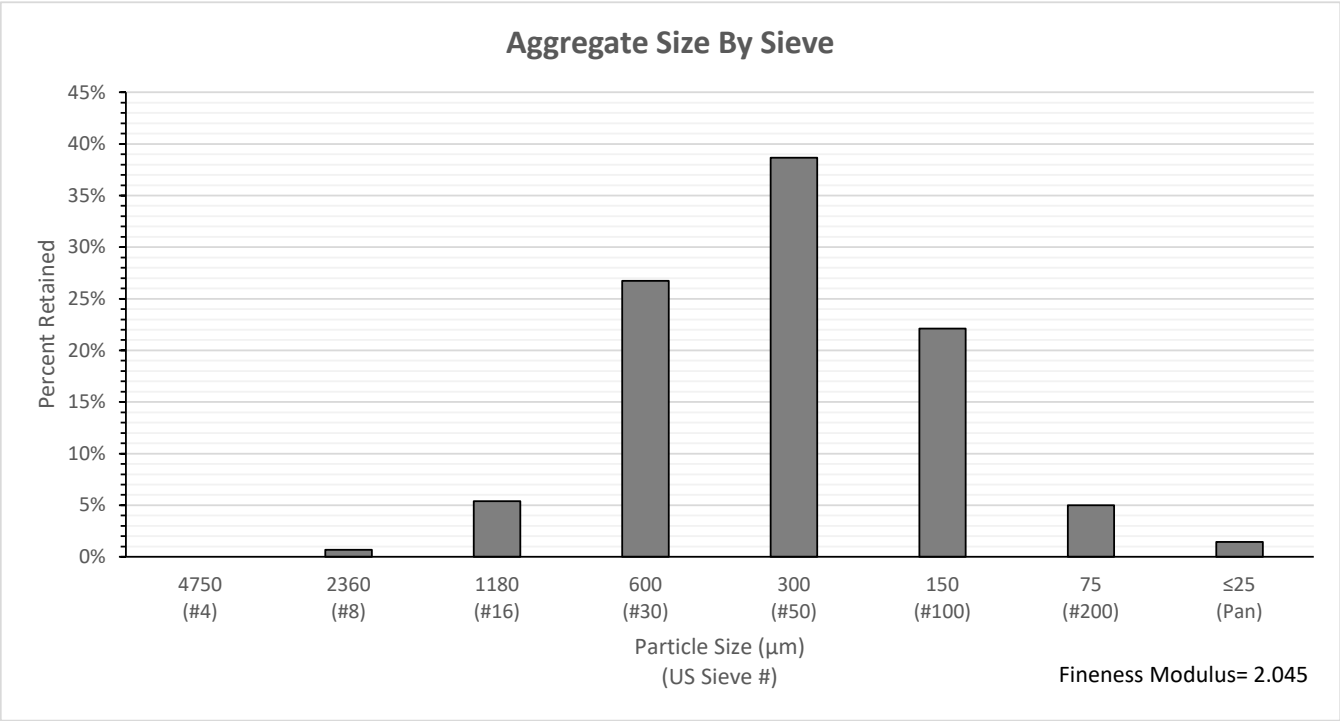
Extracted aggregates were sieved according to ASTM C136. Material was passed through a US Standard Sieve Stack (as governed in ASTM E11) and material retained on each mesh was recorded by weight and expressed as a percentage of the whole to determine approximate grading of the aggregate. Results are as follows:

Aggregate Grading:

Sieve Number	#4	#8	#16	#30	#50	#100	#200	Pan
Screen Size	4750µm	2360µm	1180µm	600µm	300µm	150µm	75µm	≥25µm
Aggregate Retained	0.000%	0.673%	5.385%	26.731%	38.654%	22.115%	5.000%	1.442%

Washed and sieved sands sorted according to sieve size (color corrected fluorescent light)


Aggregate Profile
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percent Finer
(Percent Passing)
10000
1000
100
10
1
Particle Size (µm)
Fineness Modulus= 2.045


Aggregate Size By Sieve
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Percent Retained
4750
(#4)
2360
(#8)
1180
(#16)
600
(#30)
300
(#50)
150
(#100)
75
(#200)
≤25
(Pan)
Particle Size (µm)
(US Sieve #)
Fineness Modulus= 2.045

Section 3.0: Product Recommendations

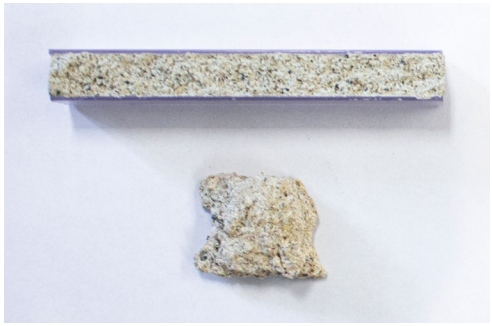
The National Register, the Secretary of the Interior's *Standards for the Treatment of Historic Properties* published by the National Park Service recommends replacing a historic mortar with a mortar similar to or sympathetic to the original. In cases where the material properties of the masonry have degraded over time, these standards recommend considering a lime mortar instead of historic cementitious mortars.[2]

Given that the analysis suggests that both the submitted mortar samples was a relatively soft lime mortars, and in consideration to the small size of the mortar joints and geographic location, a replacement mortar based on Natural Hydraulic Lime 3.5 (NHL 3.5) would normally be recommended. However, the proximity to salt water and a salt pile could pose weathering stresses that may dictate a stronger NHL such as an NHL 5. This denser NHL is generally compatible with historic masonry, but like with all structures, care should be taken to assess the state of the masonry to ensure denser mortars are appropriate. The advantage to a higher strength NHL like 5 is that it is more resistant to weathering, particularly from salts and sea air. The client should take care to assess the condition of the masonry before choosing an NHL strength, as NHL 5 should only be used on dense stone or brick. Regardless of the NHL strength, only St. Astier NHL is recommended here due to the specific mineralogy of the quarry which results in an NHL that is highly resistant to salts and sulfate, and gains strength more consistently in damp environments than other NHL brands.

Sample 1 compared to the recommended product substitution (color-corrected fluorescent light).

NHL is a traditional building material which offers certain advantages over non-hydraulic lime materials, lime-Portland hybrids, and cement-based materials. Whereas materials based on slaked lime putty or dolomitic lime cure with a process of carbonation over extended periods of time, NHL achieves a cure time more quickly through hydration. Additionally, materials based on St. Astier® NHL are typically more durable than those based on non-hydraulic limes, yet more flexible, vapor-permeable, and sulfate resistant than lime-cement hybrids or cementitious materials.

Given that all the samples were approximately 1/4" to 3/8" profile of the joints on the building, a fine sand is recommended mixed in a ratio of 1 part lime to 2.5 parts sand in accordance with ASTM C1713, based on the joint thickness with an appropriate mix of grain sizes distributed between the #30 and #100 sieves. The sand should be dry, clean, sharp, and contain a mixture of particle sizes and shapes to best optimizing the mortar properties. Color matching can be achieved either through the use of colored aggregates or by using a alkali-stable, UV-stable dry powdered pigment.



Sample 2 compared to the recommended product substitution (color-corrected fluorescent light).

1) Sample 1: Color-wise, the color of the mortar is a very close match to Lime*Works* **Ecologic Mortar DGM SCG (F) Non-Pigmented.**

2) Sample 2: From the Lime*Works* product line, **Ecologic Mortar SCG (F) in 90% DGM 050/ 10% DGM 250 W/XF Slag Fleck** is close in color and graduation to Sample 2.

2 United States, Department of the Interior, National Park Service Technical Preservation Services, The Secretary of the Interior's Standard for the Treatment of Historic Properties, ed. Anne E. Grimmer, 2017, (accessed November 4, 2020, https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf), 84.

It is the client's responsibility to perform appropriate mock ups or other tests to determine if these mortars are acceptable. If selected, these products can be ordered in any quantity by speaking to a Lime*Works*.us representative.

Please Note: While analysis suggests the recommended mortar is an appropriate substitution for the historic mortar, if the mortar needs to be *recreated* and not simply *substituted*, additional analysis will be required to better understand the specific aggregates, binders, or other material in the sample. Product recommendations are provided as a good faith courtesy and are not warranties or guarantees. It is the responsibility of the client and any relevant stakeholders to determine final product suitability and selection. Please speak to a Lime*Works*.us representative to discuss timetables, pricing, and additional testing options if any additional services or products are necessary.

Section 4.0: Testing Methodology

Testing is completed by an architectural conservator specializing in masonry and with sufficient education and experience to meet the American Institute for Conservation's qualifications for a conservator and bound by the AIC's Code of Ethics; or an experienced lab technician under the observation and review of an architectural conservator. Reports are written by the same and reviewed according to Lime*Works*.us strict quality control standards. All testing is performed in a laboratory conditioned to ASTM C511 specifications for a mortar mixing room.

The approximate composition of the material was determined by referencing the Jedrzejewska analytical method with a calcimeter and techniques conforming to the specifications outlined in ASTM D4373.[1] This technique essentially breaks down a sample into constituent parts and provides data on the nature of the binder by gauging the extent of its reaction with hydrochloric acid (HCl). As HCl dissolves bicarbonates of calcium carbonate ($CaCO_3$) and magnesium calcium dicarbonate ($CaMg(CO_3)_2$) compounds found in lime and (to a lesser extent) cement binders, carbon dioxide (CO_2) is produced. While not absolute and open to a degree of interpretation, by using standard gas/temperature/pressure laws, it is possible to calculate approximate amounts of carbon dioxide released during the acid digestion of the sample providing a reasonable estimation of the amount of carbonates present in the binder of the sample. Data obtained during experimentation was compared with published experimental standards based on known mixes to arrive at conclusions about the composition of all samples.[2] This method has its limits, as it can only give an approximation which can be skewed in the presence of certain additives like gypsum, and cannot differentiate between calcium-carbonate and magnesium-carbonate. Aggregates made of acid soluble material such as shells, marble, or limestone may also not be adequately characterized. A certain amount of error can be introduced by the process of crushing the sample for acid digestion, especially in mortars that require a great deal of force to pulverize.

Insoluble portions of the aggregate were retained and washed, while fine particulates of the material were captured in 20-25µm filter paper and retained. The aggregate was dried and weighed, and evaluated according to particulate size with a Standard U.S. Sieve Stack corresponding to ASTM E11 as outlined in ASTM C136. Sorted aggregate was then examined microscopically for particle sphericity, roundness, color, sorting, and other physical properties. Fine particulates, once filtered, were dried, weighed, and examined visually and microscopically. Color classification is performed using the Munsell Color System in accordance with ASTM D1535.

All microscopic examination was conducted using a Nikon SMZ-2T trinocular reflected light microscope, illuminated by an AmScope 312W-2GOP LED daylight-balanced illuminator. Photographs of samples were captured using a Canon EOS T5 DSLR camera with a special lens designed to make use of the microscope's trinocular bay. All photographs were then color corrected using Adobe Photoshop.

The degree of testing discussed herein is sufficient to establish a basic understanding about the composition of the materials supplied to our laboratory. That said, gravimetric analysis and tests which utilize acid digestion constitute an inexact science, relying substantially on the experience and interpretation of the analyst as well as comparison with materials with known composition. As such, this report should not be interpreted as providing absolute objective composition data on the material. Petrographic analysis including examination of thin sections in transmitted polarizing light and/or elemental analysis would be required to identify mineral phases which are specific to different types of cementing material and to unequivocally quantify the amount of lime and/or cement present. If analysis in accordance with testing procedures described in ASTM C1324 is desired, micro-chemical characterizations may be expanded upon with elemental analysis using techniques such as X-Ray Diffraction (XRD), petrography, and/or physical characterizations of thin sections using transmitted and polarized light microscopy.

1 Hanna Jedrzejewska, "Old Mortars in Poland: A New Method of Investigation," Studies in Conservation 5, no. 4 (November 1960): , doi:10.2307/1505237.

2 James Christopher Frey, *Exterior Stuccoes as an Interpretive and Conservation Asset: The Aiken-Rhett House*, Charleston, SC, Master's thesis, University of Pennsylvania, 1997 (Philadelphia, PA: University of Pennsylvania, 1997); John Stewart and James Moore, "Chemical Techniques of Historic Mortar Analysis," Bulletin of the Association for Preservation Technology, Vol. 14, No. 1 (Washington: APT, 1982), 11-16.

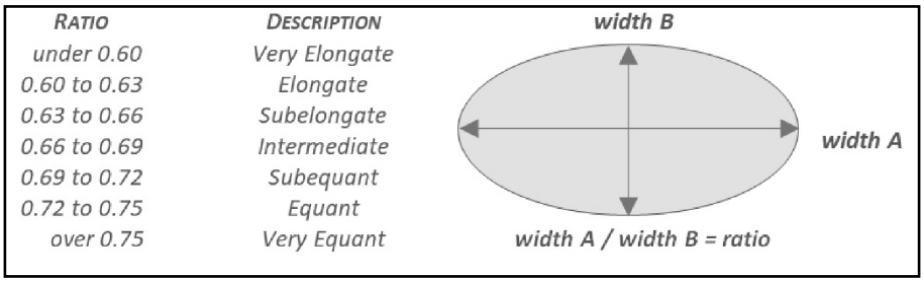
Section 5.0: Definitions[1]

- **Grading:** Grading is a measurement of how well distributed particulate sizes are within the aggregate of a sample. A sample with a broad, even distribution of grains from small to large is considered well-graded. Grading of materials helps predict certain properties of a mortar, such as shrinkage, porosity, permeability, and curing behavior. Appropriate grading for modern mortars is governed by ASTM C144, but historic mortars will vary widely from modern specifications. Typically, modern mortar sands will have a fineness modulus between 2.1 and 3.2, with smaller numbers indicating a finer sand and larger a coarser sand.

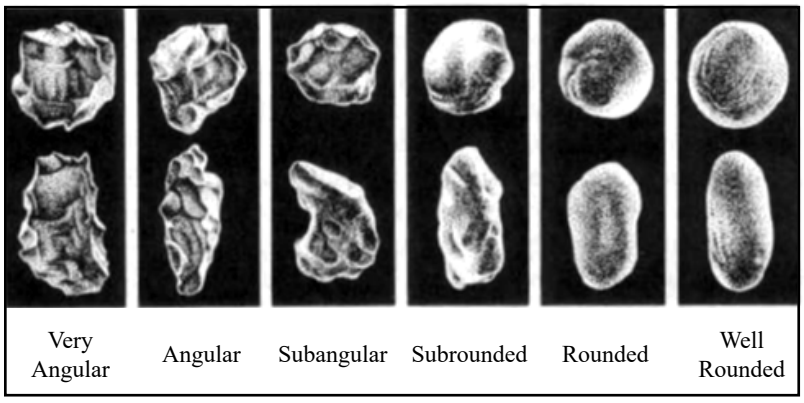
- **Hardness:** Hardness is a subjective measurement of how difficult the mortar is to snap or pulverize. Hardness can also be characterized using the Mohs Hardness Scale, which is a qualitative scale ranking an objects hardness by its resistance to being scratched by harder objects. For example, a sample with a Mohs rating of 5 will be scratched by (but cannot scratch) a 6, while being able to scratch (but not be scratched) by a 4. The Mohs Scale is based on a comparison to the hardness of known minerals.

Hardness	1	2	3	4	5	6	7	8	9	10
Mineral	Talc	Gypsum	Calcite	Fluorite	Apatite	Feldspar	Quartz	Topaz	Corun-dum	Dia-mond

- **Sphericity:** Sphericity compares the size of individual particles to how close they approach a perfect sphere. Samples very close to a sphere are said to be "very equant," while samples that are more distant from spherical are said to be "very elongate."

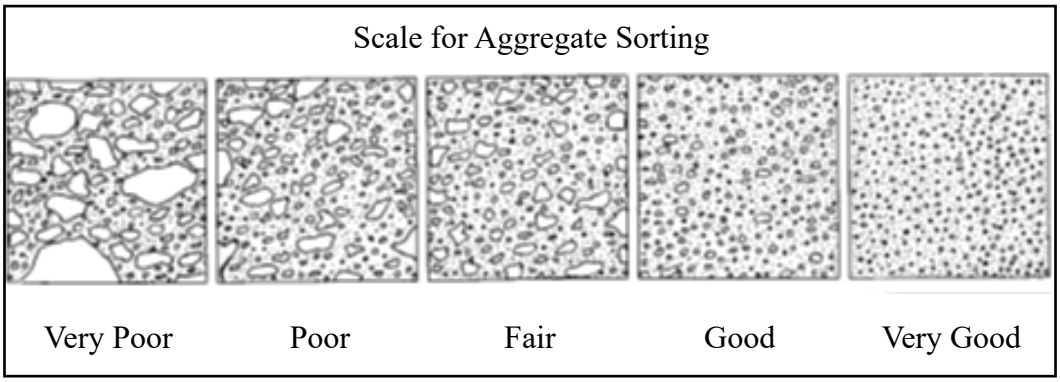


- **Roundness:** Roundness is an observation of the sharpness of the edges and corners of a particle. A particle that is significantly worn by abrasion to the point that it appears smooth is considered *well-rounded*, while a particle that appears cleaved with very sharp edges and little abrasion is considered *very angular*.

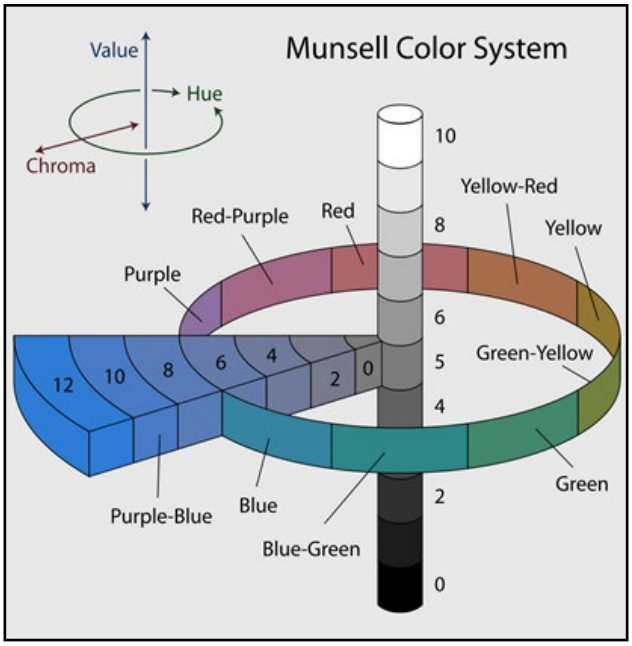


1 Definitions and figures adapted from "Characterization of Granular Samples by Sieve Analysis," Graduate Department of Historic Preservation, HSPV 555, Spring 2016 (Philadelphia: University of Pennsylvania, 2016).

- **Sorting:** Sorting is a description of the degree of distribution of particles of varying size and shape within an individual sample. Samples that are *well-sorted* have nearly homogeneous size and shape distribution, while those that are *poorly sorted* have heterogeneous size and shape distribution.



- **Color:** Because color is subjective, the Munsell Color System attempts to classify the visual experience of color into perceived attributes of hue, lightness, and chroma. These values only apply to opaque samples that are viewed by individuals with healthy color vision in daylight conditions. This method provides a simple, more cost effective alternative to analytical procedures such as spectrophotometry. Munsell notations are given a number-letter-number combination in the form number-letter-slash-number representing Munsell hue (H), Munsell value (V), and Munsell chroma (C). A Munsell color guide also assigns each value an official name. Color classification using the Munsell Color System is performed in accordance to the procedures outlined in ASTM D1535.



APPENDIX

C: BRICK RESTORATION CLEANER

PROSOCO®

Sure Klean®

CLEANING & PROTECTIVE TREATMENTS

Heavy Duty Restoration Cleaner

Sure Klean® Heavy Duty Restoration Cleaner is a concentrated acidic cleaning compound for the removal of heavy atmospheric staining from unpolished masonry. Used properly, Heavy Duty Restoration Cleaner dissolves heavy carbon and many other stains commonly found on masonry buildings in highly polluted areas. Dilute with water to produce a cost-effective, general-purpose restoration cleaner for brick, granite, sandstone, slate, terra cotta and many other masonry surfaces.

ADVANTAGES

- **Cost-effective concentrate reduces shipping, storage and container disposal costs.**
- **Proven effective for cleaning the dirtiest buildings.**
- **Safer than sandblasting. Will not damage masonry when properly used.**

Limitations

- Repeated application, or use when diluted with less than three parts fresh water, may damage some masonry surfaces. Use Sure Klean® Light Duty Restoration Cleaner or Sure Klean® Restoration Cleaner where possible.
- Not for interior use. Use Sure Klean® Light Duty Restoration Cleaner.
- Not suitable for polished stone surfaces. Use Sure Klean® Light Duty Restoration Cleaner.

REGULATORY COMPLIANCE

VOC Compliance

Sure Klean® Heavy Duty Restoration Cleaner is compliant with all national, state and district VOC regulations.

TYPICAL TECHNICAL DATA

FORM	Clear, colorless liquid
SPECIFIC GRAVITY	1.132
pH	2.2 @ 1:3 dilution
WT/GAL	9.42 lbs
ACTIVE CONTENT	not applicable
TOTAL SOLIDS	not applicable
VOC CONTENT	not applicable
FLASH POINT	not applicable
FREEZE POINT	no data
SHELF LIFE	3 years in tightly sealed, unopened container

SAFETY INFORMATION

Always read full label and SDS for precautionary instructions before use. Use appropriate safety equipment and job site controls during application and handling.

24-Hour Emergency Information:
INFOTRAC at 800-535-5053

PREPARATION

Protect people, vehicles, property, plants and all non masonry surfaces from cleaner, rinse, fumes, and wind drift. Protect and/or divert auto and pedestrian traffic. This product is corrosive, etches glass and architectural aluminum and is harmful to wood, painted surfaces and foliage.

Complete cleaning before installing windows, doors, hardware, light fixtures, roofing materials and any other non masonry items. If such fixtures have been installed, protect before application of cleaner.

All caulking and sealant materials should be in place and thoroughly cured before cleaning begins.

Avoid exposing building occupants to fumes. On occupied buildings, cover all windows, air intakes and exterior air conditioning vents. Shut down air handling equipment during cleaning and until surfaces are thoroughly dry.

Fumes attack glass, metal and all other acid-sensitive surfaces.

Recommended for these substrates. Always test. Coverage is in sq.ft./m. per gallon of concentrate.

Substrate	*Type*	*Use?*	*Coverage*
Architectural Concrete Block	Burnished Smooth Split-faced Ribbed	no no no no	N/A
Concrete	Brick Tile Precast Panels Pavers Cast-in-place	no no no no no	N/A
Fired Clay	Brick Tile Terra Cotta Pavers	**yes** **yes** **yes** **yes**	125–400 sq.ft. 28–47 sq.m.
Marble, Travertine, Limestone	Polished	no	N/A
	Unpolished	no	N/A
Granite	Polished	no	N/A
	Unpolished	**yes**	100–175 sq.ft. 9–16 sq.m.
Sandstone	Unpolished	**yes**	100–175 sq.ft. 9–16 sq.m.
Slate	Unpolished	**yes**	100–175 sq.ft. 9–16 sq.m.

Repeated applications may damage some surfaces. Always test to ensure desired results. Coverage estimates depend on surface texture and porosity.

Surface and Air Temperatures

Best cleaning results are obtained when air and masonry surface temperatures are 40° F (4° C) or above. Cleaning when temperatures are below freezing or will be overnight may harm masonry. If freezing conditions exist prior to application, let masonry thaw.

Equipment

Apply using an acid-resistant brush or low-pressure (50 psi max) airless spray equipment. Equipment should be fitted with acid-resistant hoses and gaskets to avoid discoloration. Pressure spray above 50 psi drives the chemicals deep into the surface, making it difficult to rinse completely, and may result in staining.

Rinse with enough water and pressure to flush spent cleaner and dissolved soiling from the masonry surface and surface pores without damage. Inadequate rinsing leaves residues which may stain the cleaned surface.

Masonry-washing equipment generating 400–1000 psi with a water flow rate of 6–8 gallons per minute is the best water/pressure combination for rinsing porous masonry. Use a 15–45° fan spray tip. Heated water (150–180° F; 65–82° C) may improve cleaning efficiency. Use adjustable equipment for reducing water flow-rates and rinsing pressure as needed for sensitive surfaces.

Rinsing pressures greater than 1000 psi and fan spray tips smaller than 15° may permanently damage sensitive masonry. Water flow-rates less than 6 gallons per minute may reduce cleaning productivity and contribute to uneven cleaning results.

Storage and Handling

Store in a cool, dry place with adequate ventilation. Always seal container after dispensing. Do not alter or mix with other chemicals. Published shelf life assumes upright storage of factory-sealed containers in a dry place. Maintain temperature of 45–100° F (7–38° C). Do not double stack pallets. Dispose of unused product and container in accordance with local, state and federal regulations.

APPLICATION

Read "Preparation" and the Safety Data Sheet before use. ALWAYS TEST a small area of each surface to confirm suitability and desired results before beginning overall application. Test each type of masonry and each type of stain. Test with the same equipment, recommended surface preparation

and application procedures planned for general application. Let test area dry 3–7 days before inspection and approval. Make the test panel available for comparison throughout the cleaning project.

Dilution

Sure Klean® Heavy Duty Restoration Cleaner must be diluted with fresh water before application. Failure to dilute may result in bleaching of the masonry's natural color.

When diluting, always pour cold water into bucket first, then carefully add product. Acidic materials will attack metal. Use polyethylene or polypropylene buckets only.

- *Porous Masonry*: dilute 1 part concentrate to 3 parts water, depending on test results.
- *Nonporous Masonry (glazed brick, terra cotta)*: dilute 1 part concentrate to 4 to 6 parts water, depending on test results.

Application Instructions

1. Working from the bottom to the top, prewet the surface with clean water.
2. Apply using a brush or low-pressure spray.
3. Let the cleaning solution stay on the surface for 3 to 5 minutes. Reapply. Gently scrub heavily soiled areas. Do not let cleaner dry on the surface. If drying occurs, lightly wet treated surfaces with fresh water and reapply in a gentle scrubbing manner.
4. Rinse with low-pressure flood rinse to remove initial acidic residue with minimum risk of wind drift.
5. Rinse thoroughly using high-pressure spray, from the bottom of the treated area to the top covering each section of the surface with a concentrated stream of water. To avoid streaking, keep wall below wet and rinsed free of cleaner and residues.

Cleanup

Clean tools and equipment using fresh water.

WARRANTY

The information and recommendations made are based on our own research and the research of others, and are believed to be accurate. However, no guarantee of their accuracy is made because we cannot cover every possible application of our products, nor anticipate every variation encountered in masonry surfaces, job conditions and methods used. The purchasers shall make their own tests to determine the suitability of such products for a particular purpose.

PROSOCO, Inc. warrants this product to be free from defects. **Where permitted by law, PROSOCO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of merchantability or fitness for particular purpose**. The purchaser shall be responsible to make his own tests to determine the suitability of this product for his particular purpose. PROSOCO's liability shall be limited in all events to supplying sufficient product to re-treat the specific areas to which defective product has been applied. Acceptance and use of this product absolves PROSOCO from any other liability, from whatever source, including liability for incidental, consequential or resultant damages whether due to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of PROSOCO, its distributors or dealers.

CUSTOMER CARE

Factory personnel are available for product, environment and job-safety assistance with no obligation. Call 800-255-4255 and ask for Customer Care – technical support.

Factory-trained representatives are established in principal cities throughout the continental United States. Call Customer Care at 800-255-4255, or visit our web site at www.prosoco.com, for the name of the PROSOCO representative in your area.

BEST PRACTICES

Apply using an acid-resistant brush or low-pressure airless spray equipment fitted with acid-resistant hoses and gaskets to avoid discoloration.

Do not use spray equipment above 50 psi. Pressure spray above 50 psi drives the chemicals deep into the surface, making it difficult to rinse completely, and may result in staining.

Heavy Duty Restoration Cleaner must be diluted with fresh water before application. Failure to dilute may result in bleaching of the masonry's natural color. When diluting, always pour cold water into bucket first, then carefully add product. Acidic materials will attack metal. Use polyethylene or polypropylene buckets only.

Never go it alone. For problems or questions, contact your local PROSOCO distributor or field representative. Or call PROSOCO technical Customer Care toll-free at 800-255-4255.

APPENDIX

D: STORM WINDOW SPECIFICATIONS

CONCORD DOUBLE HUNG
MODEL 696

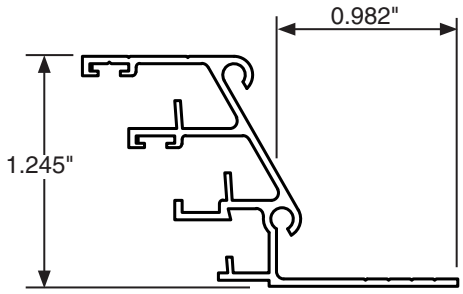
GENERAL INFORMATION:

- The 696 is an aluminum double hung storm window.
- The 696 is a 3-track model that allows the inside screen and two sashes to operate independently.
- The 696 is standard with an INSIDE 1/2 screen. A full screen is optional for an up charge. Both screens are available with various mesh options.
- The 696 is standard with a 1" bottom expander.
- The 696 is available as an Oriel Style window. A custom CMR (center meeting rail) measurement must be provided.

STANDARD FEATURES:

- Color matched installation screws.
- Marine glazed.
- Rustproof screws and clips.
- 1" bottom expander standard.
- Can accommodate side expanders.
- Pre-punched installation holes.
- Mid-window stabilizer bar.
- Full weatherstripped frame.
- Ratcheted sash stops every 1¼"
- Screw Corner Construction
- Interlocking meeting rail.

696 Frame Extrusion Detail



MODEL 696: PART ID and PART # REFERENCE

Full Perimeter Weatherstripping: S-WS-597-00

Mid-Window Stabilizer Bar: S-AE-4167-CC

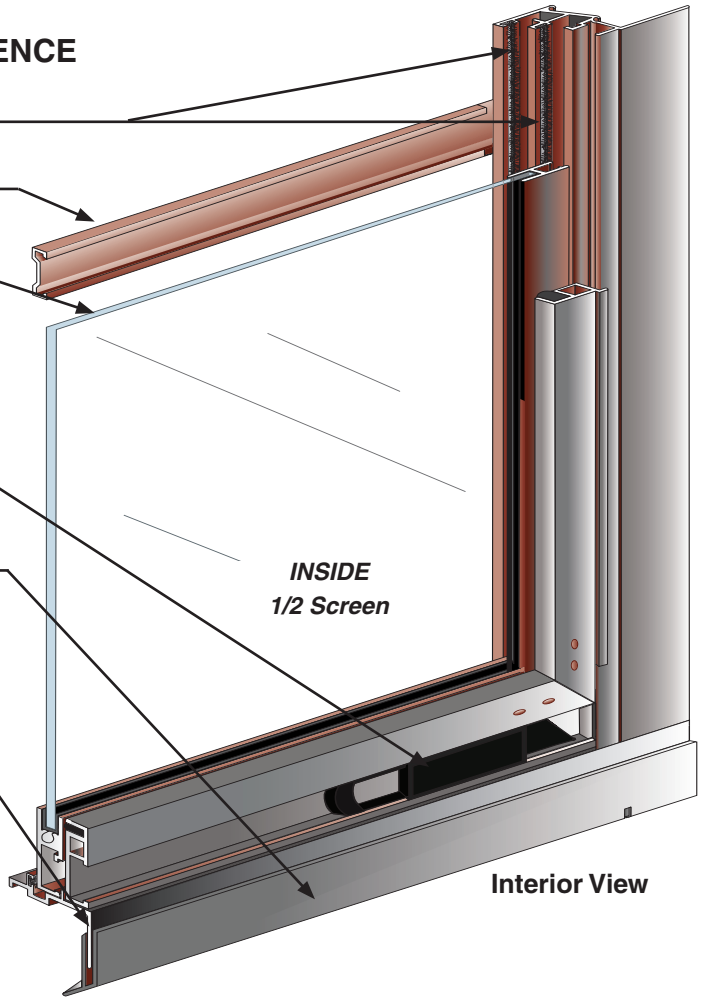
Wrap-Around Marine Glazing:
Single Strength (3/32" thickness): S-VS-455-13
Double Strength (1/8" thickness): S-VS-456-13

Sash Bolt Assembly,
Right Latch Bolt: S-HG-145-13
Left Latch Bolt: S-HG-144-13
Spring Retainer: S-HG-347-00

1" Bottom Expander (Standard): S-AE-4151-CC
(1¾" Bottom Expander Optional)
*Bottom expanders are weeped for drainage

Master Frame, Bottom Sill: S-AE-4227-CC
(Sill leg measures 1.210")

NOTE: The 696 Storm Window Flange is punched with installation holes 1/8" from the edge.



Interior View

CONCORD DOUBLE HUNG
MODEL 696 (CONTINUED)

MODEL 696: PART ID and PART # REFERENCE

Master Frame, Header: S-AE-4150-CC
(Measures 0.590")

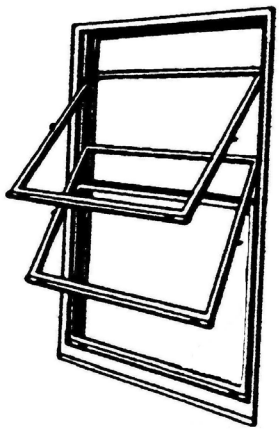
Master Frame, Sides: S-AE-4120-CC
(Measures 0.952")

Additional Parts Not Shown:
⅛" x ¼" Aluminium Pop Rivet: S-HG-613-CC

6 x 1" w/ ⅜" Lead Point SS: S-HS-369-00

Installation Screw Pack # S-HS-783P-01 (White)
or Pack # S-HS-783S-CC (For all other color options)
w/ 6 x ½" Pan Head Screws: S-HS-783-CC

**CC represents the color code. Each available color is represented by a two-digit number.*



Removable Tilt-In Sashes with Anti-Bow Pins:
S-HG-662-13

Right Latch Bolt: S-HG-145-13
Left Latch Bolt: S-HG-144-13

Self Storing Swivel Sash Key:
S-HG-660-13

ProVia
THE PROFESSIONAL WAY

2150 State Route 39, Sugarcreek, OH 44681
Phone: 330.852.4711 • Fax: 877.735.2057
provia.com

APPENDIX

E: SNOW GUARD SPECIFICATIONS

S-5!®

The Right Way!

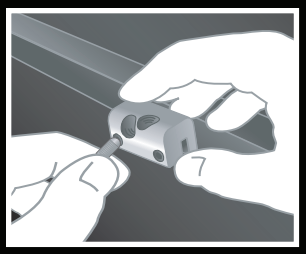
Why Snow Retention?

When snow accumulations begin to melt, the result can be catastrophic as the blanket of snow avalanches off the roof, dumping tons of snow onto anything in its path, damaging landscape, gutters, adjacent roofs, and vehicles, and causing injury or death to passers-by. SnoRail™ and SnoFence™ can dramatically reduce these risks associated with rooftop avalanches, maintaining the clean lines of the roof and lasting as long as the roof itself! SnoRail and SnoFence can be designed and engineered on a site-specific basis.

Why SnoRail™/SnoFence™?

Architects and roof designers agree: the clean lines, cylindrical shapes and high-tech look of our SnoRail and SnoFence systems present an attractive solution to snow retention problems! They function without cluttering the lines of the roof. With up to six times the strength of adhesively-mounted devices, and without the high labor costs and inconsistencies of soldered snow guards, S-5!® offers the perfect, long term, dependable solution for traditional standing seam and sheet copper roofing. The SnoRail and SnoFence systems are mechanically attached with S-5! clamps utilizing our round-point setscrews—designed not to "pin" or "fix" the roof panels to the building, leaving thermal movement unrestricted.

1



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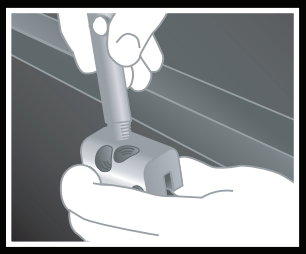

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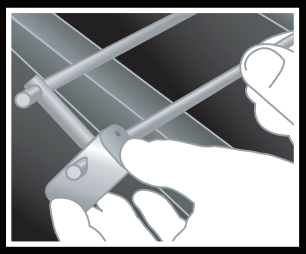

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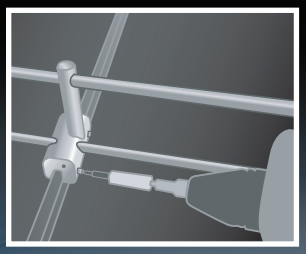
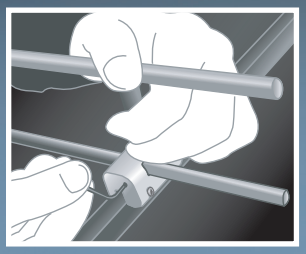


5

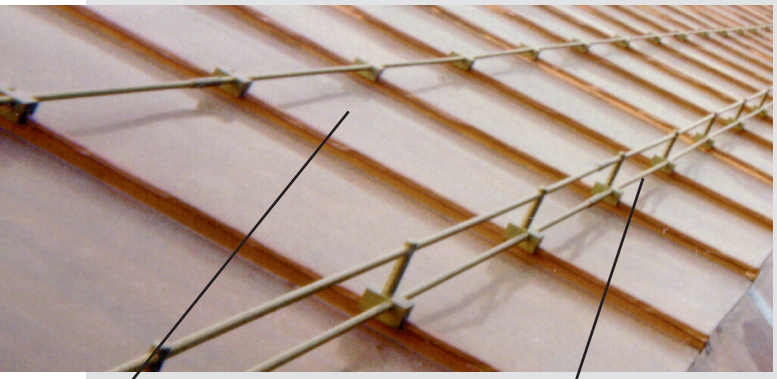


The right way to attach almost anything to metal roofs!

888-825-3432 | www.S-5.com SnoRail™ & SnoFence™ – Aluminum & Brass

S-5!®
The Right Way!

Whether aluminum or brass, our SnoRail™ and SnoFence™ systems offer a sleek, stylish design. Utilizing patented S-5!® clamp technology, this snow retention system doesn't pierce the metal roofing, thereby protecting roof coatings and weather-tightness warranties.



SnoRail – Brass SnoFence – Brass

The **SnoRail™ and SnoFence™** system is available in brass for use on copper batten or standing seam roofs and in aluminum for other standing seam roofing materials.

SnoRail™

One SnoRod™* is inserted through the S-5-A SF or S-5-B SF clamps, positioning it just above the panel seams. The resulting assembly is called SnoRail. SnoRod is available in brass and stainless steel.

SnoFence™

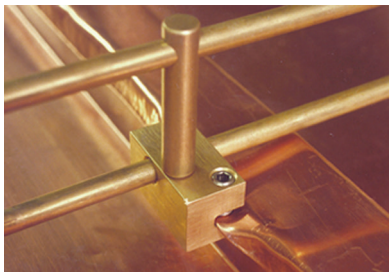
With an assembled SnoRail System, simply thread one SnoPost™ into the S-5-A SF or S-5-B SF clamp, and then add a second SnoRod two inches above the first. The resulting double-rod assembly is called SnoFence. SnoPost is available in brass and stainless steel.

Installation is easy: The S-5!® clamp mechanically attaches to the panel seam by inserting and tightening our patented round-point setscrews to the specified tension (see **www.S-5.com**). These setscrews will slightly dimple the seam material, but not pierce it. Our patented clamps offer durability unequaled by chemical bonds and adhesives that degrade with time and exposure.

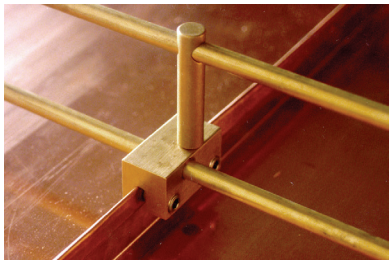
*Not supplied by S-5!

SnoRail™ and SnoFence™

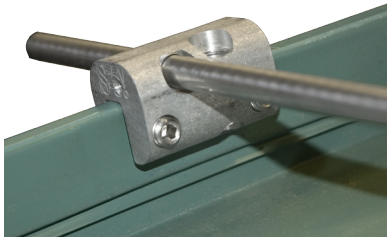
SnoFence – Brass on copper batten seam



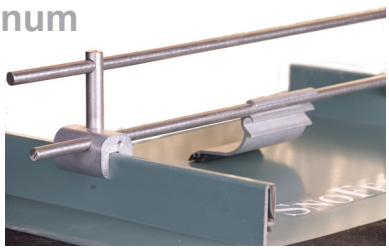
SnoFence – Brass on copper standing seam



SnoRail - Aluminum



SnoFence - Aluminum



S-5!® Warning! Please use this product responsibly!

Products are protected by multiple U.S. and foreign patents. Visit the website at www.S-5.com for complete information on patents and trademarks. For maximum holding strength, setscrews should be tensioned and re-tensioned as the seam material compresses. Clamp setscrew tension should be verified using a calibrated torque wrench between 160 and 180 inch pounds when used on 22ga steel, and between 130 and 150 inch pounds for all other metals and thinner gauges of steel. Consult the S-5! website at www.S-5.com for published data regarding holding strength.

Distributed by

APPENDIX

F: EXISTING CONDITIONS PHOTOS

205 MARKET STREET

PORTSMOUTH, NEW HAMPSHIRE

AERIAL VIEW OF SITE AND SURROUNDINGS

HISTORIC DISTRICT COMMISSION ADMINISTRATIVE APPROVAL: JUNE 2, 2021

CJ ARCHITECTS

1.0

ADD $\frac{3}{8}$" THICK METAL STORM SHUTTERS SIZE TO MATCH HISTORIC SHUTTERS

ADD TWO NEW COMMERCIAL SIGNS

ADD $\frac{3}{8}$" THICK METAL STORM SHUTTERS SIZE TO MATCH HISTORIC SHUTTERS

ADD (4) NEW EXTERIOR LIGHTING FIXTURES

ADD (3) MOTORIZED TOUCHSCREEN KEYPAD DEADBOLTS AT ENTRY DOORS

INSTALL NEW STANDING SEAM COPPER METAL ROOFING AND SNOW GUARDS

REPAIR AND RESTORE LOOSE BRICK CORBEL DETAIL AT GUTTER LINE

REPLACE EXISTING GUTTER WITH 6" K-STYLE COPPER GUTTER

REPLACE EXISTING DOWNSPOUT WITH 3" SMOOTH ROUND COPPER DOWNSPOUT

REPAIR, SANDBLAST, AND COLOR GALVANIZE EXISTING SHUTTERS

ADD LIGHT MOUNTING BAR TO SUPPORT (4) LIGHT FIXTURES

CLEAN / REPAIR EXISTING BASEMENT HOPPER WINDOWS.

GENERAL NOTES:

1. REPAIR / CLEAN /RE-POINT BRICK

2. PAINT ALL EXTERIOR WOODWORK ON DOORS AND WINDOWS

3. REPLACE ALL STORM WINDOWS

4. WORK PREFORMED ON DORMERS WILL BE LIMITED TO PAINTING EXISTING WINDOW SASHES AND REPLACING STORM UNITS AS REQUIRED

5. ALL ABANDONED EXTERIOR WIRES AND BRACKETS WILL BE REMOVED IN PREPARATION FOR RE-POINTING.

205 MARKET STREET

PORTSMOUTH, NEW HAMPSHIRE

FRONT ELEVATION

HISTORIC DISTRICT COMMISSION ADMINISTRATIVE APPROVAL: JUNE 2, 2021

CJ ARCHITECTS

RIGHT SIDE

GENERAL NOTES:

1. REPAIR / CLEAN / RE-POINT BRICK

2. PAINT ALL EXTERIOR WOODWORK ON DOORS AND WINDOWS

3. REPLACE ALL STORM WINDOWS

LEFT SIDE

205 MARKET STREET

PORTSMOUTH, NEW HAMPSHIRE

SIDE ELEVATIONS

HISTORIC DISTRICT COMMISSION ADMINISTRATIVE APPROVAL: JUNE 2, 2021

CJ ARCHITECTS

2.1

GENERAL NOTES:

1. REPAIR / CLEAN / RE-POINT BRICK

2. PAINT ALL EXTERIOR WOODWORK ON DOORS AND WINDOWS

3. REPLACE ALL STORM WINDOWS

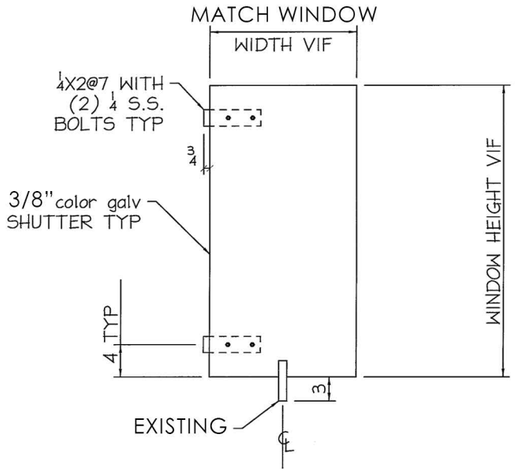
205 MARKET STREET

PORTSMOUTH, NEW HAMPSHIRE

REAR ELEVATION

HISTORIC DISTRICT COMMISSION ADMINISTRATIVE APPROVAL: JUNE 2, 2021

CJ ARCHITECTS



SHUTTERS AND HARDWARE

MANUFACTURER: CUSTOM FABRICATED

COLOR: COLOR GALVANIZED (BLACK HC 190)

STORM WINDOWS

MANUFACTURER: GRANITE STATE GLASS

STYLE: PRO VIA - CONCORD

COLOR: WHITE ALUMINUM FRAMES

DOWNSPOUTS

MANUFACTURER: CUSTOM FABRICATED

STYLE: 3"SMOOTH ROUND

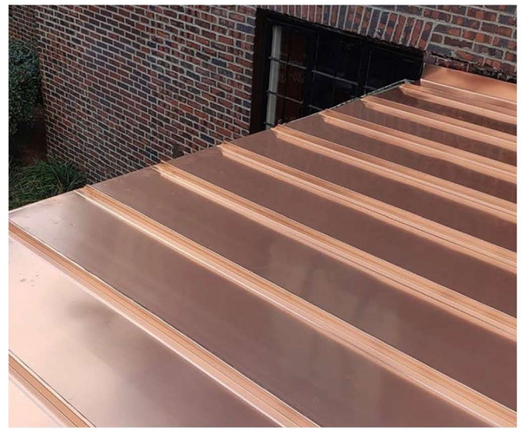
COLOR: 22 mil COLD ROLLED RED RIVER COPPER

GUTTERS

MANUFACTURER: CUSTOM FABRICATED

STYLE: 6"K STYLE

COLOR: 22mil COLD ROLLED RED RIVER COPPER

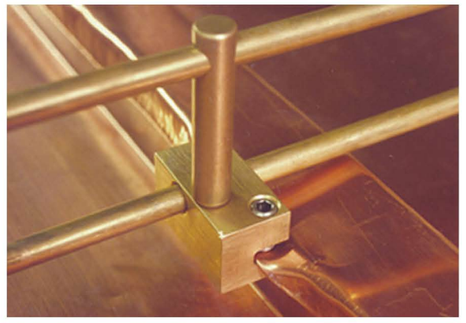


METAL ROOFING

MANUFACTURER: CUSTOM FABRICATED

STYLE: STANDING SEAM 18"x24" PANELS

COLOR: 32 mil COLD ROLLED RED RIVER COPPER



SNOW GUARDS

MANUFACTURER: SNORAIL

STYLE: RAIL SYSTEM

COLOR: BRASS

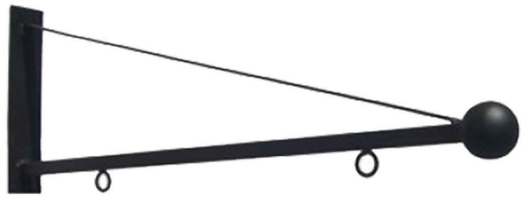
205 MARKET STREET

PORTSMOUTH, NEW HAMPSHIRE

PROPOSED MATERIALS

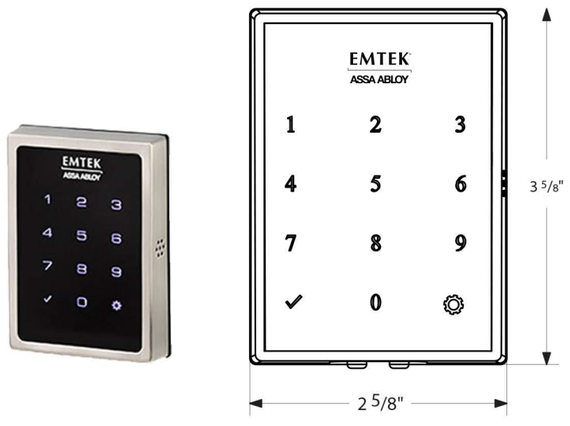
HISTORIC DISTRICT COMMISSION ADMINISTRATIVE APPROVAL: JUNE 2, 2021

CJ ARCHITECTS



COMMERCIAL SIGNS

STYLE: 30" TRIANGLE BALL HANGING SIGN BRACKET
COLOR: BLACK



ACCESS CONTROL

MANUFACTURER: EMTEK
STYLE: EMPOWERED MOTORIZED TOUCHSCREEN KEY PAD
COLOR: BLACK

EXTERIOR LIGHTING (x4)

MANUFACTURER: HI LITE
STYLE: DEEP BOWL WAREHOUSE OUTDOOR WALL SCONCE
COLOR: BLACK

MASONRY BRICK

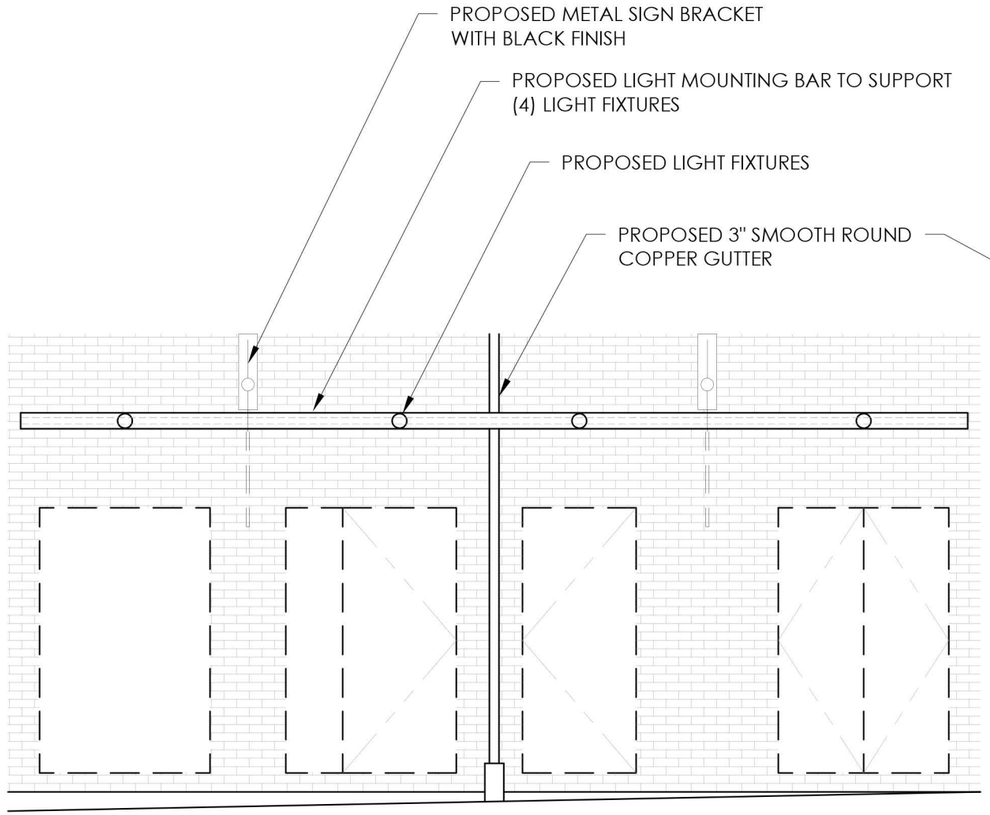
MANUFACTURER: MORIN BRICK
COLOR: COLONY RED WATERSTRUCK

205 MARKET STREET
PORTSMOUTH, NEW HAMPSHIRE

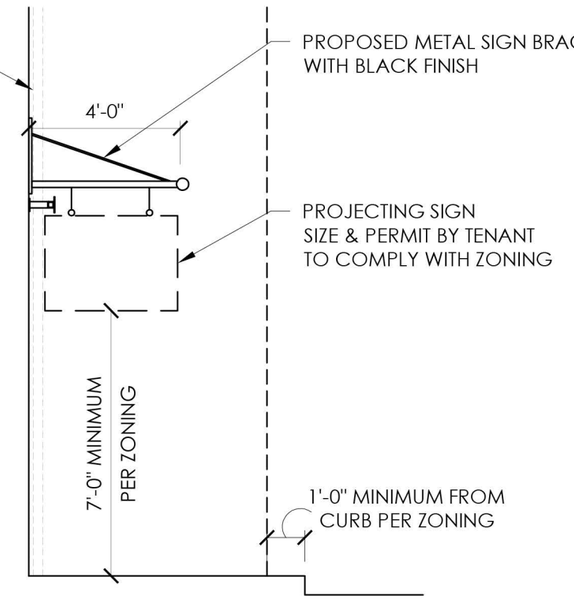
PROPOSED MATERIALS

HISTORIC DISTRICT COMMISSION ADMINISTRATIVE APPROVAL: JUNE 2, 2021

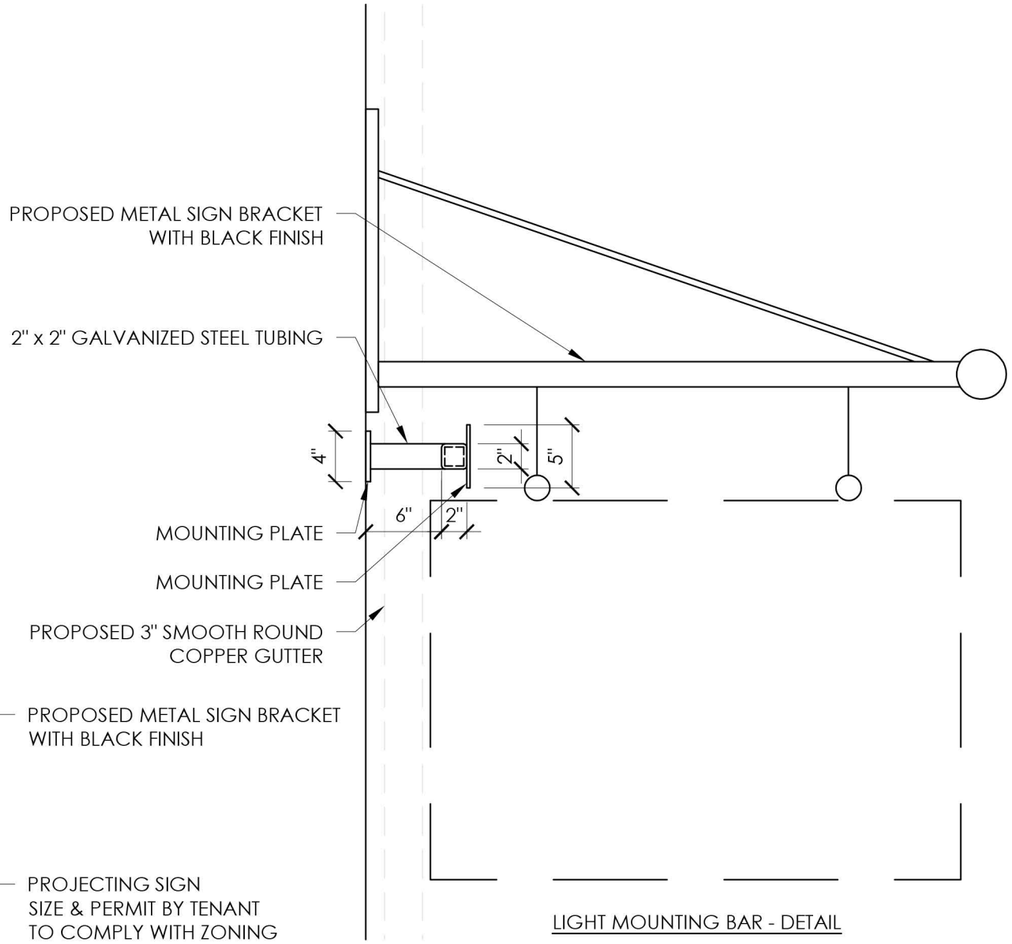
CJ ARCHITECTS



LIGHT MOUNTING BAR - FRONT ELEVATION



LIGHT MOUNTING BAR - SIDE ELEVATION



LIGHT MOUNTING BAR - DETAIL

205 MARKET STREET

PORTSMOUTH, NEW HAMPSHIRE

LIGHT MOUNTING BAR ELEVATIONS AND DETAIL

HISTORIC DISTRICT COMMISSION ADMINISTRATIVE APPROVAL: JUNE 2, 2021

CJ ARCHITECTS

7. 100 Market Street - Recommended Approval

Background: The applicant is seeking approval for a change to a previously approved design (change door head height from 11' to 10').

Staff Comment: Recommended Approval

Stipulations:

1. _____
2. _____
3. _____

City of Portsmouth, NH

05/25/2021

LUHD-345

Historic District Commission Work Session or Administrative Approval Application

Status: Active

Date Created: May 25, 2021

Applicant

Timothy Hart
thart@canal5studio.com
One Canal Plaza, #888
Portland, Maine 04101
207-553-2115 Ext.101

Location

100 MARKET ST
Portsmouth, NH 03801

Owner:

100 MARKET STREET LLC
PO BOX 1257 PORTSMOUTH, NH 03802

Application Type

Please select application type from the drop down menu below

Administrative Approval

Project Information

Brief Description of Proposed Work

Lowered door head height from 11' to 10' due to field conditions.

Description of Proposed Work (Planning Staff)

--

Project Representatives

Relationship to Project

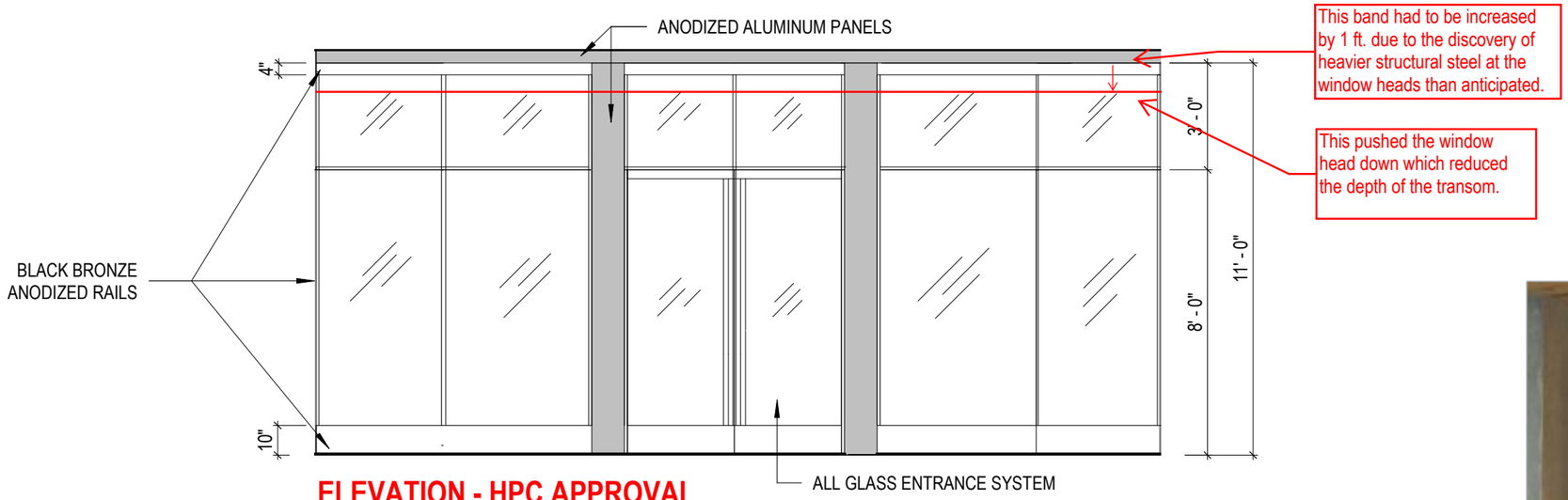
Architect

If you selected "Other", please state relationship to project.

--

Full Name (First and Last)

Business Name (if applicable)



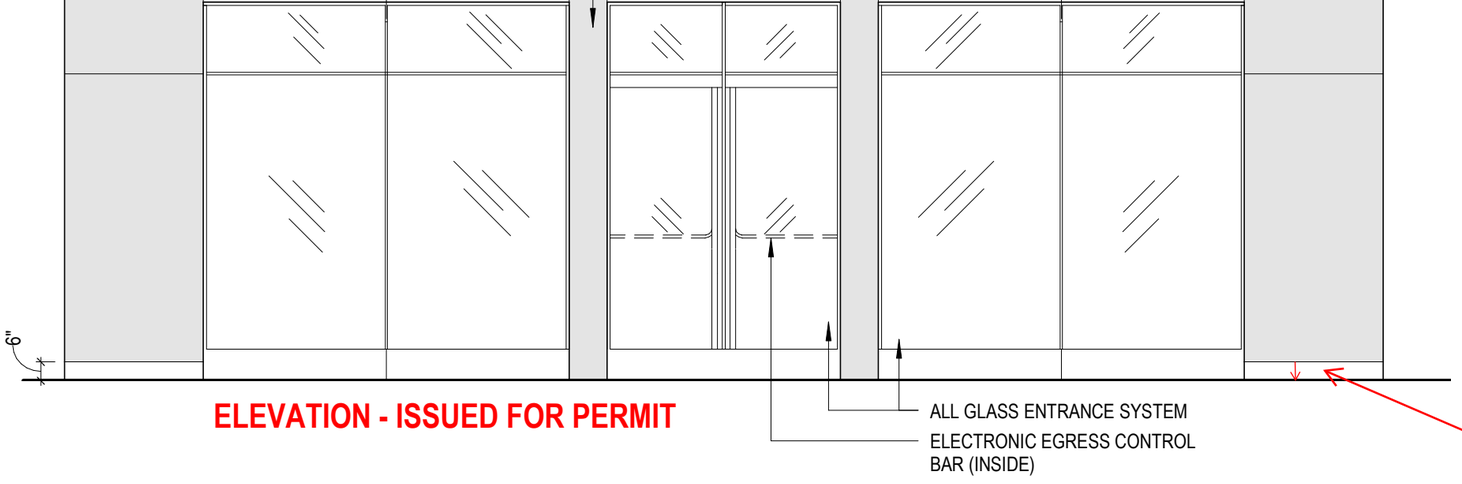
This band had to be increased by 1 ft. due to the discovery of heavier structural steel at the window heads than anticipated.

This pushed the window head down which reduced the depth of the transom.

ELEVATION - HPC APPROVAL

1 ENTRANCE ELEVATION
1/4" = 1'-0"

ENTRANCE SYSTEM - CR LAURENCE BLACK BRONZE ANODIZED WITH LONG "F-STYLE" HANDLES



ELEVATION - ISSUED FOR PERMIT

6 ENTRANCE ELEVATION
1/4" = 1'-0"

This building elevation simply provides a wider angle view than the earlier HPC elevation. It is showing all the same elements that were approved in the HPC plan, but for the benefit of the contractor we showed the anodized aluminum panels which were in the HPC plan drawing but not elevated. The 6" band you note is not a change but simply shows the bottom of the cladding relative to the pavers.

EXTERIOR GLAZING SYSTEM BASIS OF DESIGN: CR LAURENCE ALL GLASS STOREFRONT AND ENTRY SYSTEM. BLUMCRAFT ELECTRONIC EGRESS CONTROL HANDLES ON INTERIOR.

DECEMBER 16, 2020

CANAL 5 STUDIO
One Canal Plaza, Suite 888
Portland, Maine 04101
207 553 2115
canal5studio.com

Scale:	Project Title				Project Status	Drawing Title	Drawing Number
1/4" = 1'-0"	EXTERIOR RENOVATIONS	REV.	DATE	DESCRIPTION	HDC APPLICATION	ENTRANCE ELEVATION	A2
C5S Project No. 20002							

8. 66 Marcy Street - Recommended Approval

Background: The applicant is seeking approval to remove all hedges between the existing patio, parking lot, and Marcy Street and to install a new 4 ft. fence to be made of steel.

Staff Comment: Recommended Approval

Stipulations:

1. _____
2. _____
3. _____

City of Portsmouth, NH

05/26/2021

LUHD-346

Historic District Commission Work Session or Administrative Approval Application

Status: Active

Date Created: May 25, 2021

Applicant

Ryan Lent
ryan@nnehospitality.com
PO Box 4117
Portsmouth, New Hampshire 03802
6038127775

Location

66 MARCY ST
Portsmouth, NH 03801

Owner:

STRAWBERY BANKE INC & MOMBO RESTAURANT
PO BOX 300 PORTSMOUTH, NH 03802

Application Type

Please select application type from the drop down menu below

Administrative Approval

Project Information

Brief Description of Proposed Work

We are looking to remove the hedges on our front patio abutting the parking lot and Marcy St. We would like to install a 4" heavy steel fence with a classic wrought iron look. I have attached the photos and build sheet for the fence. Depending on cost estimates which we will obtain prior to the meeting, we may also consider a heavy industrial grade aluminum fence with a classic look. That build sheet is attached as well.

I hope to have approval for this project utilizing preferably the heavy steel, but possibly the aluminum to both enhance the ascetic of the property and the functionality, while keeping a classic feel.

Description of Proposed Work (Planning Staff)

--

Property Information

Property ID 0104-0007-0009
Location 72-74 JEFFERSON ST
Owner STRAWBERY BANKE INC

*PROPOSED LOCATION OF FENCE IS SAME AS EXISTING.

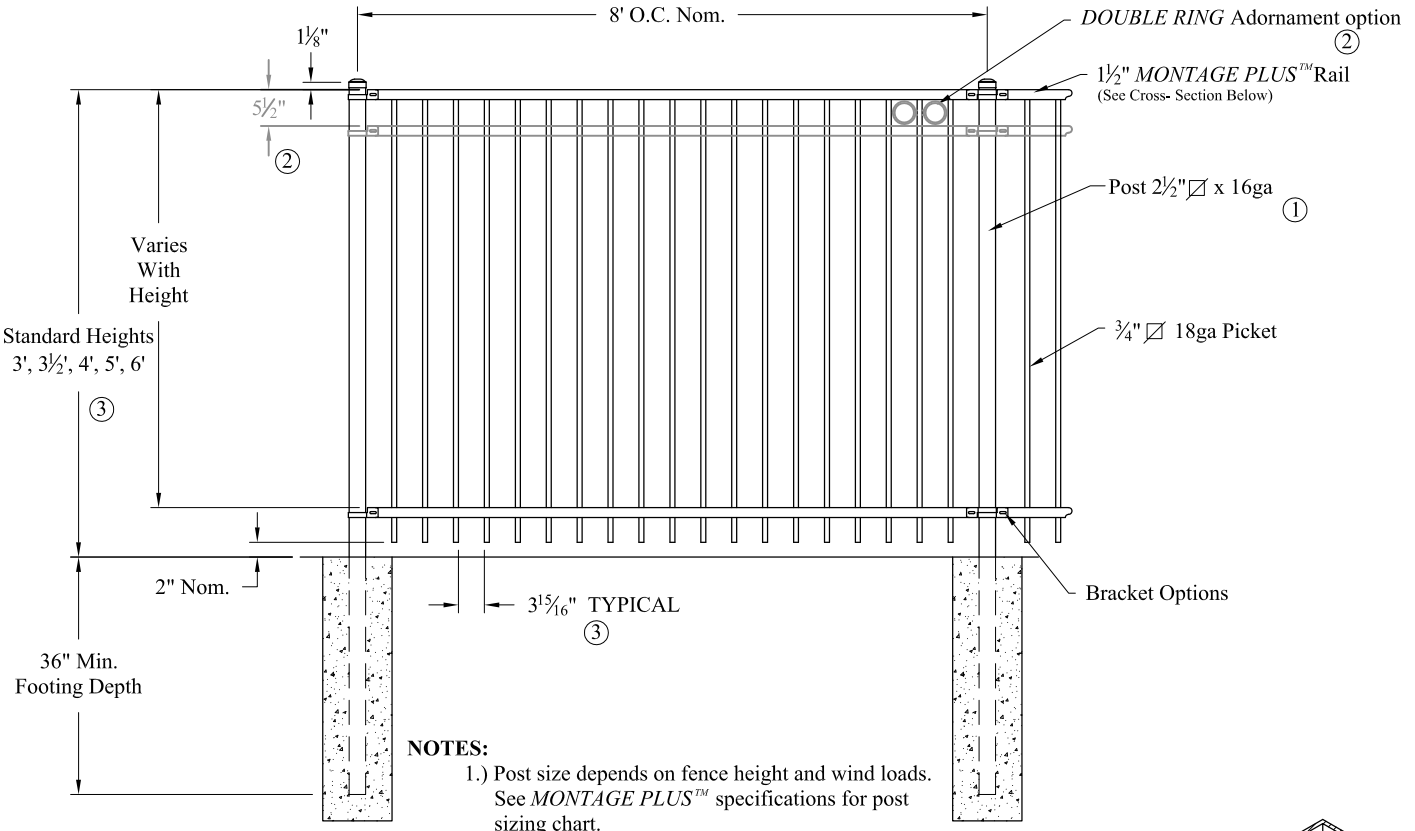
MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Portsmouth, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 4/1/2019
Data updated 7/17/2019

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

Existing conditions:

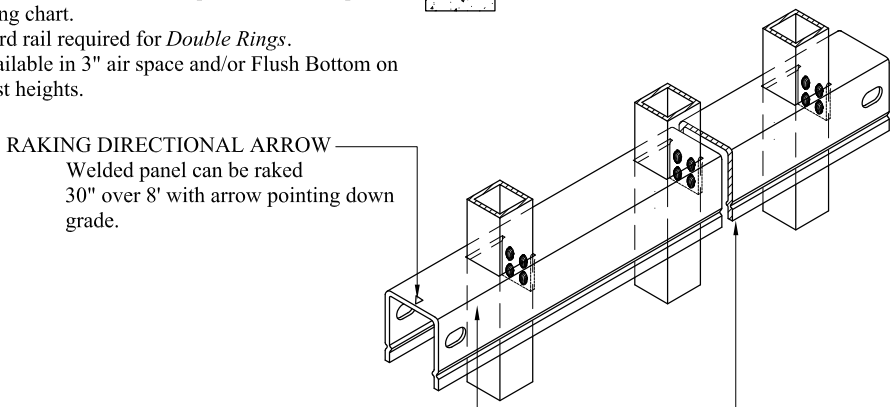


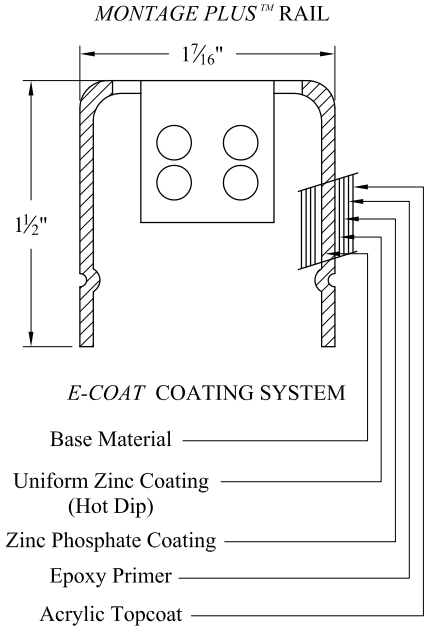
NOTES:

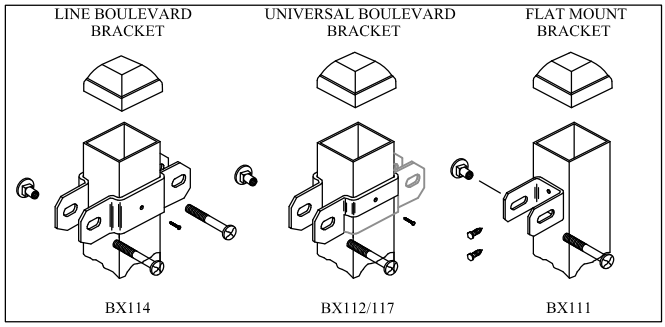
1.) Post size depends on fence height and wind loads. See *MONTAGE PLUS™* specifications for post sizing chart.

2.) Third rail required for *Double Rings*.

3.) Available in 3" air space and/or Flush Bottom on most heights.







COMMERCIAL STRENGTH WELDED STEEL PANEL

PRE-ASSEMBLED

Values shown are nominal and not to be used for installation purposes. See product specification for installation requirements.

1RMISO

Title: MONTAGE PLUS MAJESTIC 2/3-RAIL			
DR: CI	SH . 1of 1	SCALE: DO NOT SCALE	
CK: ME	Date 6/28/10		REV: e

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