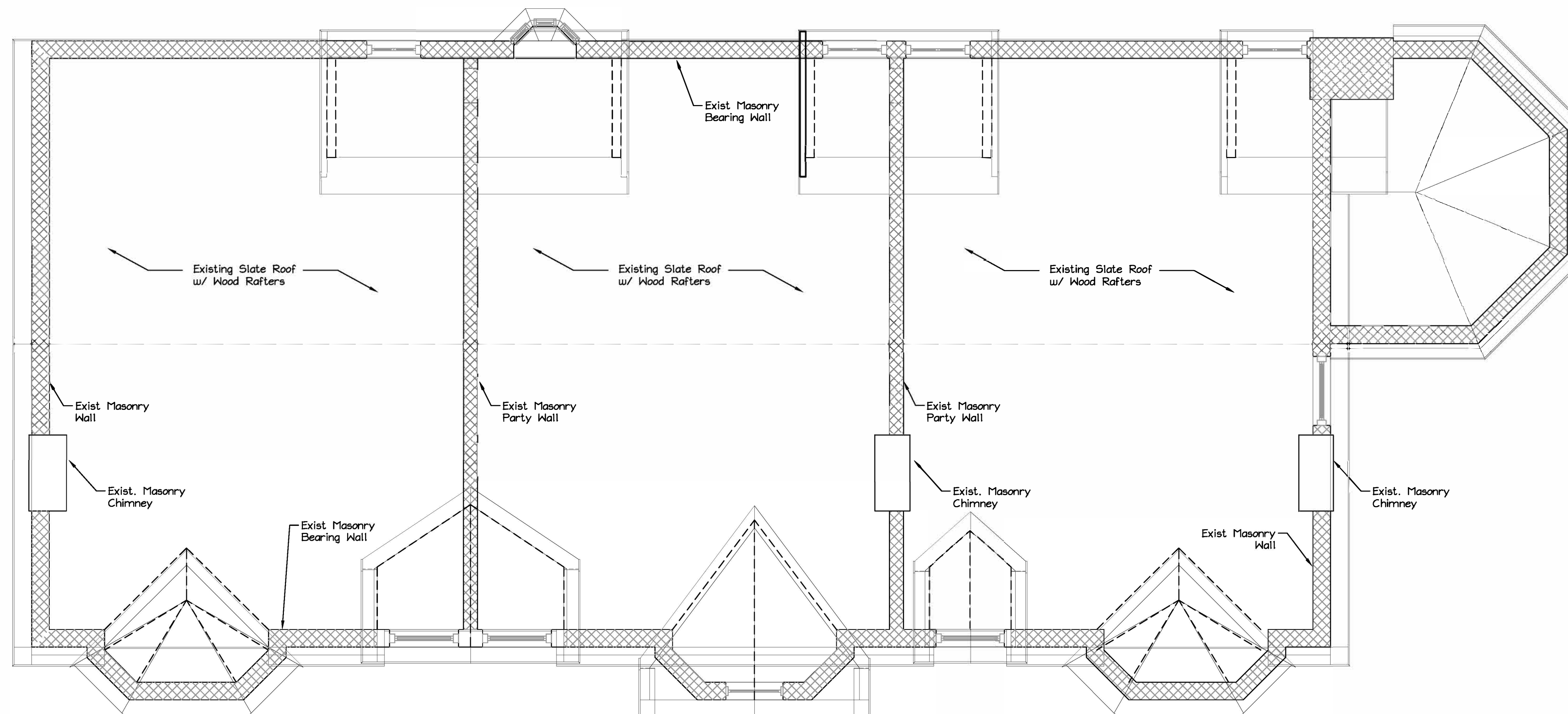


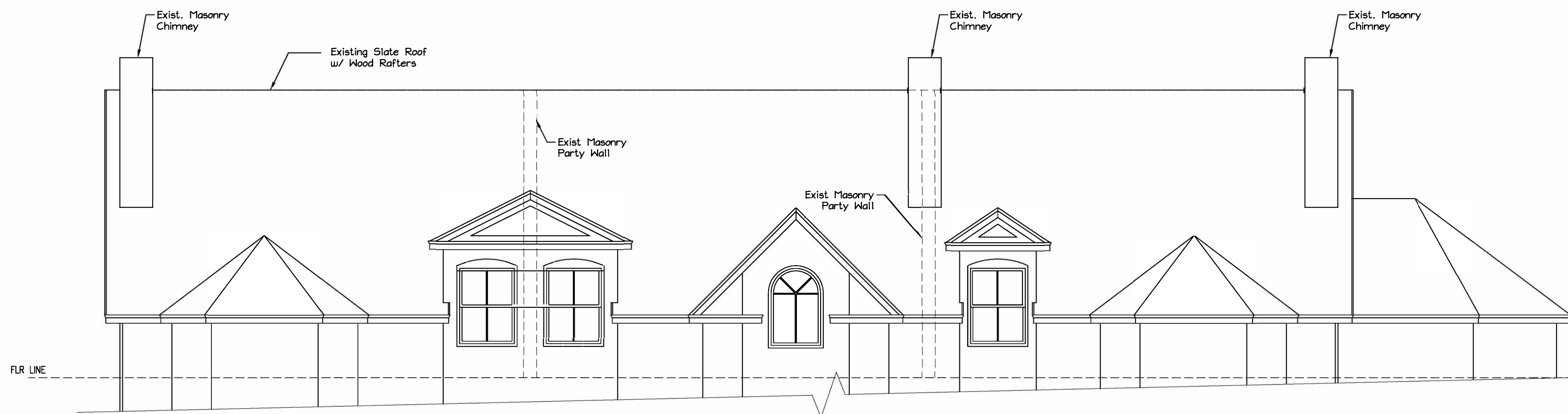


Reviewed for Code Compliance
Permitting and Inspections Department
Approved with Conditions

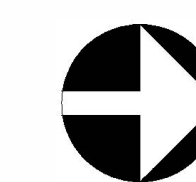
06/28/2018



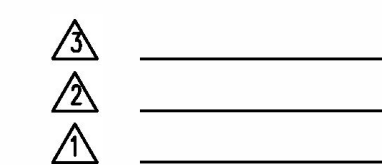
ROOF PLAN



FRONT ELEVATION



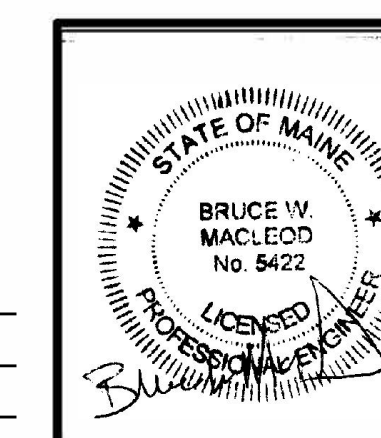
PROJECT NORTH



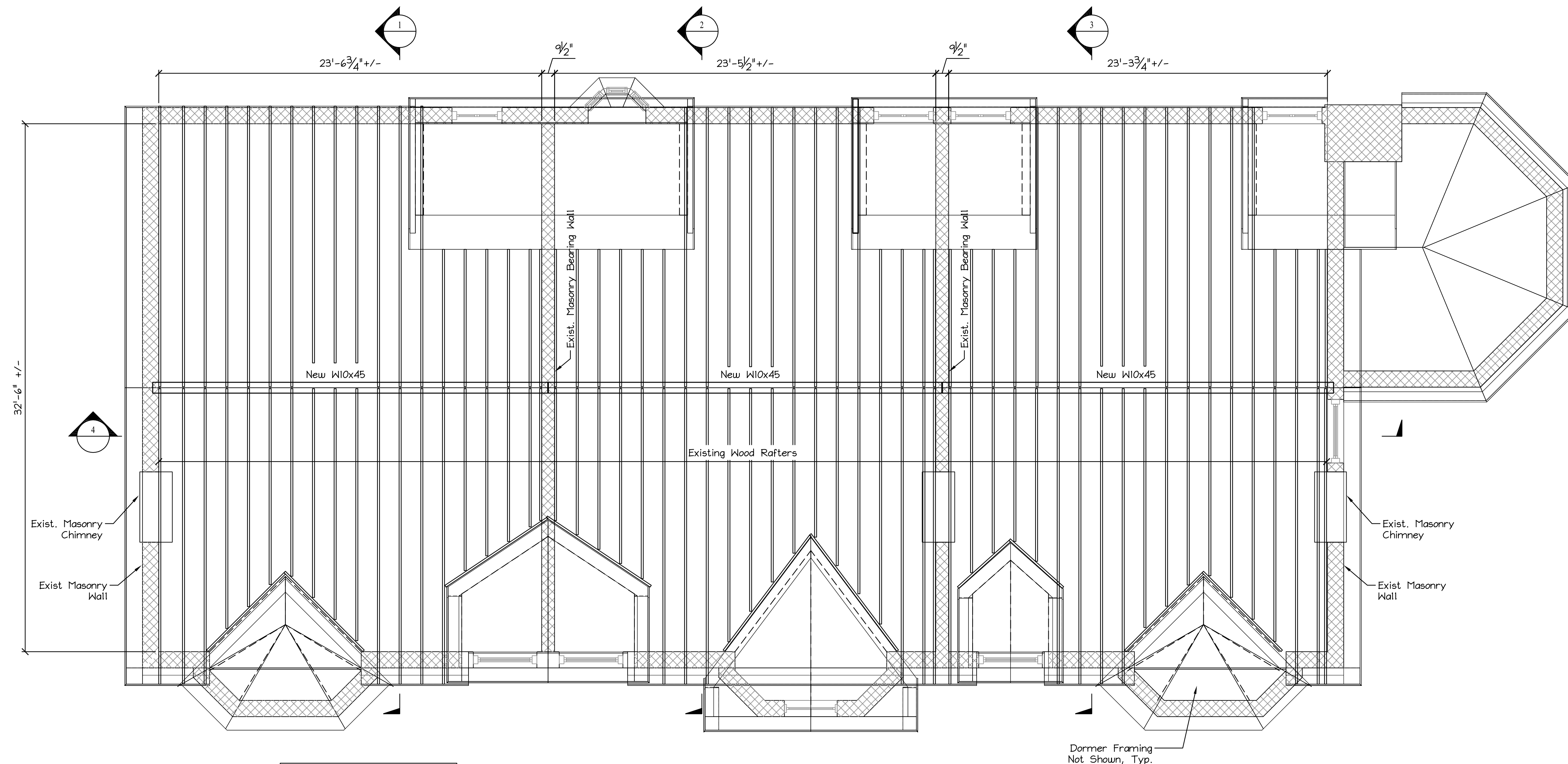
Pettengill Row Condominiums
Portland, Maine

ISSUED FOR CONSTRUCTION
JUNE 6, 2018

- 51 ROOF PLAN
- 52 ROOF FRAMING PLAN
- 53 SECTIONS
- 54 NOTES
- 55 BEAM SPLICE DETAIL



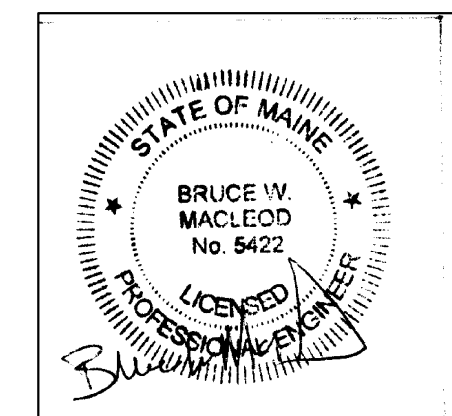
MacLeod Structural Engineers, P.A.		
404 Main Street	Corham, Maine 04038	207.839.0980
Pettengill Row Condominiums		
Portland, Maine		
Roof Structural Upgrade		
TITLE: Roof Plan		
DATE: 09/15/11	DRAWN BY: BIM	DRAWING NUMBER:
SCALE: as noted	PROJ. NO: 2011-220	S-1



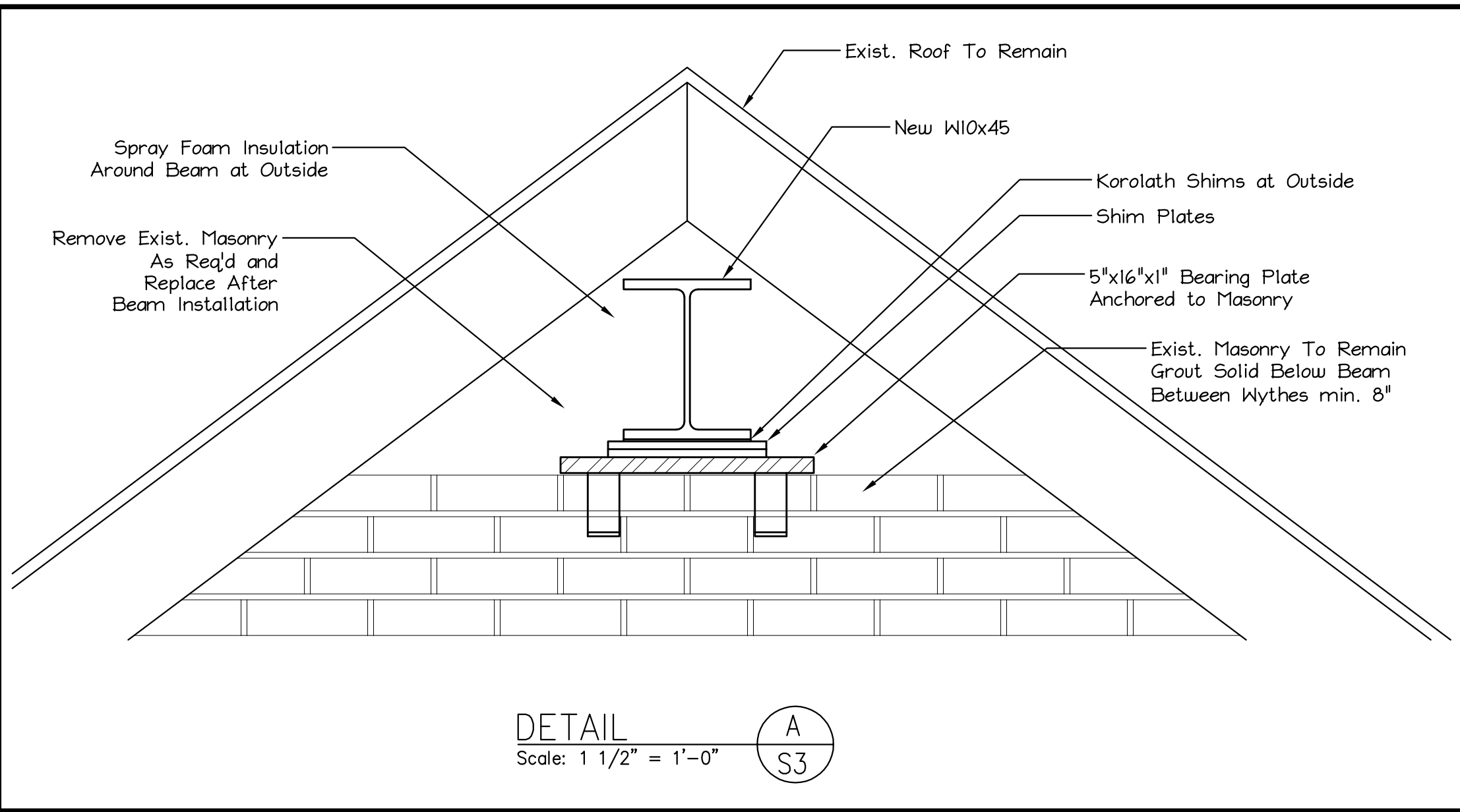
NOTE: Contractor Shall Verify Dimensions Prior To Fabrication/Construction

ROOF FRAMING PLAN

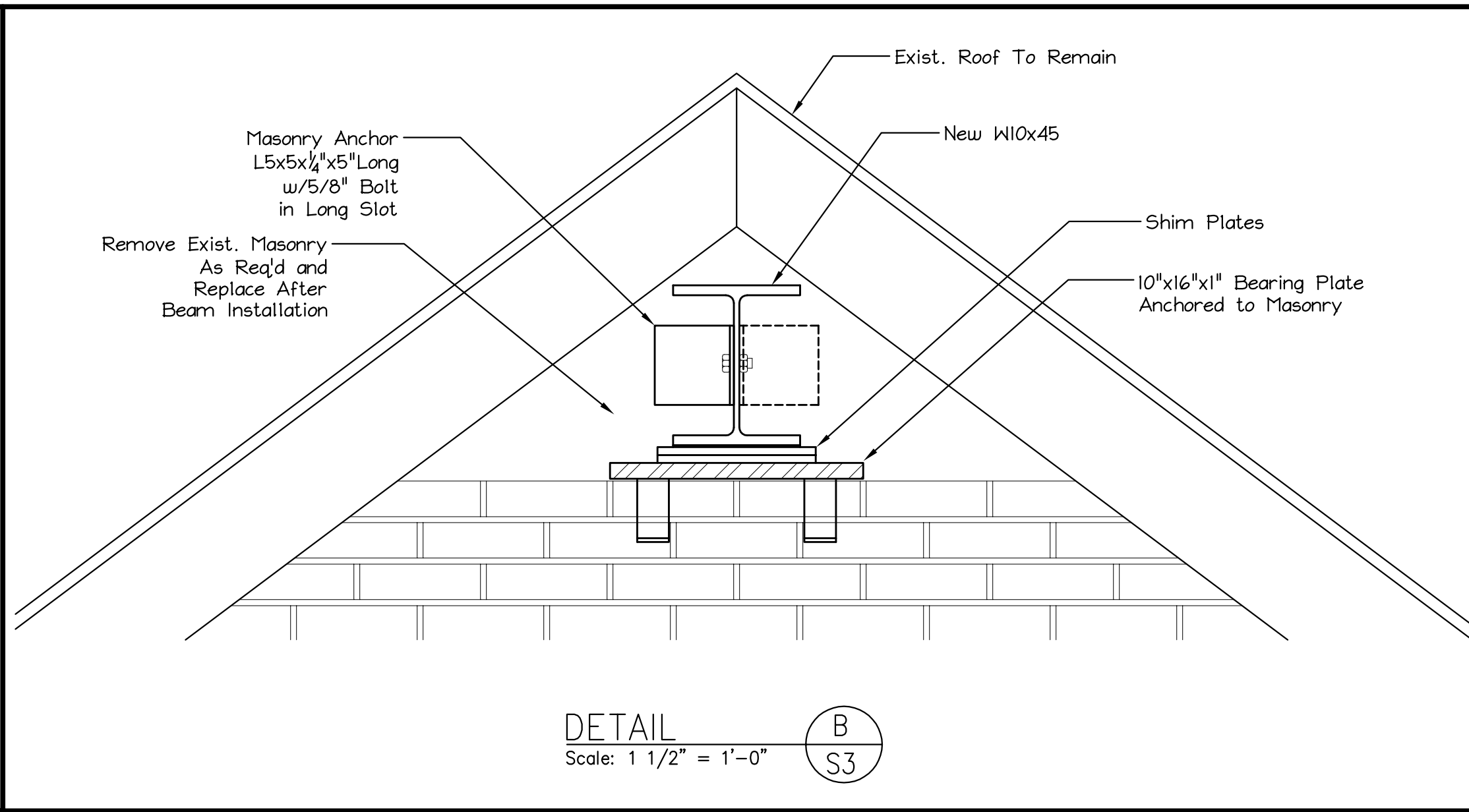
ISSUED 06/06/18
 FOR CONSTRUCTION



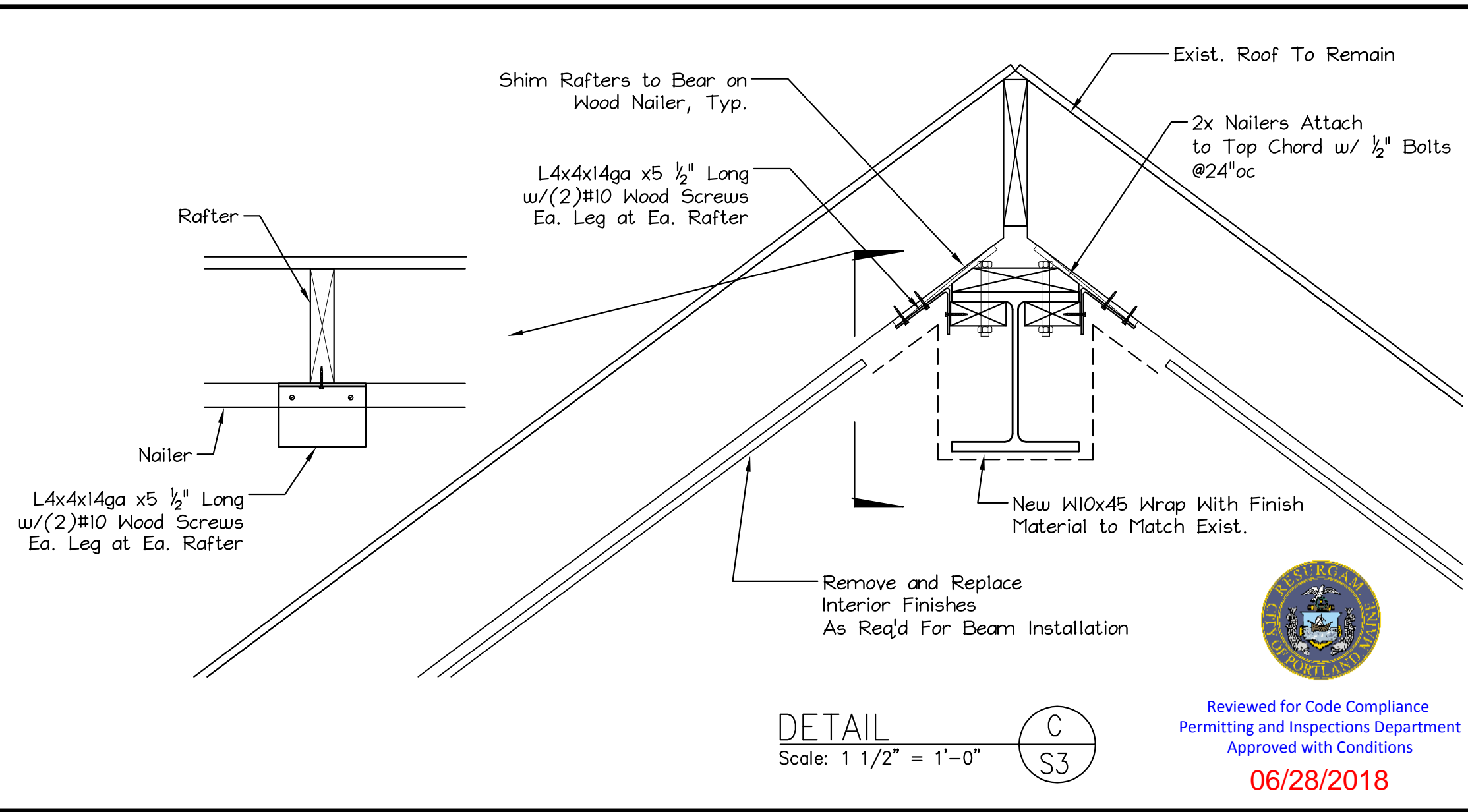
MacLeod Structural Engineers, PA 404 Main Street Corham, Maine 04038 207.839.0980		
Pettengill Row Condominiums Portland, Maine		
Roof Structural Upgrade		
TITLE: ROOF FRAMING PLAN		
DATE: 09/15/11	DRAWN BY: BIM	DRAWING NUMBER:
SCALE: as noted	PROJ NO: 2011-220	S-2



DETAIL A
Scale: 1 1/2" = 1'-0"
S3

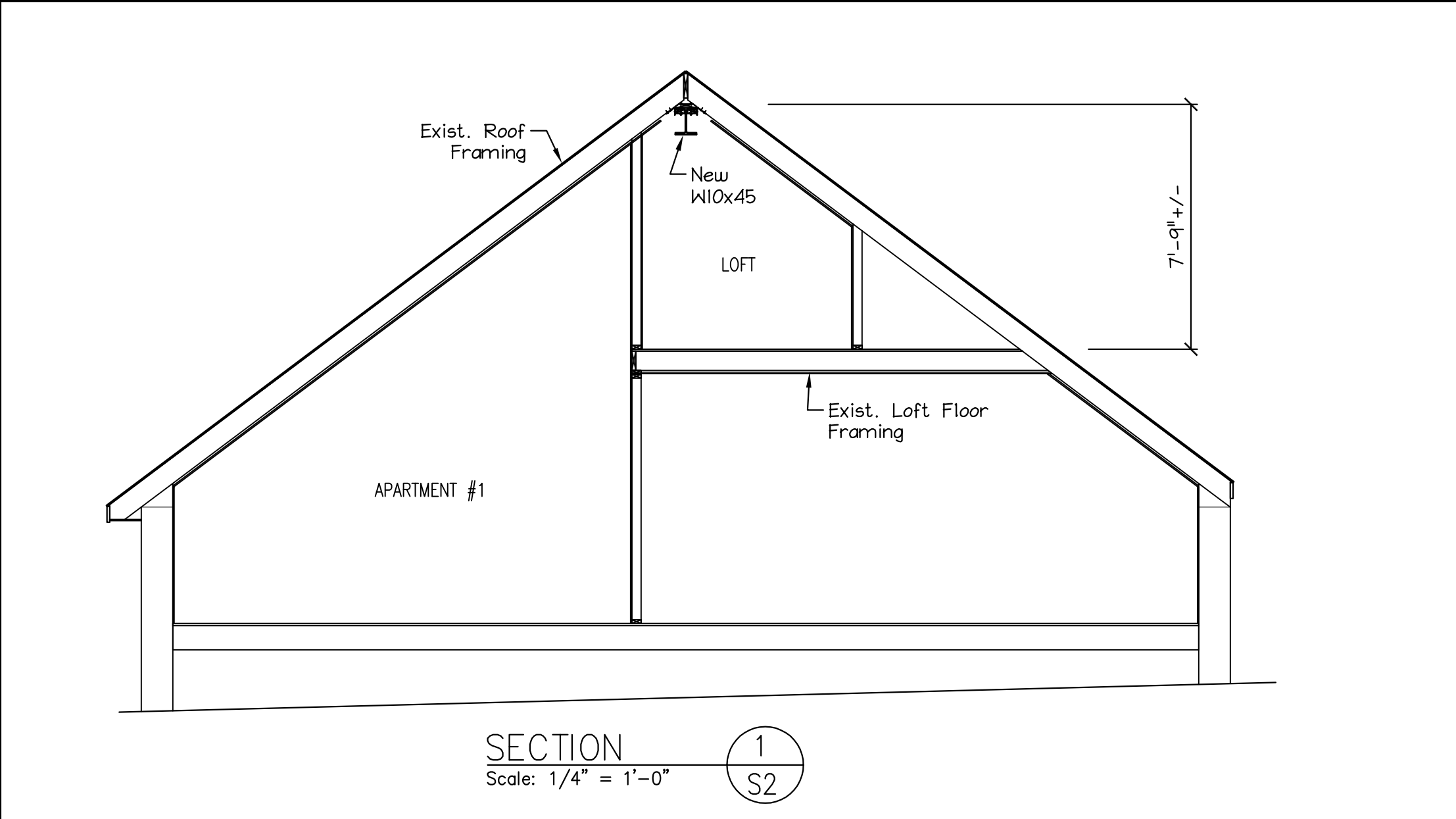


DETAIL B
Scale: 1 1/2" = 1'-0"
S3

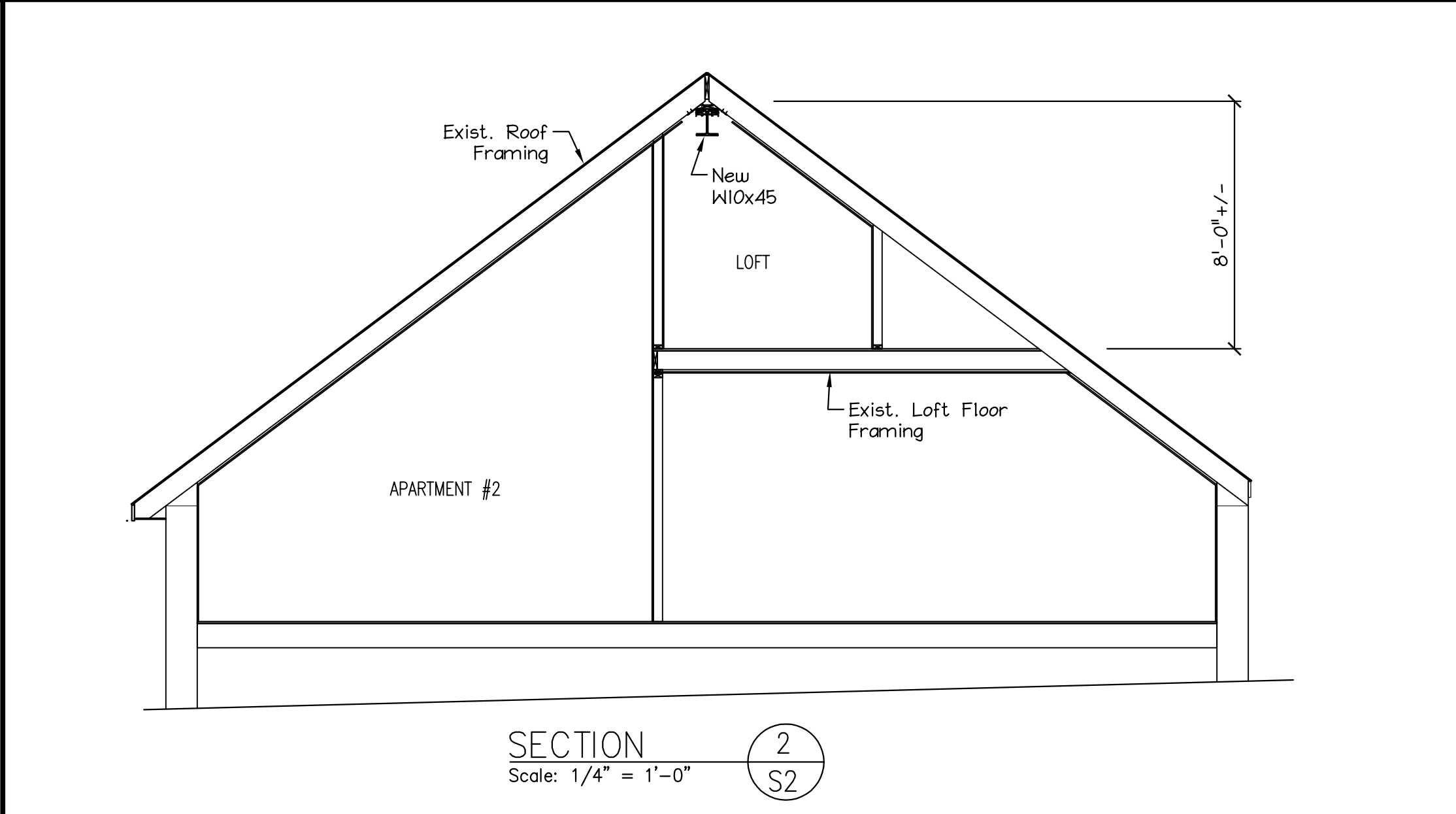


DETAIL C
Scale: 1 1/2" = 1'-0"
S3

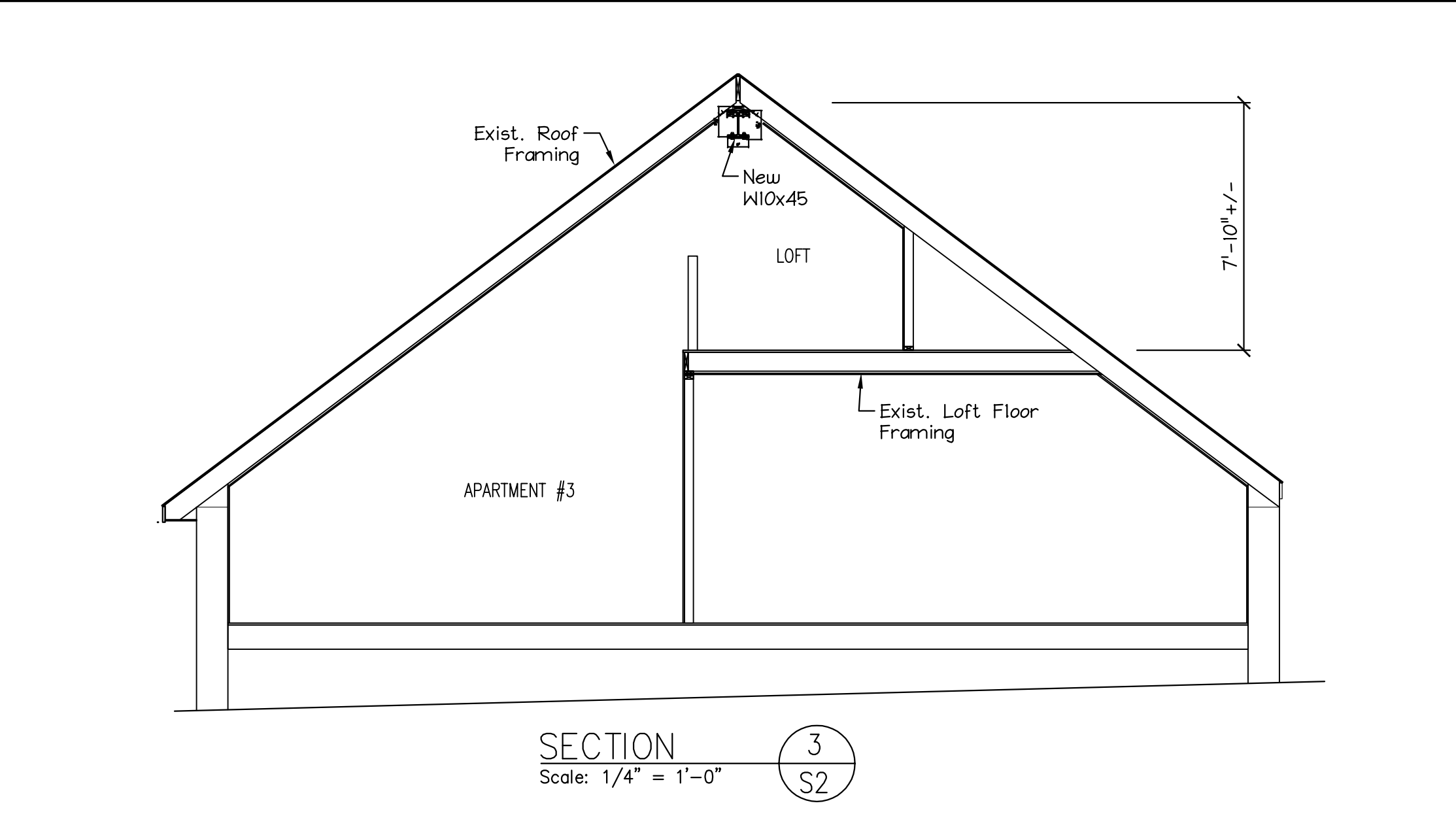
Reviewed for Code Compliance
Permitting and Inspections Department
Approved with Conditions
06/28/2018



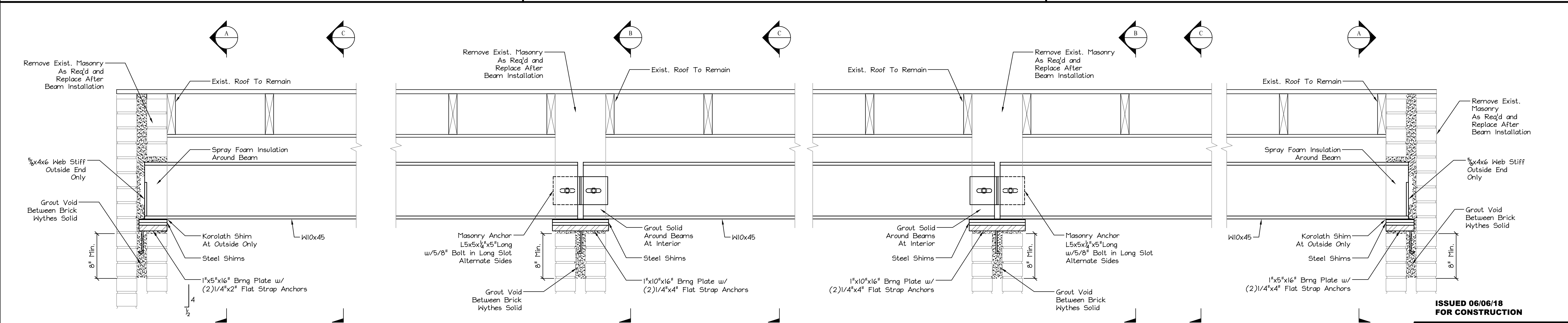
SECTION 1
Scale: 1/4" = 1'-0"
S2



SECTION 2
Scale: 1/4" = 1'-0"
S2

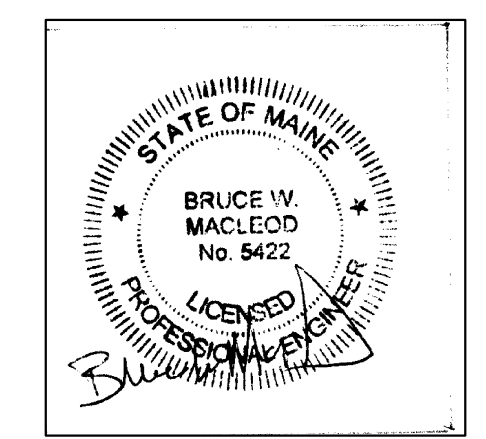


SECTION 3
Scale: 1/4" = 1'-0"
S2



LONGITUDINAL SECTION
Not To Scale

CONSTRUCTION NOTE:
CONTRACTOR TO VERIFY GRADE AND ALL DIMENSIONS IN FIELD BEFORE CONSTRUCTION. DESIGN SHOWN MAY DIFFER FROM ACTUAL FINISHED CONSTRUCTION. FINAL FINISH MATERIALS TO BE DETERMINED PER OWNER/CONT. OR LOCAL CODES.



ISSUED 06/06/18
FOR CONSTRUCTION

MacLeod
Structural Engineers, PA
404 Main Street Gorham, Maine 04038 207.839.0980

Pettengill Row Condominiums
Portland, Maine

Roof Structural Upgrade

TITLE: SECTIONS

DATE: 09/15/11 DRAWN BY: BIM DRAWING NUMBER: S-3
SCALE: as noted PROJ NO: 2011-220



Reviewed for Code Compliance
 Permitting and Inspections Department
 Approved with Conditions

06/28/2018

GENERAL NOTES:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
2. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
3. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE STRUCTURE AND PERSONNEL DURING ERECTION. THIS INCLUDES THE ADDITION OF THE NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
4. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

MASONRY GENERAL NOTES

1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1.
2. BRICK SHALL COMPLY WITH ASTM C62.
3. GROUT SHALL ASTM C476, TYPE I FINE GROUT. SHRINKAGE COMPENSATING, SLUMP 8" TO 11".
4. MORTAR SHALL BE ASTM C270 TYPE S. PORTLAND CEMENT SHALL BE ASTM C150 TYPE I. MORTAR SHALL NOT BE USED WHERE GROUT IS SPECIFIED.

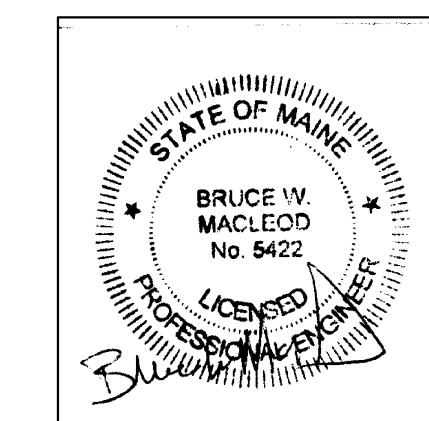
STRUCTURAL STEEL NOTES - GENERAL

1. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL" 9th EDITION.
2. ALL STEEL SHAPES AND PLATES TO BE ASTM A36 UNLESS NOTED OTHERWISE. ALL WF SHAPES TO BE ASTM A527 GR 50
3. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B. STEEL PIPES SHALL BE A53, GRADE B
4. THE DESIGN OF CONNECTIONS NOT SHOWN ON THE DRAWINGS SHALL BE PROVIDED BY THE FABRICATOR. CONNECTIONS SHALL BE DESIGNED FOR THE FORCES SHOWN, OR IF NOT SHOWN, EACH CONNECTION SHALL BE CAPABLE OF SUPPORTING ONE HALF THE TOTAL ALLOWABLE UNIFORM LOAD CAPACITY OF THE MEMBER, PER AISC MANUAL OF STEEL CONSTRUCTION.
5. ALL BOLTED CONNECTIONS SHALL BE MADE WITH 3/4" Ø ASTM A325 HIGH STRENGTH BOLTS.
6. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 - LATEST EDITION. ALL WELDS SHALL BE MADE WITH E70XX ELECTRODES.
7. STEEL BEAMS AND COLUMNS SHALL BE CUT FROM FULL LENGTH STOCK. UNAUTHORIZED SPLICES WILL BE CAUSE FOR REJECTION.
8. STRUCTURAL STEEL SHALL BE PAINTED WITH A SHOP APPLIED COAT OF THE FABRICATOR'S RUST INHIBITIVE PRIMER.
9. SUBMIT COMPLETE STRUCTURAL STEEL SHOP DRAWINGS FOR REVIEW PRIOR TO ANY STEEL FABRICATION.

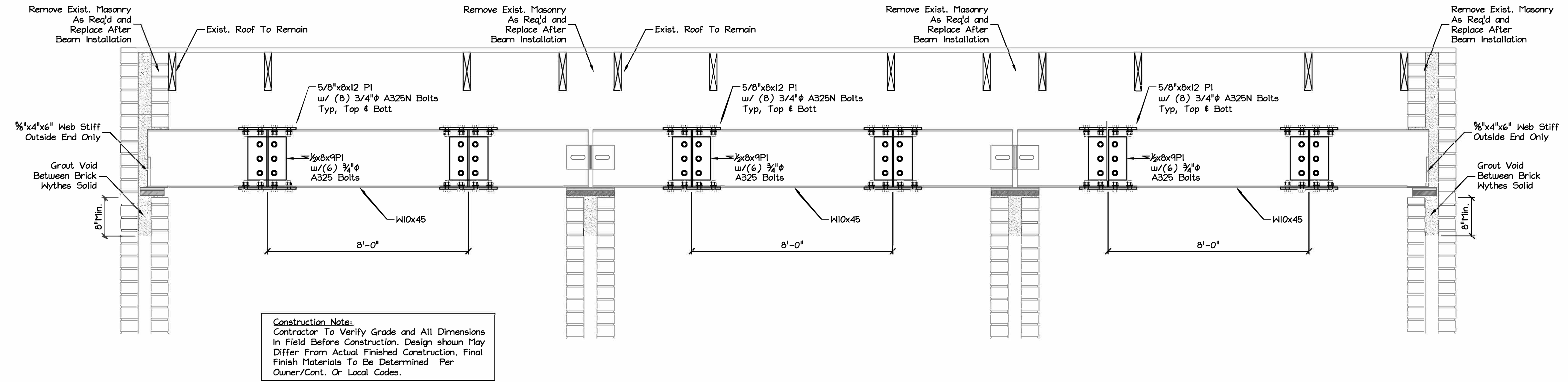
DESIGN NOTES:

1. THIS BUILDING IS DESIGNED TO COMPLY WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE.
2. SNOW LOAD
 - a. GROUND SNOW LOAD = 60 PSF
 - b. FLAT ROOF SNOW LOAD = 42 PSF
 - c. SNOW LOAD IMPORTANCE FACTOR I = 1.0
 - d. SNOW EXPOSURE FACTOR Ce = 1.0
 - e. SNOW THERMAL FACTOR Ct = 1.0
 - f. BALANCE AND UNBALANCED SNOW LOADS IN ACCORDANCE WITH ASCE 7/05
3. WIND LOADS:
 - a. BASIC WIND SPEED V = 100 MPH
 - b. WIND LOAD IMPORTANCE FACTOR I = 1.0
 - c. WIND INTERNAL PRESSURE COEFFICIENT GCPI = ±.18
 - d. EXPOSURE = B
4. ROOF DEAD LOAD
 - a. TOP CHORD = 25.0 PSF
5. EARTHQUAKE LOAD:
 - a. DESIGN OF EARTHQUAKE LOAD IN ACCORDANCE WITH ASCE 7/05
 - b. SEISMIC IMPORTANCE FACTOR I = 1.0
 - c. 0.2s MAPPED SPECTRAL RESPONSE ACCELERATION Sa = 31.7%g
 - d. 1.0s MAPPED SPECTRAL RESPONSE ACCELERATION S1 = 7.7%g
 - e. SITE CLASS = CLASS D.
 - f. SPECTRAL RESPONSE COEFFICIENT SDS = .327
 - g. SPECTRAL RESPONSE COEFFICIENT SD1 = .123
 - h. SEISMIC DESIGN CATEGORY = CATEGORY B
 - i. BASIC SEISMIC FORCE RESISTING SYSTEM: BEARING WALL SYSTEM = ORDINARY PLAIN MASONRY SHEAR WALLS
 - j. RESPONSE MODIFICATION FACTOR R = 1.5
 - k. DEFLECTION AMPLIFICATION FACTOR CD = 1.25
 - l. ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE
 - m. V=0.218W
6. DEFLECTION CRITERIA
 - a. ROOF (LIVE) = L/360
 - b. ROOF (TOTAL) = L/240

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 FOR CONSTRUCTION

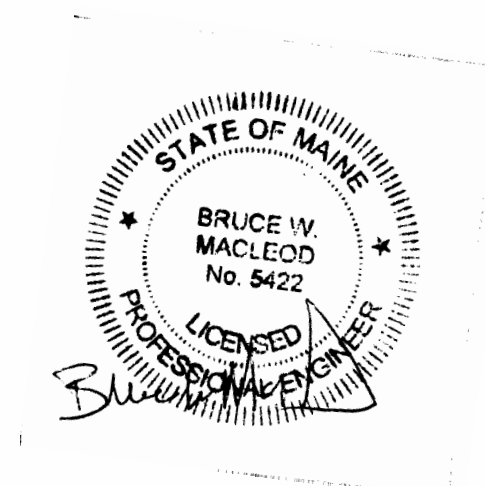


MacLeod Structural Engineers, PA		
404 Main Street Corham, Maine 04038 207.839.0980		
Pettengill Row Condominiums		
Portland, Maine		
Roof Structural Upgrade		
TITLE: NOTES		
DATE: 09/15/11	DRAWN BY: BIM	DRAWING NUMBER:
SCALE: as noted	PROJ NO: 2011-220	S-4

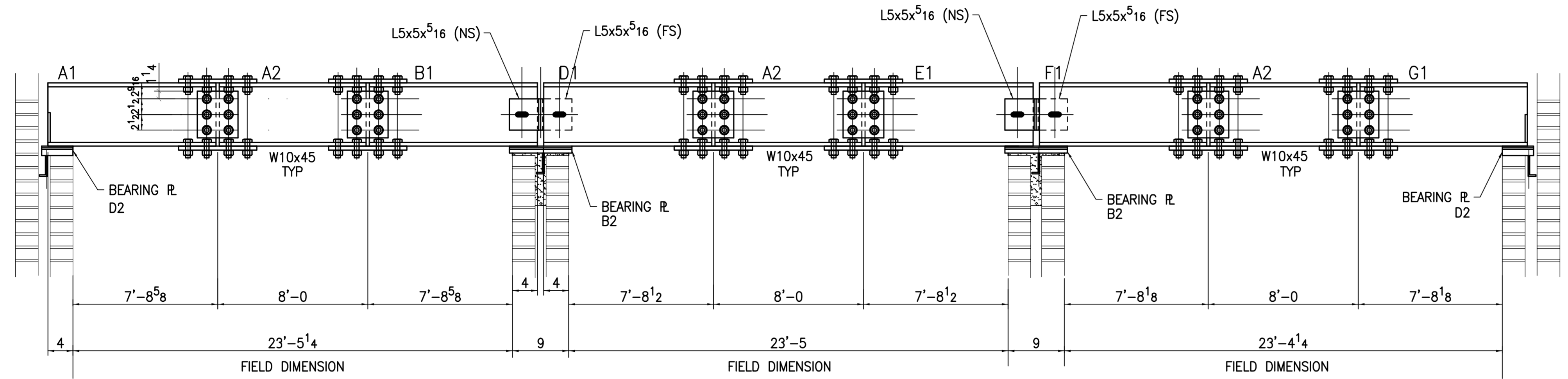


BEAM SPLICE DETAILS
Scale: N.T.S.

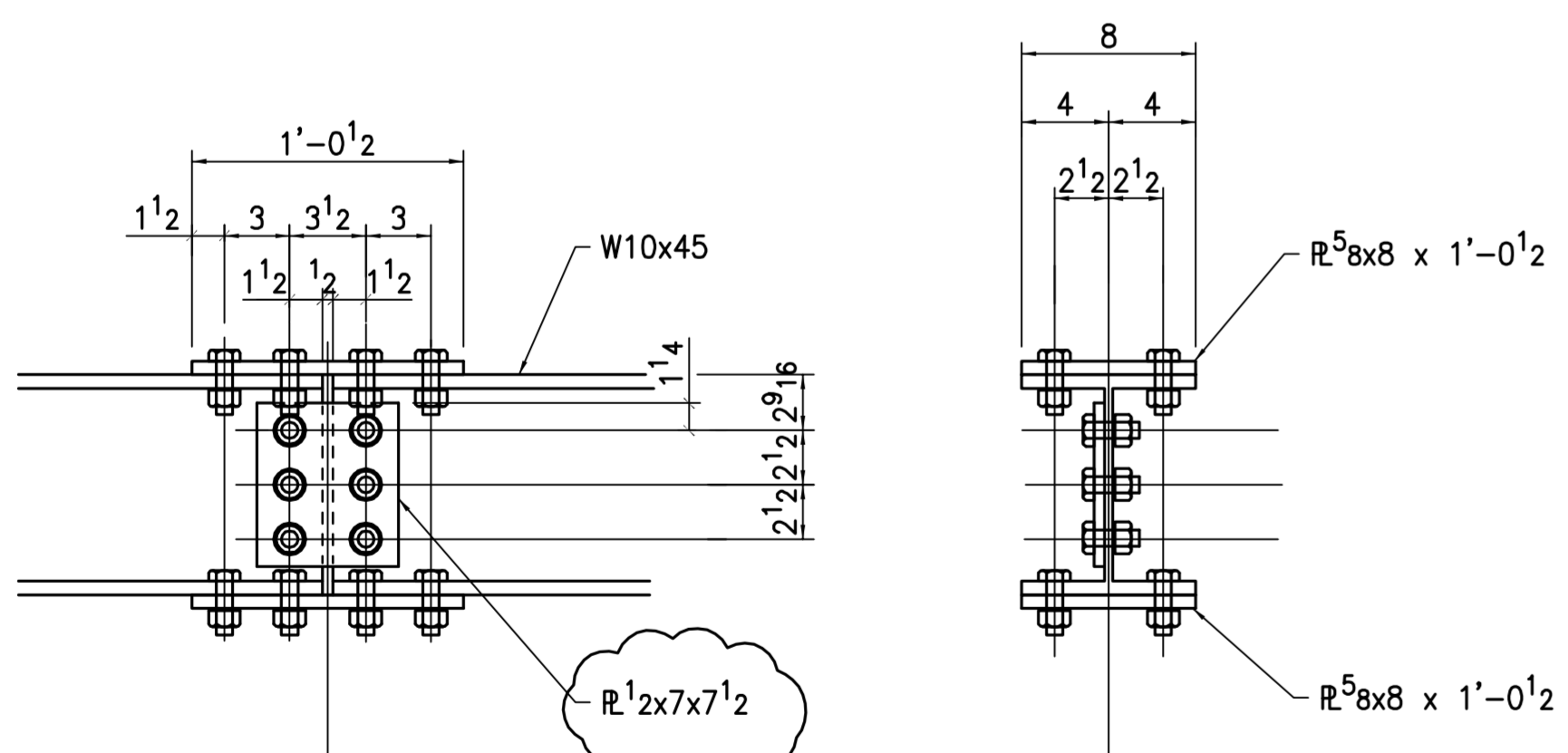
ISSUED 06/06/18
FOR CONSTRUCTION



MacLeod Structural Engineers, PA		
80 Bridge Street, Suite 252, Westbrook, Maine 04092 207.839.0980		
Pettingill Park Condominiums		
Portland, Maine		
TITLE: ROOF BEAM SPLICE DETAIL		
DATE: 06/31/17	DRAWN BY: BIM	DRAWING NUMBER: S-3
SCALE: as noted	PROJ NO: 2017-065	



ELEVATION OF NEW ROOF STRUCTURAL UP GRADE BEAMS



TYPICAL BEAM SPLICE DETAIL

ENGINEER PLEASE NOTE REDUCED PLATE SIZE TO ALLOW FOR K-DISTANCE
 THIS IS ACCEPTABLE

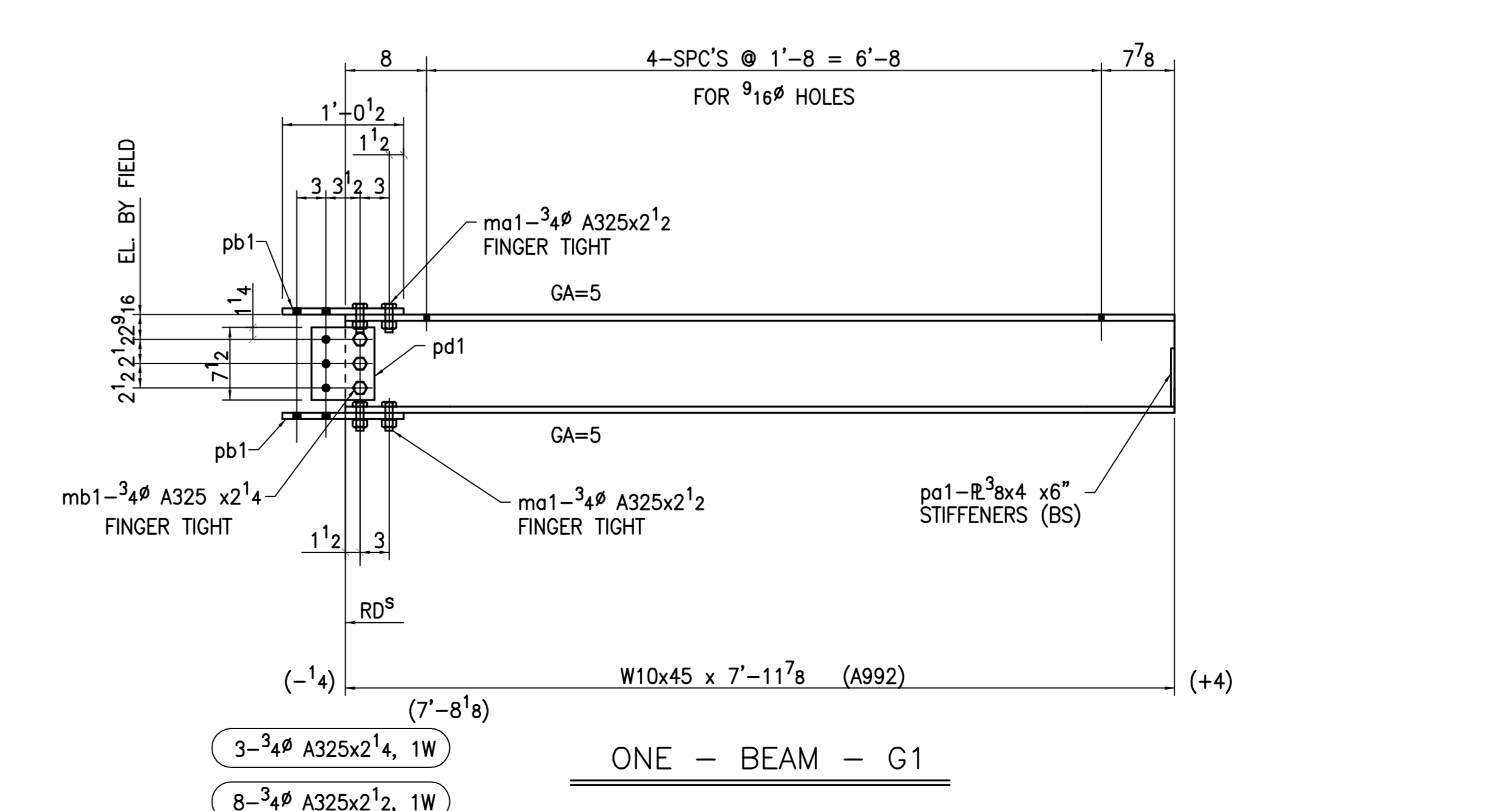
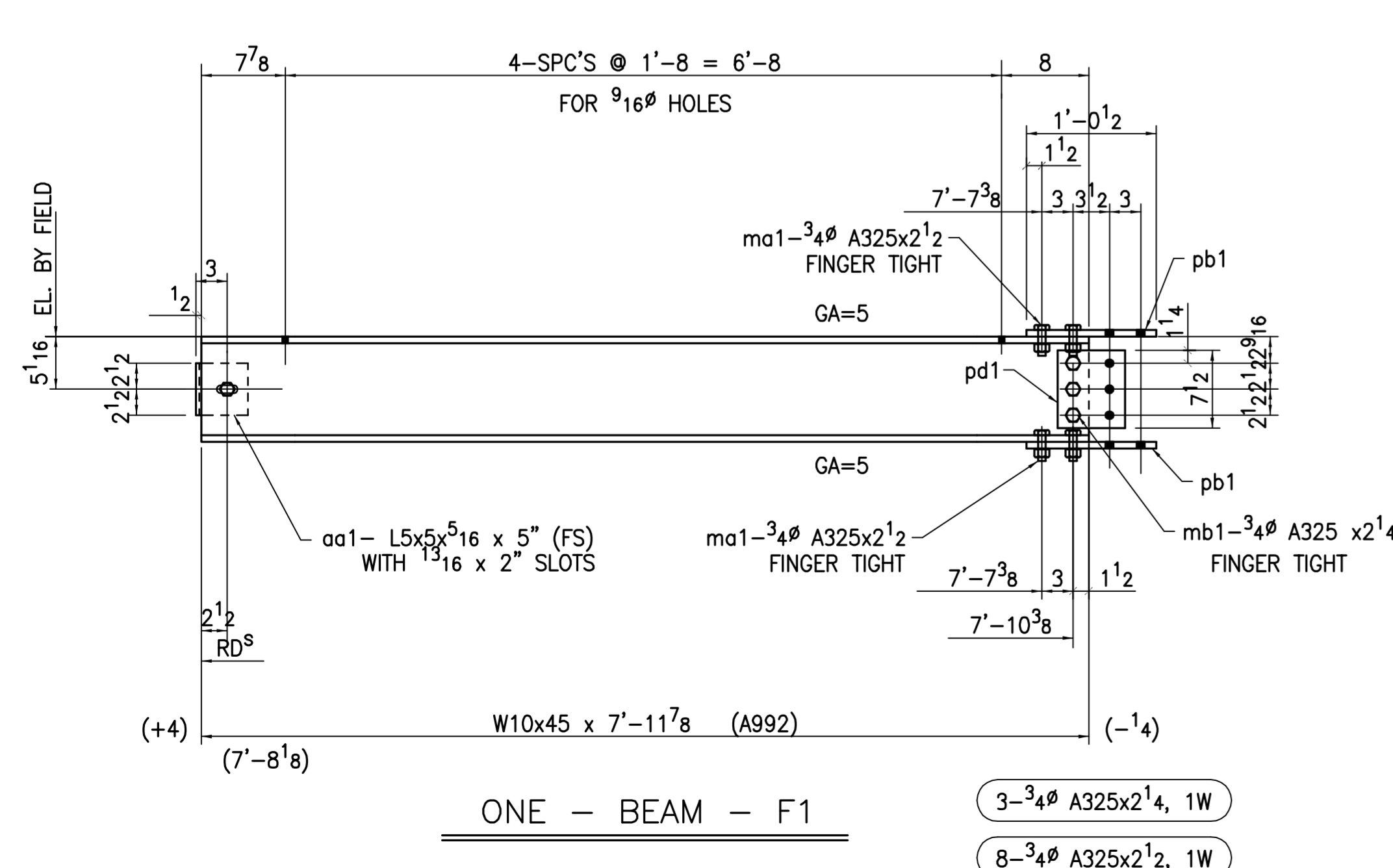
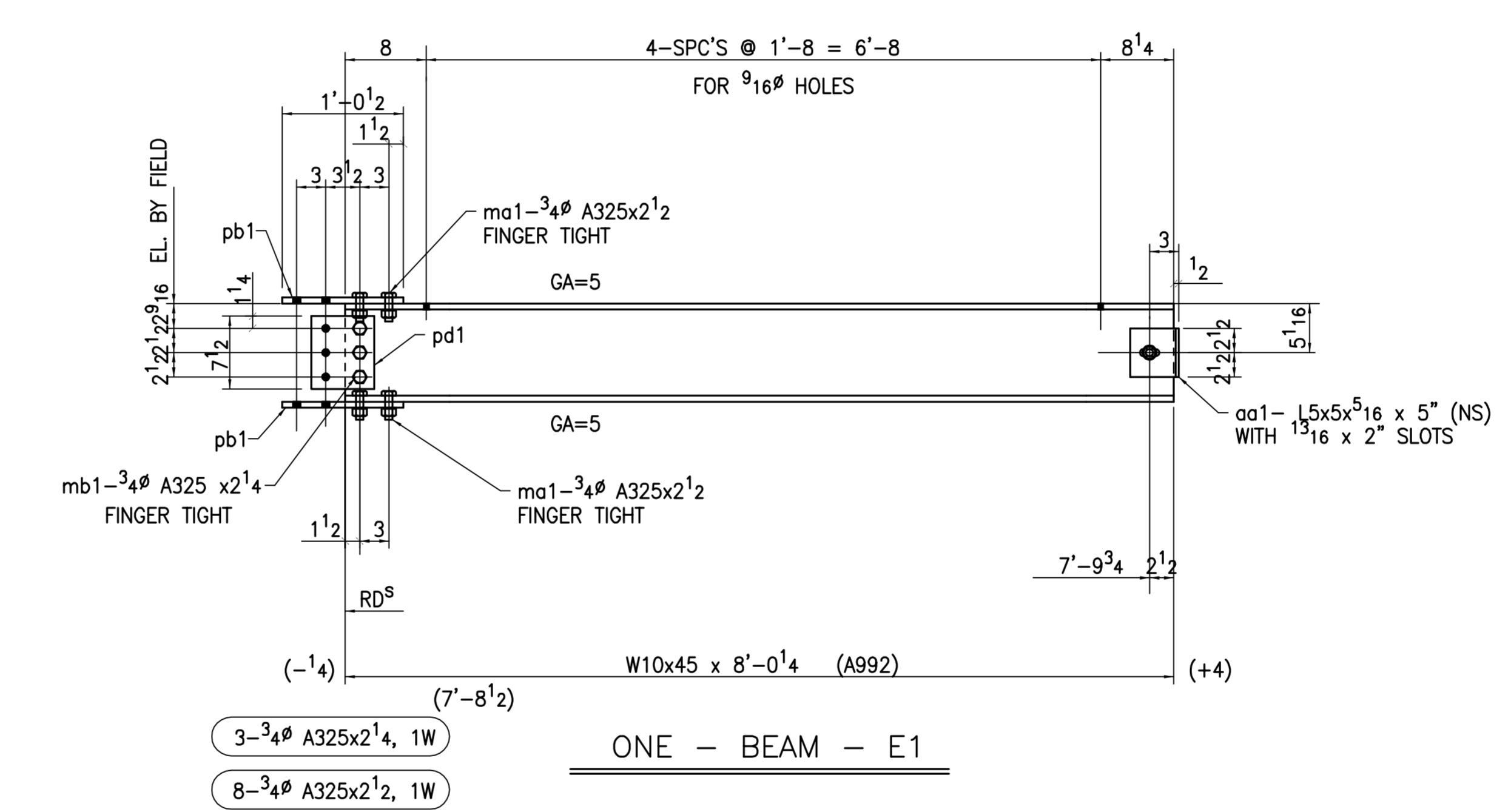
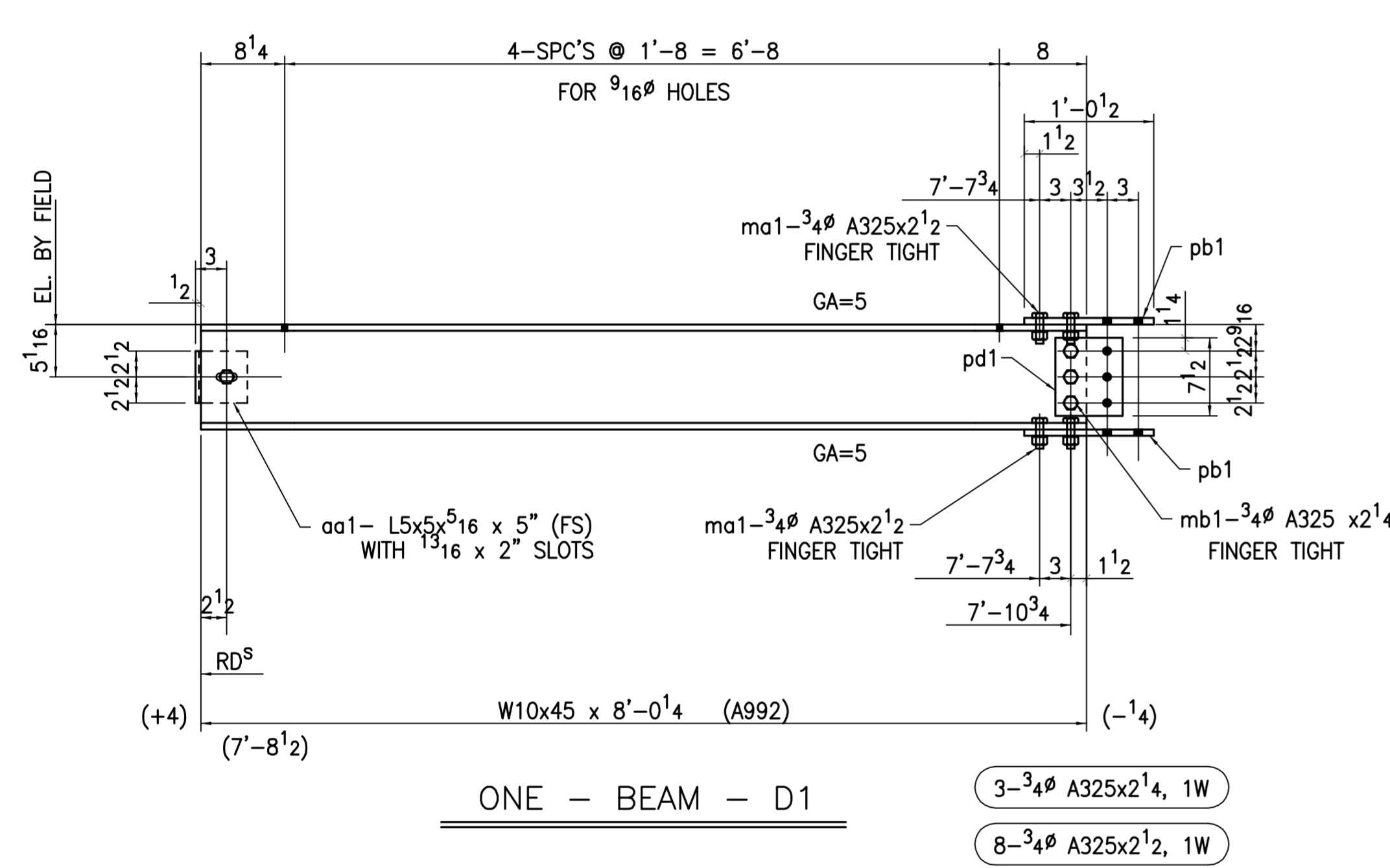
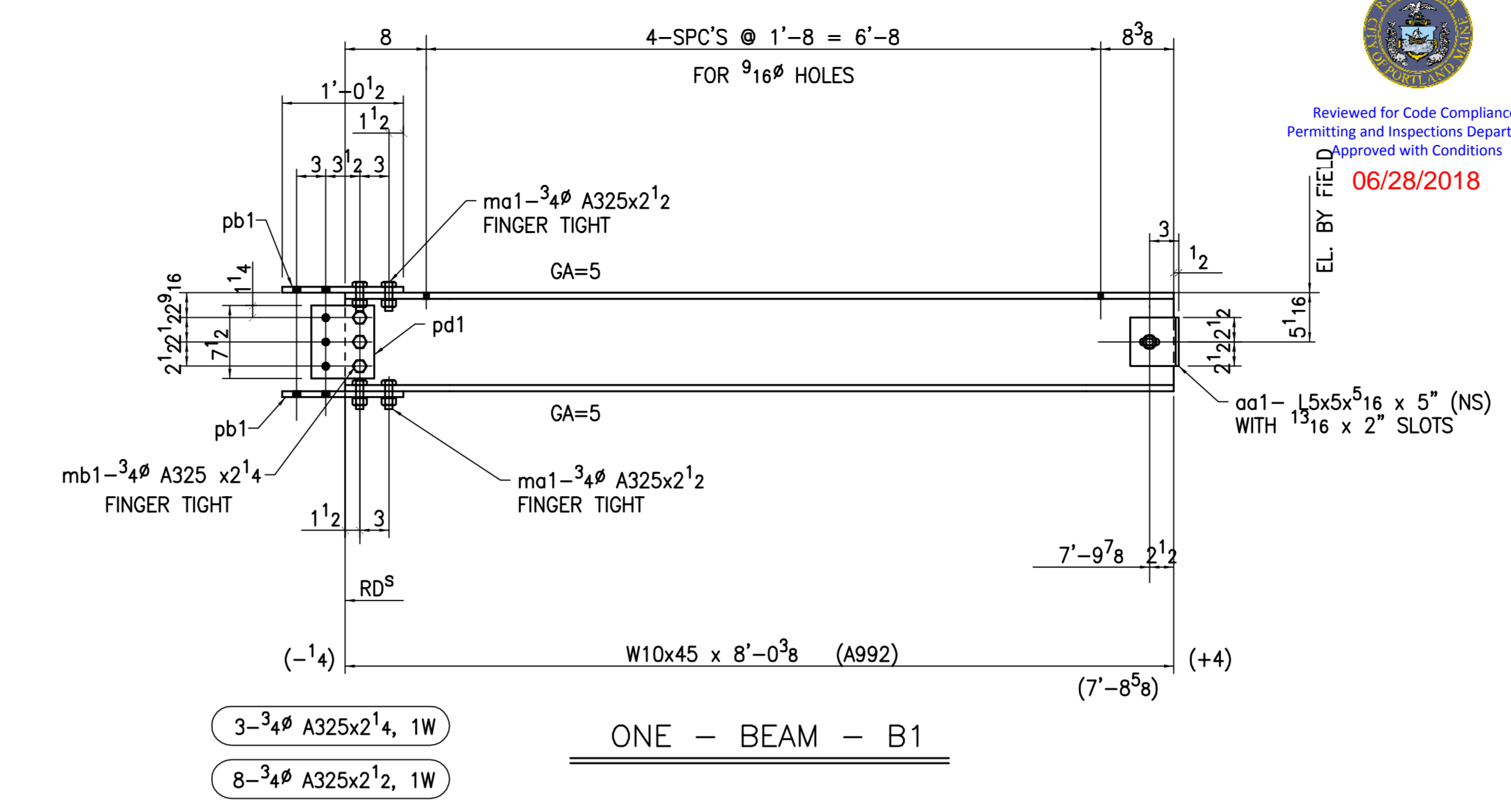
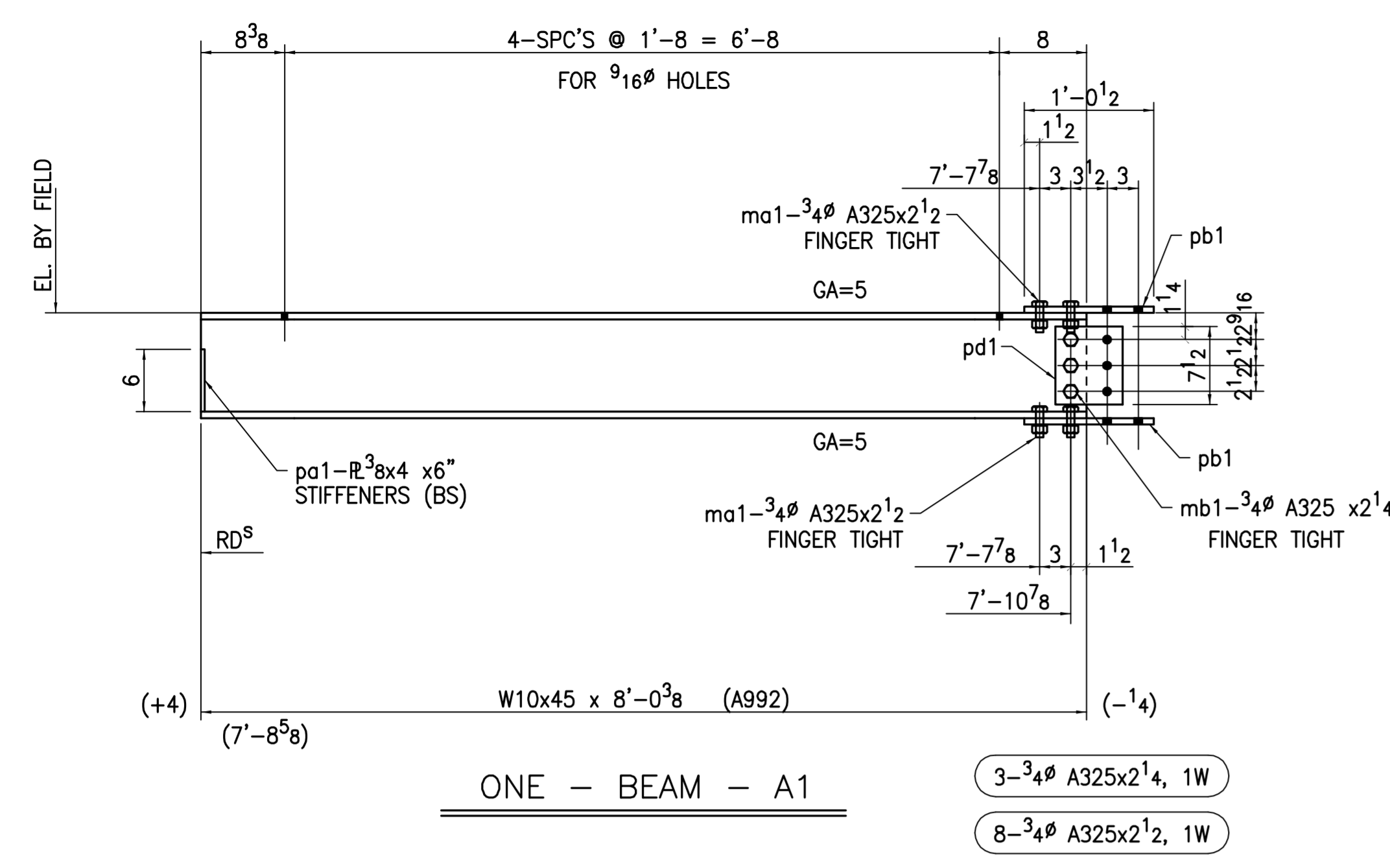
NOTE: ALL BOLTED CONNECTIONS ARE TO BE SLIP CRITICAL
 PREPARE CONNECTION SURFACES FOR SLIP CRITICAL ASSEMBLY . NO PAINT AT BOLTED AREAS PER AISC

ERECTOR NOTE:
 BACK CHARGES FOR REPAIRS OR ALTERATION TO OUR WORK WILL NOT BE ACCEPTED UNLESS APPROVED BY PRECISION WELDING & FABRICATION (207) 854-9330

PRINT RECORD			PRECISION WELDING & FABRICATION, INC.	
DATE	NO	USE	690 STROUDWATER ST. TEL: (207) 854-9330	
3-18-18	EM	O.F.A.	P.O. BOX 880 FAX: (207) 854-9694	
			WESTBROOK, MAINE 04098-880 WEB: precisionwelding.net	
			TITLE: ROOF STRUCTURAL UPGRADE	
			JOB: PETTINGILL ROW	
			LOCATION: 194 HIGH ST. PORTLAND ,ME	
			CONTRACTOR: ED CARRIGNAN	
			ARCH./ENG'R: MACLEOD STRUCTURAL ENGINEERS	
			DRAWN	DATE
			DATE	CHECKED
			DATE	DATE
			JOB NO. 2774	DWG. NO. E1



Reviewed for Code Compliance
Permitting and Inspections Department
Approved with Conditions
06/28/2018



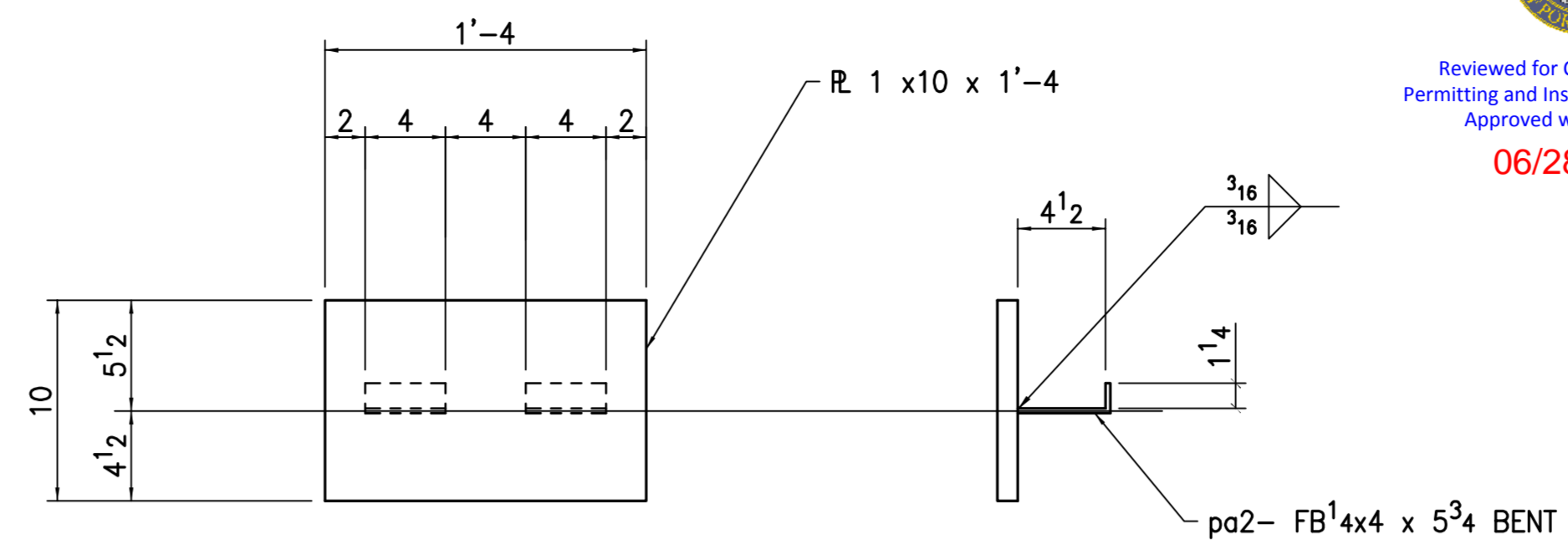
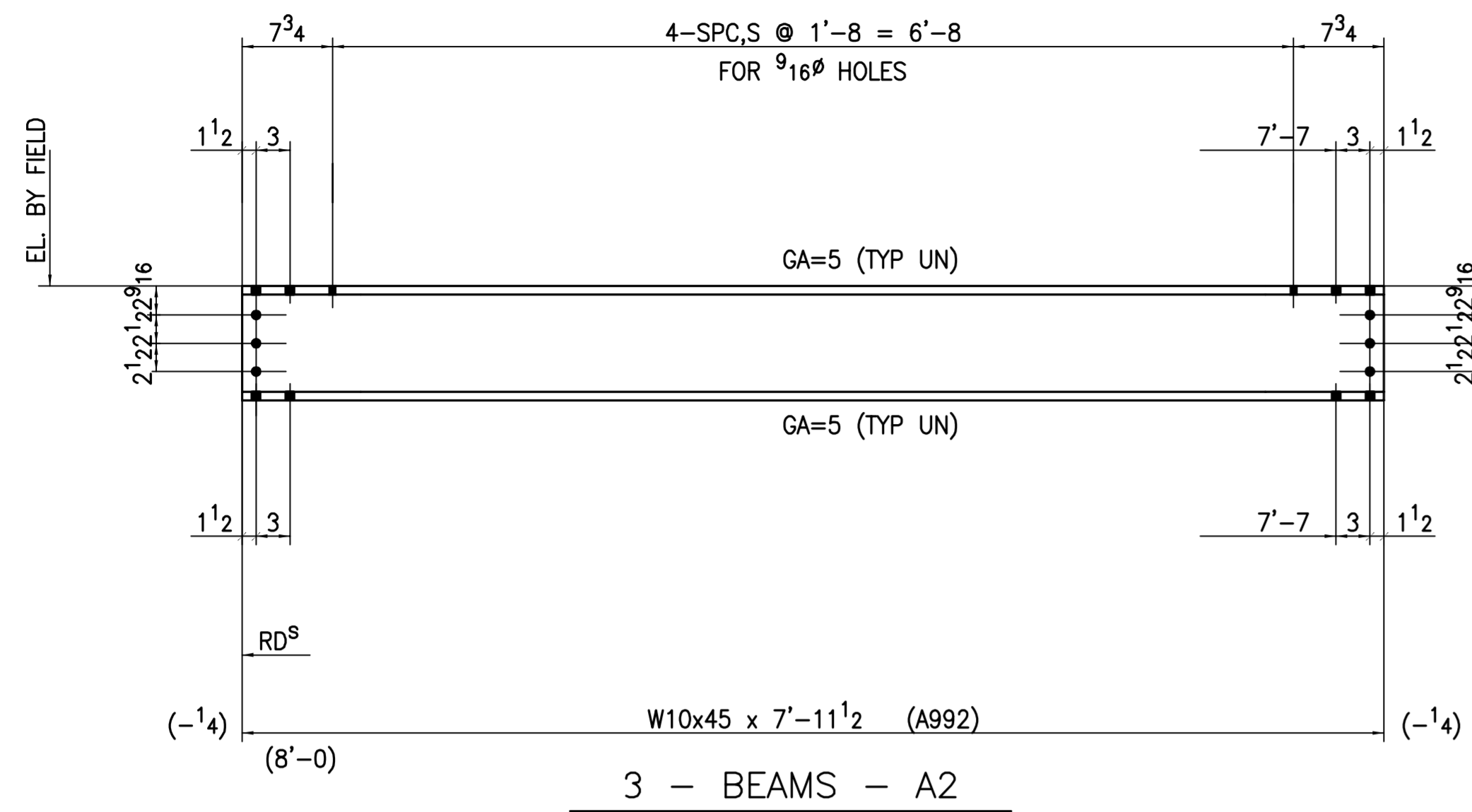
SHIP	BILL OF MATERIAL			JOB NO. 2774	DWG. NO. 1	
MARK	QUAN	MARK	SHAPE	FEET/INCHES	WEIGHT	REMARKS
A1	ONE		W10x45	8 0 3/8	361.41	
	2	pa1	R ³ Bx4	0 6	5.10	
	2	pb1	R ⁵ Bx8	1 0 1/2	35.42	
	ONE	pd1	R ¹ 2x6 ¹ 2	0 7 1/2	6.91	
	8	ma1	3/4 A325	0 2 1/2	5.55	C/W NUT & WA
	3	mb1	3/4 A325	0 2 1/4	1.99	C/W NUT & WA.
B1	ONE		W10x45	8 0 3/8	361.41	
	ONE	aa1	L5x5x ⁵ 16	0 5	4.29	
	2	pb1	R ⁵ Bx8	1 0 1/2	35.42	
	ONE	pd1	R ¹ 2x6 ¹ 2	0 7 1/2	6.91	
	8	ma1	3/4 A325	0 2 1/2	5.55	C/W NUT & WA
	3	mb1	3/4 A325	0 2 1/4	1.99	C/W NUT & WA.
D1	ONE		W10x45	8 0 1/4	360.94	
	ONE	aa1	L5x5x ⁵ 16	0 5	4.29	
	2	pb1	R ⁵ Bx8	1 0 1/2	35.42	
	ONE	pd1	R ¹ 2x6 ¹ 2	0 7 1/2	6.91	
	8	ma1	3/4 A325	0 2 1/2	5.55	C/W NUT & WA
	3	mb1	3/4 A325	0 2 1/4	1.99	C/W NUT & WA.
E1	ONE		W10x45	8 0 1/4	360.94	
	ONE	aa1	L5x5x ⁵ 16	0 5	4.29	
	2	pb1	R ⁵ Bx8	1 0 1/2	35.42	
	ONE	pd1	R ¹ 2x6 ¹ 2	0 7 1/2	6.91	
	8	ma1	3/4 A325	0 2 1/2	5.55	C/W NUT & WA
	3	mb1	3/4 A325	0 2 1/4	1.99	C/W NUT & WA.
F1	ONE		W10x45	7 11 7/8	359.53	
	ONE	aa1	L5x5x ⁵ 16	0 5	4.29	
	2	pb1	R ⁵ Bx8	1 0 1/2	35.42	
	ONE	pd1	R ¹ 2x6 ¹ 2	0 7 1/2	6.91	
	8	ma1	3/4 A325	0 2 1/2	5.55	C/W NUT & WA
	3	mb1	3/4 A325	0 2 1/4	1.99	C/W NUT & WA.
G1	ONE		W10x45	7 11 7/8	359.53	
	2	pa1	R ³ Bx4	0 6	5.10	
	2	pb1	R ⁵ Bx8	1 0 1/2	35.42	
	ONE	pd1	R ¹ 2x6 ¹ 2	0 7 1/2	6.91	
	8	ma1	3/4 A325	0 2 1/2	5.55	C/W NUT & WA
	3	mb1	3/4 A325	0 2 1/4	1.99	C/W NUT & WA.

STEEL: A36 TYP (UNO) SURFACE PREP: SSPC-SP3
 HOLES: 1 3/16 TYP (UNO) PAINT: 1-SHOP COAT SHERWIN WILLIAMS
 WELDS: E70xx RED PRIMER
 FIELD CONN: 3/4 A325 TYP (UNO) REF. DWGS:

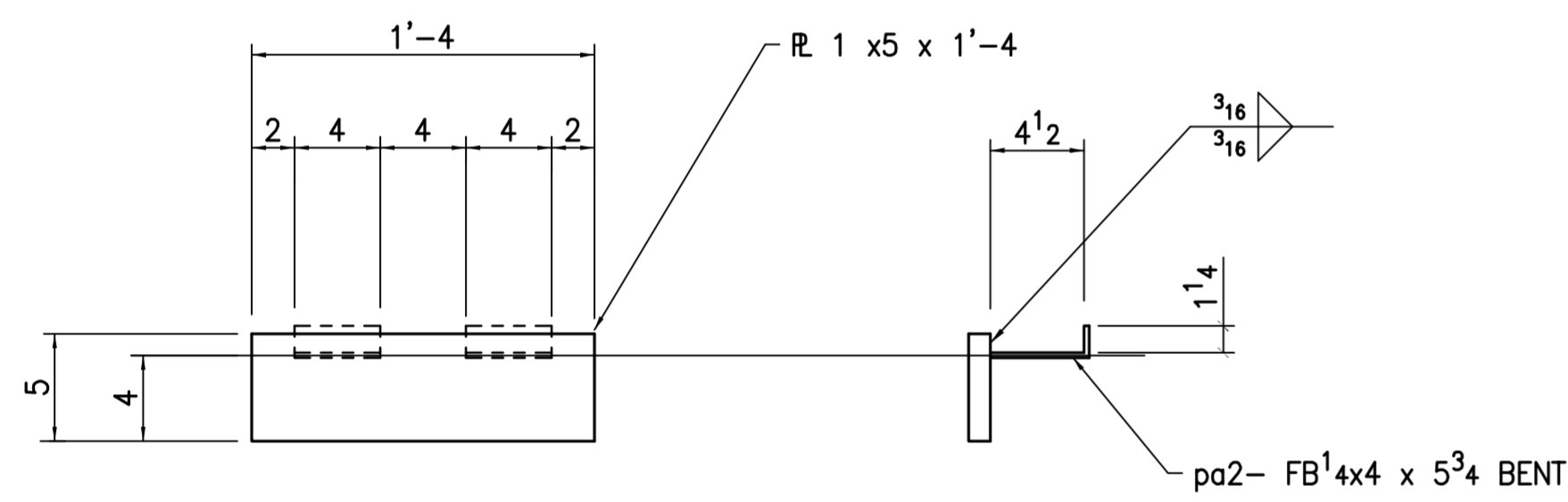
PRECISION WELDING & FABRICATION, INC.
 690 STROUDWATER ST. TEL: (207) 854-9330
 P.O. BOX 880 FAX: (207) 854-9694
 WESTBROOK, MAINE 04098-880 WEB: precisionwelding.net

TITLE: NEW HIGH ROOF BEAMS
 JOB: PETTINGILL ROW
 LOCATION: 194 HIGH ST. PORTLAND, MAINE
 CONTRACTOR: ED CARRIGAN
 ARCH./ENG'R: MACLEOD STRUCTURAL ENGINEERS
 DRAWN DATE CHECKED DATE
 PFS 3-17-18

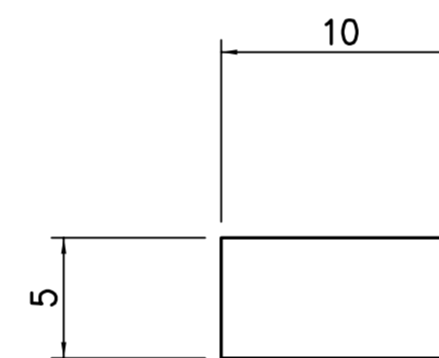
JOB NO. 2774 DWG. NO. 1



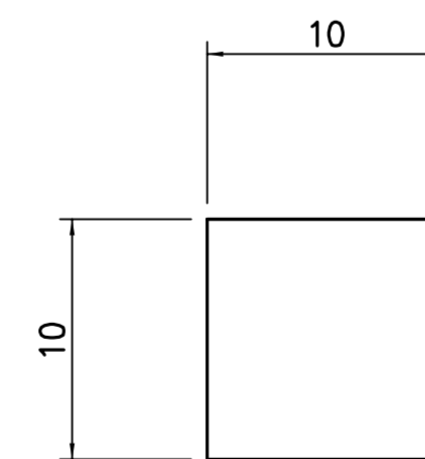
2 - BEARING PLATES - B2



2 - BEARING PLATES - D2



- 2- R 3/8 SHIM PLATES
- 2- R 1/4 SHIM PLATES
- 4- R 1/8 SHIM PLATES



- 2- R 3/8 SHIM PLATES
- 2- R 1/4 SHIM PLATES
- 4- R 1/8 SHIM PLATES



Reviewed for Code Compliance
Permitting and Inspections Department
Approved with Conditions
06/28/2018

SHIP		BILL OF MATERIAL			JOB NO. 2774	DWG. NO. 2
MARK	QUAN	MARK	SHAPE	FEET/INCHES	WEIGHT	REMARKS
1						
2						
3						
4	A2	3	W10x45	7 11 1/2	1074.38	
5						
6						
7						
8	B2	2	R 1 x 10	1 4	90.67	A36
9		4	pa2	R 1/4x4	0 5 3/4	6.52 BENT
10						
11						
12						
13	D2	2	R 1 x 5	1 4	45.33	A36
14		4	pa2	R 1/4x4	0 5 3/4	6.52 BENT
15						
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STEEL: A36 TYP (UNO) SURFACE PREP: SSPC-SP3
 HOLES: 13/16" TYP (UNO) PAINT: 1-SHOP COAT SHERWIN WILLIAMS RED PRIMER
 WELDS: E70xx
 FIELD CONN: 3/4" A325 TYP (UNO) REF. DWGS:

PRINT RECORD
 DATE NO USE
 3-18-18 EM O.F.A.

PRECISION WELDING & FABRICATION, INC.
 690 STROUDWATER ST. TEL: (207) 854-9330
 P.O. BOX 880 FAX: (207) 854-9694
 WESTBROOK, MAINE 04098-880 WEB: precisionwelding.net

TITLE: BEAMS & BEARING PLATES
 JOB: PETTINGILL ROW
 LOCATION: 194 HIGH ST. PORTLAND, MAINE
 CONTRACTOR: ED CARRIGNAN
 ARCH./ENG'R: MACLEOD STRUCTURAL ENGINEERS

REVISIONS
 DATE NO BY

DRAWN DATE CHECKED DATE
 PFS 3-18-18

JOB NO. 2774 DWG. NO. 2