CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

DEVIN D GATES
SUBMITTED BY

057100-008
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

057100
SPECIFICATION SECTION / PARAGRAPH

MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

◯ CRITICAL

ITEM BEING SUBMITTED (check only one)

- ◉ Shop Drawings
- ◯ Samples (_____ copies)
- ◯ LEED Submittal
- ◯ Certification / Qualifications
- ◯ Record Documents
- ◯ Product Data
- ◯ Coordination Drawing
- ◯ Calculations
- ◯ Schedules
- ◯ O&M Manuals
- ◯ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action ◯ Information Only ◯ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

DEVIN D GATES — 1/16/16
REVIEWED BY — DATE

To be completed by Reviewer

05 7100-008
CANNON DESIGN SUBMITTAL NUMBER

1/16/17
RECEIVED DATE

- ◯ A. No Exceptions Taken
  No further review of submittal is required.
- ◉ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ◯ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ◯ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ◯ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ◯ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ◯ See attached sheet(s) for additional comments

1. See comments

2. Revise/Resubmit wood paneling sheets only for review (All other sheets Make Corrections Noted, no resubmittal required).

3. Verify wood railing size and glazing thickness with delegated design engineer. If changed from dimensions shown in these shop drawings, please submit documentation that no changes to the details occur as a result from any such modification.

4. Previously sent sketch details included on page 3 for reference with modification shown for landing structure thickness

Kelvin Patel — Digitally signed by Kelvin Patel DN: C=US, E=kpatel@cannondesign.com, O=Cannon Design, OU=Architect, CN=Kelvin Patel Date: 2017.02.09 11:09:54-06'00' — 2/9/17
REVIEWED BY — DATE

LaSalle Iron Works, Inc.

Steel Fabricators

3110 LaSalle Street 314-771-5350 fax 314-771-5352 St. Louis, MO 63104

To: Atlas Iron Works

Date: December 19, 2016

Attn: Guy Don Carlos

Contract #27072
Job: Webster U ISB

Subject: Stair 1 Submittal

Sheet #	No. of Prints	For	Description
E100 – E102	pdf	Review & Approval	Erection
100 – 106	pdf	Review & Approval	Details
	pdf	Review	Signed and sealed Calculations
D1	pdf	Review & Approval	Load & Deflection Criteria

Remarks: Please note and respond to all questions and verifies. Failure to respond will delay fabrication.

NOTE: Present details for A103 (2), A104 (1), & A102 (2) limit the deflection to l/360. To decrease the center point deflection to 3/8", ADD: $8,305.00.

confirm ALL dead loads are accounted for (cannot confirm wood panel load is included)

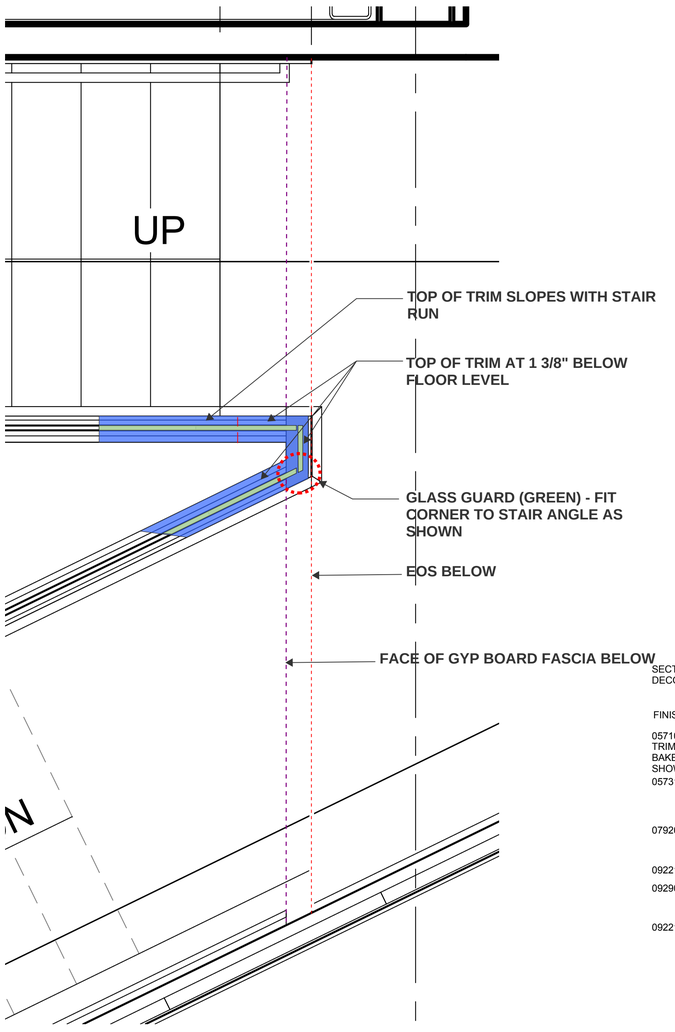
NOTE: Rail suppliers, verify the supports meet their code requirements for loading. Our engineering applies only to dead loads!

DMA - please verify both items!

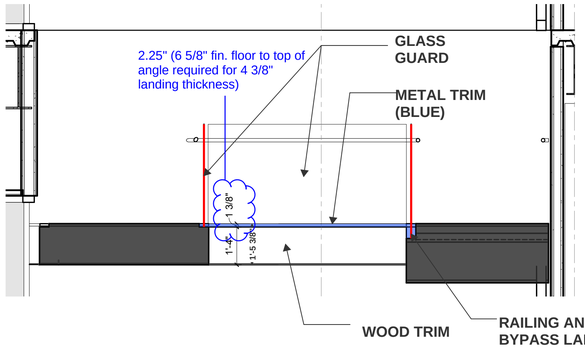
these are delegated design items, delegated design engineer is responsible for these items (not DMA)

LaSalle Iron Works

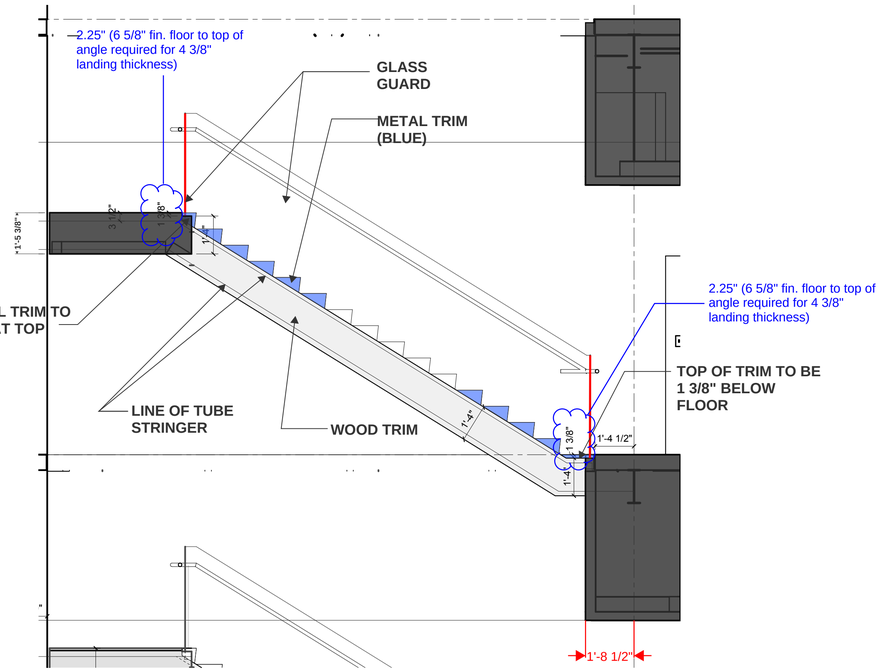
By: Jim Randant



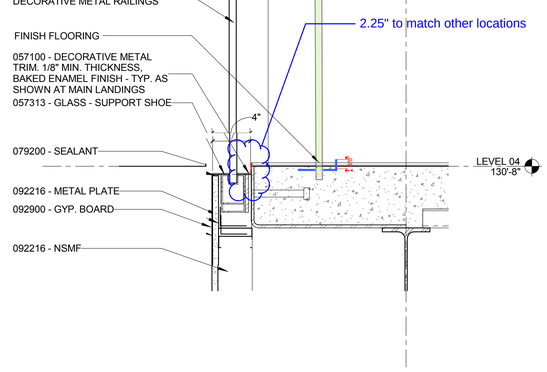
PLAN DETAIL AT FLOOR LEVEL LANDING



ELEVATION AT FACE OF WEST LANDING

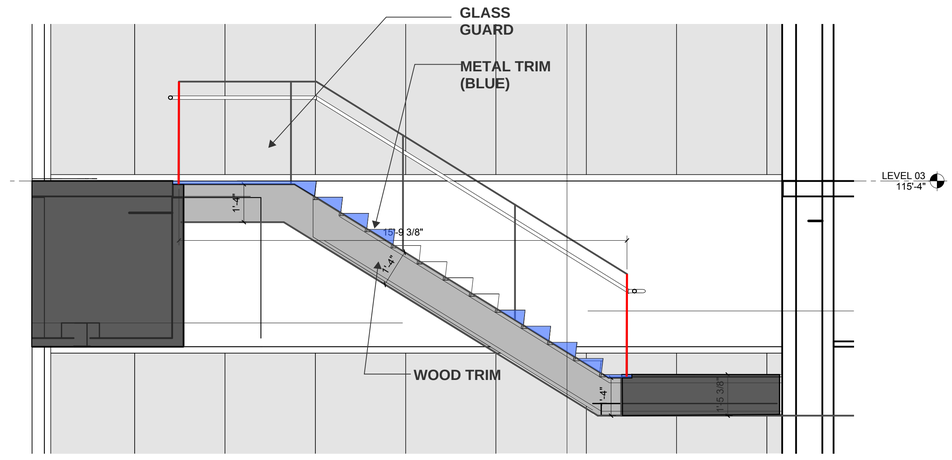


ELEVATION AT FACE NORTH STAIR RUN



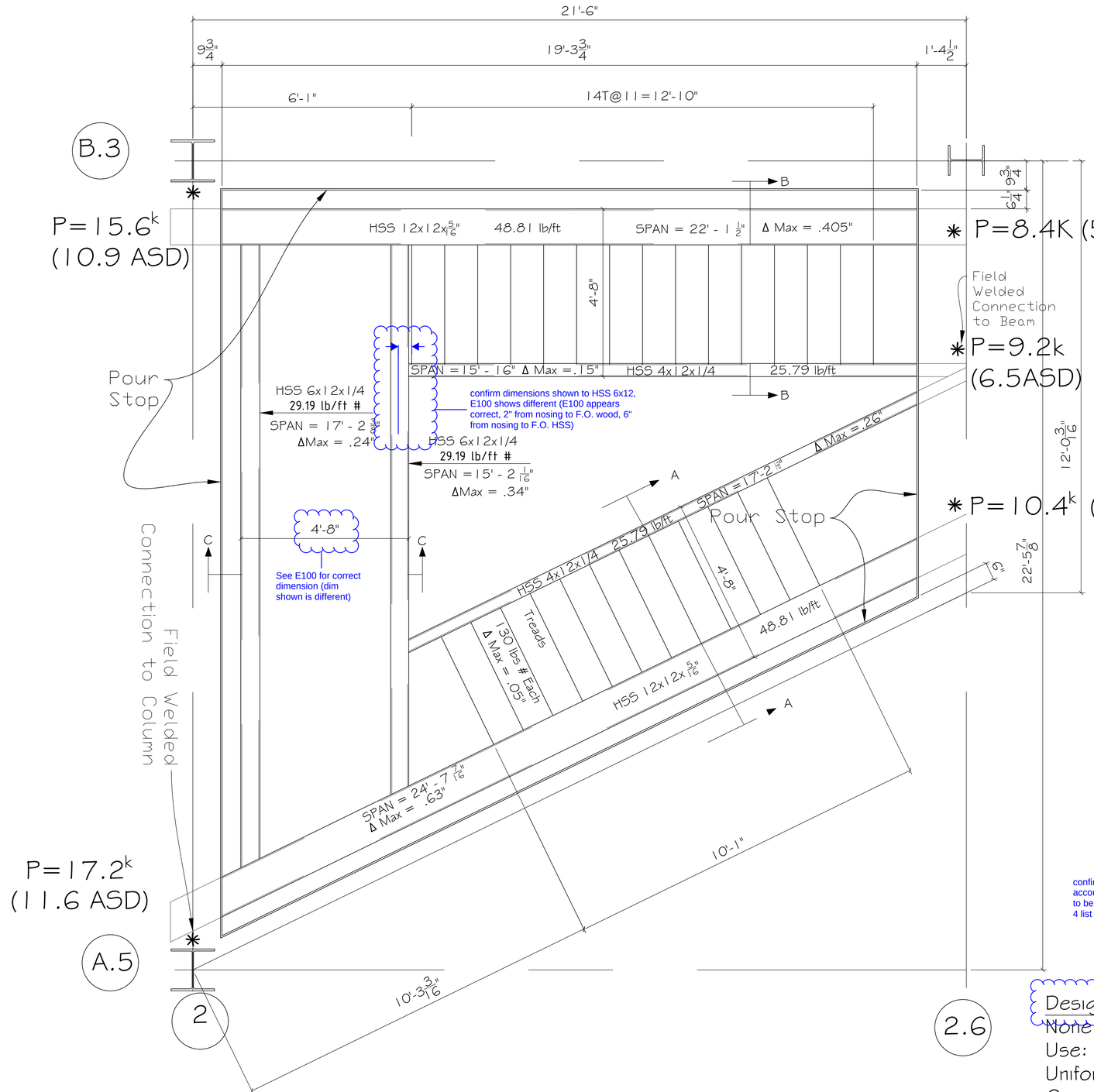
5 STAIR 1 ENLARGED SECTION
1 1/2" = 1'-0"

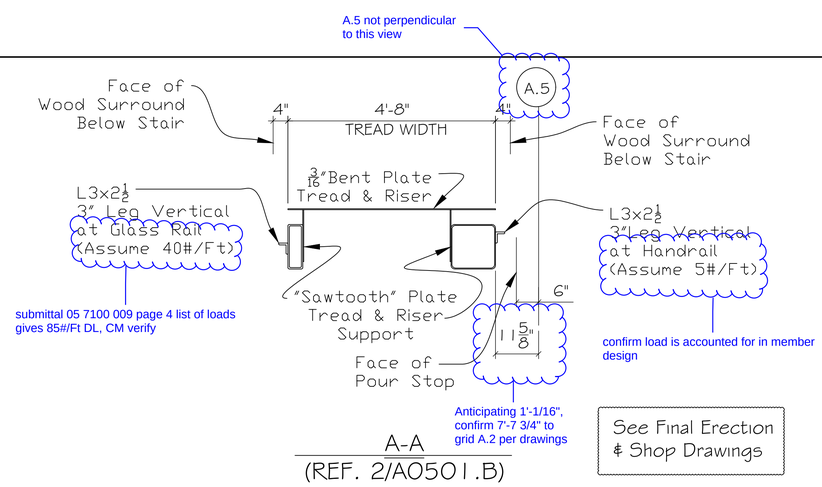
RAILING DETAIL AT FLOOR LEVEL LANDING -

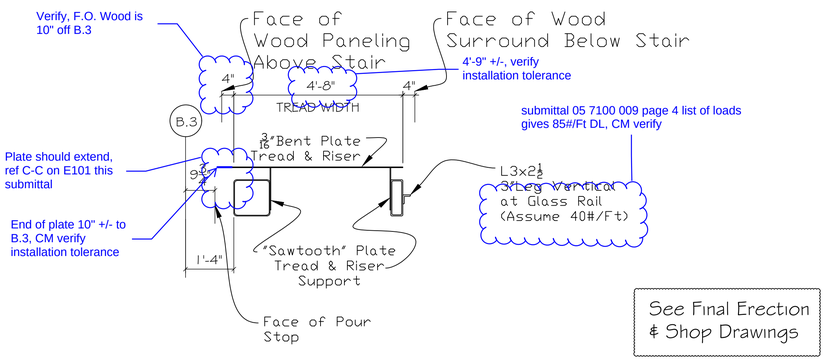


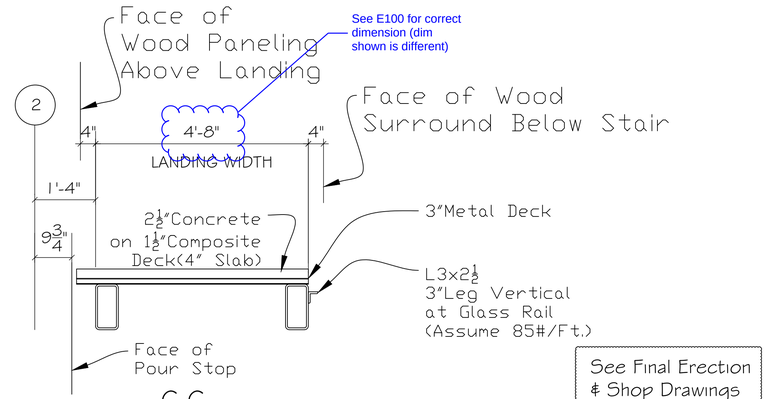
ELEVATION AT FACE SOUTH STAIR RUN

SUPPLEMENTAL ELEVATIONS AND DETAILS STAIR 1
WEBSTER UNIVERSITY ISB
CANNON DESIGN









confirm that 3.5lb/ft wood panel dead load is accounted for in stair design (does not appear to be included in submittal 05 7100 009 page 4 list of loads)

Design Criteria:
None Specified (Spec. Sect. 057100)
Use:
Uniform Load: 100# Sq. Ft.
Concentrated Load" 300# on 4" x 4"
(Uniform & Concentrated Load
Not Concurrent)
Maximum Deflection: L/360

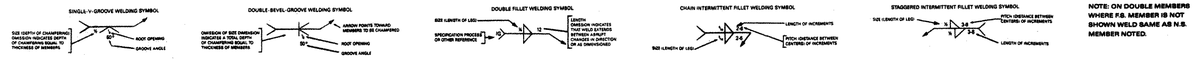
Glass Rail Load: 85#/ft.

REFERENCE DRWG. / LOCATION					FIELD				
	2	12/16	Rev. ENGR. CALC'S		SHOP				
MATERIAL (UNLESS NOTED)	1	9/23	ENGR. CALC'S		APPROVAL	PDF	12/19		
	REV.	DATE	DESCRIPTION		PRINTS	NO.	DATE	NO.	DATE
SURFACE PREPARATION	LaSalle Iron Works, Inc. 3110 LaSalle St. St. Louis, MO								
SHOP PAINT	JOB Webster University								
SHOP CONNECTIONS/ELECTRODES	LOCATION								
	CUSTOMER Atlas Iron								
	DRWG. COVERS Stairs #1								
FIELD CONNECTIONS / HOLES (U.N.)	DETAILER SCP DATE 09-15-16			JOB NO. 27072		DRWG. NO. D1			
	CHECKER DATE								
	IN CHARGE OF								

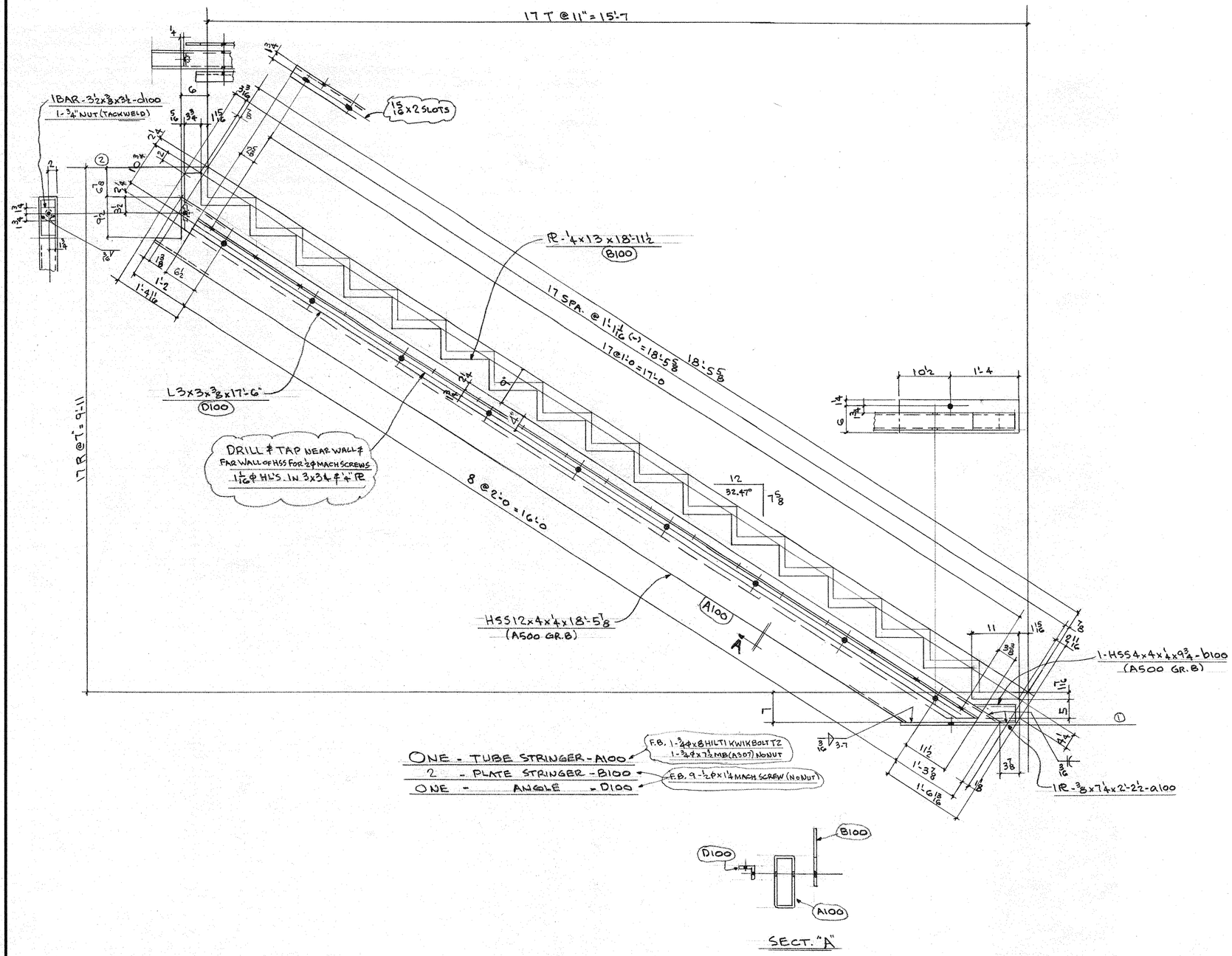
a b d e f g h k m n p t v w

A B D E F G H K M N P T V W

WELDING SYMBOLS



NOTE: ON DOUBLE MEMBERS WHERE F.B. MEMBER IS NOT SHOWN WELD SAME AS N.S. MEMBER NOTED.



REF: E100

NOT APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
		REVISIONS

LA SALLE IRON WORKS, INC.
SINCE 1921
3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE	WEBSTER UNIVERSITY		
LOCATION	WEBSTER GROVES, MO. 63119		
DESCRIPTION	STRINGER		
CUSTOMER	ATLAS IRON		
DRN. BY	RL	CHK'D. BY	CONT. 27027
APP. SENT	12/19	APP. REC'D	SHEET 100
APP. SENT		APP. REC'D.	
HOLES	13/16 ø UN		
PAINT	CLEAN PER SSPC SP1, 2, 3 PAINT SHOP COAT STD. PRIMER		
REMARKS			
A			

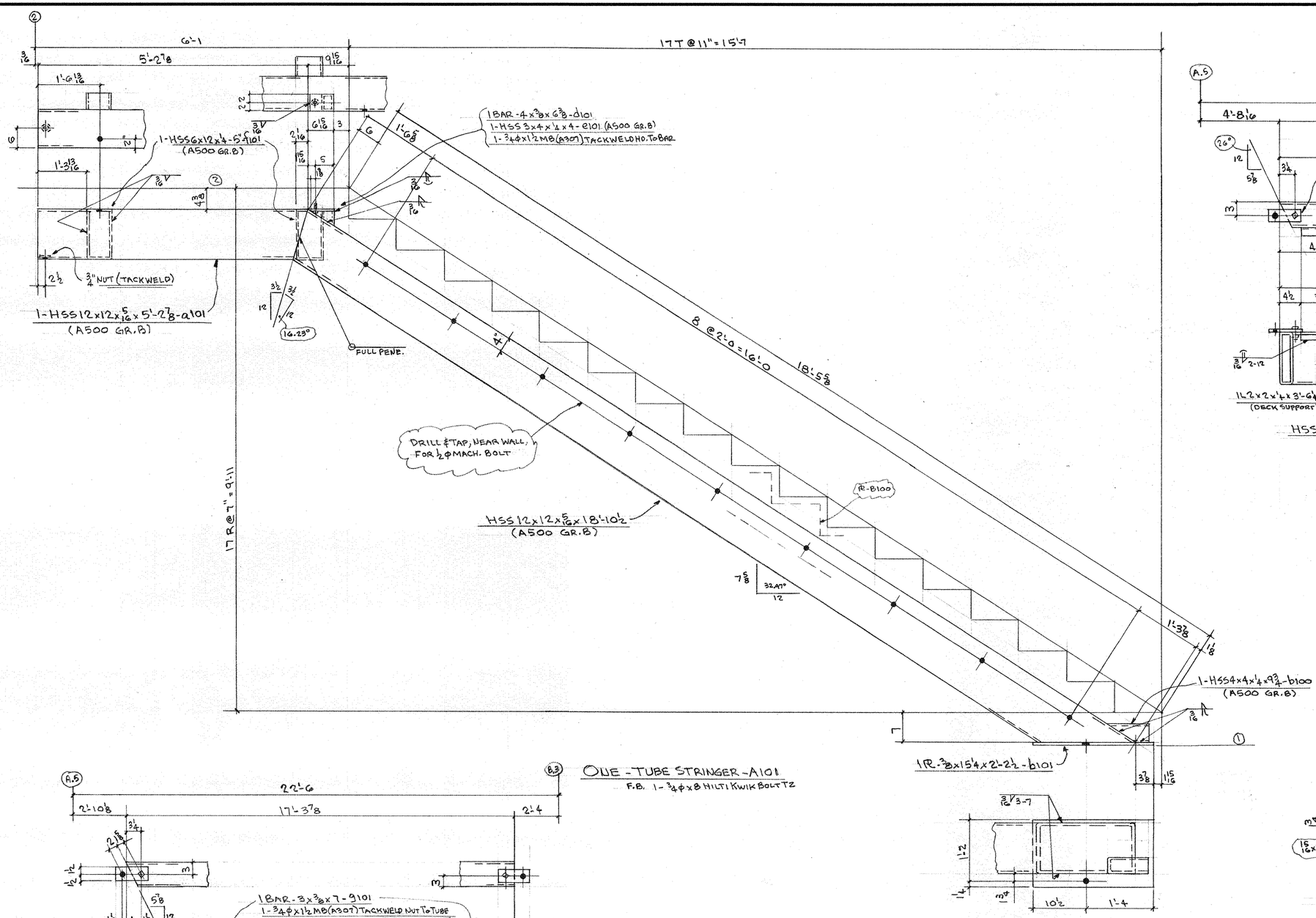
NAAMM The National Association of Architectural Metal Manufacturers

AISC American Institute of Steel Construction Founded 1921

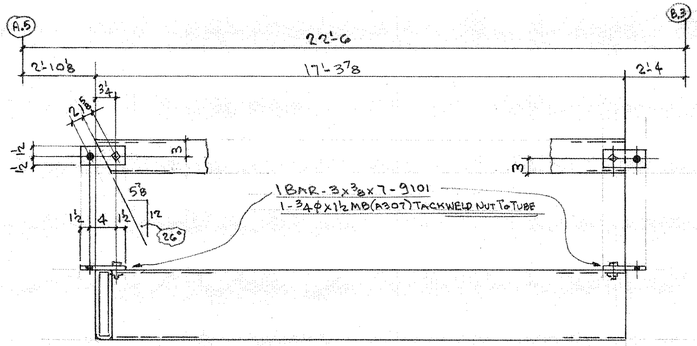
INSTITUTE OF ST. LOUIS

WELDING SYMBOLS

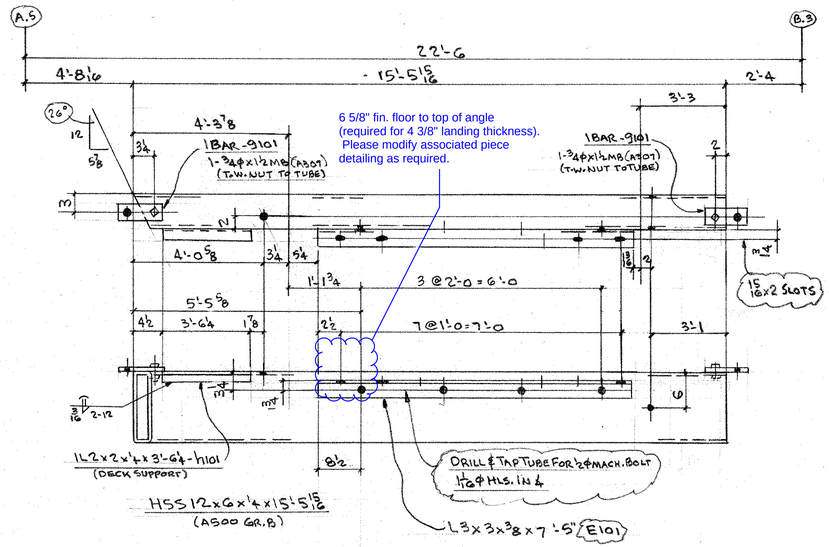
NOTE: ON DOUBLE MEMBERS WHERE F.B. MEMBER IS NOT SHOWN WELD SAME AS N.S. MEMBER NOTED.



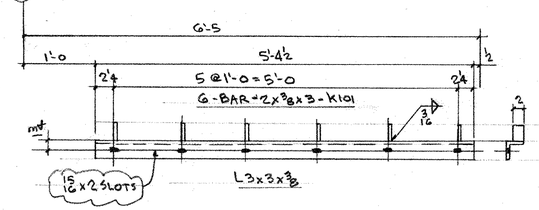
ONE - TUBE STRINGER - A101
F.B. 1 - 3/4Φx8 HILTI KWIK BOLT TZ



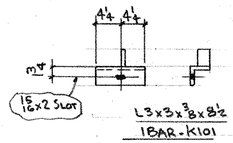
3 - TUBE - B101
F.B. 2 - 3/4Φx1 1/2MB(A307) NO NUT



3 - TUBE - D101 — F.B. 2 - 3/4Φx1 1/2MB(A307) NO NUT
3 - ANGLE - E101 — F.B. 4 - 1/2Φx1"Φ MACH SCREW (NO NUT)



ONE - ANGLE - F101



2 - ANGLE - G101

PLAIN MAT'L
3 - L2x2x1/4x3'-11 - H101
SEE SECT. B-B DWG. E102

REF: E100, E101

NOT APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
		REVISIONS

LA SALLE IRON WORKS, INC.
SINCE 1921
3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE	WEBSTER UNIVERSITY
LOCATION	WEBSTER GROVES, MO 63119
DESCRIPTION	STRINGER'S, MISC. TUBES
CUSTOMER	ATLAS IRON
DRN. BY	RL
CHK'D. BY	
APP. SENT	1/3/19
APP. REC'D	
APP. SENT	
APP. REC'D	
CONT.	27027
SHEET	101
HOLES	13/16ΦUN
PAINT	CLEAN PER SSPC SP1/2/3 PAINT SHOP COAT STT. PRIMER
REMARKS	

NAAMM — The National Association of Architectural Metal Manufacturers

AISC — American Institute of Steel Construction, Founded 1921

A

REPRODUCTION OF ST. LOUIS

a b d e g h k m n p t v w

A B D E F G H K M N P T V W

WELDING SYMBOLS

FIELD WELD

ALL AROUND (WELD AT ALL CONTACT SURFACES)

OTHER SIDE OF JOINT

ARROW SIDE OF JOINT

SQUARE-GROOVE

BEVEL-GROOVE

VEE-GROOVE

FILLET

PLUG

SINGLE-V-GROOVE WELDING SYMBOL

SIZE (DEPTH OF CHAMFERING) OR GROOVE (INDICATES DEPTH OF CHAMFERING EQUAL TO THICKNESS OF MEMBER)

ROOT OPENING

GROOVE ANGLE

DOUBLE-BEVEL-GROOVE WELDING SYMBOL

DIMENSION OF ARROW SIDE (INDICATES A FINAL DEPTH OF CHAMFERING EQUAL TO THICKNESS OF MEMBERS)

ARROW POINTS TOWARD MEMBERS TO BE CHAMFERED

ROOT OPENING

GROOVE ANGLE

DOUBLE FILLET WELDING SYMBOL

SIZE (LENGTH OF LEG)

SPECIFICATION PROCESS OR OTHER REFERENCE

LENGTH (DIMENSION INDICATES THAT HOLD EXTENDS BETWEEN ABRUPT CHANGES IN CROSS SECTION OR AT DISCONTINUITY)

CHAIN INTERMITTENT FILLET WELDING SYMBOL

LENGTH OF INCREMENTS

PITCH (DISTANCE BETWEEN CENTERS OF INCREMENTS)

SIZE (LENGTH OF LEG)

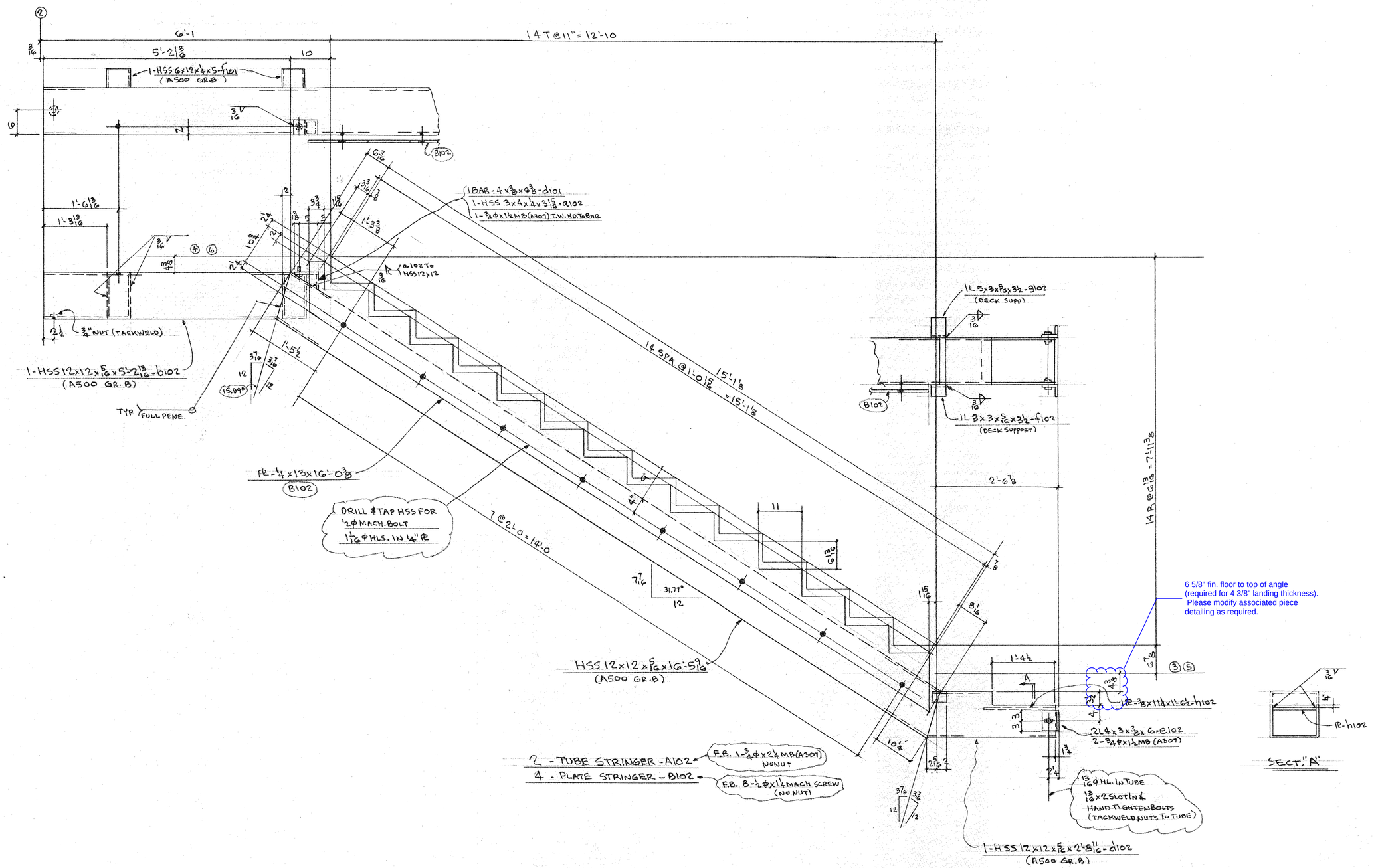
STAGGERED INTERMITTENT FILLET WELDING SYMBOL

SIZE (LENGTH OF LEG)

PITCH (DISTANCE BETWEEN CENTERS OF INCREMENTS)

LENGTH OF INCREMENTS

NOTE: ON DOUBLE MEMBERS WHERE P.B. MEMBER IS NOT SHOWN WELD SAME AS N.S. MEMBER NOTED.



Not Approved
For Construction

REF: E100

NO.	DATE	DESCRIPTION
		REVISIONS

LA SALLE IRON WORKS, INC.
SINCE 1921
3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE WEBSTER UNIVERSITY
LOCATION WEBSTER GROVES, MO. 63119
DESCRIPTION STRINGERS
CUSTOMER ATLAS IRON
DRN. BY RL | CHK'D. BY | CONT. 27027
APP. SENT 12/19 | APP. REC'D | SHEET 102
APP. SENT | APP. REC'D.
HOLES 13/16Φ UN
PAINT STD. PRIMER CLEAN PER SSPC SP1, 2.3 PAINT SHOP COAT
REMARKS
A

NAAMM The National Association of Architectural Metal Manufacturers

AISC American Institute of Steel Construction Founded 1921

ROTOLITE OF ST. LOUIS

a b d e f g h k m n p t v w

A B D E F G H K M N P T V W

WELDING SYMBOLS

FIELD WELD · ALL AROUND WELD AT ALL CONTACT SURFACES · OTHER SIDE OF JOINT · ARROW SIDE OF JOINT · SQUARE-GROOVE · BEVEL-GROOVE · VEE-GROOVE · FILLET · PLUG

SINGLE-V-GROOVE WELDING SYMBOL — SIZE (DEPTH OF CHAMFERING MINUS 1/16") OF CHAMFERING EQUAL TO THICKNESS OF MEMBERS · ROOT OPENING · GROOVE ANGLE

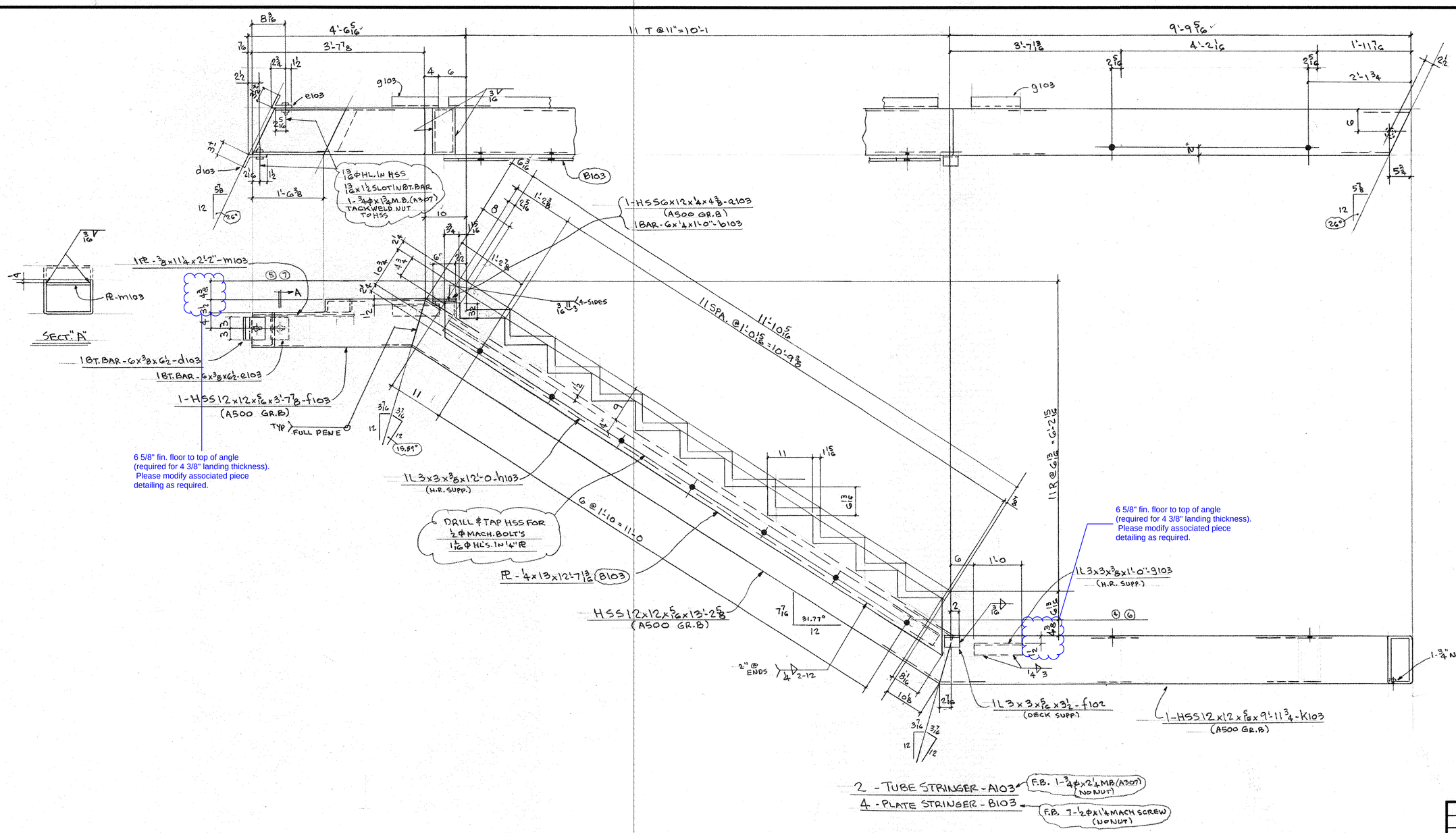
DOUBLE-BEVEL-GROOVE WELDING SYMBOL — DIMENSION OF SIDE CHAMFERING MINUS 1/16" EQUAL TO THICKNESS OF MEMBERS · ARROW POINTS TOWARD MEMBERS TO BE CHAMFERED · ROOT OPENING · GROOVE ANGLE

DOUBLE FILLET WELDING SYMBOL — SIZE (LENGTH OF LEG) · SPECIFICATION PROCESS OR OTHER REFERENCE · LENGTH (DIMENSION INDICATES THAT WELD EXTENDS BETWEEN ABRUPT CHANGES IN DIRECTION OF AS DIMENSIONED)

CHAIN INTERMITTENT FILLET WELDING SYMBOL — SIZE (LENGTH OF LEG) · LENGTH OF INCREMENTS · PITCH (DISTANCE BETWEEN CENTERS OF INCREMENTS)

STAGGERED INTERMITTENT FILLET WELDING SYMBOL — SIZE (LENGTH OF LEG) · PITCH (DISTANCE BETWEEN CENTERS OF INCREMENTS) · LENGTH OF INCREMENTS

NOTE: ON DOUBLE MEMBERS WHERE F.B. MEMBER ID NOT SHOWN WELD SAME AS N.S. MEMBER NOTED.



REF: E100

NO.	DATE	DESCRIPTION
		REVISIONS

LA SALLE IRON WORKS, INC.
SINCE 1921
3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE: WEBSTER UNIVERSITY
LOCATION: WEBSTER GROVES, MO. 63119
DESCRIPTION: STRINGER
CUSTOMER: ATLAS IRON
DRN. BY: RLL · CHK'D. BY: · CONT.: 27027
APP. SENT: · APP. REC'D: 12/19 · SHEET: 103
APP. SENT: · APP. REC'D:
HOLES: 13/16 Φ UNO
PAINT: CLEAN PER SSPC SP1,2,3 PAINT SHOP COAT STD. PRIMER
REMARKS:
A

NOT APPROVED FOR CONSTRUCTION

NAAMM The National Association of Architectural Metal Manufacturers

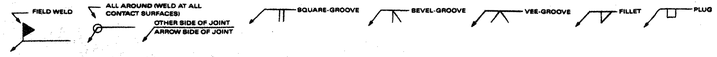
AISC American Institute of Steel Construction Founded 1921

ROTOLITE OF ST. LOUIS

a b d e f g h k m n p t v w

A B D E F G H K M N P T V W

WELDING SYMBOLS



NOTE: ON DOUBLE MEMBERS WHERE F.B. MEMBER IS NOT SHOWN WELD SAME AS N.S. MEMBER NOTED.

10'-0 5/16"
5 T @ 11" = 4'-7
9'-9 5/16"
9'-1 15/16"
9 15/16"
3'-7 13/16"
4'-2 1/16"
1'-11 7/16"
2'-1 3/4"
1 3/16" Ø HOLE IN HSS
1 3/16" x 1/2" SLOT IN BT. BAR
1-3/4" Ø x 1 3/4" MB (A307) (TACKWELD NUT TO HSS)
6 5/8" fin. floor to top of angle (required for 4 3/8" landing thickness). Please modify associated piece detailing as required.
1-HSS6x12x1/4 x 4'-4 1/2" - e104 (A500 GR.B)
1 BAR - 6" x 1/4" x 1'-0" - b102
1 PL - 3/8" x 11 1/4" x 2'-2" - m103
PL-m103
SECT. "A"
1 BT. BAR - G x 3/8 x G 1/2 - d103
1 BT. BAR - G x 3/8 x G 1/2 - e103
1-HSS12x12x5/16 x 9'-1 15/16" - b104 (A500 GR.B)
1L-g103
4 @ 1'-1 7/16" (c) = 4'-1 1/8"
5'-5 3/16"
5 R @ 7" = 2'-11
1L 3x3x3/8 x 1'-0 - g103 (H.R. SUPPORT)
3/4" NUT (TACKWELD)
HSS12x12x5/16 x 6'-10 1/16" (A500 GR.B)
DRILL & TAP HSS FOR 1/2 Ø MACH SCREWS 1 1/16 Ø HOLES IN 1/4" PL
PL-1/4 x 13 x 6'-2 1/16" (B104)
3 @ 1'-8 = 5'-0
32.47°
1L-3x3x3/8 x 5'-6 - d104
1-HSS12x12x5/16 x 9'-11 1/16" - a104 (A500 GR.B)
1L 3x3x5/16 x 3 1/2 - f102 (DECK SUPPORT)
FULL PENE. TYP
6 5/8" fin. floor to top of angle (required for 4 3/8" landing thickness). Please modify associated piece detailing as required.
ONE - TUBE STRINGER - A104
2 - PLATE STRINGER - B104
F.B. 1-3/4 Ø x 2 1/4 MB (A307) (NO NUT)
F.B. 4-1/2 Ø x 1 1/4 MACH SCREW (NO NUT)
BAR-m104
SECT. "B"
10'-11 3/8"
9 15/16"
5T @ 11" = 4'-7
1'-5 9/16"
1 BAR - 3 x 3/8 x 7 - g101
1-3/4 Ø x 1 1/2 MB (A307) (T.W. NUT TO HSS)
8 @ 1'-0 = 8'-0
15/16" x 2 SLOTS
4 @ 2'-0 = 8'-0
1 BAR - 3 3/8 x 3/8 x 1'-10" - m104
1-HSS6x4x1/4 x 4 1/2 - h104
1-BAR-4 x 1/4 x 6 - k104
6 @ 1'-0 = 6'-0
1 BAR - 4 1/2 x 3/8 x 6 - m104
1 BT. BAR - d103 (W.S.)
1 BT. BAR - e103 (F.S.)
2 - 3/4 Ø x 1 3/4 MB (A307) (T.W. NUT TO HSS)
13/16" x 1 1/2" SLOT
DRILL & TAP HSS FOR 1/2 Ø MACH. SCREWS 1 1/16 Ø HOLES IN 3 x 3/8
L3x3x3/8 x 8'-11 1/2" (E104)
1-HSS12x4x1/4 x 10'-11 3/8" - g104 (A500 GR.B)
5 R @ 7" = 2'-11
3'-6
6 5/8" fin. floor to top of angle (required for 4 3/8" landing thickness). Please modify associated piece detailing as required.
ONE - TUBE STRINGER - D104
ONE - ANGLE - E104
ONE - Do - F104
3 - Do - G104
F.B. 1-3/4 Ø x 1/2 MB (A307) NONUT
F.B. 1/2 Ø x 1 1/4 MACH SCREW (NO NUT)
5 - FOR E104
4 - FOR F104
2 - FOR G104
L3x3x3/8 x 6'-4" (F104)
DRILL & TAP NEAR WALL & FAR WALL OF HSS FOR 1/2 Ø MACH. SCREWS 1 1/16 Ø HOLES IN 3 x 3/8
HSS12x4x1/4 x 6'-10 1/16" (A500 GR.B)
DRILL & TAP HSS FOR 1/2 Ø MACH. SCREW'S 1 1/16 Ø HOLES IN 3 x 3/8
L3x3x3/8 x 1'-2" (G104)
1-HSS12x4x1/4 x 1'-7 1/8" - f104
8 1/2"
7"

REF: E101

NO.	DATE	DESCRIPTION

REVISIONS

LA SALLE IRON WORKS, INC.
SINCE 1921
3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE	WEBSTER UNIVERSITY
LOCATION	WEBSTER GROVES, MO. 63119
DESCRIPTION	STAIR STRINGERS
CUSTOMER	ATLAS IRON
DRN. BY	RL
CHK'D. BY	
APP. SENT	8/9
APP. REC'D	
APP. SENT	
APP. REC'D	
CONT.	27027
SHEET	104
HOLES	13/16 Ø UN
PAINT	CLEAN PER SSPC SP1, 2, 3 PAINT SHOP COAT STD. PRIMER
REMARKS	

NOT APPROVED FOR CONSTRUCTION

NAAMM The National Association of Architectural Metal Manufacturers

AISC American Institute of Steel Construction Founded 1921

A

ROTOLITE OF ST. LOUIS

a b d e f g h k m n p t v w

A B D E F G H K M N P T V W

WELDING SYMBOLS

FIELD WELD · ALL AROUND (WELD AT ALL CONTACT SURFACES) · OTHER SIDE OF JOINT · ARROW SIDE OF JOINT · SQUARE-GROOVE · BEVEL-GROOVE · VEE-GROOVE · FILLET · PLUG

SINGLE-V-GROOVE WELDING SYMBOL — SIZE; DEPTH OF CHAMFERING; DIMENSION INDICATES DEPTH OF CHAMFERING EQUAL TO THICKNESS OF BARRIER; ROOT OPENING; GROOVE ANGLE

DOUBLE-BEVEL-GROOVE WELDING SYMBOL — ARROW POINTS TOWARD MEMBER TO BE CHAMFERED; DIMENSION IS A TOTAL DEPTH OF CHAMFERING EQUAL TO THICKNESS OF MEMBER; ROOT OPENING; GROOVE ANGLE

DOUBLE FILLET WELDING SYMBOL — SIZE (LENGTH OF LEG); SPECIFICATION PROCESS OR OTHER REFERENCE; LENGTH; DIMENSION INDICATES THAT HOLD EXTENDS BETWEEN ARROW AND OTHER SIDE OF JOINT OR AS DIMENSIONED

CHAIN INTERMITTENT FILLET WELDING SYMBOL — SIZE (LENGTH OF LEG); LENGTH OF INCREMENTS; PITCH (DISTANCE BETWEEN CENTERS OF INCREMENTS)

STAGGERED INTERMITTENT FILLET WELDING SYMBOL — SIZE (LENGTH OF LEG); PITCH (DISTANCE BETWEEN CENTERS OF INCREMENTS); LENGTH OF INCREMENTS

NOTE: ON DOUBLE MEMBERS WHERE F.B. MEMBER IS NOT SHOWN WELD SAME AS N.S. MEMBER NOTED.

6'-3 3/4 · 5'-5 5/16 · 10 · 11 T@11"=10'-1 · 1'-6 9/16

1-3/4ϕx1 3/4 MB (A307) (TACKWELD NUT TO HSS)

1'-6 1/4 · 2'-2 9/16 · 1'-3 · 1'-3 · 8 3/4 · 6 · 2'-2

15/16x2 SLOTS

3@1'-0=3'-0

1BAR-3 3/8x3 3/8x1'-10-M104

BAR-M104

SECT. "A"

FOR A105

1BAR-4 1/2x3/8xG-M104

1BT.BAR-Gx3/8x6 1/2-D103

1BT.BAR-Gx3/8x6 1/2-E103

L3x3x3/8x3'-5 1/2 (D105)

1-HSS12x4x1/4x5'-5 5/16-B105 (A500 GR.B)

DRILL & TAP HSS FOR 1/2ϕ MACH SCREWS 1 1/16ϕ HOLES IN 3x3/4

6 5/8" fin. floor to top of angle (required for 4 3/8" landing thickness). Please modify associated piece detailing as required.

1-HSS6x4x1/4x4 3/8-D105 (A500 GR.B)

1BAR-4x1/4xG-K104

4-SIDES

11'-10 5/16

12@1'-0=12'-0

TYP FULL PEN

L3x3x3/8x12'-9" (E105)

DRILL & TAP NEAR WALL & FAR WALL OF HSS FOR 1/2ϕ MACH SCREWS 1 1/16ϕ HOLES IN 3x3/4

6@1'-10=11'-0

HSS12x4x1/4x13'-2 5/8 (A500 GR.B)

1BAR-3 3/8x7-9101

1-3/4ϕx1 1/2 MB (A307) (TACKWELD NUT TO HSS)

11 R@6 1/8=5'-7 5/16

ONE-TUBE STRINGER - A105
ONE DO DO - B105
2 - ANGLE - D105
2 - DO - E105

F.B.-1-3/4ϕx1 1/2 MB (A307) (NONUT)

F.B. 1/2ϕx1 1/2 MACH SCREW (NONUT)
3-FOR D105
7-FOR E105

1-HSS12x4x1/4x1'-8-Q105 (A500 GR.B)

6 5/8" fin. floor to top of angle (required for 4 3/8" landing thickness). Please modify associated piece detailing as required.

missing angle?

REF: E100

NOT APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
		REVISIONS

LA SALLE IRON WORKS, INC.
SINCE 1921
3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE WEBSTER UNIVERSITY
LOCATION WEBSTER GROVES, MO. 63119
DESCRIPTION STRINGER
CUSTOMER ATLAS IRON

DRN. BY RL		CHK'D. BY	CONT. 27072
APP. SENT	12/19	APP. REC'D	SHEET 105
APP. SENT		APP. REC'D.	

HOLES 13/16 ϕ UN
PAINT CLEAN PER SSPC SP1,2,3 PAINT SHOP COAT STD. PRIMER
REMARKS

A

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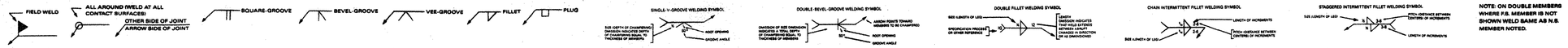
AISC American Institute of Steel Construction — Founded 1921

INSTITUTE OF ST. LOUIS

a b d e f g h k m n p t v w

A B D E F G H K M N P T V W

WELDING SYMBOLS



NOTE: ON DOUBLE MEMBERS WHERE F.S. MEMBER IS NOT SHOWN WELD SAME AS N.S. MEMBER NOTED.

14T @11" = 12'-10

3/4" NUT (TACKWELD TO HSS)

15/16 x 2 SLOTS

1BAR 3 1/2 x 3/8 x 3 1/4 - D100
1-3/4" NUT (TACKWELD)

15'-1 1/8

14 @ 1'-0 = 14'-0

L3x3x3/8x15'-0 1/4
(B100)

DRILL & TAP NEAR WALL & FAR WALL OF HSS FOR 1/2ϕ MACH SCREWS 1 1/2ϕ HOLES IN 3x3/8

7 @ 2'-0 = 14'-0

7 7/16 31.77° 12

HSS12x4x1/4x16'-0 7/8
(A500 GR.B)

2'-6 5/8

1'-4 1/4

6 5/8" fin. floor to top of angle (required for 4 3/8" landing thickness). Please modify associated piece detailing as required.

1BAR-3/8x3/8x1'-6 1/2-D106

L4x3x3/8x6-E102
1-3/4ϕx1 1/2 MB (A307)

1-HSS12x4x1/4x2'-8 15/16-Q106
(A500 GR.B)

DRILL & TAP HSS FOR 1/2ϕ MACH SCREWS 1 1/2ϕ HOLES IN 3x3/8

L3x3x3/8x11 1/4 D106

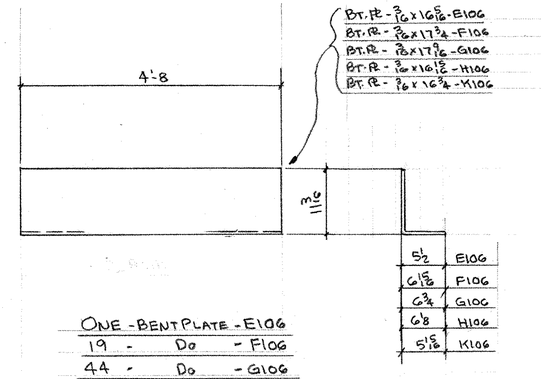
2 - TUBE STRINGER - A106
2 - ANGLE - B106
2 - Do - D106

F.B. 1-3/4ϕx1 1/2 MB (A307) (NO NUT)
1-3/4ϕx1 1/2 MB (A307) (NO NUT)

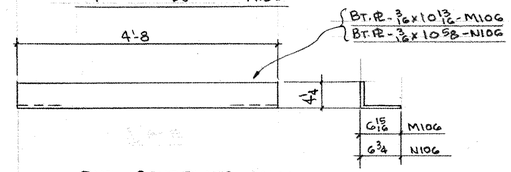
F.B. 1/2ϕx1 1/4 MACH SCREW (NO NUT)
8 - FOR B106
2 - FOR D106

15.89° 3/16 3/16 12

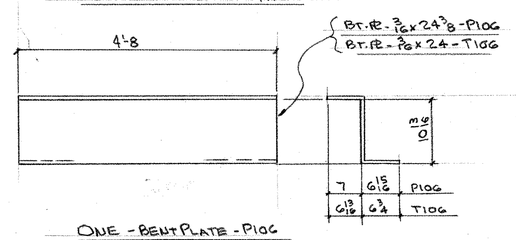
SECT. "A"



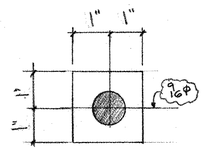
ONE-BENT PLATE-E106
19 - Do - F106
44 - Do - G106
ONE - Do - H106
4 - Do - K106



ONE-BENT PLATE-M106
2 - Do - N106

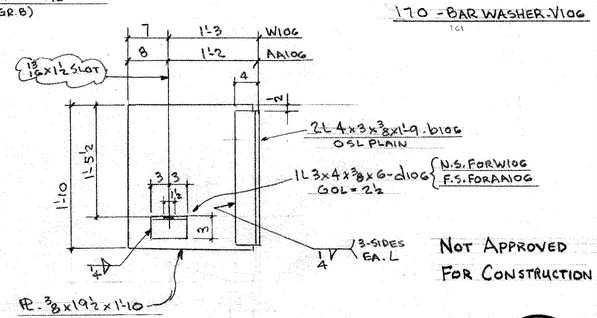


ONE-BENT PLATE-P106
2 - Do - T106



170 - BAR WASHER. V106

REF: E100, E101



3 - PLATE - W106
3 - Do - AA106

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NO.	DATE	DESCRIPTION
		REVISIONS

LA SALLE IRON WORKS, INC.
SINCE 1921
3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE WEBSTER UNIVERSITY
LOCATION WEBSTER GROVES, MO. 63119
DESCRIPTION STRINGER, MISC. PCS
CUSTOMER ATLAS IRON

DRN. BY	RL	CHK'D. BY		CONT.	27072
APP. SENT	4/19	APP. REC'D		SHEET	106
APP. SENT		APP. REC'D.			

HOLES 13/16ϕ UN
PAINT CLEAN PER SSPC SP1, 2, 3 PAINT SHOP COAT STD. PRIMER
REMARKS

A

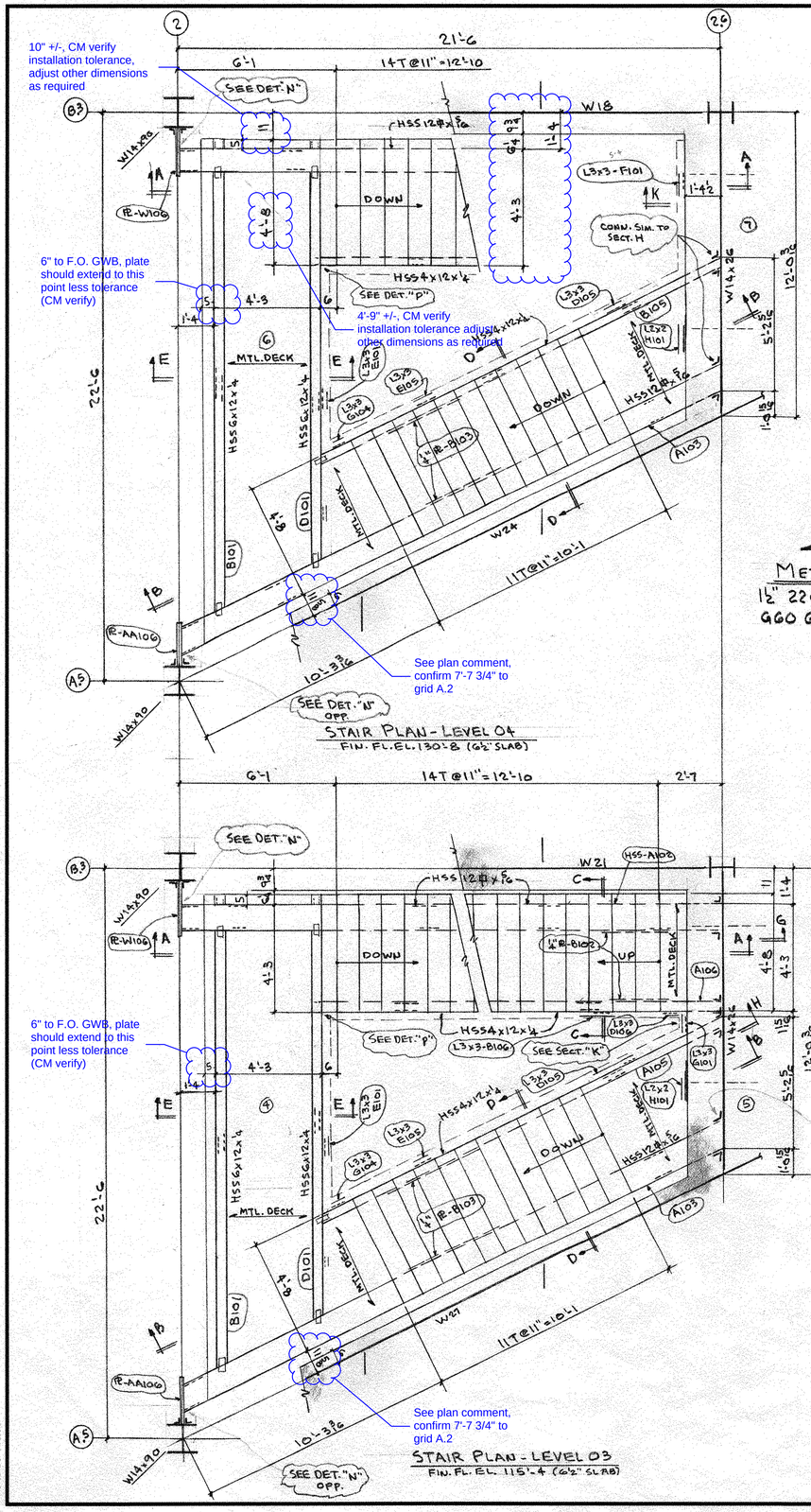
PROPERTY OF ST. LOUIS

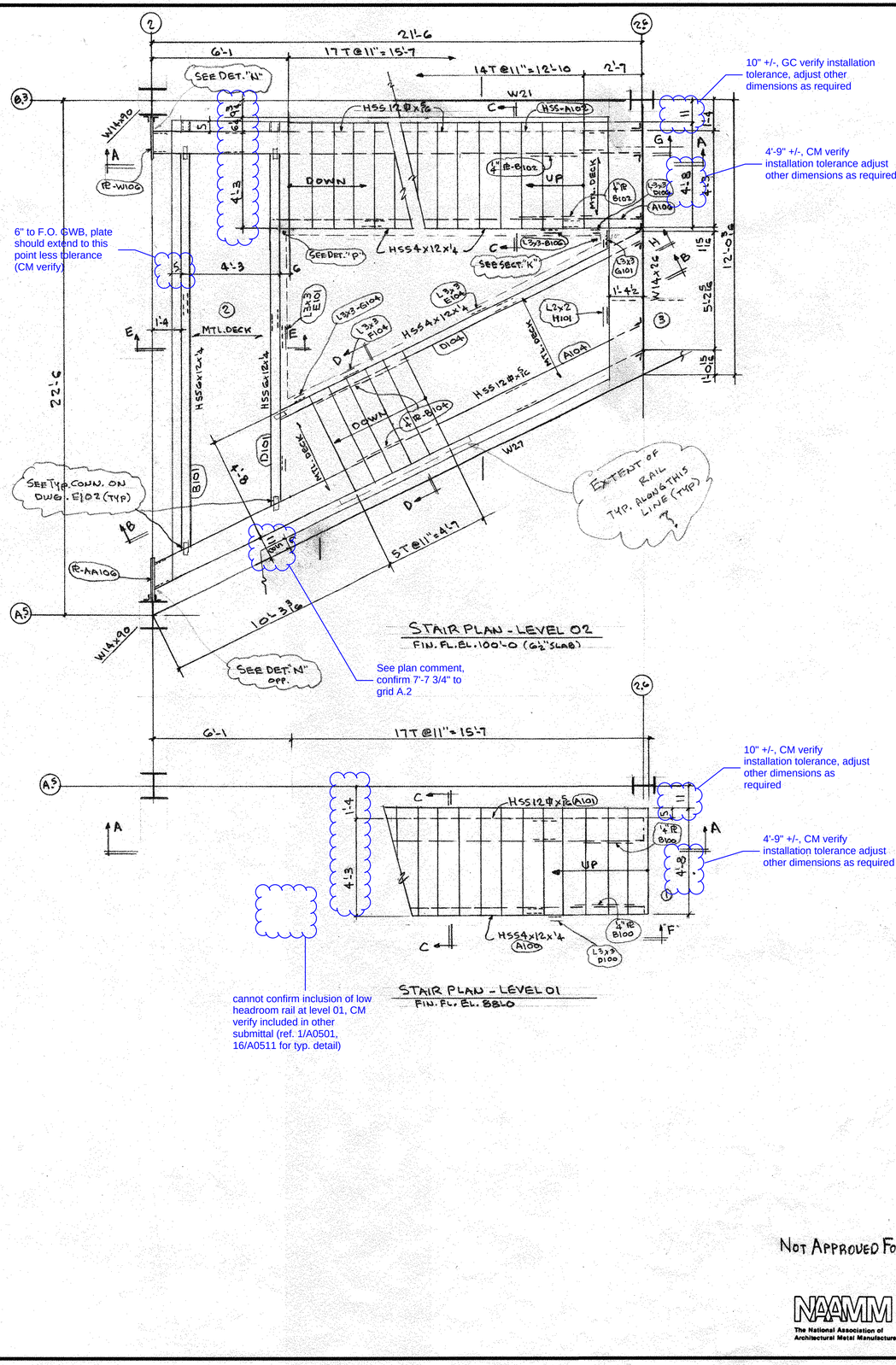
a b d e f g h k m n p t v w

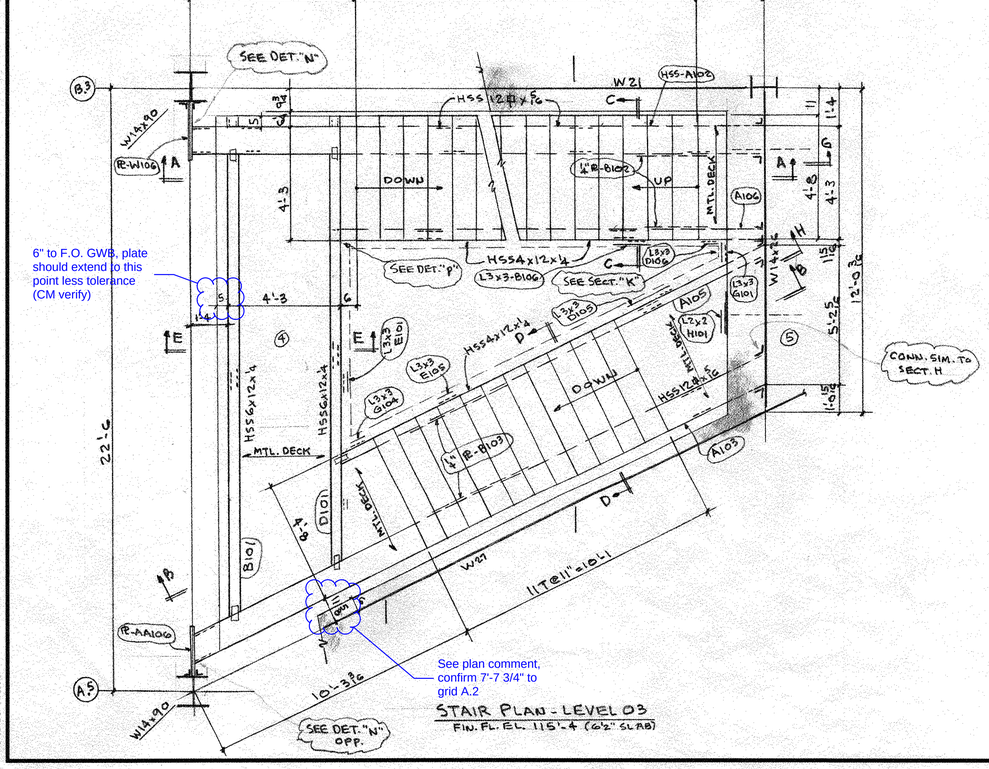
A B D E F G H K M N P T V W

WELDING SYMBOLS

NOTE: ON DOUBLE MEMBERS WHERE P.B. MEMBER IS NOT SHOWN WELD SAME AS N.S. MEMBER NOTED.







METAL DECK:
1½" 22GA. COMPOSITE
GGO GALV. 36" COVER

SEE DWG. E101 FOR SECT'S. "A-A", "B-B" "C-C", "D-D", "E-E"
SEE DWG. E102 FOR VIEW "F", SECT'S. "G", "H", "K", DET. "N", DET. "P"

NO.	DATE	DESCRIPTION

REVISIONS

LA SALLE IRON WORKS, INC.
SINCE 1921
3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE: WEBSTER UNIVERSITY
LOCATION: WEBSTER GROVES, MO 63119
DESCRIPTION: STAIR NO. 1 PLANS
CUSTOMER: ATLAS IRON

DRN. BY: AL		CHK'D. BY		CONT.	27072
APP. SENT	12/19	APP. REC'D		SHEET	E100
APP. SENT		APP. REC'D			

HOLES
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REMARKS
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NAAMM The National Association of Architectural Metal Manufacturers

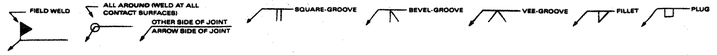
AISC American Institute of Steel Construction Founded 1921

INSTITUTE OF ST. LOUIS

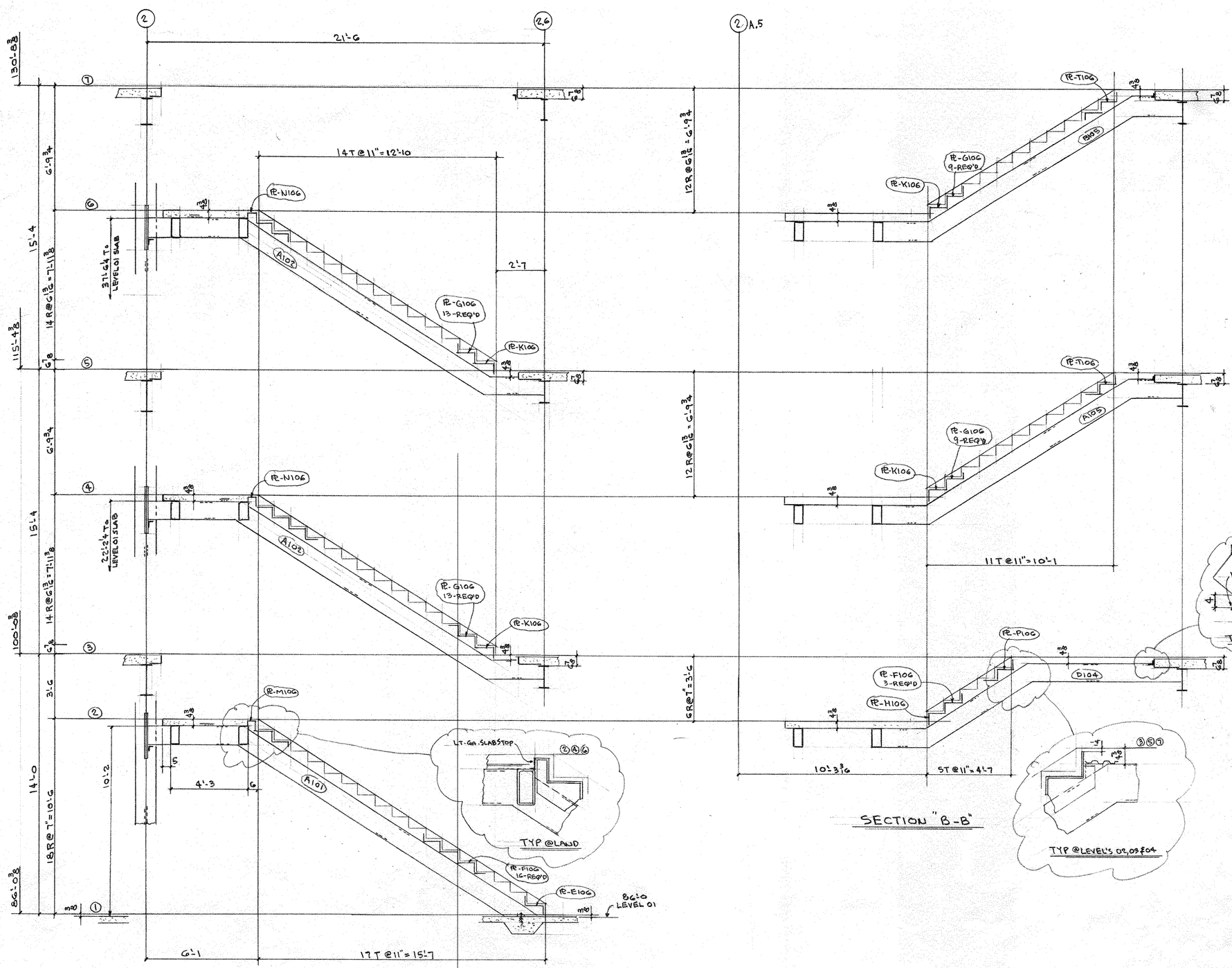
a b d e f g h k m n p t v w

A B D E F G H K M N P T V W

WELDING SYMBOLS

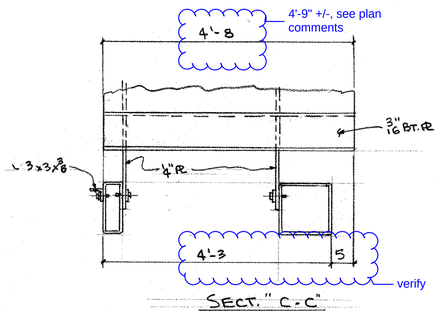


NOTE: ON DOUBLE MEMBERS WHERE P.B. MEMBER IS NOT SHOWN WELD SAME AS N.B. MEMBER NOTED.

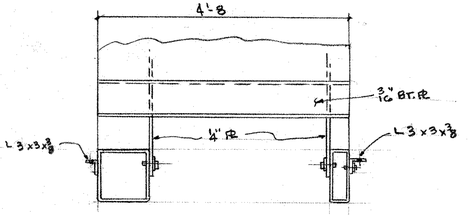


SECTION "A-A"

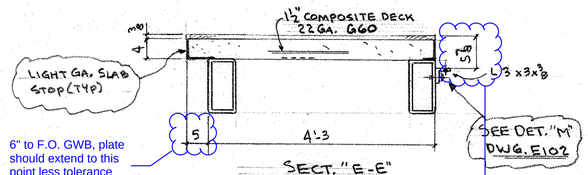
SECTION "B-B"



SECT. "C-C"



SECT. "D-D"

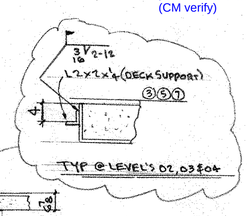


SECT. "E-E"

6" to F.O. GWB, plate should extend to this point less tolerance (CM verify)

At intermediate landings there is to be 3/8" poured in place terrazzo on top of 4" slab (2 1/2" normal weight concrete on 1 1/2" composite deck) = 4 3/8" total thickness

6 5/8" fin. floor to top of angle (required for 4 3/8" landing thickness). Please modify associated piece detailing as required.



NOT APPROVED FOR CONSTRUCTION

NAAMM The National Association of Architectural Metal Manufacturers

AISC American Institute of Steel Construction

NO.	DATE	DESCRIPTION
		REVISIONS

LA SALLE IRON WORKS, INC.
SINCE 1921

3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE WEBSTER UNIVERSITY
LOCATION WEBSTER GROVES, Mo. 63119
DESCRIPTION STAIR No. 1 SECTIONS
CUSTOMER ATLAS IRON

DRN. BY	RL	CHK'D. BY		CONT.	27072
APP. SENT	12/19	APP. REC'D		SHEET	E101
APP. SENT		APP. REC'D.			

HOLES
PAINT
REMARKS

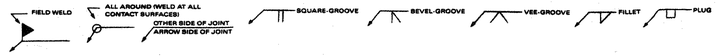
A

INSTITUTE OF ST. LOUIS

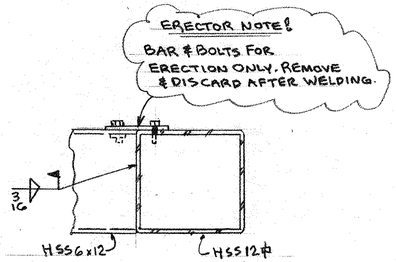
a b d e f g h k m n p t v w

A B D E F G H K M N P T V W

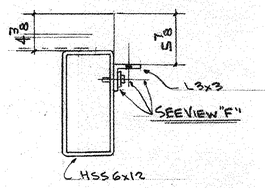
WELDING SYMBOLS



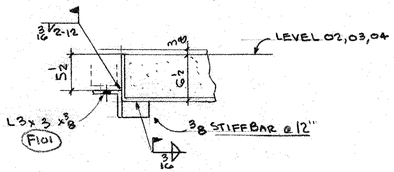
NOTE: ON DOUBLE MEMBERS WHERE F.B. MEMBER IS NOT SHOWN WELD SAME AS N.S. MEMBER NOTED.



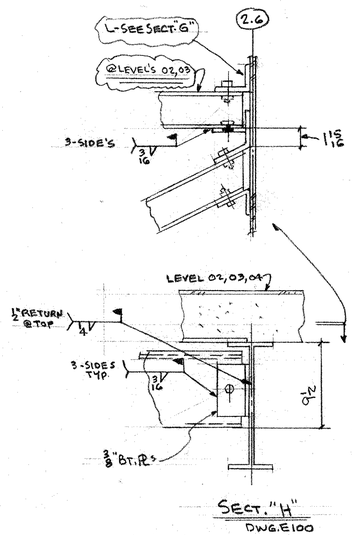
TYP. CONN. HSS6x12 TO HSS12x4



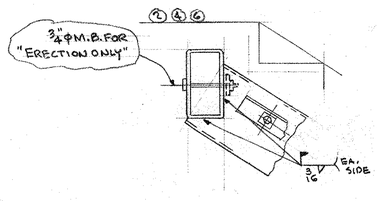
DETAIL "M"
DWG. E100, SECT. E-E



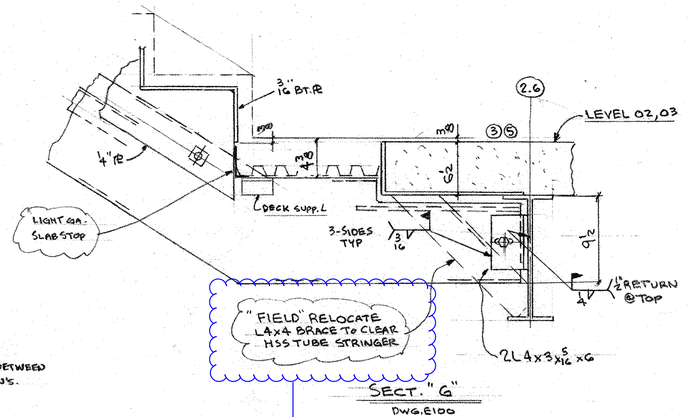
SECT. "K"
DWG. E100



SECT. "H"
DWG. E100

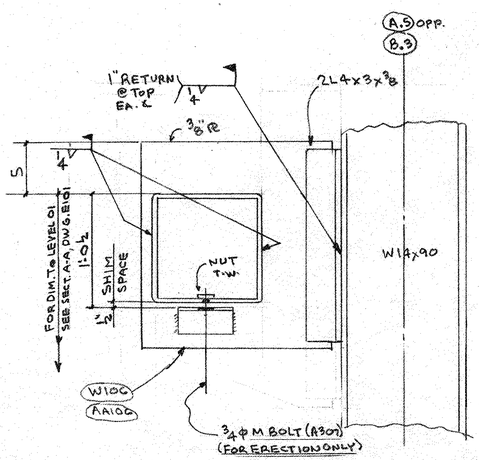


DETAIL "P"

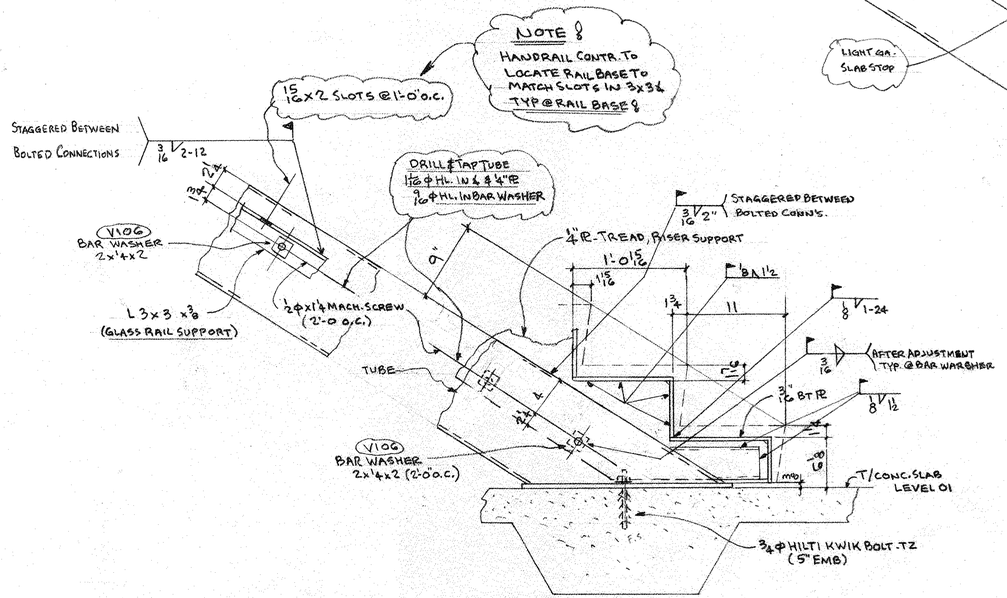


SECT. "G"
DWG. E100

verify with CM that no re submittal required to structural for corrective work



DETAIL "N"
DWG'S. E100, E101



VIEW "F"
DWG. E101

NOT APPROVED FOR CONSTRUCTION

NAAMM
The National Association of Architectural Metal Manufacturers

AISC
American Institute of Steel Construction
Founded 1921

NO.	DATE	DESCRIPTION

REVISIONS

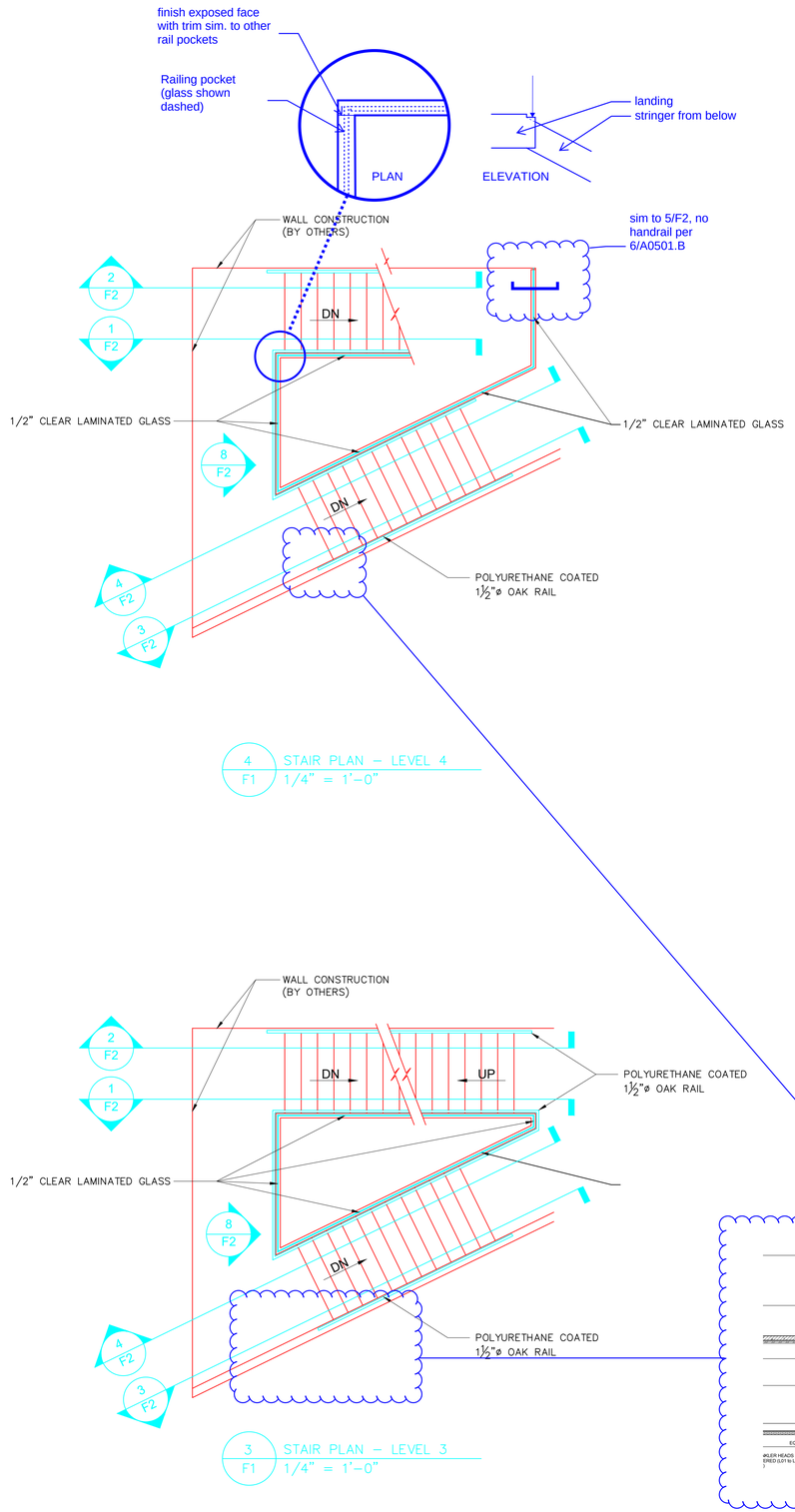
LA SALLE IRON WORKS, INC.
SINCE 1921
3110 LA SALLE STREET — SAINT LOUIS, MO.

STRUCTURE WEBSTER UNIVERSITY
LOCATION WEBSTER GROVES, MO 63119
DESCRIPTION STAIR NO. 1 SECT'S & DET'S.
CUSTOMER ATLAS IRON

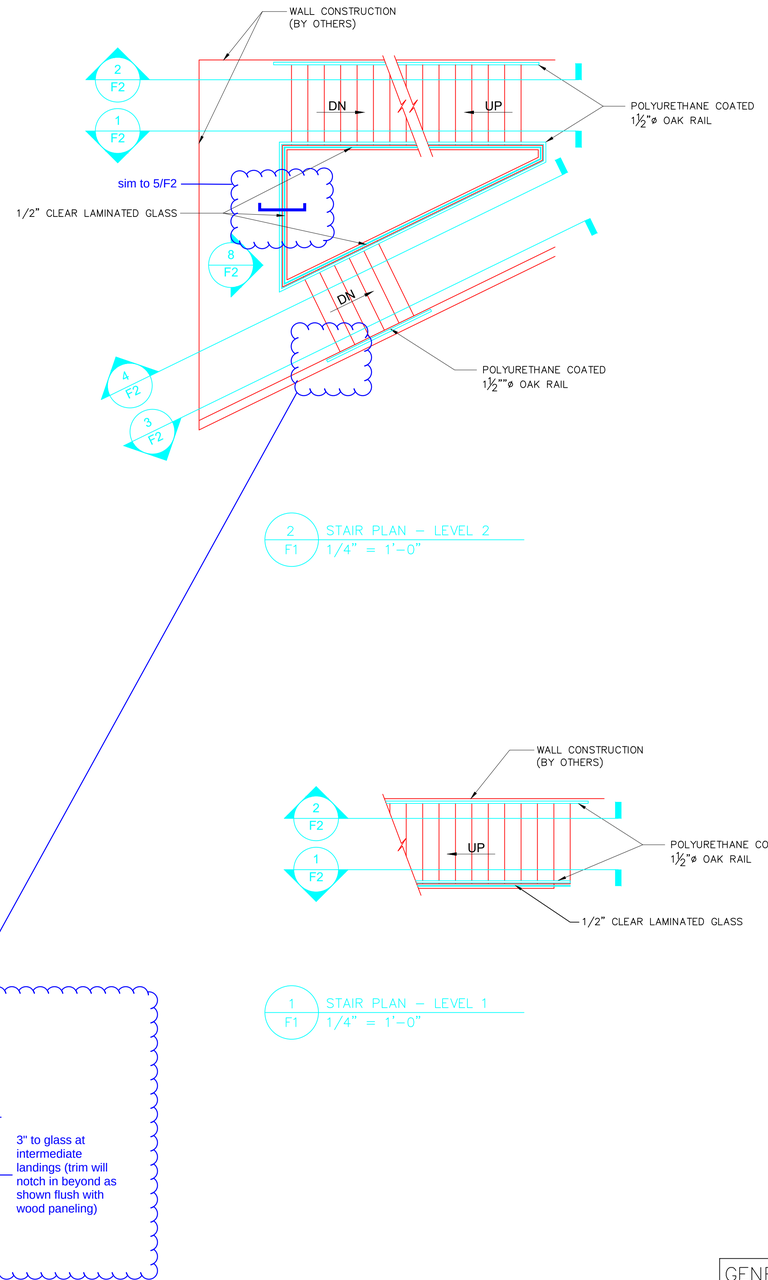
DRN. BY RL		CHK'D. BY	CONT. 27072
APP. SENT	12/19	APP. REC'D	SHEET E102
APP. SENT		APP. REC'D.	

HOLES
PAINT
REMARKS
A

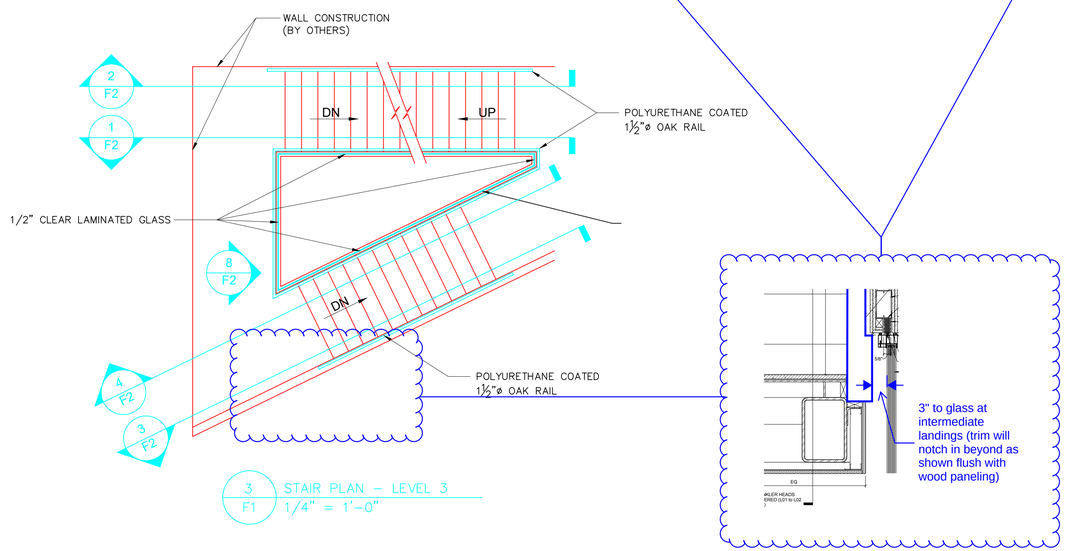
INSTITUTE OF ST. LOUIS



4 F1 STAIR PLAN – LEVEL 4
1/4" = 1'-0"



2 F1 STAIR PLAN – LEVEL 2
1/4" = 1'-0"



3 F1 STAIR PLAN – LEVEL 3
1/4" = 1'-0"

1 F1 STAIR PLAN – LEVEL 1
1/4" = 1'-0"

GENERAL NOTES

1. ALL DIMENSIONS TO BE FIELD VERIFIED
2. GLASS PANELS TO BE TEMPERED AND LAMINATED SAFETY GLASS U.N.O.
3. GLASS SHOE CLADDING TO BE BUTT JOINED ONLY AND SUPPLIED IN 120" MAX. LENGTHS (NO WELDING INCLUDED)

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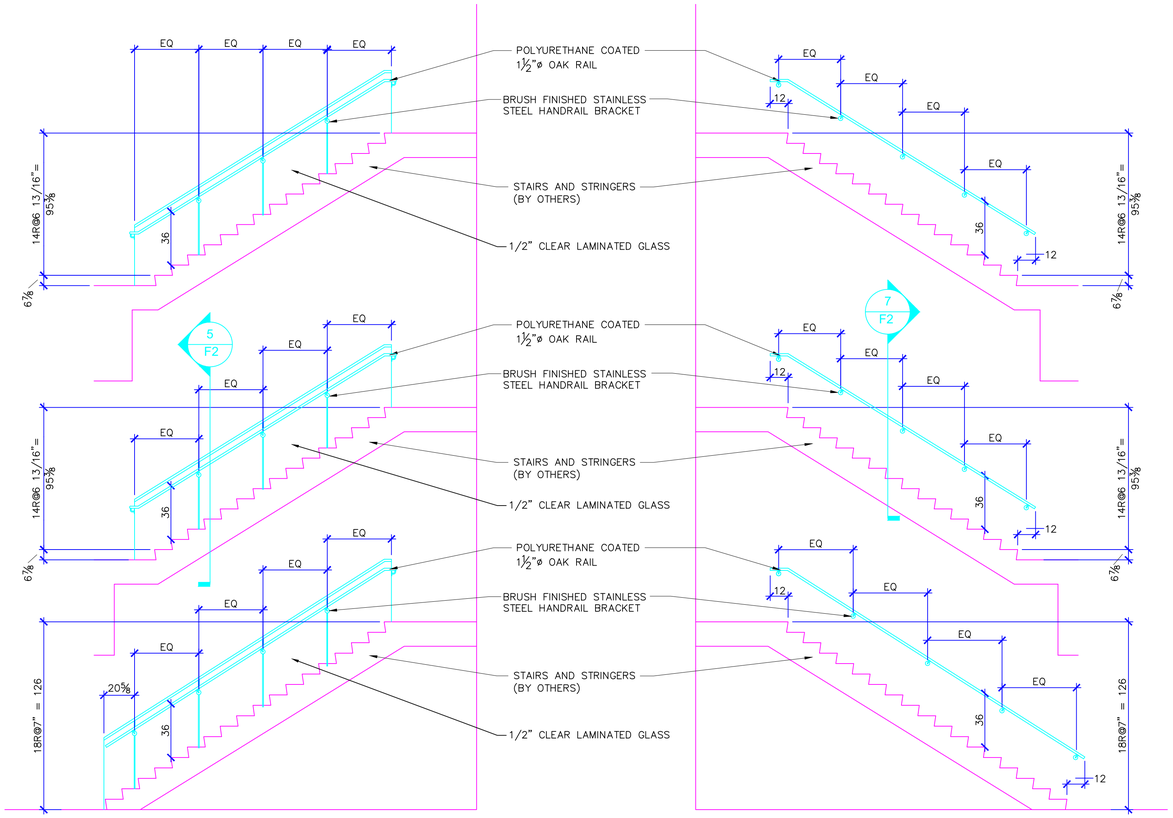
4605 McRee - St. Louis, MO. 63110
(314) 771-1717 Fax (314)772-5991

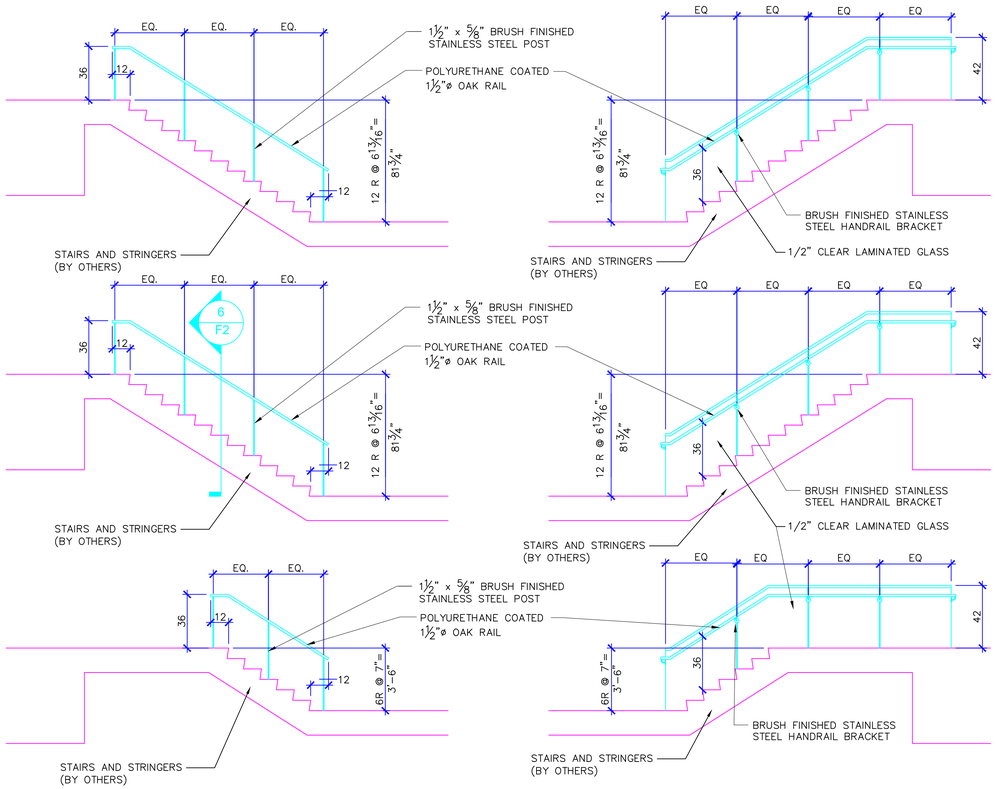
PARIC
15051-WEBSTER UNIVERSITY INTERDISCIPLINARY SCIENCE BUILDING
8274 BIG BEND BLVD.
WEBSTER GROVE, MO 63119

GLASS GUARDRAILS AND GRABRAILS

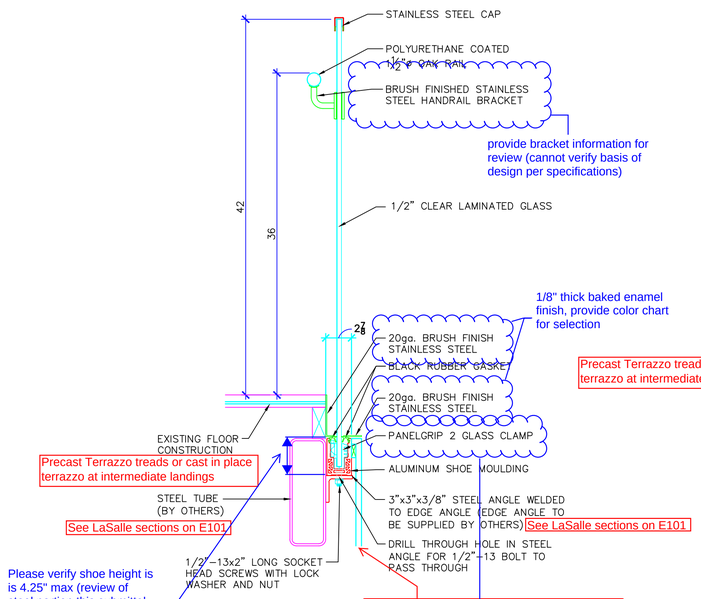
Job Number	
DRAWN	J-MARQUARDT
SCALE	As Noted
DATE	01/09/17

F1



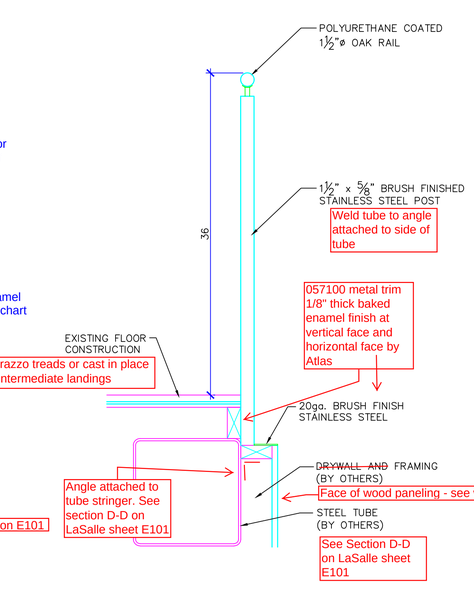


1 F2 STAIR SECTION 1
1/4" = 1'-0"



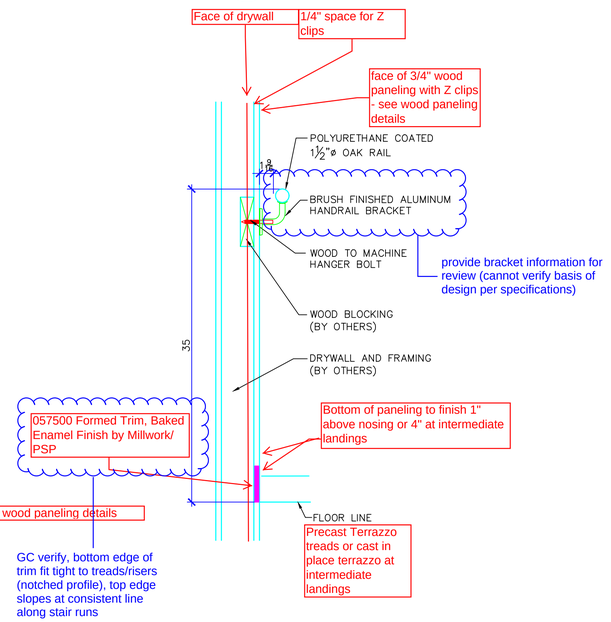
5 F2 RAIL DETAIL AT GLASS PANEL
1 1/2" = 1'-0"

2 F2 STAIR SECTION 2
1/4" = 1'-0"



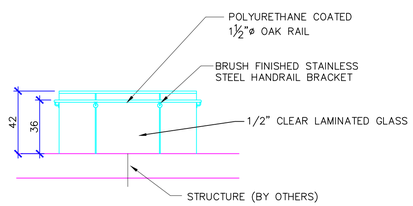
6 F2 BAR RAIL DETAIL
1 1/2" = 1'-0"

3 F2 STAIR SECTION 3
1/4" = 1'-0"



7 F2 RAIL DETAIL AT WALL
1 1/2" = 1'-0"

4 F2 STAIR SECTION 4
1/4" = 1'-0"



8 F2 RAILING ELEVATION
1/4" = 1'-0"

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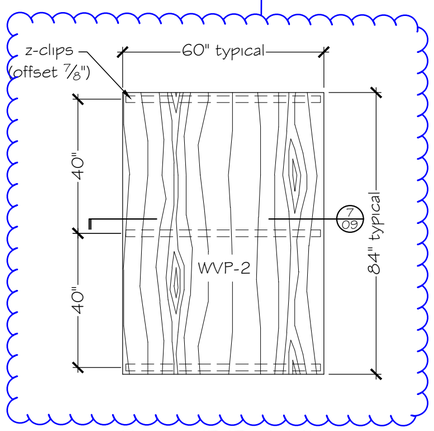
F2

include all details for review, cannot verify design intent at vertical to horizontal transitions, stair to wall transitions, stair to landing, etc.

Need to see joint layout and grain direction of all panels specific to this project (RCP each floor), not just typical sizing. Locate sprinkler heads for design intent verification (ref. A0501.B)

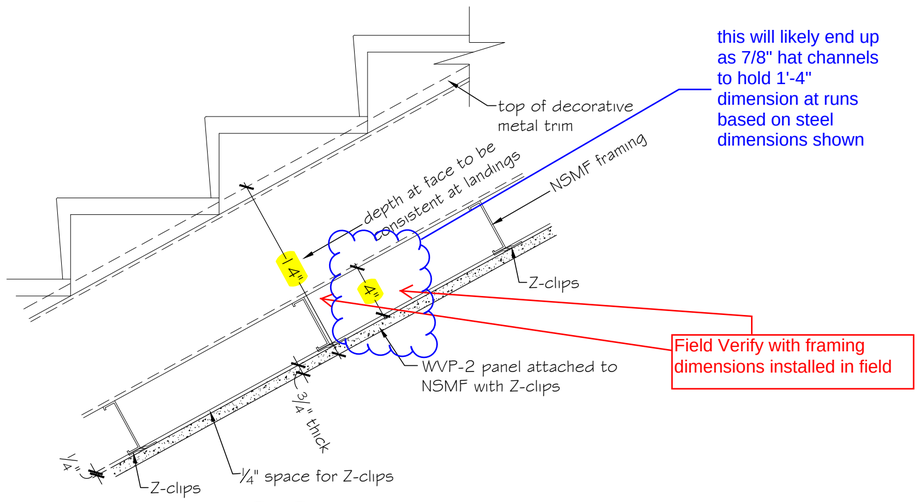


QUANTITY ~~(6)~~

verify size in field

3/07 Elevation at Panels Under Stairs
3/8"=1'-0"

this will likely end up as 7/8" hat channels to hold 1'-4" dimension at runs based on steel dimensions shown



Field Verify with framing dimensions installed in field

Z-clip attachment: -(1) clip will be pre-attached to panel
-(1) clip sent loose to be attached to framing
-connect clip on panel to clip on framing

Panel System Weight

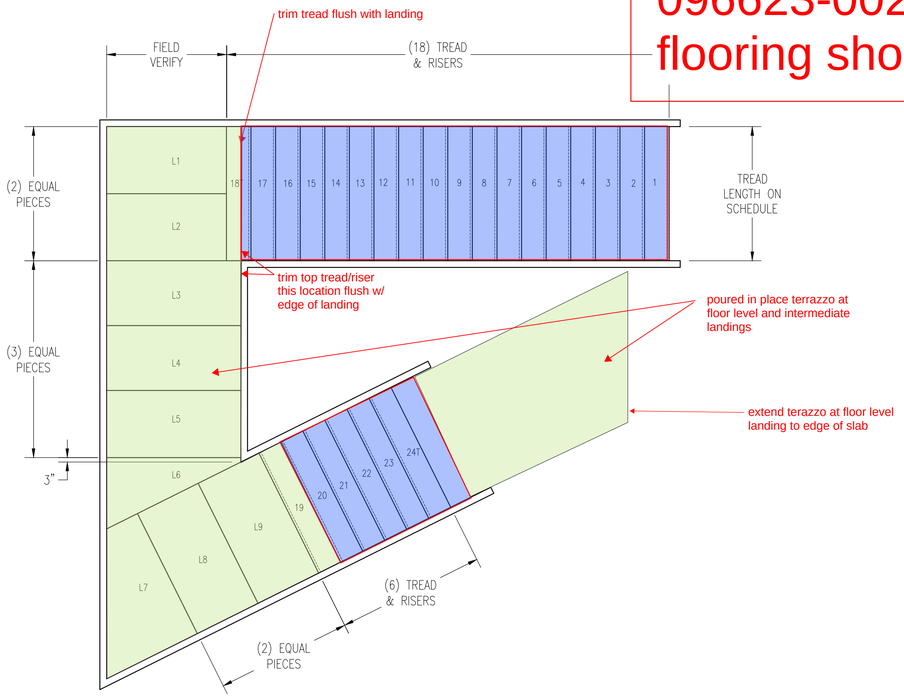
3.5 lbs PER SQ FT

confirm that this dead load is accounted for in stair design (does not appear to be included in submittal 05 7100 009 page 4 list of loads)

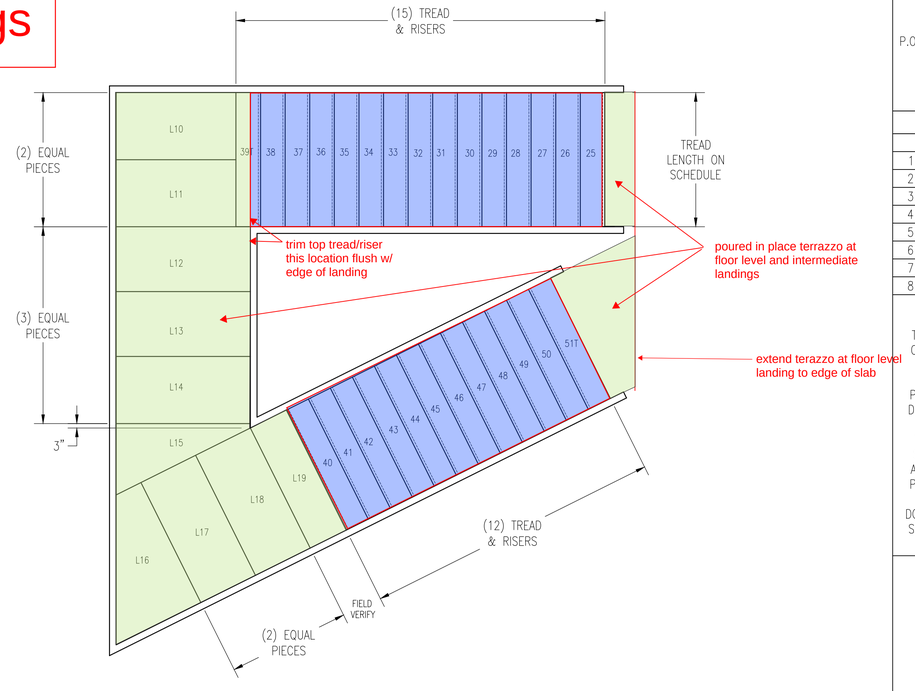
7/09 Section at Underside of Stairs
1 1/2"=1'-0"

Stair #1 Wood Paneling Details

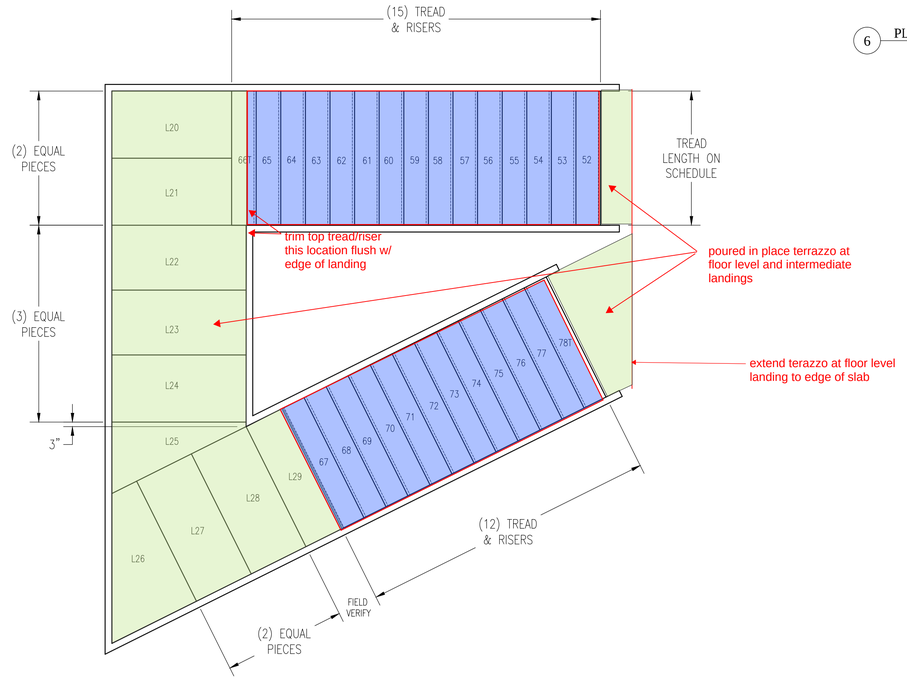
Pages from approved 096623-002 Terrazzo flooring shop drawings



6 PLAN VIEW STAIR #1 1ST TO 2ND FLOOR
SCALE 3/8" =12"



6 PLAN VIEW STAIR #1 2ND TO 3RD FLOOR
SCALE 3/8" =12"



6 PLAN VIEW STAIR #1 3RD TO 4TH FLOOR
SCALE 3/8" =12"

see following page - A0501.! for context

NOTE: PRODUCTION WILL TAKE FROM (8) TO (10) WEEKS AFTER FIELD DIMENSIONS ARE TAKEN

TECTURA designs
P.O. BOX 1520 WAUSAU, WI 54402-1520
800-388-8728
E-MAIL: WTILE@WAUSAUTILE.COM
WEB SITE: WWW.WAUSAUTILE.COM

REVISIONS

	NAME	DATE	NOTES
1	GSK		
2	---	---	---
3	---	---	---
4	---	---	---
5	---	---	---
6	---	---	---
7	---	---	---
8	---	---	---

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1100 CLARK AVE
ST LOUIS, MO

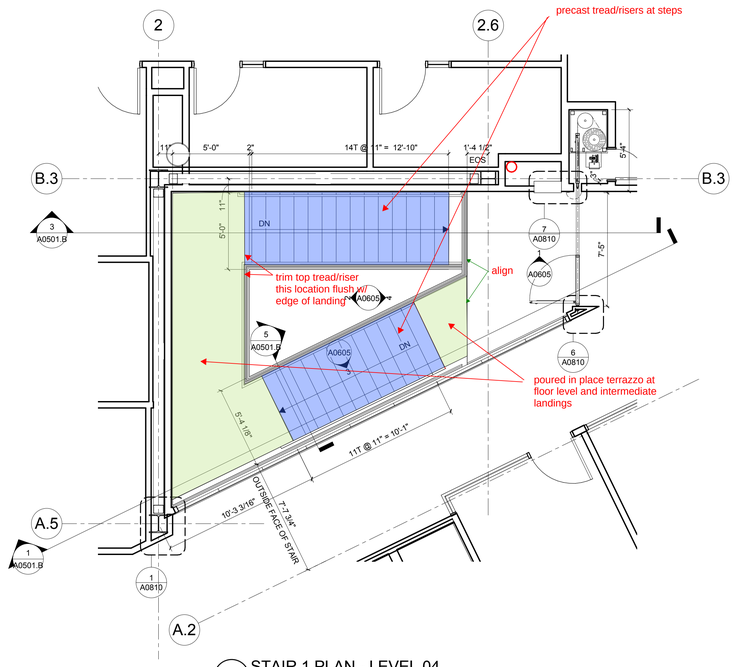
MISSOURI TERRAZZO

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS ± 1/16"

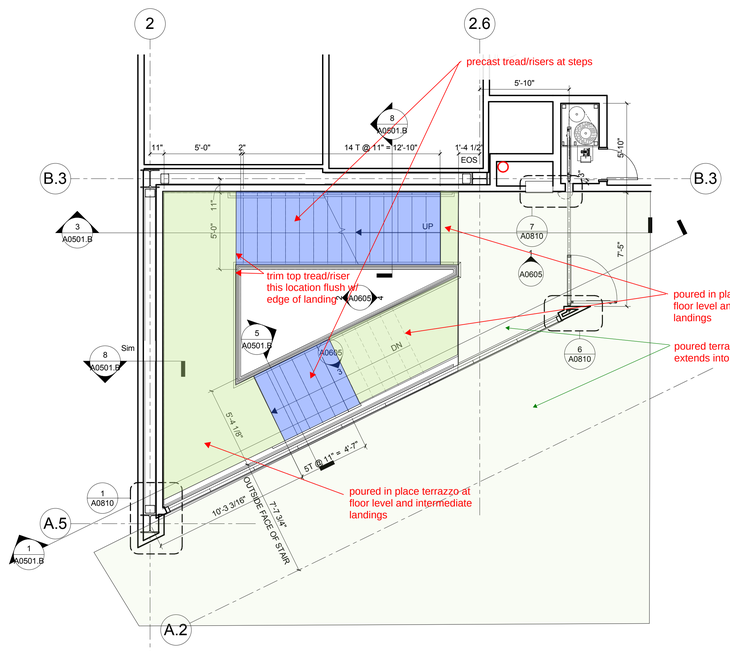
DRAWN BY: GSK
DATE: 10-19-16
MATERIAL: PRECAST EPOXY TERRAZZO
SCALE: AS NOTED
CO NUMBER: 589994
PROJECT NUMBER: 16-4211-344
MIX DESIGN NO.

SHEET NO.
2 OF 2

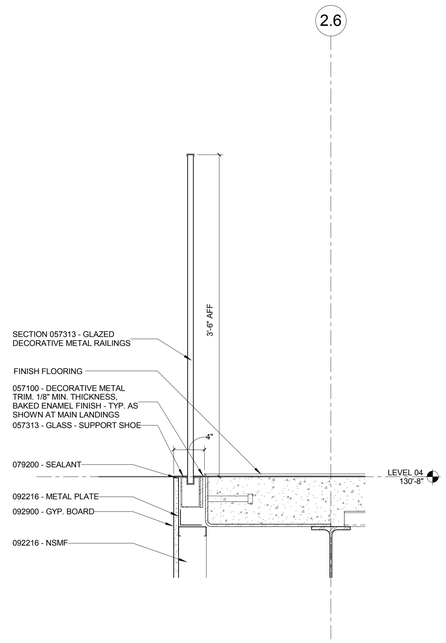
Pages from approved 096623-002 Terrazzo flooring shop drawings



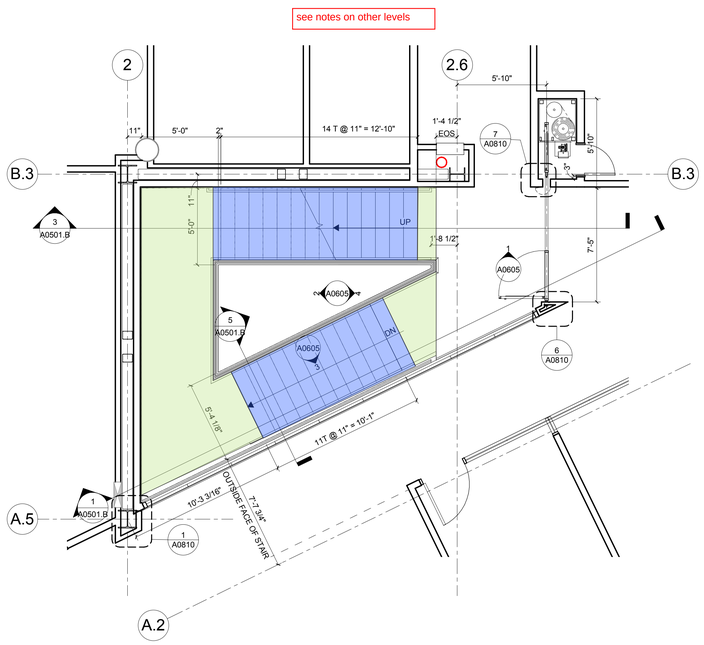
4 STAIR 1 PLAN - LEVEL 04
1/4" = 1'-0"



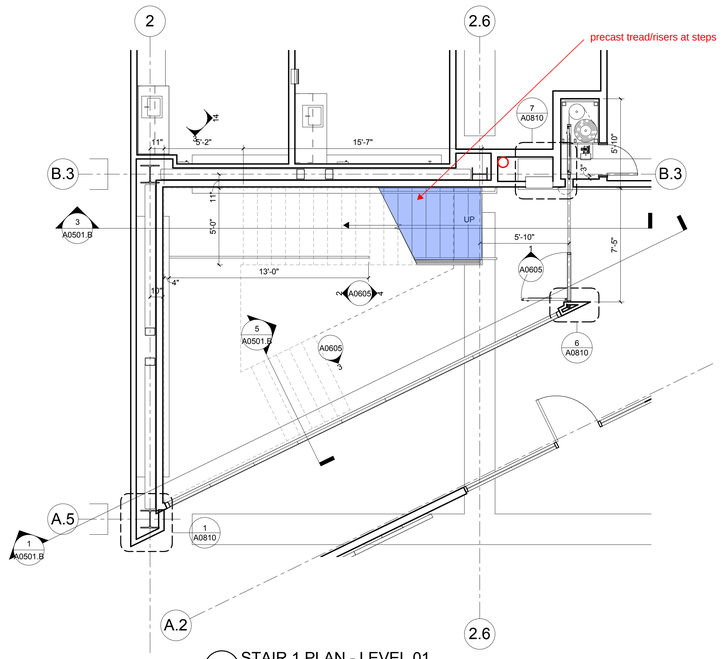
2 STAIR 1 PLAN - LEVEL 02
1/4" = 1'-0"



5 STAIR 1 ENLARGED SECTION
1 1/2" = 1'-0"



3 STAIR 1 PLAN - LEVEL 03
1/4" = 1'-0"



1 STAIR 1 PLAN - LEVEL 01
1/4" = 1'-0"

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3/30/2016 11:51:28 PM

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

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St. Louis, MO 63104
314.588.0600

CONFORMED SET **01 JUL 2016**

No.	Description	Date
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016

Drawing Title:

STAIR 1 PLANS AND SECTIONS

Project No.: 04561.01 Checked by:

A0501.A

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