

SPECIFICATIONS FOR STAIRWAY FROM FOURTH TO FIFTH FLOOR

529 Congress Street

1. Stairway to be constructed at rear of Rines Store from fourth floor to fifth floor, next to freight elevator.
2. At end of trimmer next to 12" floor stringer will install 1-3/4" hanger rod to bracket in roof as shown on plan, on two new 3" x 8" timbers installed in roof next to present rafters. Timbers to extend to header in roof at higher elevation, header made of 4" x 4" x 1/4" angle iron with welded end flanges to fasten to timbers. Large flange 4" x 4" to be placed on bottom of rod hanger with nut on end to take weight off header.
3. Stair treads to maximum 8" rise and minimum 9" tread.
4. Landing to be constructed of 2 x 6 stringers 12" on centers and covered with hard pine 3 1/4" flooring.
5. Stairway to have hand rail on two sides to foot of stairway.

COPY

10.6 *FGC* *11/21/56* *RECEIVED* 1956

November 21, 1956.

Chief Harry W. Marr
Portland Fire Department
330 Congress Street
Portland, Maine.

RECEIVED
NOV 25 1956
CITY OF PORTLAND

Dear Chief Marr:

Supplementing my letter to you of November 1, we have decided to put in an inside extra exit from the fifth to the fourth floor in Rines Brothers Department Store. Mr. Lund, our superintendent, will draw up the plans and submit them to you for your approval.

Thank you for your courtesy in giving us an extension in this matter.

Yours very truly,

Treasurer
J. B. BROWN & SONS.

FGC:jm

cc: Mr. Ebenstein
Mr. McDonald

RECEIVED
1956
CITY OF PORTLAND

COPY

*logs. 40 notes
J. B. Brown
11/2/56*

November 1, 1956.

Chief Harry W. Marr
Portland Fire Department
380 Congress Street
Portland, Maine.

Re: 529 Congress St.

Dear Chief Marr:

We are in receipt of a copy of your letter to Mr. Weiner, dated September 21, 1956, regarding a second means of egress from the fifth floor of 529 Congress Street.

I have had conferences with Mr. Ebenstein of Rines Brothers, and with your Department, and also with the building inspector. There are many questions involved and different interests which have to be reconciled and satisfied. Also, Mr. Lund, our superintendent, is away on a much needed vacation and will not return until after the sixteenth of November.

Therefore I am asking you to please give us an extension of time on this matter, which I assure you we will conclude as soon as we can get all parties interested to agree.

Yours very truly,

Treasurer
J. B. BROWN & SONS

FGC:jm

cc: Building Inspector
Mr. Ebenstein



(G) GENERAL BUSINESS ZONE
APPLICATION FOR PERMIT

PERMIT ISSUED
 00034
 JAN 11 1957
 DEPT. OF DEPT. AMT

Class of Building or Type of Structure Second Class
 Portland, Maine, Jan. 9, 1957

To the INSPECTOR OF BUILDINGS, PORTLAND, MAINE

The undersigned hereby applies for a permit to ~~erect~~ ~~alter~~ ~~relocate~~ ~~move~~ ~~or~~ ~~disturb~~ ~~all~~ the following building ~~structure~~ ~~equipment~~ in accordance with the Laws of the State of Maine, the Building Code and Zoning Ordinance of the City of Portland, plans and specifications, if any, submitted herewith and the following specifications:

Location 529 Congress St. Within Fire Limits? yes Dist. No. 1
 Owner's name and address J. B. Brown & Sons, 57 Exchange St. Telephone 3-2217
 Lessee's name and address _____ Telephone _____
 Contractor's name and address owners Telephone _____
 Architect _____ Specifications _____ Plans yes No. of sheets 1
 Proposed use of building Store No. families _____
 Last use " " No. families _____
 Material brick No. stories 5 Heat _____ Style of roof _____ Roofing _____
 Other buildings on same lot _____
 Estimated cost \$500. Fee \$ 2.00

General Description of New Work

To construct inside stairway fourth to fifth floors as per plan and specifications.

CERTIFICATE OF OCCUPANCY
 REQUIREMENT IS WAIVED

It is understood that this permit does not include installation of heating apparatus which is to be taken out separately by and in the name of the heating contractor. **PERMIT TO BE ISSUED TO owners** 1/10/57
 Issued from DEPT. DEPT. 1/11/57

Details of New Work

Is any plumbing involved in this work? _____ Is any electrical work involved in this work? _____
 Is connection to be made to public sewer? _____ If not, what is proposed for sewage? _____
 Has septic tank notice been sent? _____ Form notice sent? _____
 Height average grade to top of plate _____ Height average grade to highest point of roof _____
 Size, front _____ depth _____ No. stories _____ solid or filled land? _____ earth or rock? _____
 Material of foundation _____ Thickness, top _____ bottom _____ cellar _____
 Material of underpinning _____ Height _____ Thickness _____
 Kind of roof _____ Rise per foot _____ Roof covering _____
 No. of chimneys _____ Material of chimneys _____ of lining _____ Kind of heat _____ fuel _____
 Framing lumber—Kind _____ Dressed or full size? _____
 Corner posts _____ Sills _____ Girt or ledger board? _____ Size _____
 Girders _____ Size _____ Columns under girders _____ Size _____ Max. on centers _____
 Studs (outside walls and carrying partitions) 2x4-16" O. C. Bridging in every floor and flat roof span over 8 feet.
 Joists and rafters: 1st floor _____, 2nd _____, 3rd _____, roof _____
 On centers: 1st floor _____, 2nd _____, 3rd _____, roof _____
 Maximum span: 1st floor _____, 2nd _____, 3rd _____, roof _____
 If one story building with masonry walls, thickness of walls? _____ height? _____

If a Garage

No. cars now accommodated on same lot _____, to be accommodated _____ number commercial cars to be accommodated _____
 Will automobile repairing be done other than minor repairs to cars habitually stored in the proposed building? _____

Miscellaneous

Will work require disturbing of any tree on a public street? no
 Will there be in charge of the above work a person competent to see that the State and City requirements pertaining thereto are observed? yes

APPROVED:

Carl F. Johnson
 CHIEF OF FIRE DEPT.
O.R.-111157-a

J. B. Brown & Sons

Signature of owner by: A. J. Lund

21482

NOTES

2/14/57 - Handrails installed on both sides of stairway. Hangers made out in for trimmer beams. *Allen*

2/13/57 - same - *Allen*

2/20/57 - same - *Allen*

3/4/57 - Job completed. - *Allen*

~~Blank lined area with a large X drawn through it.~~

Permit No.	57134
Location	529 Coughran St.
Owner	J. B. Cunningham
Date of Permit	1/17/57
Notif. closing-i	
Inspn. closing-in	
Final Notif.	
Final Inspn.	
Cert. of Occupancy issued	
Staking Out Notice	
Form Check Notice	



(G) GENERAL BUSINESS ZONE

APPLICATION FOR PERMIT

Class of Building or Type of Structure _____ Installation _____
Portland, Maine, August 8, 1956

PERMIT ISSUED
01270
AUG 13 1956

CITY OF PORTLAND

To the INSPECTOR OF BUILDINGS, PORTLAND, MAINE

The undersigned hereby applies for a permit to ~~erect~~ ~~alter~~ ~~repair~~ ~~demolish~~ install the following building structure equipment in accordance with the Laws of the State of Maine, the Building Code and Zoning Ordinance of the City of Portland, plans and specifications, if any, submitted herewith and the following specifications:

Location 529 Congress Street Within Fire Limits? _____ Dist. No. _____
 Owner's name and address Rines Brothers, 529 Congress St. Telephone _____
 Lessee's name and address _____ Telephone _____
 Contractor's name and address Grinnell Co., 501 Fore St. Telephone 3-3879
 Architect _____ Specifications _____ Plans yes No. of sheets 1
 Proposed use of building _____ Store _____ No. families _____
 Last use _____ " _____ No. families _____
 Material _____ No. stories _____ Heat _____ Style of roof _____ Roofing _____
 Other buildings on same lot _____
 Estimated cost \$ _____ Fee \$ 2.00

General Description of New Work

~~Structure~~ Alterations to existing sprinkler system as per plan

CERTIFICATE OF OCCUPANCY
REQUIREMENT IS MET
Grinnell Co.

It is understood that this permit does not include installation of heating apparatus which is to be taken out separately by and in the name of the heating contractor. **PERMIT TO BE ISSUED TO** Grinnell Co.

Details of New Work

Is any plumbing involved in this work? _____ Is any electrical work involved in this work? _____
 Is connection to be made to public sewer? _____ If not, what is proposed for sewage? _____
 Has septic tank notice been sent? _____ Form notice sent? _____
 Height average grade to top of plate _____ Height average grade to higher point of roof _____
 Size, front _____ depth _____ No. stories _____ solid or filled land? _____ earth or rock? _____
 Material of foundation _____ Thickness, top _____ bottom _____ cellar _____
 Material of underpinning _____ Height _____ Thickness _____
 Kind of roof _____ Rise per foot _____ Roof covering _____ Kind of heat _____ fuel _____
 No. of chimneys _____ Material of chimneys _____ of lining _____ Dressed or full size? _____
 Framing lumber—Kind _____ Sills _____ Girt or ledger board? _____
 Corner posts _____ Size _____ Columns under girders _____ Size _____ Max. on centers _____
 Girders _____ Size _____ Columns under girders _____ Size _____ Max. on centers _____
 Studs (outside walls and carrying partitions) 2x4-16" O. C. Bridging in every floor and flat roof span over 8 feet.
 Joists and rafters: 1st floor _____, 2nd _____, 3rd _____, roof _____
 On centers: 1st floor _____, 2nd _____, 3rd _____, roof _____
 Maximum span: 1st floor _____, 2nd _____, 3rd _____, roof _____
 If one story building with masonry walls, thickness of walls? _____ height? _____

If a Garage

No. cars now accommodated on same lot _____, to be accommodated _____ number commercial cars to be accommodated _____
Will automobile repairing be done other than minor repairs to cars habitually stored in the proposed building? _____

Miscellaneous

Will work require disturbing of any tree on a public street? no
Will there be in charge of the above work a person competent to see that the State and City requirements pertaining thereto are observed? yes

APPROVED:

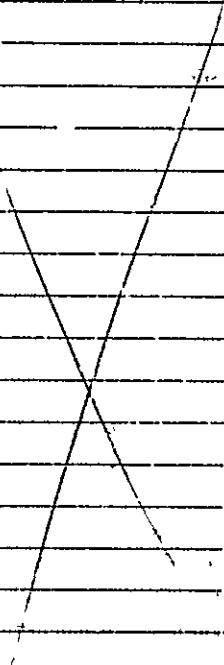
Rines Brothers
Grinnell Co.

Signature of owner By: E. H. [Signature]

INSPECTION COPY

NOTES

8/29/52 - work not done on
 sprinkler system on either floor
 - Allen
 9/11/52 - same - Allen
 10/29/52 - job finished -
 Allen



Permit No. 56/1970
 Location 539 Leavenworth St
 Owner: Edward C. Stevens
 Date of permit 8/13/56
 Notif. closing-in
 Inspn. closing-in
 Final Notif.
 Final Inspn.
 Cert. of Occupancy issued
 Sinking Out Notice
 Form Check Notice



APPLICATION FOR AMENDMENT TO PERMIT

Amendment No. 1

Portland, Maine, ... July 3, 1956

PERMIT ISSUED

JUL 6 1956

CITY OF PORTLAND

To the INSPECTOR OF BUILDINGS, PORTLAND, MAINE

The undersigned hereby applies for amendment to Permit No. 55/2216 pertaining to the building or structure comprised in the original application in accordance with the Laws of the State of Maine, the Building Code and Zoning Ordinance of the City of Portland, plans and specifications, if any, submitted herewith, and the following specifications:

Location 529 Congress St. Within Fire Limits? Dist. No. 1 ...
 Lessee's name and address .. Hines Bros. 529 Congress St. Telephone
 Owner's name and address .. J. B. Brown & Sons, 57 Exchange St. Telephone
 Contractor's name and address .. F. W. Cunningham & Sons, 181 State St. Telephone 4-0246
 Architect Plans filed . No. of sheets .. 1.
 Proposed use of building ... store .. No. families
 Last use .. " .. No. families
 Increased cost of work .. Additional fee ... 50

Description of Proposed Work

Modification in method of splicing out, with channels, the two existing 12 x 12 Second Floor interior beams at approximately right angles to Congress St.; beam to be further supported by short columns, with 4x12 Douglas Fir or 3 1/2" Lally, at the point indicated on accompanying plan; said columns to bear on the beam indicated on the plan as "L 3"

Details of New Work Permit to be issued to

Is any plumbing involved in this work? ... Is any electrical work involved in this work? ... F. W. Cunningham & Sons
 Height average grade to top of plate Height average grade to highest point of roof
 Size, front depth No. stories solid or filled land? earth or rock?
 Material of foundation Thickness, top bottom cellar
 Material of underpinning Height Thickness
 Kind of roof Rise per foot Roof covering
 No. of chimneys Material of chimneys of lining
 Framing lumber—Kind Dressed or full size?
 Corner posts Sills Girt or ledger board? Size
 Girders Size Columns under girders Size Max. on centers
 Studs (outside walls and carrying partitions) 2x4-16" O. C. Bridging in every floor and flat roof span over 8 feet.
 Joists and rafters: 1st floor 2nd 3rd roof
 On centers: 1st floor 2nd 3rd roof
 Maximum span: 1st floor 2nd 3rd F. W. Cunningham & Sons

Approved: *OK - 7/4/56 - ags*

Signature of Owner . By: *William Stanley*

Approved: *7/4/56 WWD* Inspector of Building



APPLICATION FOR AMENDMENT TO PERMIT

Amendment No. 1

Portland, Maine, Feb. 6, 1956

PERMIT ISSUED

FEB 8 1956

CITY of PORTLAND

To the INSPECTOR OF BUILDINGS, PORTLAND, MAINE

The undersigned hereby applies for amendment to Permit No. 55/2216 pertaining to the building or structure comprised in the original application in accordance with the Laws of the State of Maine, the Building Code and Zoning Ordinance of the City of Portland, plans and specification, if any, submitted herewith, and the following specifications:

Location 529 Congress St. Within Fire Limits? **yes** Dist. No. 1
 Owner's name and address ~~Rineu Bros., 529 Congress St.~~ J. E. Brown & Sons, 57 Exchange St. Telephone
 Lessee's name and address Rineu Bros., 529 Congress St. Telephone
 Contractor's name and address F. W. Cunningham & Sons, 181 State St. Telephone 3-0246
 Architect Plans filed **RD** No. of sheets
 Proposed use of building store No. families
 Last use No. families
 Increased cost of work 5,000. Additional fee 5.00

Description of Proposed Work

To make changes in original specifications and plans as per the attached sheet.

Amendment to be issued F. W. Cunningham & Sons
Details of New Work

Is any plumbing involved in this work? Is any electrical work involved in this work?
 Height average grade to top of plate Height average grade to highest point of roof
 Size, front depth No. stories solid or filled land? earth or rock?
 Material of foundation Thickness, top bottom cellar
 Material of underpinning Height Thickness
 Kind of roof Rise per foot Roof covering
 No. of chimneys Material of chimneys of lining
 Framing lumber—Kind Dressed or full size?
 Corner posts Sills Girt or ledger board? Size
 Girders Size Columns under girders Size Max. on centers
 Studs (outside walls and carrying partitions) 2x4-16" O. C. Bridging in every floor and flat roof span over 8 feet.
 Joists and rafters: 1st floor 2nd 3rd roof
 On centers: 1st floor 2nd 3rd roof
 Maximum span: 1st floor 2nd 3rd roof

Approved:

F. W. Cunningham & Sons

Signature of Owner

Approved: *[Signature]*

Inspector of Buildings

F. W. CUNNINGHAM & SONS ENGINEERS - CONTRACTORS
I N C O R P O R A T E D 1 9 0 5

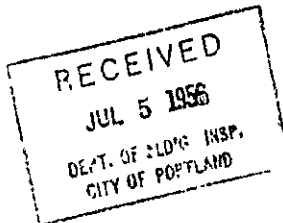
ARTHUR J CULLINAN
President
WILLIAM H GILL
Vice-President
ROBERT V CULLINAN
Vice-President
JOHN J. CUNNINGHAM, JR.
Treasurer
JOHN P. DOYLE
Asst. Treasurer

181 STATE STREET
PORTLAND 3, MAINE

July 5, 1956.

Subject: Rines Brothers Company
Store Alterations
Portland, Maine

Mr. Warren McDonald
Inspector of Buildings
City of Portland
City Hall
Portland, Maine



Dear Warren:

We have investigated the angle supporting the terrazzo facing and also the supporting clips and bolts which attach said angle to the 12" beam.

We find that the angle supporting clips and bolts are comfortably adequate to support the load of the terrazzo veneer.

This investigation has been made by the undersigned, according to the latest rules of engineering practice and to comply with the allowable working stresses required by the Building Code of the City of Portland.

Very truly yours,

F. W. CUNNINGHAM & SONS

John P. Doyle
Asst. Treasurer

JFD:aml

Callan: on a account of change of size of units of present terrazzo, contractor wanted to furnish the 1 1/2 x 1 1/2 x 1/4" Ls in every second course as in item (4) Page 210 of Code. I was told OK if the one angle at bottom of veneer over stone windows with its hangers and connections is strong enough without (over)



relying on the ratchet anchors to carry
every downward load, the ratchet
be anchored to the ~~structure~~ strictly
as called for on Page 210.

Plus letter says they have checked
the strength and take the responsibility
of the arrangement being strong
enough.

WLD
7/5/56

Call on me:

Consulting & fabricator

with the iron shop

HAMILTON GRAY
Consulting Engineer
1775 Arlington Ave.
Columbus, Ohio

March 2 1956

Bernard Boep Associates
711 Boylston Street
Boston 1, Mass.

W.G.
3/4/56

Dear Sirs:

In reply to your letter of March 19th which enclosed shop drawings for steel for the Rines job in Portland we have the following comments to make:

Sheet No. 1 - The location of plate P-11 at the corner column is not correctly shown by the arrow in one view. No indication of the extent of welding between P-11 and the column is indicated. Plate P-10 should be larger so that 12 inches of weld would be obtained at its junction with the column in accordance with sheet 7 of my details. The dimensions of the bearing plate at the bottom of the corner column do not check; i.e., the sum of the dimensions shown as parallel to the bottom of this sheet totals 28" whereas the dimension on the Caseo Street side totals 35". I believe that this bearing plate was intended to be symmetrical about a diagonal axis. So far as bolt holes for this plate are concerned these are purely nominal and I suggest that three or four holes for one inch bolts be used. I am also lacking a copy of the letter dated January 13 from the Lilly Column Company to Mr. McDonald, hence I do not know the significance of the note given on sheet 7. Plate 14 does not agree with the details shown on my sheet 7 and finally the angles K-3 need be only 4" x 3-1/2" x 3/8". I have no objection, however, to these larger angles as shown.

On Sheet No. 3 the dimensions of the weld at the top of item A-3 should be specified and the location of two of the far side plates on the piece P-18 should also be given. In view of the method now used to support item K-3 the pieces C-3 appear to be superfluous.

On Sheet No. 7 the size of angles attached to the end of item C-7 is not given. This should be a B-3 type connection.

Aside from the foregoing exceptions everything else on the shop detail sheets appears to be of satisfactory size. Inasmuch as the lengths of the various pieces depends upon the actual dimensions existing in the present building, I am unable to check the indicated lengths of the various beams and columns except in an approximate manner. That is to say the exact dimensions I cannot vouch for, but assume that these have been determined by actual measurements in the existing building.

I am returning herewith the various sheets upon which I have marked in yellow pencil the exceptions above noted and have also indicated by a check mark all other items which are in accordance with details shown on the sheets I previously submitted. If there are any other further questions I shall expect to hear from you.

cc: Mr. A. J. Cullinan
Mr. Warren McDonald
Mr. P. G. Clifford

Very truly yours,

HG
Hamilton Gray

all items:

Committee & files

with info copy

HAMILTON GRAY
Consulting Engineer
1775 Arlington Ave.
Columbus, Ohio

March 27, 1956

Bernard Seep Associates
711 Boylston Street
Boston 1, Mass.

W. H. N. J.
3/4/56

Dear Sirs:

In reply to your letter of March 19th which enclosed shop drawings for steel for the Rines job in Portland we have the following comments to make:

Sheet No. 1 - The location of plate P-11 at the corner column is not correctly shown by the arrow in one view. No indication of the extent of welding between F-11 and the column is indicated. Plate P-10 should be larger so that 12 inches of weld would be obtained at its junction with the column in accordance with sheet 7 of my details. The dimensions of the bearing plate at the bottom of the corner column do not check; i.e., the sum of the dimensions shown as parallel to the bottom of this sheet totals 29" whereas the dimension on the Casco Street side totals 35". I believe that this bearing plate was intended to be symmetrical about a diagonal axis. So far as bolt holes for this plate are concerned these are purely nominal and I suggest that three or four holes for one inch bolts be used. I am also lacking a copy of the letter dated January 13 from the Lally Column Company to Mr. McDonald, hence I do not know the significance of the note given on sheet one. Plate 14 does not agree with the details shown on my sheet 7 and finally the angles K-3 need be only 4" x 3-1/2" x 3/8". I have no objection, however, to these larger angles as shown.

On Sheet No. 3 the dimensions of the weld at the top of item A-3 should be specified and the location of two of the far side plates on the piece P-18 should also be given. In view of the method now used to support item B-3 the pieces C-3 appear to be superfluous.

On Sheet No. 7 the size of angles attached to the end of item C-7 is not given. This should be a B-3 type connection.

Aside from the foregoing exceptions everything else on the shop detail sheets appears to be of satisfactory size. Inasmuch as the lengths of the various pieces depends upon the actual dimension existing in the present building, I am unable to check the indicated lengths of the various beams and columns except in an approximate manner. That is to say the exact dimensions I cannot vouch for, but assume that these have been determined by actual measurements in the existing building.

I am returning herewith the various sheets upon which I have marked in yellow pencil the exceptions above noted and have also indicated by a check mark all other items which are in conformance with details shown on the sheets I previously submitted. If there are any other further questions I shall expect to hear from you.

cc: Mr. A. J. Cullinan
Mr. Warren McDonald
Mr. P. G. Clifford

Very truly yours,

HG
Hamilton Gray

F. W. CUNNINGHAM & SONS ENGINEERS - CONTRACTORS
INCORPORATED 1908

181 STATE STREET
PORTLAND 3, MAINE

ARTHUR J. CULLINAN
President
WILLIAM H. GILL
Vice-President
THOMAS P. FALLONA
Vice-President
JOHN J. CUNNINGHAM, JR.
Treasurer
ROBERT V. CULLINAN
Asst. Treasurer

*allow
Please send
with plans
plans of
down with
basis*

February 13, 1956

*MMW
2/14/56*

Subject: Rines Brothers Company
Portland, Maine

Mr. Warren McDonald
Inspector of Buildings
City of Portland
City Hall
Portland, Maine

RECEIVED
FEB 14 1956
CITY OF PORTLAND

Dear Mr. McDonald:

In answer to paragraph No. 8 in your letter of February 8, 1956, in connection with the above project, relating to alternative methods of supporting ends of mezzanine beams, it is our intention to follow Sheet No. 11, the alternate sketch shown by Dr. Gray.

Very truly yours,

F. W. CUNNINGHAM & SONS

Arthur J. Cullinan
President

AJC:arl

CC/Bernard Soep Associates
Megquier & Jones Company



BERNARD SOEP
associates

711 BOYLSTON STREET • BOSTON 6, MASS. • Commonwealth 6-3329

February 10, 1956

*File
copy
done for*

Mr. Warren McDonald,
Inspector of Buildings
Department of Building Inspection
City of Portland, Maine

Dear Mr. McDonald:

I was extremely pleased to receive your letter of February 8 in which you have rescinded the stop order on Rines Bros. job.

We all have had a trying time but everyone has been most cooperative and I feel that there is a closer bond of understanding than usually exists on a job of this type.

May I thank you for the attention you have given to all phases of the work and for your fair and considerate manner in dealing with all parties concerned.

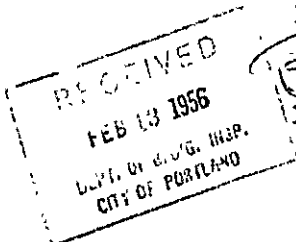
I will expect to see you as the job progresses and we will do our part to see that the completed job meets all expectations.

Very truly yours,

BERNARD SOEP ASSOCIATES

Bernard Soep
Bernard Soep

BS:hca



STORE PLANNING • SHOWROOM AND OFFICE DESIGN



APPLICATION FOR PERMIT

PERMIT ISSUED

B.O.C.A. USE GROUP

B.O.C.A. TYPE OF CONSTRUCTION 855

AUG 25 1981

ZONING LOCATION _____ PORTLAND, MAINE, Aug. 13, 1981

CITY of PORTLAND

To the DIRECTOR OF BUILDING & INSPECTION SERVICES, PORTLAND, MAINE

The undersigned hereby applies for a permit to erect, alter, repair, demolish, move or install the following building, structure, equipment or change use in accordance with the Laws of the State of Maine, the Portland B.O.C.A. Building Code and Zoning Ordinance of the City of Portland with plans and specifications, if any, submitted herewith and the following specifications:

LOCATION 539 Congress St. Fire District #1 #2
1. Owner's name and address .. J. B. Brown & Sons - Exchange St. Telephone
2. Lessee's name and address ... Lamey Wellehan Shoes - same Telephone 773-6206
3. Contractor's name and address ... Edward Habert & Sons - Old Lisbon Rd. Telephone 783-2091
4. Architect Specifications Lewiston 04240 No. of sheets
Proposed use of building retail of shoes No. families
Last use same No. families
Material No. stories Heat Style of roof Roofing
Other buildings on same lot
Estimated contractual cost \$ 2,500 Fee \$ 25.00

FIELD INSPECTOR—Mr.

GENERAL DESCRIPTION

This application is for: @ 775-543
Dwelling Ext. 234
Garage
Masonry Bldg.
Metal Bldg.
Alterations
Demolitions
Change of Use
Other

To make alterations to existing shoe store as per plans. 1 sheet of plans.

Stamp of Special Conditions

NOTE TO APPLICANT: Separate permits are required by the installers and subcontractors of heating, plumbing, electrical and mechanical.

PERMIT IS TO BE ISSUED TO 1 2 3 4

Other:

DETAILS OF NEW WORK

Is any plumbing involved in this work? Is any electrical work involved in this work?
Is connection to be made to public sewer? If not, what is proposed for sewage?
Has septic tank notice been sent? Form notice sent?
Height average grade to top of plate Height average grade to highest point of roof
Size, front depth No. stories soil or filled land? earth or rock?
Material of foundation Thickness, top bottom cellar
Kind of roof Rise per foot Roof covering
No. of chimneys Material of chimneys of lining Kind of heat fuel
Framing Lumber—Kind Dressed or full size? Corner posts Sills
Size Girder Columns under girders Size Max. on centers
Studs (outside walls and carrying partitions) 2x4-15" O. C. Bridging in every floor and flat roof span over 8 feet.
Joists and rafters: 1st floor, 2nd, 3rd, roof
On centers: 1st floor, 2nd, 3rd, roof
Maximum span: 1st floor, 2nd, 3rd, roof
If one story building with masonry walls, thickness of walls? height?

IF A GARAGE

No cars now accommodated on same lot, to be accommodated ... number commercial cars to be accommodated ...
Will automobile repairing be done other than minor repairs to cars habitually stored in the proposed building?

APPROVALS BY: DATE
BUILDING INSPECTION—PLAN EXAMINER
ZONING:
BUILDING CODE:
Fire Dept.:
Health Dept.:
Others:

MISCELLANEOUS
Will work require disturbing of any tree on a public street? ..
Will there be in charge of the above work a person competent to see that the State and City requirements pertaining thereto are observed?

Signature of Applicant [Signature] Phone #

Type Name of above Edward Habert & Sons 1 2 3 4
Richard Habert

Other
and Address

OFFICE FILE COPY

4

True copy

February 3, 1956

BP 529 Congress St.--Rines Job

Not sent by Air Mail

F. W. Cunningham & Sons
Att: Mr. Arthur Cullinan
181 State St.

Copy by Air-Mail to:
Dr. Hamilton Gray
1775 Arlington Ave.
Columbus, Ohio

Gentlemen:-

In order that the Rines job may be placed in a position to proceed, and in view of the number of changes which have been made in the structural plans since the permit was issued, it seems necessary that application be filed for amendment to the original permit covering these changes and with which the various revised plans, letters and statements of design should be filed. We believe that we have all of the data to be filed with this application for amendment, but in order to get the matter cleared up with a minimum of delay, I am enclosing herewith a statement of the list of plans and other data which we understand now will be applied to the job.

Will you be good enough to check this against your records and understanding? If the list is correct, please file a copy of the statement with the application for the amendment. If it is not correct, please advise us so that the list filed with the amendment may be correct and so that we may check to be sure that we have all the data on which the job is to proceed.

That having been completed we should be in a position to approve and issue the amendment and at the same time lift the stop order applied some time ago.

In this connection we find that Dr. Gray's actual statement of design refers only to his own letter size plans of 11 sheets. Inasmuch as these 11 sheets do not contain all the structural details, these other structural details should be covered by a statement of design, since I understand Mr. Mallon has withdrawn from the job. After all this time we are not disposed to stand on ceremony with regard to this item; but a copy of this letter is being sent to Dr. Gray, and if we are not to take it that he has checked and approves all important details of the Mallon design which are not revised by his plans, will he be good enough to notify me at once so that we may know just where we stand with regard to the responsibility for the total structural design?

Very truly yours,

Warron McDonald
Inspector of Buildings

WMcD/LS

Enclosures: 3 copies of list to F. W. C.,
one copy to Dr. Gray

P. S. When filing amendment please enter additional total estimated cost that given on original application.

See Page 2

February 3, 1956

Dear Dr. Gray:

We seem to be at the end of this long road. I think that in some of your letters you have acknowledged responsibility for the main features of the structural designs, as having checked them and having revised those with which you do not agree. As in the last paragraph above, I would appreciate confirmation of that impression direct to me with a copy to the contractor if you desire.

Warren McDonald

Statement of Design

The structural details shown on 11 sheets and the specifications accompanying the same, covering construction work on

Alterations for Rines Bros. Store, Brown Block

have been designed and drawn up by the undersigned according to the latest rules of engineering practice and to comply with the allowable working stresses, floor loads, etc. required by the Building Code of the City of Portland.

(Signature) Hamilton Gray

HAMILTON GRAY
Consulting Engineer
1775 Arlington Ave.
Columbus, Ohio

January 3, 1956.

Mr. Arthur J. Cullinan
President
F.W.Cunningham & Sons
181 State Street
Portland 3, Maine

Dear Mr. Cullinan:

The last three drawings I sent you for details on the Rines Store alterations showed alternate schemes for supporting those ends of the mezzanine beams which abut the existing masonry. One of these alternative schemes utilizes steel framing entirely and obviates the necessity of cutting into or utilizing any part of the existing pilasters or walls above the first floor. Once the loads from the diagonal struts have been brought into play on the ends of the mezzanine support beams there should be no difficulty with regard to the lateral forces that will be developed by the fascia wall. It is, however, highly desirable that construction of the masonry on the fascia support beam not be undertaken until the diagonal struts are effectively bearing on the ends of the mezzanine beams.

The other alternative involves seating the mezzanine support beams directly upon existing masonry and involves cutting into the existing pilaster or outside wall. Since I lack detailed information on the party wall between Rines Store and the adjoining store on Congress Street as well as details of the brick wall on Casco Street, I must at the moment prefer that construction which utilizes steel through. On the Congress Street side I would be concerned about cutting the necessary beam pocket into the existing pilaster. On the other hand, because this pilaster is backed up with a transverse party wall, the horizontal thrust developed by the fascia support would be resisted not only by the pilaster itself but by this cross wall. On Casco Street, on the other hand, the cutting into the wall for the beam pocket would not appear to present nearly as serious a problem as cutting into one of the pilasters. On the other hand, there is no transverse wall here to take the thrust from the fascia support. However, assuming that adequate bearing area is obtained on existing masonry, I believe that once the reaction of the diagonal struts has been brought to bear upon the mezzanine beams, these will create sufficient reaction between the bearing plate and masonry to eliminate fear of lateral displacement due to the thrust caused by the fascia loads.

Therefore, unless Mr. Ebenstein protests strongly it would be preferable to utilize that alternative employing steel throughout. On the other hand, the other scheme would be perfectly satisfactory if carried out carefully. However, it is obvious that greater care and workmanship would be required when installing this second alternative scheme.

I enclose herewith also copies of a statement of design and copies of the architectural plans on which I have circled in blue pencil those details which I feel are not satisfactory and on which I have checked in red pencil those items which are perfectly satisfactory to me.

I very much hope that this will enable you to proceed and that both Mr. McDonald and Mr. Ebenstein will be satisfied.

Very truly yours,

(Sgd.) Hamilton Gray

cc Mr. P.C. Clifford
J.B. Brown & Sons
57 Exchange Street, Portland, Maine

XXXXXXXXXX
1775 Arlington Avenue

January 31, 1956

RECEIVED

FEB 2 1956

DEPT. OF BLDG. P. P.
CITY OF PORTLAND

F. W. Cunningham and Sons
181 East State Street
Portland 3, Maine

Re: Alterations to Rines Store

Dear Sirs:

In consideration of your statement that Mr. McDonald did not feel particularly happy with the arrangement originally proposed, of forming columns with an outer shell of 8-5/8" diameter double extra heavy steel pipe and an inner shell of 6-5/8" diameter extra heavy steel pipe owing to the impossibility of filling the space between the inside of the 8" and outside of the 6" shells, we have considered the feasibility of utilizing a similar form of construction which would provide a greater space between the concentric shells which could be filled with concrete. We find that for the two columns on Congress Street an outer shell of 8-5/8" diameter double extra heavy pipe plus an inner shell of 4-1/2" diameter double extra heavy pipe with the annular space between these shells and the interior of the smaller shell filled with concrete will provide adequate carrying capacity for the estimated loads to be brought on these two columns.

Owing to the somewhat more severe eccentricity at the corner column it is necessary to utilize there a 10-3/4" extra heavy outer shell with a 5-9/16" diameter double extra heavy inner shell. In this case also the annular space between the shells and interior of the inner shell should both be filled with concrete.

It is our recommendation that these two types of columns be substituted for that previously suggested, namely, 8-5/8" double extra heavy outside shell and 6-5/8" extra heavy inner shell.

The "statement of design" previously sent by us with reference to the eleven sheets of drawings covering steel details on this particular job, is applicable to these new types of columns.

I very much hope that the foregoing will be adequate to permit the building inspector to issue a permit for proceeding with the desired alterations.

Very truly yours,

HG
Hamilton Gray

HG/rjh
cc: McDonald
Clifford

TEL KIRKLAND 7-4500

Lally Column Company

ESTABLISHED 1897

*Manufacturers of
Genuine Lally Columns*

BOSTON
NEW YORK
CHICAGO

Erie and Albany Streets
CAMBRIDGE 39, MASSACHUSETTS

January 18, 1956

Warren McDonald
Inspector of Buildings
City of Portland
Portland, Maine

*File
Review Job*

Dear Mr. McDonald:

I wish to acknowledge the receipt of your Special Delivery letter dated January 17, 1956, in the mail this afternoon.

Your letter apparently was written prior to our telephone conversation late yesterday afternoon at my home and subsequent thereto, I called George Strehan, 100 Palmer Place, Leonia, New Jersey and acquainted him with the problem which has been confronting you and requested that he call John Doyle of F. W. Cunningham at Spruce 3 - 0246, Portland, Maine, at eleven o'clock this morning as I felt sanguine that Mr. Strehan could iron out the difficulties confronting you on this type of fabrication much better than I could.

I assume that after Mr. Doyle's conversation with Mr. Strehan that he will have contacted you and I will await word from you as to whether I can be of further service before doing anything further re this matter.

With kind regards and assuring you of this company's cooperation, I am

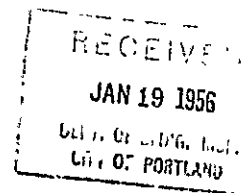
Very truly yours,

LALLY COLUMN COMPANY

J. Stanley Donahue

J. Stanley Donahue
President

JSD:ms



F. W. CUNNINGHAM & SONS ENGINEERS - CONTRACTORS
INCORPORATED 1903

181 STATE STREET
PORTLAND 3, MAINE

February 1, 1956.

ARTHUR L. CULLINAN
President
WILLIAM H. GILL
Vice-President
THOMAS P. FALLONA
Vice-President
JOHN J. CUNNINGHAM, JR.
Treasurer
ROBERT V. CULLINAN
Asst. Treasurer

Subject: Hines Brothers Company
Store Front
Portland, Maine

Mr. Warren McDonald
Inspector of Buildings
City Hall
Portland, Maine

Dear Mr. McDonald:

In connection with our application for permit for the above project, we would say that you are obviously by this time in receipt of a letter dated January 31, 1956, from Hamilton Gray, in regard to the columns, in which he revises the column design which he previously submitted and by this letter extends his Statement of Design to include the revised columns.

Will you, therefore, consider this letter as being a part of our application for the permit?

Very truly yours,

F. W. CUNNINGHAM & SONS

Arthur L. Cullinan
President

AJC:am1

CC/ Mr. Clifford
Mr. Gray
Mr. Soep
Mr. Ebenstein



RECEIVED
FEB 1 1956
CITY OF PORTLAND

F. W. CUNNINGHAM & SONS ENGINEERS - CONTRACTORS
I N C O R P O R A T E D 1 9 0 5

181 STATE STREET
PORTLAND 3, MAINE

ARTHUR J. CULLINAN
President

WILLIAM H. GILL
Vice-President

THOMAS P. FALLONA
Vice-President

JOHN J. CUNNINGHAM, JR.
Treasurer

ROBERT V. CULLINAN
Asst. Treasurer

February 1, 1956.

Subject: Rines Brothers Company
Store Front
Portland, Maine

Mr. Warren McDonald
Inspector of Buildings
City of Portland
City Hall
Portland, Maine

Dear Mr. McDonald:

In connection with our application for permit for the above project, we would say that you are obviously by this time in receipt of a letter dated January 31, 1956, from Hamilton Gray, in regard to the columns, in which he revises the column design which he previously submitted and by this letter extends his Statement of Design to include the revised columns.

Will you, therefore, consider this letter as being a part of our application for the permit?

Very truly yours,

F. W. CUNNINGHAM & SONS

Arthur J. Cullinan
President

AJC:am1

CC/ Mr. Clifford
Dr. Gray
Mr. Scop
Mr. Ebenstein



RECEIVED

FEB 1 1956

INSPECTOR OF BLDG. DEPT.
CITY OF PORTLAND

F. W. CUNNINGHAM & SONS ENGINEERS - CONTRACTORS

INCORPORATED 1905

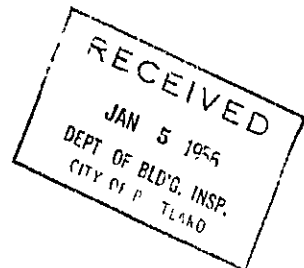
ARTHUR J. CULLINAN
President
WILLIAM H. GILL
Vice-President
THOMAS P. FALLONA
Vice-President
JOHN J. CUNNINGHAM, JR.
Treasurer
ROBERT V. CULLINAN
Asst. Treasurer

*AGS. These are probably the
final Gray plans, Soep
think it better to work
at least with us on January 6, 1956.
down the typical loads*

181 STATE STREET
PORTLAND 3, MAINE

*ms
1/9/56*

Subject: Rines Brothers Company
Portland, Maine



Mr. Warren McDonald
Inspector of Buildings
City of Portland
City Hall
Portland, Maine

Dear Mr. McDonald:

We are enclosing copy of a letter from Dr. Hamilton Gray, dated January 3, 1956, also a complete set of Plans as prepared by Soep Associates, which we had sent to Dr. Gray for the purpose of enabling him to make a comprehensive survey of this project and which Plans have been marked as indicated in this copy of letter from Dr. Gray.

We are enclosing also a Statement of Design signed by Dr. Gray.

We believe this provides all that would be required to enable you to lift the "Stop Order".

Very truly yours,

F. W. CUNNINGHAM & SONS

President

AJC:aml
Encls.

CC/Mr. Soep
Mr. Ebenstein



*File
Rue
got*

~~XXXXXXXXXX~~
1775 Arlington Avenue
Columbus, Ohio

January 25, 1956

Mr. Arthur Cullinan
F. W. Cunningham and Sons
181 State Street
Portland 3, Maine

JAN 27 1956

Dear Mr. Cullinan:

In reply to your letter of January 20th which enclosed a copy of a letter from Mr. George E. Strehan, I would say that so far as a single shell column is concerned I would be satisfied only with a 12-3/4 inch diameter extra heavy weight lolly column. This I have previously avoided because of the increased diameter and the expectation that Mr. Ebenstein would find this reduction in his window space objectionable.

The villain in this whole business seems to be the eccentric load which is induced by that excrescence of a fascia wall which the architect has provided. I cannot see my way clear to balancing the dead load of this fascia wall with an uncertain live load from the second floor. It seems to me obvious that this live load may not exist at all and then the fascia load which will exist at all times would not be balanced. This is true not only of the columns along Congress Street but in particular it is true for the corner column which is offset from the line of the others in such a fashion as to result in a much larger fascia moment than is true of the Congress Street columns.

Conceivably the fascia beams might be supported on short diagonal beams similar to the method used in supporting the mezzanine beams at this corner but this would certainly complicate details of fabrication at this corner and introduces the question as to whether a suitable connection could be made with sufficient capacity to support the reactions of both the mezzanine and the fascia beams at this particular elevation on that particular column. At any rate, there appears to be no simple means of eliminating the eccentricity of the fascia load from the Congress Street columns unless this fascia wall be removed or greatly reduced in weight.

With reference to Mr. Strehan's letter it is apparent that he has assumed a direct concentric load of 278 kips. However, he points out near the bottom of the first page that eccentric loads would introduce other considerations and I think that his little table of alternate schemes is based wholly upon the assumption of a concentric load, which as above indicated I can not agree to. Is it not true that the eccentric load of 19 kips which Mr. Strehan utilizes is made up in large part of assumed live load at the second floor level where the dead load available at all times at this level is substantially smaller? Is it not true also that there is no similar second floor load acting eccentrically on the corner column and that the eccentricity of the fascia load is considerably greater there than on the Congress Street columns?

January 25, 1956

-2-

Mr. Arthur Callinan

In conclusion I am sure that were Mr. Strehan familiar with all the details of this job and the uncertainties inherent in the transfer of loads to the new steel work that he would not hesitate to recommend substantially heavier columns than his alternate proposals numbered 1, 2 and 3. If you can persuade Mr. Ebenstein to go along with the 12-3/4" extra heavy concrete filled lally columns that will perfectly acceptable to me and I judge also to Mr. McDonald. However, if the O.D. of column is to be kept below 9" I see no solution other than the combined concentric shells previously proposed.

Sincerely,

HG
Hamilton Gray

cc: Warren McDonald
Philip G. Clifford

XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX

January 18, 1956.

P.O. BOX
JAN 20 1956
U.S. DEPARTMENT OF
COMMERCE

F. W. Cunningham
181 State Street
Portland, Me.
Attention of Mr. John Doyle.

*File
Review
JGD*

Dear Mr. Doyle:

In accordance with your inquiry of January 17, I have checked the proposed 18-foot long pipe column designed for the loads specified by you and report as follows:

From the information submitted, the total equivalent direct load on the column is 278 kips. The proposed column section consisting of one 6-5/8" E.H.W. Lally with an 8-5/8" Dbl. Extra Strong outer shell has a safe working load of 317 kips. This is based on the safe load capacity of the inner 6-5/8" Lally plus the value of the outer shell working at the same unit steel stress as limited by the inner Lally columns. Both shells must work together and should be welded to the cap and base plates.

Three alternative solutions are recommended in place of the above design for a working load of 278 kips and unsupported length of 18 feet:

Alt. No. 1. A 10-3/4" E.H.W. Lally Column with shell weighing 54.7 lbs. per linear foot, which has a safe load capacity of 298 kips;

Alt. No. 2. An 8-5/8" Dbl. E.H.W. Lally Column with shell weighing 72.42 lbs. per linear foot, which has a safe load capacity of 293 kips.

Alt. No. 3. An 8-5/8" E.H.W. Lally Column with shell weighing 43.39 lbs. per foot reinforced with a 4 1/2" Extra Strong pipe weighing 27.54 lbs. per linear foot, which has a safe load capacity of 288 kips.

Any one of the three alternate designs can be used in place of the original proposal with preference for Alt. No. 2. Following is a comparison of the weight of steel and computed safe loads of the 4 methods.

	Steel Per Ft. Lbs.	Safe Load Kips
Proposed Dble. Columns	91.39	317
Alt. No. 1	54.74	298
Alt. No. 2	72.42	293
Alt. No. 3	70.93	288

Mr. John Doyle.

-2-

1/18/56.

Cap plates, thru-plates and brackets for beam and girder connections should conform to the Lally Standards. The eccentric loads of 19 kips at 7½" and 13 kips at 11" eccentricity, framing into the column at opposite sides, balance each other and are equivalent to a concentric load of 32 kips. If there is any unbalanced eccentric load on the 8-5/8" column, an additional direct load of 5.6 kips should be added for each 10,000 in.-lbs. unbalanced moment.

It is understood that the column rests on an existing 36" x 36" brick pier capped with a granite stone some 8 to 10 inches thick. This requires a 20" x 20" x 2" base plate on the column, welded and anchored to the shaft with anchor bolts.

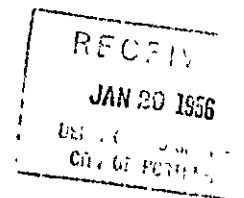
Very truly yours,

Geo. E. Strehan,
Consultant.

GES:mfs

cc: J.S. Donahue
E. Kortlander
Warren McDonald, Bldg. Insp.
City Hall, Portland, Me.

COPY



Air Mail
Special Delivery

January 17, 1956

Mr. J. Stanley Donahue
Pres. Lally Column Co.
Erie & Albany Sts.
Cambridge 39, Mass.

Copies to: F. W. Cunningham & Sons
Att: Mr. Arthur Cullinan
181 State St.
Mcquier & Jones
33 Pearl St.

Dear Mr. Donahue:-

Your letter of January 13th makes clear that the concentric pipe columns to which you refer would be filled with concrete. If that had been the case my letter would not have been written. I can only surmise that the plans may have been omitted from my letter for they clearly showed the annular space between the two pipes to be closed solidly at each end by welding. One wonders anyway how it would be possible to get enough concrete to do any good to fill this annular space.

Will you be good enough to answer my letter of January 13th on the basis of an unfilled column, and very quickly—because this latest misunderstanding is the last of a long list of obstacles which have plagued everyone in connection with the job?

Very truly yours,

Warren McDonald
Inspector of Buildings

WHCD/n

Telegram

January 17, 1956

J. Stanley Donahue, Pres.
Lally Column Co.
Erie & Albany Sts.
Cambridge, Mass.

Your letter January 13th indicates concrete filling of concentric pipe. Please answer my letter quickly from standpoint of no concrete fill.

Warren McDonald
Inspector of Buildings.

J.S.D.

I promise a copy, since I have just
sent a ^{copy} notifying our operator.
When file runs O.K.

W.M.

1/17/56

TEL. KILBLAND 7 4500

Lally Column Company

ESTABLISHED 1897

Manufacturers of
Genuine Lally Columns

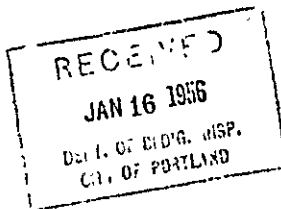
BOSTON
NEW YORK
CHICAGO

Erie and Albany Streets
CAMBRIDGE 39, MASSACHUSETTS

January 13, 1956

*J. B. Rivers
Jot.*

Warren McDonald
Inspector of Buildings
City of Portland
Portland, Maine



Dear Mr. McDonald:

Due to illness and confinement at home your letter dated January 3, 1956, was not brought to my attention until today and I hasten to acknowledge and answer it.

We are familiar with the job wherein it is contemplated to use these columns and our information is that they propose to use a 6-5/8" O. D. extra heavy pipe inside an 8-5/8" O. D. double extra heavy pipe in the fabrication and manufacture of these concrete filled columns.

In response to your inquiry in the first paragraph of your letter this type of fabrication and reinforcement has been used in thousands of jobs over a long period of years wherein this design has been successfully used and it has proved to be entirely practical.

In re the lengths mentioned in the third paragraph of your letter it is our understanding at this time that the lengths contemplated are not in excess of 20 feet.

To answer your question which you anticipate we may not care to answer, please be informed that we are a manufacturer and do not check over the adequacy of the design unless requested to do so which does happen quite frequently, however, as a general rule we receive the shop details for the columns from the steel fabricator who in turn cannot give them to us unless they are approved by the architects and engineers involved, who must in turn have had secured the approval of the building department in the city or town in which the building is being constructed and which will be used therein.

Over a long period of years we have been in Sweet's Catalogue and it is our fond hope that architects and engineers throughout the country and particularly throughout New England have our catalogue and are familiar with our safe load tables and other data pertaining to our products and consequently feel that they are sufficiently



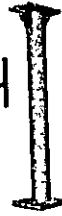
TEL KIRKLAND 7-4500

Lally Column Company

ESTABLISHED 1897

Manufacturers of
Genuine Lally Columns

Warren McDonald - Page 2 - January 13, 1956



BOSTON
NEW YORK
CHICAGO

Erie and Albany Streets
CAMBRIDGE 39, MASSACHUSETTS

familiar with our safe loads to know what our columns can and should carry in making up their design.

In regard to the matter of welding the plate to the inner pipe it is entirely feasible and our usual custom to do so and to provide working space in the outside shell it is our practice to slot it, or if the opening is too large for our machines, to burn with a torch and to fill in the opening with a weld which in no way will effect the strength of the columns.

I can recite several jobs wherein this type of fabrication has been used, but recently we supplied forty six columns toward a building being constructed for the Clorox Chemical Company, Boston, Massachusetts, in which Shepley, Bulfinch Richardson and Abbott, 1 Court Street, Boston, Massachusetts, were the engineers, wherein the City of Boston Building Department approved the columns 20 of which were made up as follows:

6-1/8" extra heavy inside 8-5/8" standard, both inside a 10-3/4" O. D. standard weight pipe all of which were approximately 19' 6" long, with beveled caps and standard bases of 12x20x1

which is the same type of fabrication we are discussing only in this case there were three pieces of pipe used instead of 2 pieces as contemplated and referred to in your letter.

In this particular instance the main carrying member would be the 8" double extra heavy pipe and the 6" extra heavy pipe would be considered a reinforcing member and in response to your inquiry as to whether or not it acts as two columns, the two filled with concrete act as one unit or column.

I have tried to cover all the inquiries in your letter as well as possible and wish to assure you that I will be only too happy to supply you with other projects in which this type of construction has been used extensively over a long period of years in hundreds of cases with the approval of the building commissioner in the city or town involving the building, and I attach hereto one of our catalogues which, while it does not cover the subject extensively will give you on Page 21 thereof three examples of reinforcing our columns.

With kind regards and the hope that you will contact me further for any information you may require and with an expression of regret for this belated reply

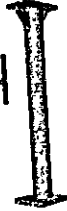


TEL KIRKLAND 7 4500

Lally Column Company

ESTABLISHED 1897

*Manufacturers of
Genuine Lally Columns*



BOSTON
NEW YORK
CHICAGO

Erie and Albany Streets
CAMBRIDGE 39, MASSACHUSETTS

Warren McDonald - Page 3 - January 13, 1956

to your letter which I assure you I regret very much and hope from this point to be in the office daily and if you care to discuss this matter on the telephone, may I suggest you call me person to person and reverse the charges.

Very truly yours,

LALLY COLUMN COMPANY

J. Stanley Donahue
President

JSD:
Enclosure



REG. PROF. ENGR.
NEW YORK, MAINE

HAMILTON GRAY
CONSULTING ENGINEER

REGISTERED
January 6, 1956

Mr. Warren McDonald
Building Inspector
City of Portland
Portland, Maine

*copy note +
the coll to
be made from
sheet to come
1/9/56*

Dear Mr. McDonald:

I wish to acknowledge receipt of your letter of January 3 which poses a number of questions with regard to the utilization of double extra heavy steel pipe concentric with extra heavy pipe of smaller diameter for new columns in the Rines building.

First of all, I might state that the only reason for my suggesting this type of construction was to provide a greater column capacity than was inherent in the original proposal and at the same time to keep the diameter of columns no greater than afforded by 8-5/8" diameter pipe. I would have not the slightest objection to utilizing regular lally column construction provided the size of column were increased to provide comparable capacity to that provided by the double pipe scheme.

I do not know of any particular instance in which this type of construction has been used, but can only state that the double extra heavy 8-5/8" diameter section has a greater column capacity than the extra heavy section when filled with concrete and angles as was originally proposed by Mr. Mallon. In other words, the smaller 6-5/8" diameter inner pipe provides a large margin of safety over and above that which was inherent in Mr. Mallon's design. My only uncertainty with regard to this double pipe affair is possible difficulty in its fabrication.

It would, as you suggest, be preferable to have a complete fabrication job done in the shop so that there need be no field splicing of column sections. In connection with the through plates, it would, of course, be satisfactory to weld those to the inner pipe, but I don't see how this can be accomplished without removing a substantial portion of the outer pipe shell. Therefore, it was my thought that the inner pipe, as well as the outer pipe, would be slotted to receive the through plates but that the only welding in connection with these plates would be on the outer surface of the outside pipe shell. I believe that if the ends of the inner and outer pipes are beveled after assembly in accordance with the scheme illustrated on my sheet #2, and that if weld metal is deposited in this bevel, so that the entire end surface can be finished plane, there will then be uniform bearing between the cap or base plate and the milled ends of the two pipes, so that both pipes would deform equally under a concentric load. I believe the manufacturer can be relied upon to handle this detail satisfactorily, although it might be desirable in addition to have an inspector on hand when this work is being done. *(before or*

RECEIVED
JAN 9 1956
DEPT. OF REG. INSP.
CITY OF PORTLAND

To: Mr. Warren McDonald

-2-

January 6, 1956

I think it would be preferable to not attempt to weld the through plates to the inner column; in other words, not to remove more metal than is necessary in forming the slots for passage of through plates through the outer column shell. I believe that so large an opening would have to be cut in the outer shell to permit effective welding of the through plates to the inner pipe that it would introduce some uncertainty as to the effectiveness of any replacement material that would be used to fill up these extra openings.

The bracket shown on sheet 1 for supporting the cap plate under the lintel beams and for supporting the channels, which in effect replace the 12x12 timber, may be placed in slots or simply welded to the outside of the outer column section. Owing to the continuity between the inner and outer columns established by the cap plate and the welding of the ends of these two columns together, I believe that the eccentricity of the load from the pair of 12" channels would be transmitted to a certain extent to the inner column as well as to the outer one.

The outer shell of the column is capable of carrying the full moment from the facia support; that is, it can of itself handle all the eccentric loads as well as a proportionate share of the concentric load, which means that the inner column could be relied upon to handle only the concentric type of load. This eccentric load from the facia support considerably exceeds that from the 12x12 timber at the top of the column.

To phrase this situation a little differently, the inner and outer shells can be viewed as taking concentric loads in proportion to their cross-section area and in addition to this the outer shell can absorb, without being overstressed, the effect of all the eccentric loads.

In figuring the eccentric loads I have used the dead load of the facia support on one side counteracted only by the dead load from the 12x12 timber at the top of the column rather than to counteract the facia load by the full dead and live load from the 12x12.

I wish to reiterate that I have no personal objection to utilizing a single shell column, but it would be necessary to fabricate this in larger diameter than 8-5/8 inches. I rather imagine that Mr. Ebenstein would raise an unholy commotion if he were presented with a scheme utilizing columns of larger diameter. I do not feel, however, that I am in any way obligated to uphold the particular desires of Mr. Ebenstein.

Please let me know if there are any other matters that I can clarify in connection with this job.

Very truly yours,

Hamilton Gray
Hamilton Gray

cc:
Mr. A.J. Cullinan
Mr. P.C. Clifford

HG:rt

F. W. CUNNINGHAM & SONS ENGINEERS - CONTRACTORS
INCORPORATED 1905

ARTHUR J. CULLINAN
President
WILLIAM H. GILL
Vice-President
THOMAS P. FALLONA
Vice-President
JOHN J. CUNNINGHAM, JR.
Treasurer
ROBERT V. CULLINAN
Asst. Treasurer

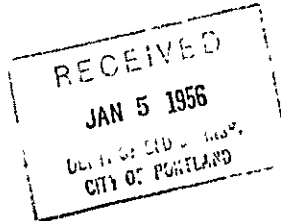
Handwritten notes:
Rines Bros Co
Storefront
1/5/56

181 STATE STREET
PORTLAND 3, MAINE

Rines Bros CO
Storefront

Jan. 4, 1956.

Inspector of Buildings,
City Hall,
Portland, Me.



Dear Sir;

Enclosed are prints of drawings Nos. 9, 10 and 11 prepared by Dr. Hamilton Gray which we are hereby filing to supplement the drawings you now have on file in connection with our application for permit on the above project.

Very truly yours,

F. W. CUNNINGHAM & SONS

Arthur J. Cullinan
President

AJC/c

Cc to Soep Associates; (w/enc)
Mr. Clifford
Mr. Ebenstein



F. W. CUNNINGHAM & SONS ENGINEERS - CONTRACTORS
I N C O R P O R A T E D 1 9 0 5

ARTHUR J. CULLINAN

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181 STATE STREET
PORTLAND 3, MAINE

December 30, 1955

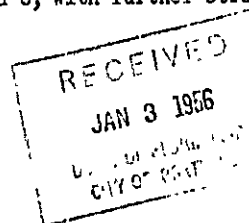
Subject: Rines Brothers Company
Portland, Maine

Mr. Warren McDonald
Inspector of Buildings
City of Portland
City Hall
Portland, Maine

Dear Mr. McDonald:

We are enclosing new Sheets from Dr. Gray, numbered 1,
2, and 3, with minor changes outlined in red.

We are also enclosing prints of Drawings Nos. 4, 5, 6,
7 and 8, with further structural details.



Very truly yours,

F. W. CUNNINGHAM & SONS

Arthur J. Cullinan
President

AJC:aml

Encls.



F. W. CUNNINGHAM & SONS ENGINEERS - CONTRACTORS
INCORPORATED 1905

181 STATE STREET
PORTLAND 3, MAINE

ARTHUR J. CULLINAN
President
WILLIAM H. GILL,
Vice-President
THOMAS P. FALLONA
Vice-President
JOHN J. CUNNINGHAM, JR.
Treasurer
ROBERT V. CULLINAN
Asst. Treasurer

December 27, 1955.

Subject: Rines Brothers Store Front Project

Mr. Warren McDonald
Inspector of Buildings
City of Portland
City Hall
Portland, Maine

RECEIVED
DEC 27 1955
CITY OF PORTLAND

Dear Mr. McDonald:

You have undoubtedly received by this time the copy of letter dated December 22nd from Hamilton Gray, in connection with the above project.

We are herewith submitting prints of Drawings Nos. 1, 2 and 3, as indicated in the first paragraph of Dr. Gray's letter. These drawings are to supplement those which you now have on file for this project.

We understand from Dr. Gray that there are additional sketches being made which will be sent to us today and these will be accompanied by the Statement of Design.

Very truly yours,

F. W. CUNNINGHAM & SONS

Prints sent to Rines Bros.

Arthur J. Cullinan
President

AJC:aml

Encl.

As with letter 1/3/55



Reg. Prof. Engr.
New York, Maine

HAMILTON GRAY

Consulting Engineer
1775 Arlington Avenue
Columbus, Ohio

December 22, 1955

Mr. Arthur J. Cullinan
President
F.W. Cunningham & Sons
181 State Street
Portland 3, Maine

RECEIVED
DEC 27 1955

Dear Mr. Cullinan:

I am sending you three prints of each of three drawings illustrating details associated with all of the columns except the corner column on the Rines project.

Owing to the small allowable bearing stress perpendicular to the grain in soft wood lumber it does not appear feasible to splice the 12 x 12 timber in such a way as to extend it to a bearing on the new column. Such a splice, to be adequate, would require the drilling of a large number of holes through the timber which in itself would tend to weaken it and would require the use of splicing steel at least half as long as the timber itself. I have, therefore, preferred to replace the supporting capacity of the timber by means of a pair of channels which are bolted to it. The timber is left in place but its only function is to transmit the reaction of the inner ends of these channels to the present support for the timber on one of the inner Lally columns. A second reason for this type of replacement is that the 12 x 12 would be very heavily stressed under the floor load of 100 pounds per square foot. The use of these channels would, therefore, increase the carrying capacity of this portion of the second floor.


It would be possible also to support the 12 x 12 by means of a 14 inch wide flange 34# beam, or by means of a 10 inch wide flange 45# beam placed directly beneath the existing timber and extending from the new Lally column to the present column supporting the inner end of the 12 x 12 timber. Such construction would, of course, cut down the head room and require the use of a new support on the interior column.

In proportioning the column, I have assumed a length of 18 feet and believe that as long as the distance from the top to the bottom of the new column does not exceed this, no modification in design is necessary. However, should for any reason the length of the column have to be increased, then it would be advisable to consider the effect of this increased length on its load carrying capacity. I have not specified the location of a splice in the new column and assume that this will be placed wherever convenient both to the fabricator and to the architectural requirements.

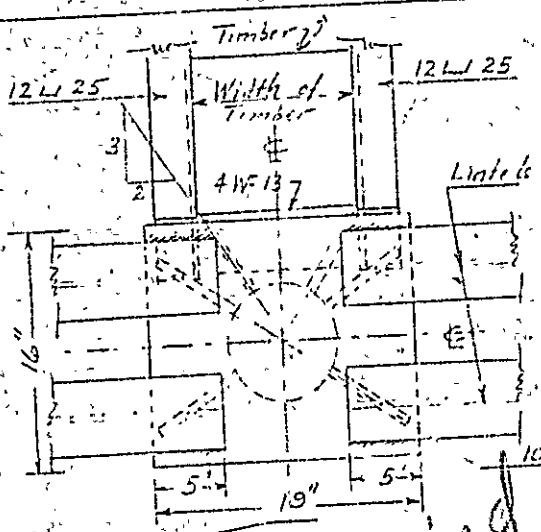
In accordance with our phone conversation of yesterday, I will send you additional details in the very near future.

cc
Mr. P.C. Clifford
Mr. Warren McDonald

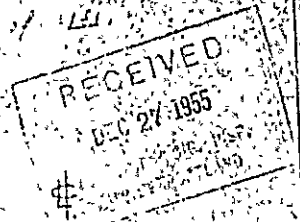
Very truly yours,


Hamilton Gray

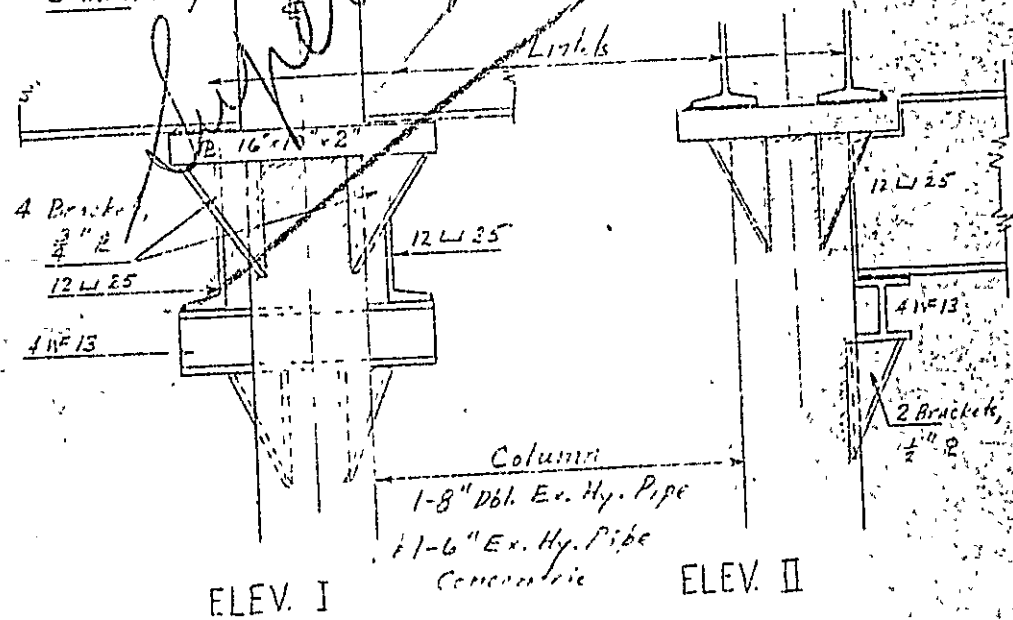
HG:rt



See sheet 2 for support of interior ends of LSI.

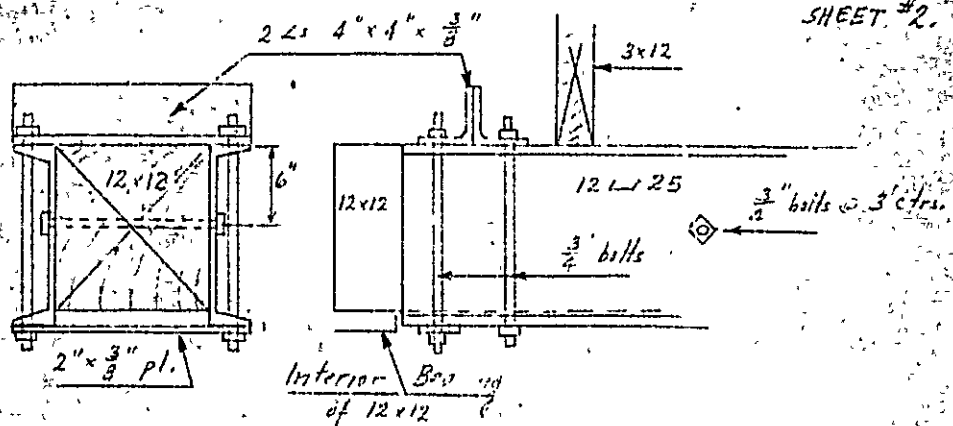


Note: Length & thickness of plate to be increased if necessary to obtain 5" min. length of lintel bearing.

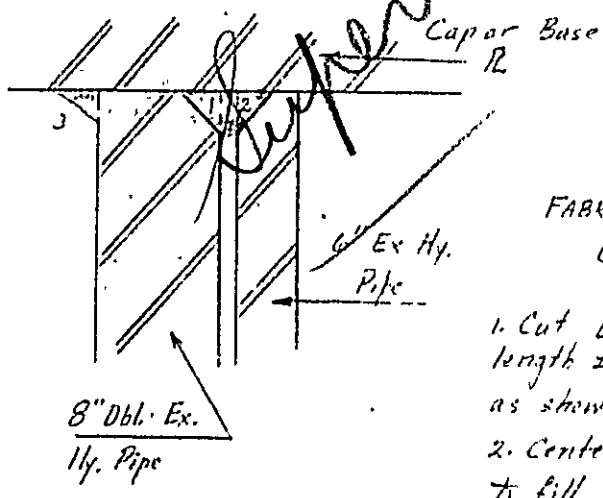


DETAILS AT TOPS OF CONGRESS ST. COLUMNS

- Notes: 1. Slight skew of timber requires cutting of LSI to different lengths, but does not require alteration of bracket details.
 2. All welds, 1/4" fillet. Brackets welded to column all around.



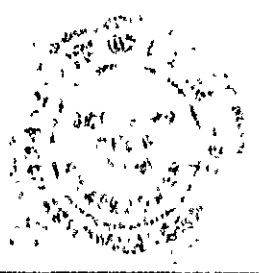
Notes: 12" Ls are to support floor joists. Outer ends of Ls to be carried by Lally Cols., inner ends by 12x12 as shown. This support to be obtained as close to interior bearing as possible. Holes for vertical bolts to be drilled according to actual width of timber.

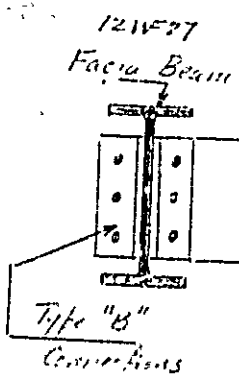


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 U. S. DEPT. OF INSP.
 CIVIL ENGINEERING

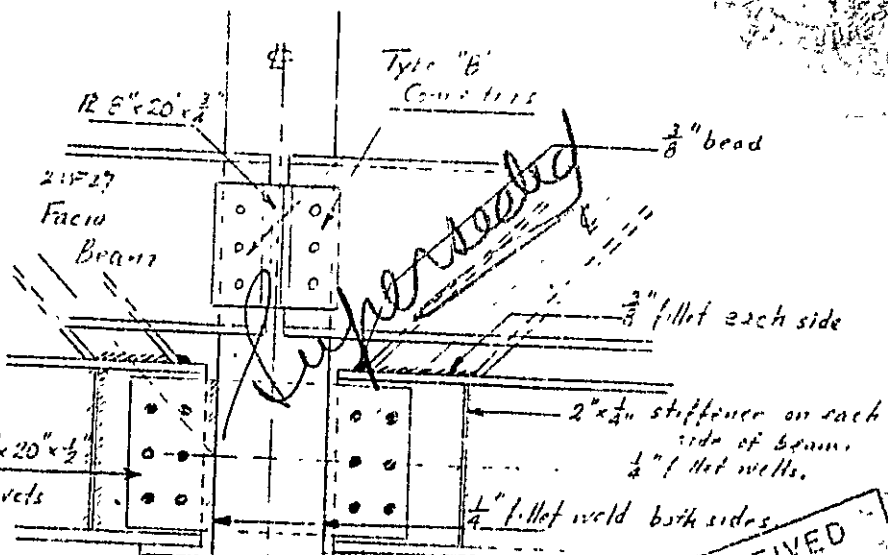
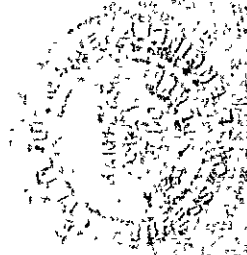
FABRICATION OF CONCENTRIC COLUMN SECTION

1. Cut both pipes to same length $\pm \frac{1}{16}$ " and bevel ends $\frac{1}{4}$ " as shown at 1 and 2.
2. Center and weld continuously to fill 1 and 2 and adjacent clearance space with weld metal.
3. Grind ends plane and square with axis.
4. Weld plate with continuous fillet at 3





12 5" x 20" x 3/4" thru column &
with 1/4" fillet welds both sides



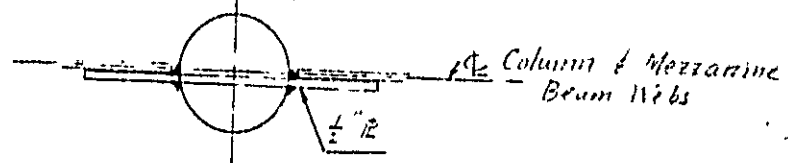
1 12 10" x 20" x 1/2"

Symm. abt. A

Bracket, 7/4" R.

RECEIVED
DEC 27 1955
DIV. OF ENG. INSP.
CITY OF PORTLAND

CONNECTIONS OF FACIA & MEZZANINE
BEAMS @ COLUMN



Reg. Prof. Engr.
New York, Maine

HAMILTON GRAY

CONSULTING ENGINEER

1775 Arlington Avenue
Columbus, Ohio

December 24, 1955

Mr. Robert E. Johnson
Architect
5 Commonwealth Park
Wellesley Hills, Mass.

RECEIVED
DEC 19 1955

Dear Mr. Johnson:

In reply to your special delivery letter of December 10, I do not feel that the Rims store job is one in which one can categorically state whether the design is safe or unsafe. Distributions of loads to the various structural elements are altogether too uncertain. Until Mr. McDonald's letter of November 3, I had been mainly concerned with the underpinning operations and assumed that any differences in column sizes between those proposed by Mr. Mallon and those indicated by my figures were due to differences in assumed loads. In other words, I did not feel it necessary to question column sizes, believing that Mr. McDonald's office would vary probably do so, and realizing that to a certain extent, considerable variation in assumed loads was entirely defensible. However, Mr. McDonald's letter of November 3rd rather put me on the spot of stating my own actual opinion. As a matter of opinion, I do favor heavier columns for reasons which I have explained in some detail in my letter to Mr. Gullinan, with copies to Mallon, McDonald and Clifford, dated December 12th.

Prior to receipt of a copy of Mr. Mallon's revised computations I had no way of knowing exactly how he had obtained his column sizes, and I think that my letter to Mr. Gullinan will serve to clarify the differences in our approach. Owing to the apparent inconsistencies in Mr. Mallon's analysis which have now been revealed I am disposed at present to be rather more insistent in regard to those columns than I was previously.

In direct answer to your last question regarding the columns I can only state that I am sure that the building would not be put in jeopardy were Mr. Mallon's column sizes to be used, but I would personally much prefer the larger factor of safety provided by somewhat heavier columns. I have, in my letter to Mr. Gullinan, pointed out a deficiency which appears in the manner of transferring loads from 12x12 timbers to the new columns, and I also am rather puzzled by the apparent location of the "strong back" used to resist horizontal thrust at the mezzanine floor level caused by the fascia beam.

I believe basically that our major differences stem from different concepts of what should be an adequate factor of safety in connection with reconstruction or alteration of this type, so that in general, it is a matter of differences in philosophy. The problem is neither black nor white and (no pun intended) more or less of a neutral gray color.

December 14, 1955

To: Mr. Robert E. Johnson

-2-

Perhaps I haven't been very helpful in replying to your letter, but this, coupled with that of December 12th to Mr. Cullinan should, I think, put the whole problem into a little better focus.

Very truly yours,

HG
Hamilton Gray

cc:
Mr. Warren McDonald
Mr. Philip G. Clifford
Mr. Arthur J. Cullinan

HG:rt

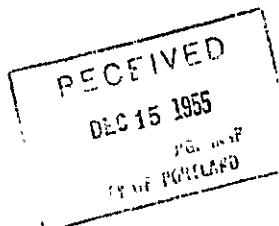
Reg. Prof. Engr.
New York, Maine

HAMILTON GRAY
Consulting Engineer

1775 Arlington Ave.
Columbus, Ohio

December 12, 1955

Mr. Arthur J. Cullinan
President
F.W. Cunningham & Sons
181 State Street
Portland 3, Maine



Dear Mr. Cullinan:

This is to acknowledge your special of December 10 and its enclosures of copies of (a) Mr. McDonald's letter to you of December 9 and (b) Mr. Mallon's letter to Mr. McDonald of December 9.

I do not mean to imply that anything is so far wrong that there would surely be any serious danger to the building, but I do feel that in this type of work the unknowns or uncertainties are numerous enough and important enough to justify a conservative attitude.

To begin with the first of Mr. Mallon's revised sheets:

The 12 x 12 appears to end about 20" short of the centerline of lintels. The detail shown on this sheet for transferring the 12 x 12 reaction to the column is not capable of transmitting any significant bending moment. Therefore, the pair of channels must act as a cantilever from the column and should be connected to the column in a way which will accomplish this. Using Mr. Mallon's reaction of 19^k , the moment at the column centerline is $19^k \times 24" (+) = 456^k \pm$ compared with his assumed moment of $19^k \times 7-1/2" = 142.5^k$ given on his sheet #4. It seems to me that if the reaction of the 12 x 12 is not to create a moment in excess of 142.5^k at the column then the connection between the 12 x 12 and the pair of channels must be designed to transmit a bending moment of about 450^k . The detail shown would not appear capable of safely transmitting more than a small fraction of this.

Much of the assumed floor load of $100 \#/\text{ft}^2$ is "live" and hence cannot be relied upon to act at all times or to counteract any "dead" load such as created by the fascia beam. Actually this assumed floor load would cause very high bending and shear stresses in the 12 x 12 timber. (Much higher than one would employ in new design.)

(Passing now to Mr. Mallon's sheet #2). My own assumptions for the loads on the fascia beam allowed $75 \#/\text{ft}^2$ for masonry and facing for a height of 9-1/2 ft. giving $715 \#/\text{ft}$, to which I added the weight of steel fascia beam $25 \#/\text{ft}$ to obtain a total of $740 \#/\text{ft}$, which I assumed on a 22 ft. spar to give an end reaction of $8150\#$ or $16,500\#$ at each Column. The eccentricity was assumed at 12" to give a fascia moment at the column centerline of $195,000 \# \text{ft}$. Therefore, slightly different

To: Mr. Arthur J. Gullinan

-2-

December 12, 1955

assumptions have led to substantially greater moment than contemplated by Mr. Mallon. Owing to uncertainty as to the magnitude of the load brought to the column by the 12 x 12 I am not disposed to believe it proper to cancel the effects of eccentricities below the fascia support as shown on Mr. Mallon's 4th sheet. It seemed to me better to ignore the probable lateral support offered to the column by the mezzanine floor and to use an unsupported length of 18 ft. anticipating possible buckling toward the street. This matter I cannot argue except on the basis of conservatism, but I do take exception to the theory that moments induced by the 12 x 12 and by the fascia beam cancel in the lower part of the column.

I am well satisfied by the use of the vertical 5" WF 16 shown on sheet 3 but wish to further consider the "strong back" and lateral thrusts. The former appears to be on the inside of the wall but the thrust is directed inward.

I hope I have made clear my view of the uncertainty of loads acting on the columns. I do not think it is necessary yet to meet to iron out the disagreements. I would be glad to discuss any of these matters with Mr. Mallon by phone.

The concentric pipe column was just a suggestion. It seems to me that with neither angle iron nor concrete required these should not present a problem of great difficulty. The pieces would need to be straight certainly, but that is one of the essentials of a column!

Very truly yours,

HG.
Hamilton Gray

cc
Mr. Warren McDonald
Mr. Philip G. Clifford
Arthur H. Mallon

HG:rt

ROBERT E. JOHNSON
ARCHITECT

COPY

December 10, 1955

Dr. Hamilton Gray
Consulting Engineer
1775 Arlington Avenue
Columbus, Ohio

Copies to Messrs. McDonald, Soap,
Clifford, Ebenstein, Cullinan.

Dear Dr. Gray,

re: Rinos Bros., Inc. Alteration

This letter is an attempt to clear the air in regard to the columns on the above job. To recapitulate, your letters of Oct. 3 and Nov. 7 stated that by changing three details you would be satisfied with the design. On this basis, Mr. McDonald gave us a permit to begin construction. Then, because of your letter of Nov. 24th to Mr. Clifford in which you questioned the Lally columns, he has now rescinded the permit.

RECEIVED
DEC 12 1955
CITY OF COLUMBUS

Your computations on your version of the column I have shown to Professor Mallon and while he recognizes certain merits in the idea, he still prefers the standard Lally column construction which he designed. In this connection, I am enclosing his letter to Mr. McDonald which accompanied the additional computations he made in an effort to convince Mr. McDonald and which might interest you.

At present, unless there is agreement on these columns, there is talk of calling in a third structural engineer. The possibilities of this third engineer disagreeing on details, devices and dimensions are appalling because work is slated to begin directly after Christmas in order to be completed before the Easter season.

When I talked with Mr. Clifford this past summer his concern, it seems to me, was that the structure be safe and my understanding was that he would call you in to check the design. Now, your remarks have included words such as "suggestions" and "would feel happier if". We would be further along if you would definitely state if Mr. Mallon's design is, in your opinion, safe or unsafe. Then Mr. McDonald would have something definite on which to base a decision.

This has been an unusual job because so many people have become involved. In my mind, I am sure that a column designed by you or Mr. Mallon would be safe even though they differed somewhat in detail. However, to pin the matter down now, will you kindly write me and state whether or not, in your opinion, Mr. Mallon's columns are safe or unsafe. It would be helpful and I would appreciate it.

Very truly yours,

Enc.

000000000000
3-3024

.....
BOSTON PHONE
888888

BL 8 2394

ARTHUR H. MALLON
CONSULTING ENGINEER
~~258 HUNTINGTON AVENUE~~
BOSTON 15, MASSACHUSETTS

9 December 1955
278 Eliot Street
Milton 87, Mass.

Mr. Warren McDonald, Inspector
Department of Building Inspection
City of Portland, Maine

Dear Mr. McDonald:

Enclosed herewith are blue prints R-1, 2, 3 & 4, intended to suit requests and suggestions made in paragraphs one, two and three of your letter to me of 29 November 1955.

R-1 revises 12 by 12 to column connection, bolts now used for "snugging" 12 by 12, no reaction transmitted by bolts.

R-3, analysis of strut at ends of fascia beam. All welding in this member eliminated, some of these welds having been tension type. The analysis of strut, suited to riveted connections are shown.

R-2 concludes R-1, and restates reinforced concrete filled Lally Column outline of design and specs. covering manufacture. Also shown is load accumulation for fascia beam.

R-4 is typical front column analysis. For some time have understood that it was satisfactory with the addition of fireproofing. Might add, here we basically have a reinforced concrete column, which is conventionally designed in terms of a safe capacity rather than a stress, that ~~that~~ being the case when empirical formula is used. The same situation prevails for eccentric loading, the required safe capacity being raised by reason of equivalent direct load due to eccentricity.

Be assured that Massachusetts is one of the states in which I am a Registered Professional Engineer, certificate no. 6248, and American Welding Society is one of the technical societies in which currently, I hold membership, #19950.

I beg to dispute the implication that "promiscuous" welding was resorted to. The quote is my own. Months ago abandoned welded extension to existing lintels because of the difficulty and hazard of field welding. The combination of mechanical anchorage and $\frac{1}{4}$ " continuous, all around, fillet welds as specified and indicated in Lally details and the fillet welds required in the sub-assembly of a column capital, together with the continuous fillets which secure diagonals are quite routine.

RECEIVED
DEC 12 1955
CIVIL ENGINEERING
DIVISION

PS 4811
1-40

RETURN RECEIPT

Receipt from the Postmaster for Registered or Insured Article, the original number of which appears on the face of this Card.

[Handwritten Signature]
(Signature of name of addressee)

[Handwritten Signature]
Signature of addressee at time Agent should enter date of receipt on line (A) above

Date of delivery, **SEPT 10 1965**

U. S. GOVERNMENT PRINTING OFFICE: 1964 O-224511

McDonald--He--Rines page 2

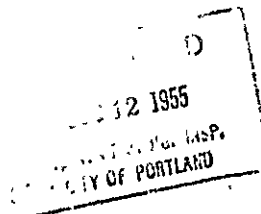
Except for the welded lintel extender, which is shown on the plans, I do not hesitate to state that the design is mine. For that matter, I would go along with Dr. Gray on the lintel extenders which he suggested but at this time I can't see how the welding of them can be executed successfully, nor am I convinced of their need. Lets leave it his way, see how the shop steel details show it, and further, if necessary handle it as a field condition as you imply in paragraph no. 5 of your November 28 letter to Cunningham, etc.

All of the above to Johnson, Cunningham, and McDonald, but this paragraph I write only on your letter, Mr. McDonald. The post-script in the letter referred to above would have been not out of place in the copy to me. If it was included in the widely circulated version, would that not have been by accident?

Very truly yours

Arthur H. Mallon

Arthur H. Mallon, P.E.



December 9, 1955

81 - 529 Congress St.,--Alterations for Sines Bros.
Co.--Stop Order

Registered Mail
Return Receipt

Copies to: J. B. Brown & Sons and to
Messrs. Eisenstein, Soop, Johnson
and Mallon

F. W. Cunningham & Sons
Att: Mr. Arthur Cullinan
101 State St.

Gentlemen:-

No such question has arisen as to the adequacy of the proposed columns and the structural steel connected with them to comply with Building Code requirements that it seems necessary to stop all work under the permit, as explained to Mr. Cullinan over the phone on Wednesday. Accordingly this letter represents an order stopping all work under the permit issued November 29th, 1955, given under authority of Section 107 of the Building Code.

This action is most regrettable and is not intended as a reflection on the good faith of anyone, but is carried out in the belief that it will help to clear up the confusion which has again arisen to plague us all.

We had not taken very seriously Mr. Gray's comment in his letter to Mr. Clifford of November 14th: "Depending, of course, upon the assumptions made as to the weights of the existing walls, it is possible that the smaller lally columns, 2 5/8 inch extra heavy weight, are not entirely adequate to carry the loads to which they would be subjected." Since we have been over the matter of columns with Prof. Mallon previous to that and he had not only increased the size but reinforced the columns, I assumed that Mr. Gray's comment was merely by way of conjecture. However, in his letter to Mr. Clifford on November 21st he suggests an entirely different type of column, not only for the smaller intermediate columns, but for the more important exterior column--a suggestion, if followed, which would certainly mean redrawing the plan.

It is also understood that at the request of the owner, in an effort to reconcile the positions of Prof. Mallon and Mr. Gray, the latter was to send his own computations in support of the statement of November 14th to Mr. Soop with the idea that the two sets of computations could be compared with the hope of reconciling them. It is my impression that Mr. Gray has already sent his computations and reasoning to Mr. Soop, and in so doing that no doubt argues that Mr. Gray feels that the design of the columns upon which the building permit was issued is inadequate.

This is most serious business from the standpoint of this department as it is with all of you--therefore this stop order, which can only be lifted when plans are filed showing what is actually intended. It is my belief that from the beginning one of the main causes for the confusion has been ~~the~~ the lack of plans of the existing structure, with thickness of walls, type, direction and arrangement of floor and roof

December 9, 1955

F. W. Cunningham & Sons - - - - #2

members and the other data necessary to arrive at an accurate conclusion as to what the problem is.

Very truly yours,

Warren McDonald
Inspector of Buildings

WMCB/s

P. S. Since dictating this letter I have learned that Prof. Mallon, evidently having examined Dr. Gray's computations, is sending to this office additional computations or reasoning in support of the design of columns etc. which now appears on his plan. If this is the case, it appears that I am supposed to assume the position of the referee between the experienced designers who do not agree. That of course is out of the question. Only one course appears open and that would be to request the owner to have Dr. Gray pass on Prof. Mallon's latest figures. In other words it appears that those two designs must be reconciled in some manner before the stop order can be lifted and the work proceed.

AP 529 Congress St.--Alterations for Rines Bros. Company in building
owned by J. B. Brown & Sons

November 29, 1955

Professor Arthur H. Mallon
278 Elliot Street
Milton, Mass.

Dear Professor Mallon:

You will see from copy of our letter to the contractor on the Rines job that I have excluded from the permit two minor items of the strut supporting the fascia wall beam on the west end and the connection for extending the 12x12 second floor timbers. I am sorry that I could not go along with a "clean bill of health" on your design as I intimated on Friday. However, it became clear over the weekend, recognizing Dr. Gray's undoubted competency as a designer and thinking back over our conversation on Friday, it seemed to me that I would not be serving the interests of all concerned if we did not have better assurances on these two points. I am taking the liberty of addressing you direct because there has been too much indirection in this entire job.

Perhaps you will agree that the plans are not so very clear as to what the final situation will be around this strut on the west end of the store front. Please let me have your complete analysis of this situation in the rational fashion, showing clearly the points of application and size of all loads, all moments and their arms and the entire theory as to all supports and bracings of this strut. Also, will you be good enough to make a sketch to scale illustrating the design and showing clearly the basis of your reasoning. For instance, if you are relying upon the weight of the wall above to lend stability against the top of the strut moving outward toward which Dr. Gray says there is a thrust of about one-half ton, please show a section including this brick work and showing also to what the strut will be fastened at the top and all other anchorages. If, after further consideration of this detail you should feel that there ought to be more of a factor of safety than is afforded by the current detail, please work it out and have Mr. Johnson show it on a supplementary plan and furnish to the contractor for filing here along with our computations and sketches.

Likewise please analyze the situation where the 12x12 timbers are to be extended for bearing by structural steel showing the loads that will come upon the bolted connection and what resistance you figure on the bolts. If, in this case, you feel that we should play a little safer, please make the revision on the plan and proceed as with the other one.

Are you to design the welded joints, and, if so, is that design included in your statement which you filed here and which now has been attached to the latest plans? If you are not responsible for these welded joints, please advise direct how we may know that the design of the welded joints has the benefit of your computations as to loads, reactions, etc.

Professor Arthur H. Mallon _____ 2

November 29, 1955

Since your statement of design was filed many months ago, it would seem better for you to furnish a new one in its place, and I am enclosing a blank for that purpose. Please enumerate the part of the work for which you are responsible including the welded joints, if you are responsible for their design.

My letter to the contractor assumes that you are a Registered Engineer in Massachusetts. I felt quite sure that I had seen your engineer's seal on some of the plans. However, as I examine all of the sheets that I have, I have been unable to find any identification of yourself as a Registered Engineer. Will you be good enough to furnish that identification along with the new statement of design?

Very truly yours,

Warren McDonald
Inspector of Buildings

WHC:YB

63

HAROLD LEE BERRY
PRESIDENT
GEORGE K BRADFORD
VICE-PRESIDENT
PHILIP GREELY CLIFFORD
TREAS. & GENL. MGR
WILLIAM A. MCCANDLESS
CLERK
WILLIAM H. CLIFFORD SRD
ASSISTANT TO GENL. MGR

J. B. BROWN & SONS
57 EXCHANGE STREET
PORTLAND, MAINE

DIRECTORS
PHILIP GREELY CLIFFORD
WILLIAM H CLIFFORD
HARRISON J HOLT
HAROLD LEE BERRY
WILLIAM H CLIFFORD SRD
WILLIAM A MCCANDLESS
HERBERT PAYSON JR
HASKET DERRY
GEORGE K BRADFORD

November 28, 1955

*Price
Company
Review*

Mr. Warren McDonald
City Building Inspector
City Hall
Portland, Maine

Dear Mr. McDonald:

After talking with Mr. Cullinan this morning on
the telephone, I am sending you a copy of the
letter received this morning from Mr. Gray.

I am sending copies, also, to the architect and
to Mr. Cullinan.

Yours very truly,

Philip G Clifford

Treasurer
J. B. BROWN & SONS

PGC:fh
Enc.

RECEIVED

NOV 29 1955

U.S. DEPT. OF JUSTICE
CITY OF PORTLAND

AP 529 Congress St.--Alterations for Rines Bron. Company in building
owned by J. B. Brown & Sons

November 28, 1955

Copies to Messrs. Seep, Johnson and Mallon.
Copy to owner for Dr. Gray

F. W. Cunningham & Sons
181 State St.
J. B. Brown & Sons
57 Exchange St.
Rines Brothers Co.,
309 Congress St.

Gentlemen:

Building permit for the above work is issued to the general contractor, herewith, but excluding two details of the framing and supports--the 4-inch I-beam strut forming the most westerly support of the fascia beam, shown on Section 3-3 on sheet 3 of the plans, and the extension for bearing of the 12x12 timbers carrying second floor loads, Section 1-2 on sheet 3. Despite my statement to Messrs. Johnson and Mallon on Friday that I felt that we could issue the permit without exclusions, further consideration over the weekend compels me to withhold these two items because they are the only two, as far as I can determine in which Dr. Gray takes positive issue with Mr. Mallon's design as to their adequacy. I am taking these two matters up direct with Professor Mallon and I feel sure that the questions can be settled quickly either by his complete support of his design or some increase in strength to provide a greater factor of safety. I am not, of course, attempting to act as a referee between these two competent designers, but when they disagree as positively as in this case, it seems incumbent upon the City to go slowly.

We were not able to clear up all matters completely at the Friday conference, so the permit is also issued subject to the following conditions:

1. On the basis of Mr. Johnson's presentation as to the matter of caring for water and snow on the top and vertical surface of the fascia wall to prevent dripping on the public sidewalk, the permit is issued without requiring any special features for drainage because the question of protection of the public sidewalk in case of heavy snow can at this stage be only a matter of opinion or conjecture, but, since this projection required and has the approval of the Municipal Officers subject to full compliance with the Building Code, should seriously objectionable features occur later, tenant or owner will have to be responsible for correcting the situation in the public interest.

2. The terrazzo veneer is to be furnished, constructed and anchored strictly in accordance with the authorization of the Board of Municipal Officers as an equivalent standard of the Building Code (contractor and Mr. Seep each has a copy).

3. The emergency means of egress as now shown on sheet 2, revised November 17, 1955, is approved on the basis that there will never be more than five persons on the mezzanine at any one time, as stated by Mr. Abenstein of Rines Brothers Co. over the telephone. We have not looked far enough to see whether or not this platform

F. A. Cunningham & Sons
J. B. Brown & Sons
Kings Brothers Co.

November 28, 1955

2

with its supports has been detailed, if not, of course, it will have to be and we shall expect the details to be furnished here for approval.

4. The extension of sprinkler system is not in the general construction contract, but is understood to be the responsibility of the tenant. The sprinkler work requires a separate permit from this department and with the application a plan of the new work bearing upon it the approval of the New England Fire Insurance Rating Association or some equivalent authority, the application to be made by and the permit being issuable only to the actual installer.

5. The permit is issued on sheets 1 to 4 of Mr. Johnson's plans, all revised November 17, 1955 and under authority of Professor Mallon's statement of design, it being understood that he is a Registered Engineer in the State of Massachusetts. It is well understood in such alteration jobs, conditions are very likely to be found somewhat contrary to the assumptions when the design was made. If such cases arise, we shall expect Professor Mallon to furnish a revised design and the contractors to file application for amendment to the permit now issued.

6. All welding, whether in the shop or the field, is required to be done only by welding operators who bear certificates from this department effective within one year prior to the date of doing the welding.

Very truly Yours,

Warren McDonald
Inspector of Buildings

WHD/B

P. S. This job is unusual in that quite a number of details call for extending existing steel members to get suitable bearings, brackets to carry eccentric loads on columns, etc. For that reason the design of all welded joints is most important. If Professor Mallon is not to be the designer of these welded joints, and if the design of these joints is not included in his statement of design, it becomes important that we have another statement of design signed by the designer of established reputation, by license or otherwise, to take the responsibility for the design of these joints. A query about this is being included in a separate letter to Professor Mallon, and, if he is not to be the designer of the welded joints, we shall have to look to Mr. Boop or the contractor for this statement of design before any of the welding is done in shop or field.

C O P Y

HAMILTON GRAY

Consulting Engineer

1775 Arlington Ave.
Columbus, Ohio

November 24, 1955

Mr. P. G. Clifford
Treasurer
J. B. Brown and Sons
57 Exchange Street
Portland, Maine

Dear Mr. Clifford:

Anticipating that there may be some question with regard to the comments in my last letter regarding the adequacy of the Lally columns used in remodeling Rines store, I thought I would pass on to you a suggestion that, in place of the columns which the architect has shown heretofore, there be used the following type of construction.

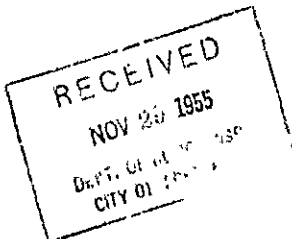
Each column, including the one at the corner of the building might consist of an outer shell of 8" nominal diameter double extra heavy steel pipe inside of which is a 6" nominal diameter extra heavy pipe. The double extra heavy pipe is not at present manufactured as a Lally column, but the supporting power of the combination of concentric 8" and 6" pipes that I have described is in excess of any of the columns which the architect has heretofore proposed using. Since there is a small clearance between the outside of the 6" nominal pipe and the inside of the 8" double extra heavy pipe, these two could be connected by welds at the ends. It would not be necessary to fill these pipes with concrete as is the practice in Lally column construction. That is to say, the steel, provided by this combination of pipes would be adequate to carry the imposed load.

This form of construction would have the additional advantage that the corner column would have a lesser diameter than that now proposed which fact I am sure would appeal to the manager of the Rines store.

Very truly yours,

(Signed) Hamilton Gray
Hamilton Gray

HG:rt

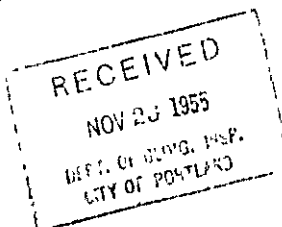


ROBERT E. JOHNSON
ARCHITECT
5 COMMONWEALTH PARK
WELLESLEY HILLS, MASS.

November 21, 1955

*Final
copy
of
plans*

Mr. Warren McDonald
Inspector of Buildings
City of Portland
Maine



Dear Mr. McDonald:

I have made revisions and notes on Drawing #1, 2, 3, & 4 under revised date on each of November 17, 1955, which I am mailing to Mr. Cullinan so he can submit them to you for your approval. On these drawings, and in this letter, I am trying to clear up each item under question to your satisfaction.

Dr. Gray's Part

Enclosed is Dr. Gray's letter of November 7, in which he gives his approval to the plans providing we take care of three items he mentioned. First, we have marked bracket size upper left hand corner Diagram #3. Secondly, we have shown extension on outer lintel ends at top middle Diagram #3. His third, and final minor point, Professor Mallon and I could not understand, but will make this revision on the shop diagrams. After you have read Dr. Gray's letter, will you kindly return it to me for my files.

Fire Proofing of Steel

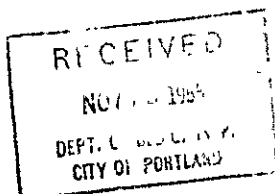
The fire proofing details, lower left hand corner of Diagram #3, are changed to use gypsum-perlite plaster as listed in "Fire Resistance Ratings," page 11.

Facia Overhang Casco St.

Dr. Gray made no objection to this overhang when we showed it to him at our meeting in Mr. Cullinan's office, but Mr. Mallon did add a 10" channel at the top as a stiffener, after we discussed the matter with you. Professor Mallon and I should like to point out that as shown on Mezzanine Plan Diagram #2, it projects out from the facia on Casco St. 2'-6" +, rather than about 4'-0". In addition, a portion of it is curved and in plan the buttress shape of its wall construction would according to Professor Mallon, adequately resist wind loads without wall cracking.

In regard to the top surface collecting snow and water, I hope you can see your way clear to pass it as shown. To drain this surface would entail a long length of drainpipe within the building.

ROBERT E. JOHNSON
ARCHITECT
5 COMMONWEALTH PARK
WELLESLEY HILLS, MASS.



Page 2.

✓ The drain would seldom be helpful in cases of snow or ice and would be a comparatively small surface to drain water from. It should not, in my opinion, collect any more water than a sign that is so often bracketed out from a building.

Concerning the water for the top and vertical surface of the facia, the facia projects from the building less than the cornice we are removing and there was no unusual dripping of water when I was there in one of last summers downpours. It also seems to me that any water beating against the facia would be little different from that on any other building wall. To provide a gutter at the bottom of the facia, and drain it seems rather unusual, as well as difficult and expensive to build and drain. Here too, I hope you will allow the facia as drawn.

Emergency Exit from Mezzanine

✓ The platform you suggest is of course, an improvement and it is shown on the Mezzanine Plan, Dtg. #2.

Projection of Doors over Sidewalk

✓ The line of doors has been set back as shown on 1st floor plan Dtg. #2 to prevent the doors from projecting outside the building line and over the sidewalk.

Locks and Hardware on Entrance Doors

✓ Added to the note under the Congress St Elev. Dtg. #1, Dead bolts mentioned in the specs are taken out.

Projecting Sign

✓ This sign is out and has been erased from the elevations on Dtg. #1.

Future Awning

✓ This was shown on Sections A-A and BB Dtg. #4. As drawn, it gave a minimum clearance of 7'-6" from any point on the sidewalk and was more than 18" from curb line plane. The note has been added to make it clear beyond a doubt.

Sprinklers

✓ The sprinklers are not in this contract but will be taken care of separately according to the building code and as the work progresses. The sprinkler plans will be submitted to you for approval.