

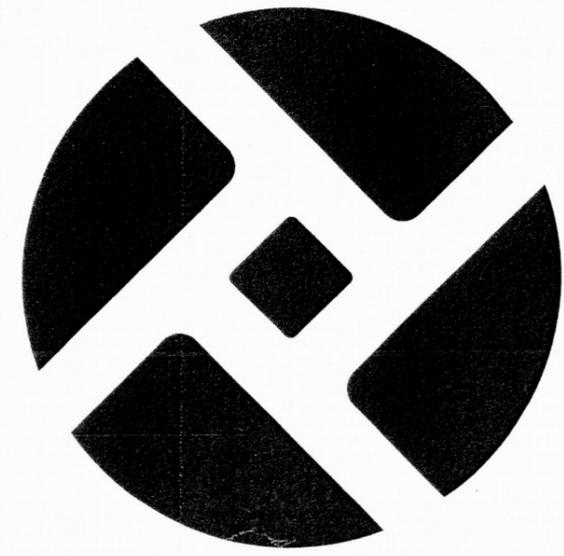
Port of Portland

2

City of Portland
 REVIEWED FOR CODE
 COMPLIANCE
 AUG 08 2013
 13-176978-FA
 Permit Number

THE PORT OF PORTLAND COMMISSION
 JIM CARTER - PRESIDENT
 PAUL A. ROSENBAUM - VICE PRESIDENT
 PETER BRAGDON - TREASURER
 DIANA DAGGETT - SECRETARY
 TOM TSURUTA
 LINDA M. PEARCE
 BRUCE HOLTE
 TOM CHAMBERLAIN
 ROBERT L. LEVY

BILL WYATT, EXECUTIVE DIRECTOR
 TOM PETERSON, CHIEF ENGINEER
 VINCE GRANATO, CHIEF OPERATING OFFICER



SHEET NO.	DESCRIPTION
1 (GI-1)	SITE PLAN & VICINITY MAP
2 (A-1)	ROOF DEMOLITION PLAN
3 (A-2)	DEMOLITION DETAILS
4 (A-3)	ROOF PLAN
5 (A-4)	DETAILS - BUILDING 7115
6 (A-5)	DETAILS - BUILDING 7113
7 (A-6)	DETAILS - BUILDING 7113
8 (A-7)	DETAILS - TYPICAL
9 (S-1)	GENERAL STRUCTURAL NOTES AND ABBREVIATIONS
10 (S-2)	BUILDING 7115 ROOF PLAN
11 (S-3)	BUILDING 7115 ROOF PLAN
12 (S-4)	STEEL DETAILS
13 (S-5)	SITE DETAILS

13-176978-FA

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
ROOF REPAIR & SEISMIC UPGRADES

BID SET
 JUNE 2013

DESIGN NO. 2013D009 PROJECT MANAGER *Tom Peterson for Marcel Hamann*
 PROJECT NO. 101527 DRAWING NO. PDX 2013-513
PDX - MAINTENANCE FACILITY, BUILDINGS 7113 & 7115 ROOF REPAIR & SEISMIC UPGRADES



VICINITY MAP
SCALE: N.T.S.

N.E. 82nd AVENUE

CONTRACTOR
ACCESS ROUTE

N.E. ALDERWOOD

ACCESS GATE

STAGING AREA

WORK AREA

BLDG 7113

BLDG 7115

PDX
MAINTENANCE
FACILITY

PORT OF PORTLAND
PORTLAND, OREGON



DESIGNED BY T WHARTON
DRAWN BY T WHARTON
CHECKED BY T WHARTON
DATE JUNE 2013
SCALE 1" = 60'

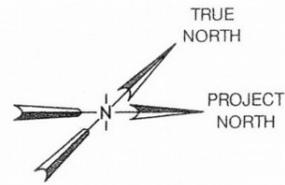
PORTLAND INTERNATIONAL AIRPORT

MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
ROOF REPAIR & SEISMIC UPGRADES
SITE PLAN AND VICINITY MAP

SUBMITTED BY
T WHARTON
PROJECT ENGINEER

TYPE DRAWING NO.
CD PDX 2013-513 1/13 (GI-1)

NO.	DATE	BY	REVISIONS	APP'D	CHK'D	NO.	DATE	BY	REVISIONS	APP'D	CHK'D



KEY NOTES:

- ① REMOVE OVER-FRAMED WOOD CRICKETS AND ASSOCIATED LEDGES DOWN TO ROOF DECK - REPLACE DAMAGED ROOF SHEATHING
- ② UNSEAM AND REMOVE OR PARTIALLY REMOVE ONE OR MORE EXISTING STRUCTURAL STANDING SEAM PANELS AS REQUIRED FOR SEISMIC STRAPPING - METAL PANELS ARE INTENDED TO BE REINSTALLED WHERE POSSIBLE - PANELS NOT SCHEDULED FOR REMOVAL ARE TO REMAIN

DEMOLITION SCOPE OF WORK:

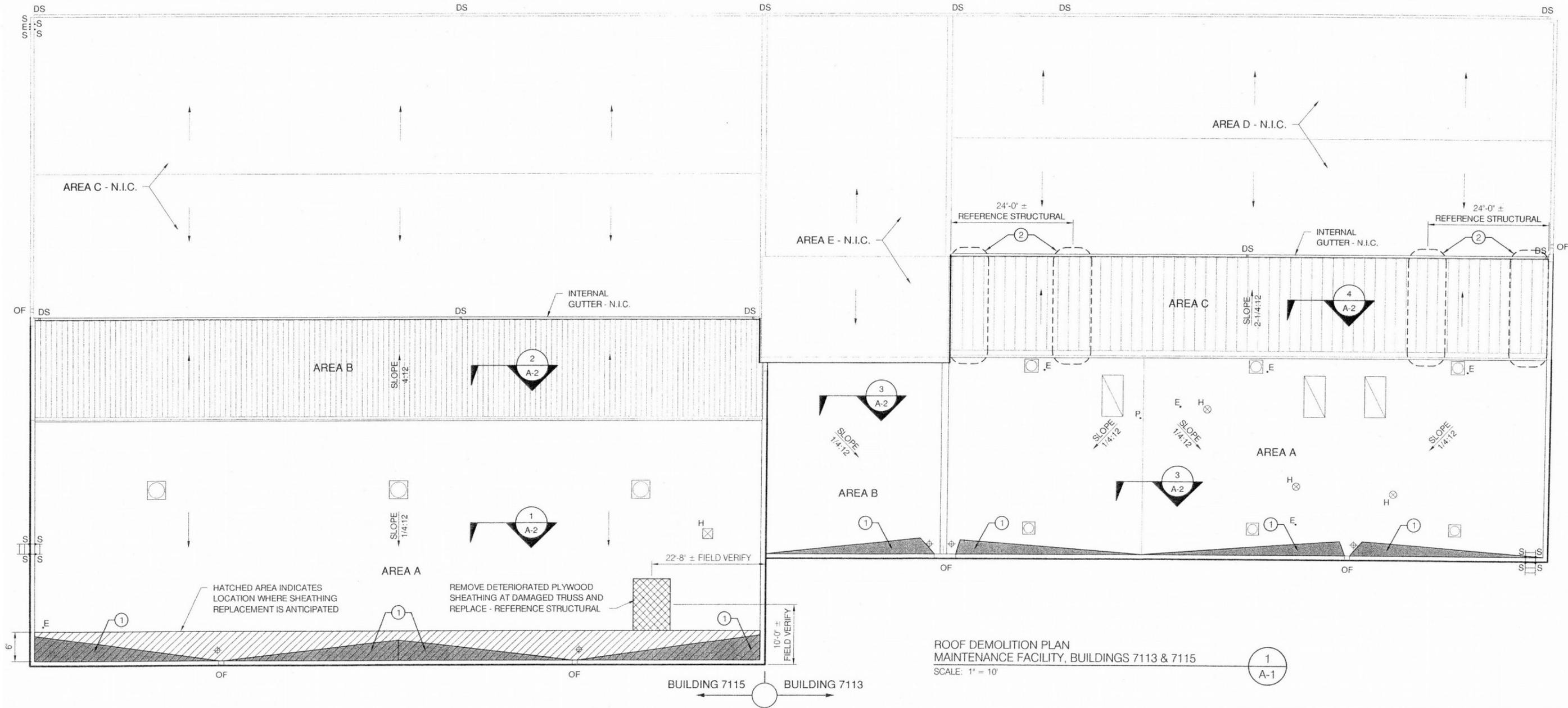
BUILDING 7115:

- AREA A - REMOVE ROCK BALLAST, EXISTING ROOF MEMBRANE DOWN TO ROOF DECK, AND ALL ASSOCIATED SHEET METAL FLASHING - INSPECT DECK FOR AREAS OF DETERIORATED WOOD SHEATHING - REPLACE WHERE REQUIRED.
- AREA B - REMOVE EXISTING METAL PANELS AND UNDERLAYMENT DOWN TO ROOF DECK - REMOVE ASSOCIATED PERIMETER FLASHING AS REQUIRED.

BUILDING 7113:

- AREAS A & B - REMOVE ROCK BALLAST, EXISTING ROOF MEMBRANE & UNDERLYING INSULATION DOWN TO ROOF DECK, AND ALL ASSOCIATED SHEET METAL FLASHING - INSPECT DECK FOR DETERIORATED WOOD SHEATHING - REPLACE WHERE REQUIRED.
- AREA C - EXISTING METAL PANEL ROOF SYSTEM TO BE PARTIALLY REMOVED AND REINSTALLED.

BUILDING 7115 BUILDING 7113



ROOF DEMOLITION PLAN
 MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
 SCALE: 1" = 10'

DATE	BY	REVISIONS	APP'VD	CK'D	NO.	DATE	BY	REVISIONS	APP'VD	CK'D



PORT OF PORTLAND
 PORTLAND, OREGON

1108 SE GRAND AVENUE, SUITE 300
 PORTLAND, OREGON 97214
 PH: 503.280.8721 FAX: 503.297.1860

2013D009
 DESIGN NUMBER

101527
 PROJECT NUMBER

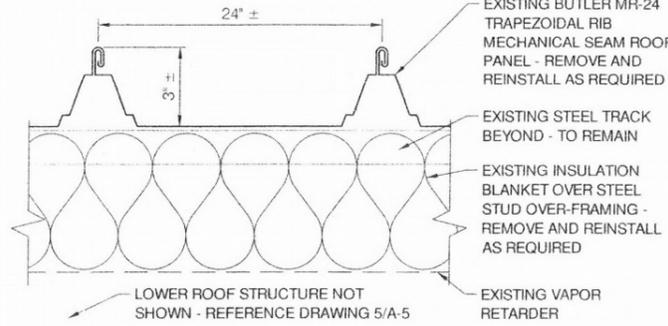
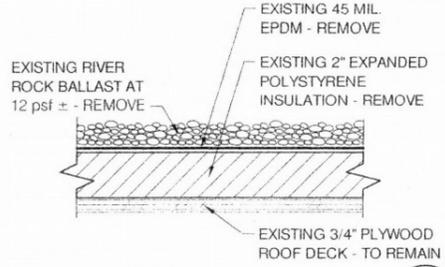
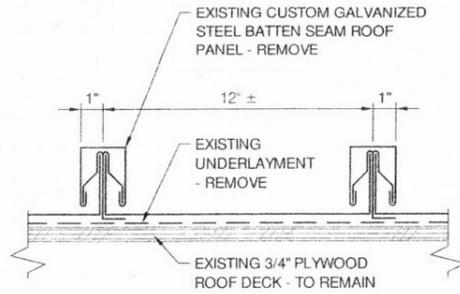
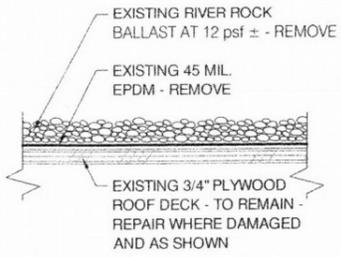
PROFESSIONAL ROOF CONSULTANTS, INC.

DESIGNED BY	B. RYAN
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	JUNE 2013
SCALE	1" = 10'-0"

PORTLAND INTERNATIONAL AIRPORT
 MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
 ROOF REPAIR & SEISMIC UPGRADES
 ROOF DEMOLITION PLAN

SUBMITTED BY	T. WHARTON	TYPE	CD
DRAWING NO.	PDX 2013-513	DATE	2/13

(A-1)



EXISTING ASSEMBLY - 7115 AREA A 1
 SCALE: 3" = 1'-0" A-2

EXISTING ASSEMBLY - 7115 AREA B 2
 SCALE: 3" = 1'-0" A-2

EXISTING ASSEMBLY - 7113 AREAS A & B 3
 SCALE: 3" = 1'-0" A-2

EXISTING ASSEMBLY - 7113 AREA C 4
 SCALE: 3" = 1'-0" A-2

DATE	BY	REVISIONS	APPVD	CKD	NO.	DATE	BY	REVISIONS	APPVD	CKD



PORT OF PORTLAND
 PORTLAND, OREGON



1100 SE GRAND AVENUE, SUITE 200
 PORTLAND, OREGON 97114
 TEL: 503.280.8750 FAX: 503.280.8866

20130009 101527

DESIGNED BY	B. RYAN
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	JUNE 2013

PORTLAND INTERNATIONAL AIRPORT
 MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
 ROOF REPAIR & SEISMIC UPGRADES
 DEMOLITION DETAILS

SUBMITTED BY	T. WHARTON	TYPE	DRAWING NO.
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GENERAL NOTES:

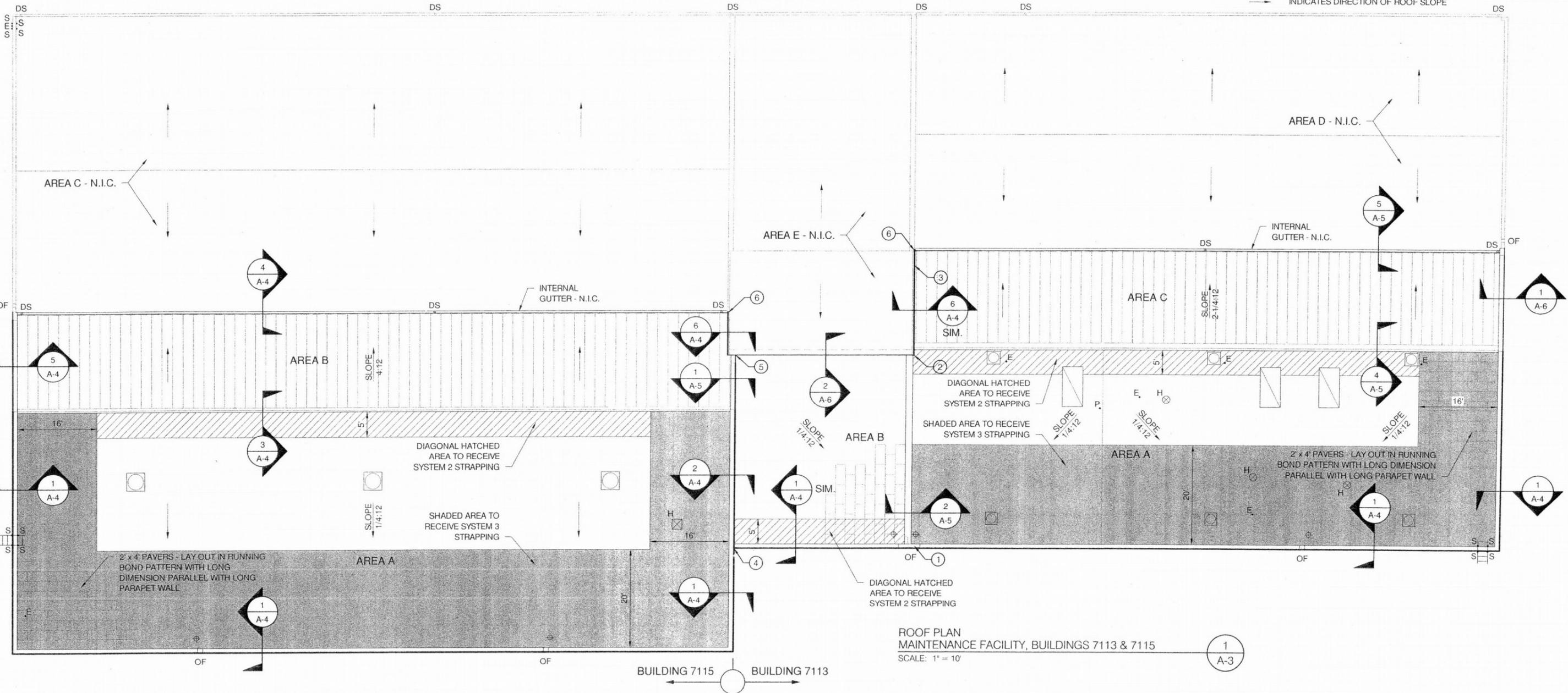
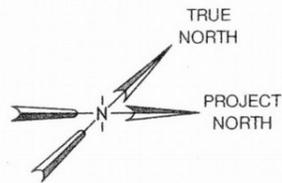
1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS OF THE PROJECT, INCLUDING VERIFICATION OF EXISTING ROOF SYSTEM CONSTRUCTION AND MATERIALS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING BUILDING SURFACES, FINISHES, ROOF SYSTEMS, CONTENTS, INTERIORS, ETC. FROM DAMAGE DURING THE COURSE OF CONSTRUCTION ACTIVITIES. DO NOT LEAVE ROOF OPEN TO THE WEATHER AT ANY TIME. PROVIDE TEMPORARY PROTECTION AS REQUIRED.

KEY NOTES:

1. PROVIDE FULL WIDTH COPING OVER NOTCH AT WALL - PROVIDE 6" DEEP STAINLESS STEEL SADDLE FLASHING WITH REVERSE HEMMED END DAM AT LEADING EDGE OPPOSITE FROM WALL FLANGE. TERMINATE COPING TO FACE OF WALL WITH BUTT EDGE TO COMPLETELY CONCEAL SADDLE FLASHING. NOTCH AND HEM INSIDE LEG OF COPING WHERE PERPENDICULAR WALL INTERFERES.
2. PROVIDE SHEET METAL SUBSTRUCTURE AT WALL END TO COMPLETE WALL CONNECTION TO AREA E SUBSTRUCTURE AS REQUIRED ELIMINATING EXISTING PASS THROUGH - ATTACHMENT TO SUBSTRUCTURE SHOULD BE MADE IN A MANNER THAT PERMITS INDEPENDENT MOVEMENT OF EACH STRUCTURE. TRIM EXISTING METAL PANEL ONLY AS MUCH AS REQUIRED TO ELIMINATE CONTACT WITH COPING FLASHING AND AS REQUIRED TO PERMIT WORK. PROVIDE 5" DEEP END CAP JOINED TO COPING WITH A STANDING SEAM LOCATED UNDER REMAINING OVERHANG OF METAL PANEL ROOFING ABOVE.
3. REMOVE AND REINSTALL EXISTING THROUGH FASTENED WALL PANELS AS REQUIRED FOR ROOFING PANEL REMOVAL. INTEGRATE NEW WALL PANELS TO EXISTING AT SEPARATION WALL INTERSECTION.

LEGEND OF SYMBOLS:

- ⊕ EXISTING ROOF DRAIN - REF. DETAIL 3/A-7
- DS EXISTING BUILT-IN GUTTER w/ DOWNSPOUT
- OF EXISTING OVERFLOW SCUPPER - REF. DETAIL 2/A-7
- P, E EXISTING PLUMBING VENT OR ELECTRICAL CONDUIT - REF. DETAIL 4/A-7
- S EXISTING STRUCTURAL WALL MOUNTS
- H ⊗ EXISTING FLANGED HOT PIPE PENETRATION - REF. DETAIL 5/A-7
- ⊗ EXISTING CURBED EXHAUST FAN - REF. DETAIL 1/A-7
- H ⊗ EXISTING CURBED HOT EXHAUST PIPE - REF. DETAIL 1/A-7
- ⊗ EXISTING CURBED SKYLIGHT - REF. DETAIL 3/A-5
- INDICATES DIRECTION OF ROOF SLOPE



ROOF PLAN
 MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
 SCALE: 1" = 10'

DATE	BY	REVISIONS	APPVD	CKD	NO.	DATE	BY	REVISIONS	APPVD	CKD



PORT OF PORTLAND
 PORTLAND, OREGON

PROFESSIONAL ROOF CONSULTANTS

1108 SE GRAND AVENUE, SUITE 300
 PORTLAND, OREGON 97214
 TEL: 503.286.8771 FAX: 503.286.8880

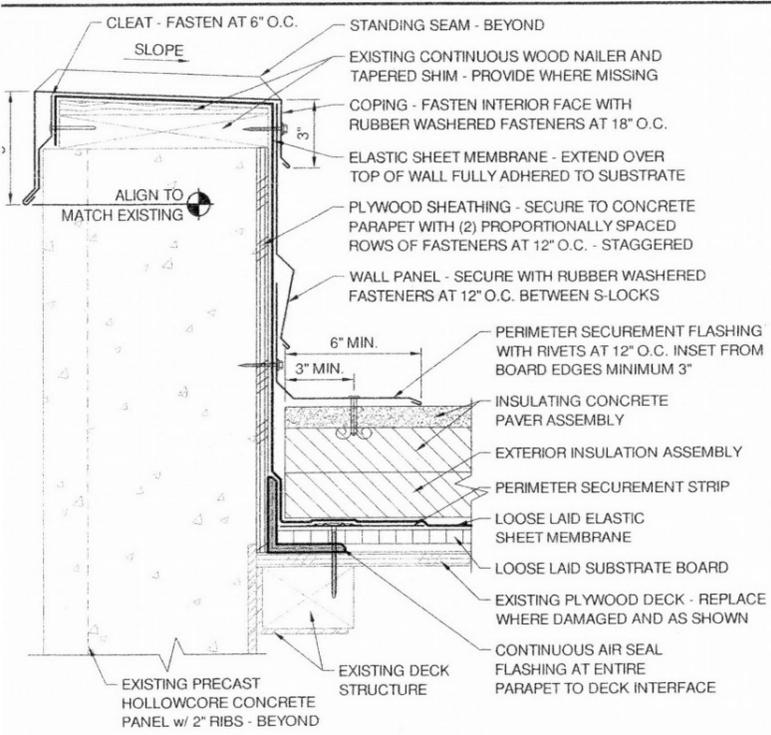
20130009 DESIGN NUMBER 101527 PROJECT NUMBER

DESIGNED BY	B. RYAN
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	JUNE 2013
SCALE	1" = 10'-0"

PORTLAND INTERNATIONAL AIRPORT
 MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
 ROOF REPAIR & SEISMIC UPGRADES
 ROOF PLAN

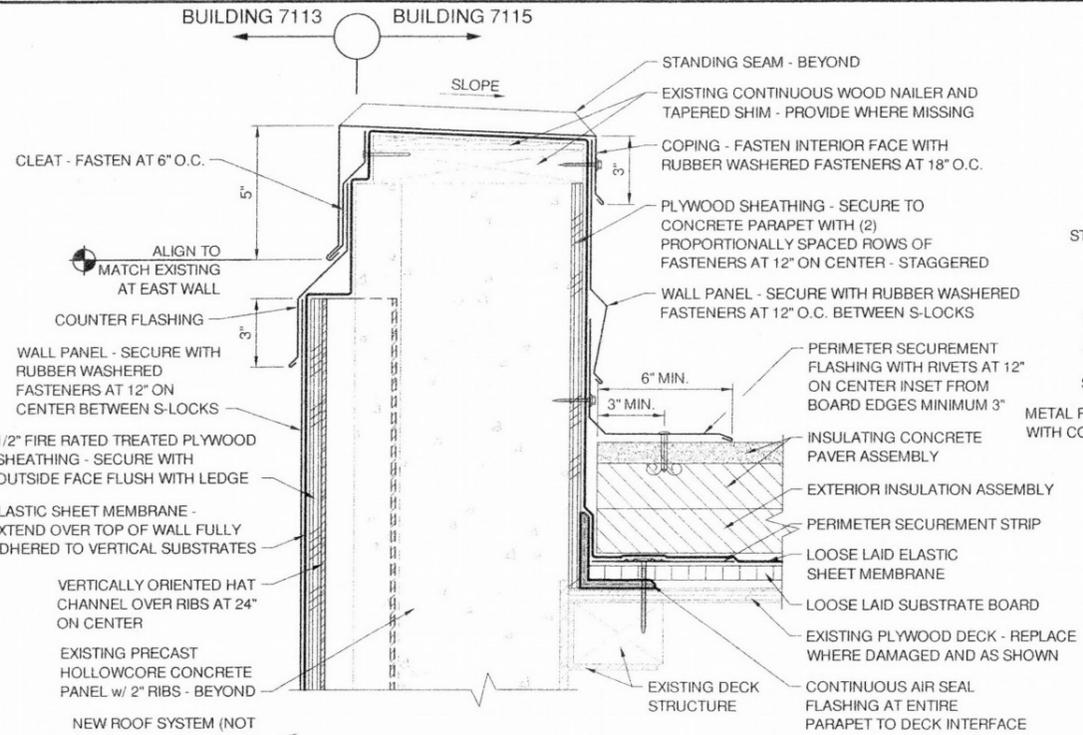
SUBMITTED BY	T. WHARTON	TYPE	DRAWING NO.
DATE			

CD | PDX 2013-513 4/13 (A-3)



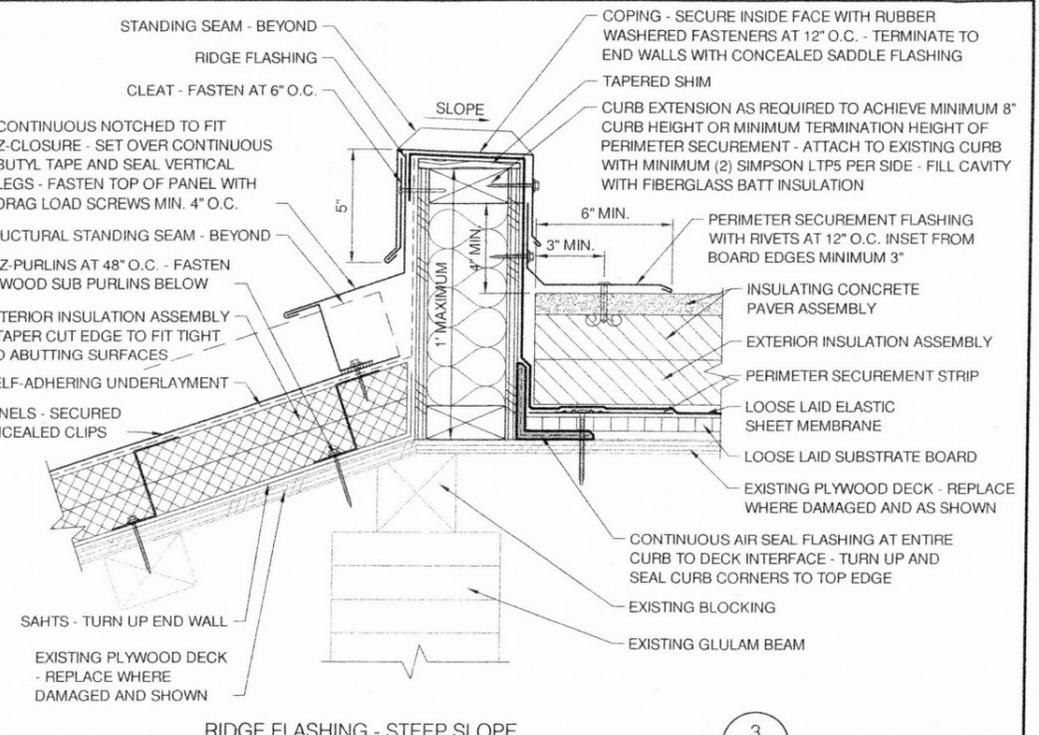
PARAPET WALL - LOW SLOPE
SCALE: 3" = 1'-0"

1
A-4



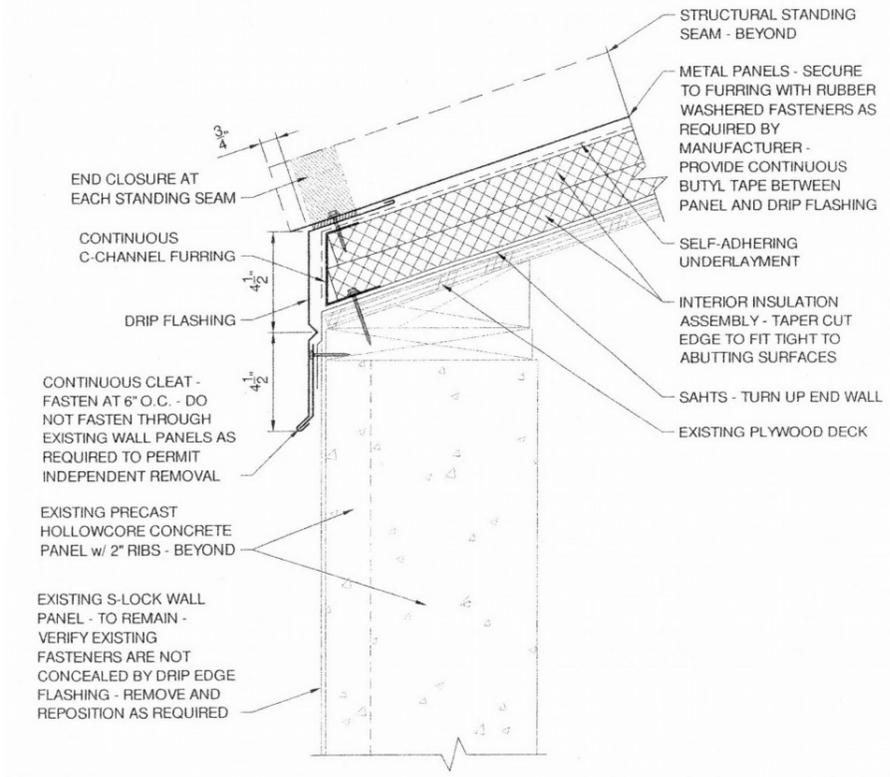
DIVIDING WALL - LOW SLOPE TO LOW SLOPE
SCALE: 3" = 1'-0"

2
A-4



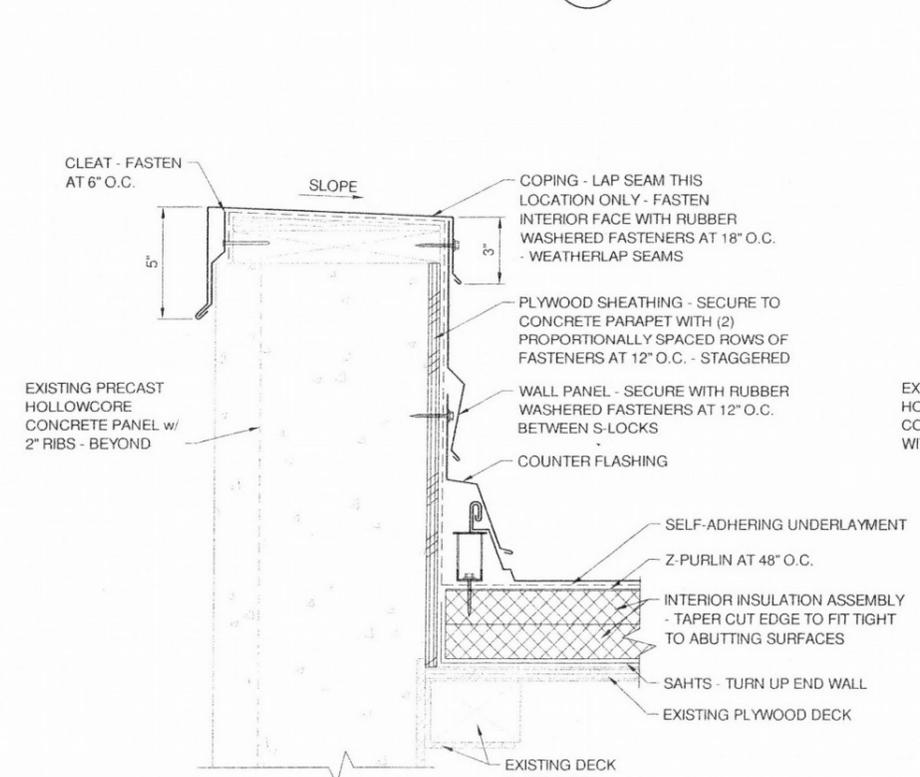
RIDGE FLASHING - STEEP SLOPE
SCALE: 3" = 1'-0"

3
A-4



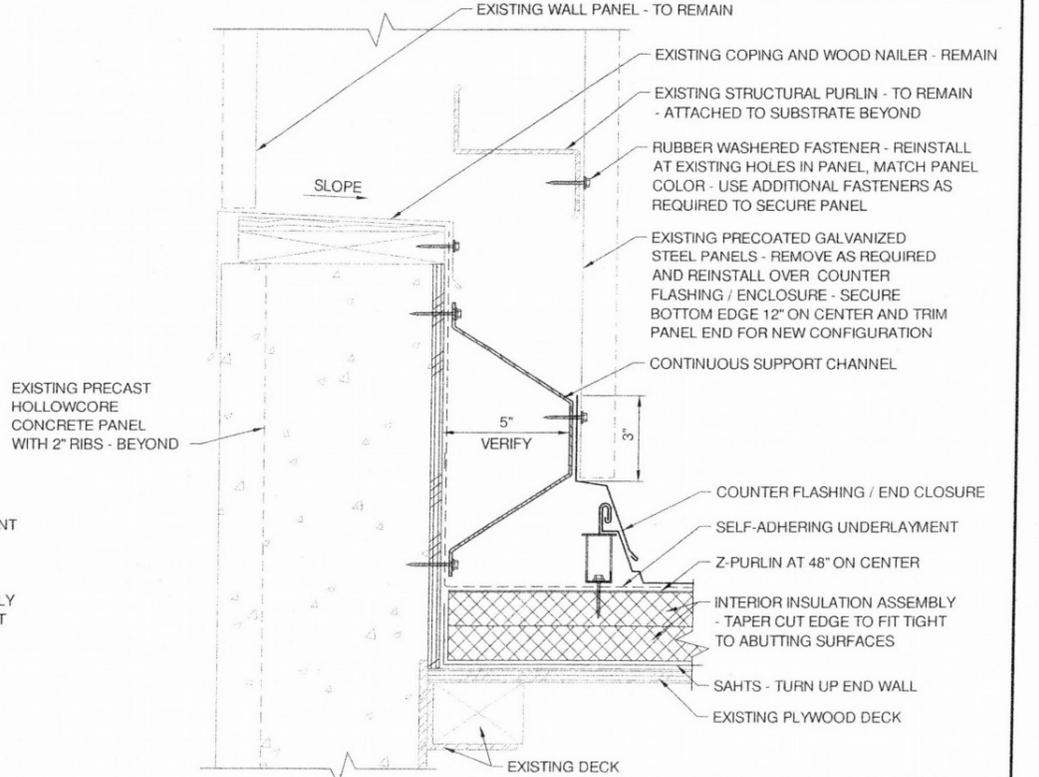
EAVE FLASHING - STEEP SLOPE
SCALE: 3" = 1'-0"

4
A-4



PARAPET WALL - STEEP SLOPE
SCALE: 3" = 1'-0"

5
A-4



METAL WALL TRANSITION - STEEP SLOPE
SCALE: 3" = 1'-0"

6
A-4

DATE	BY	REVISIONS	APPVD	CKD	NO.	DATE	BY	REVISIONS	APPVD	CKD



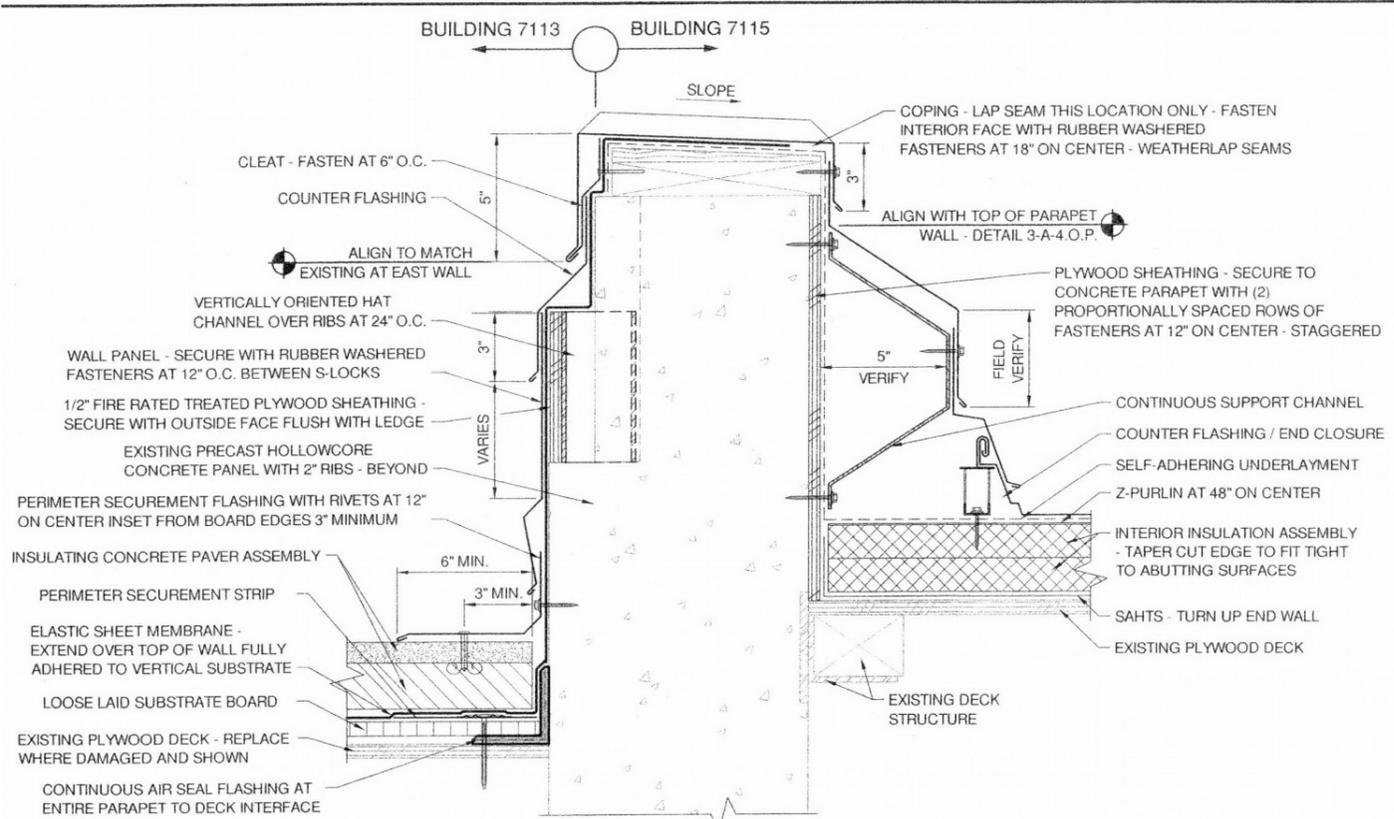
PORT OF PORTLAND
PORTLAND, OREGON



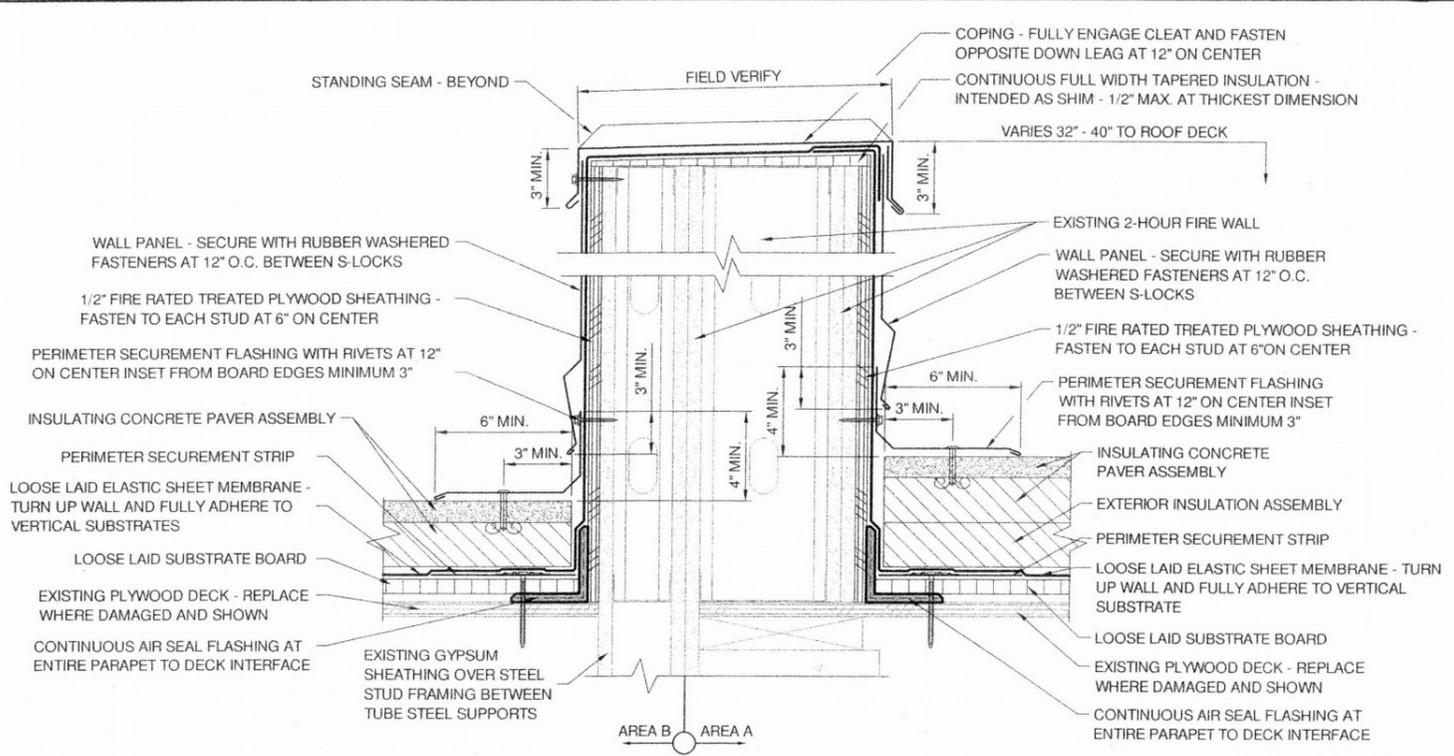
DESIGNED BY: B. RYAN
DRAWN BY: T. BERTRAND
CHECKED BY: B. RYAN
DATE: JUNE 2013
SCALE: 3" = 1'-0"

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
ROOF REPAIR & SEISMIC UPGRADES
DETAILS - BUILDING 7115

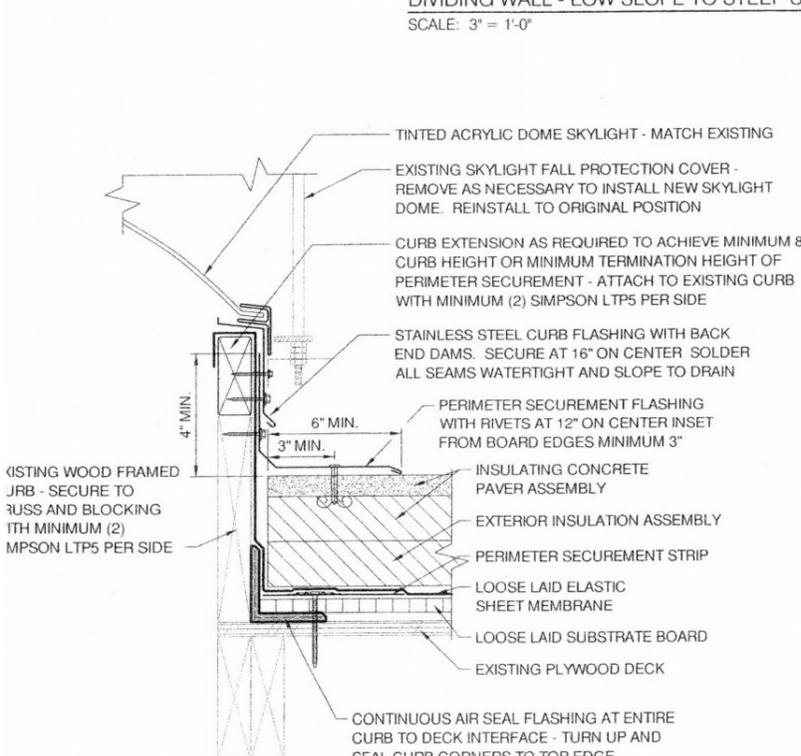
SUBMITTED BY: T. WHARTON
TYPE: CD
DRAWING NO.: PDX 2013-513
DATE: 5/13
SCALE: (A-4)



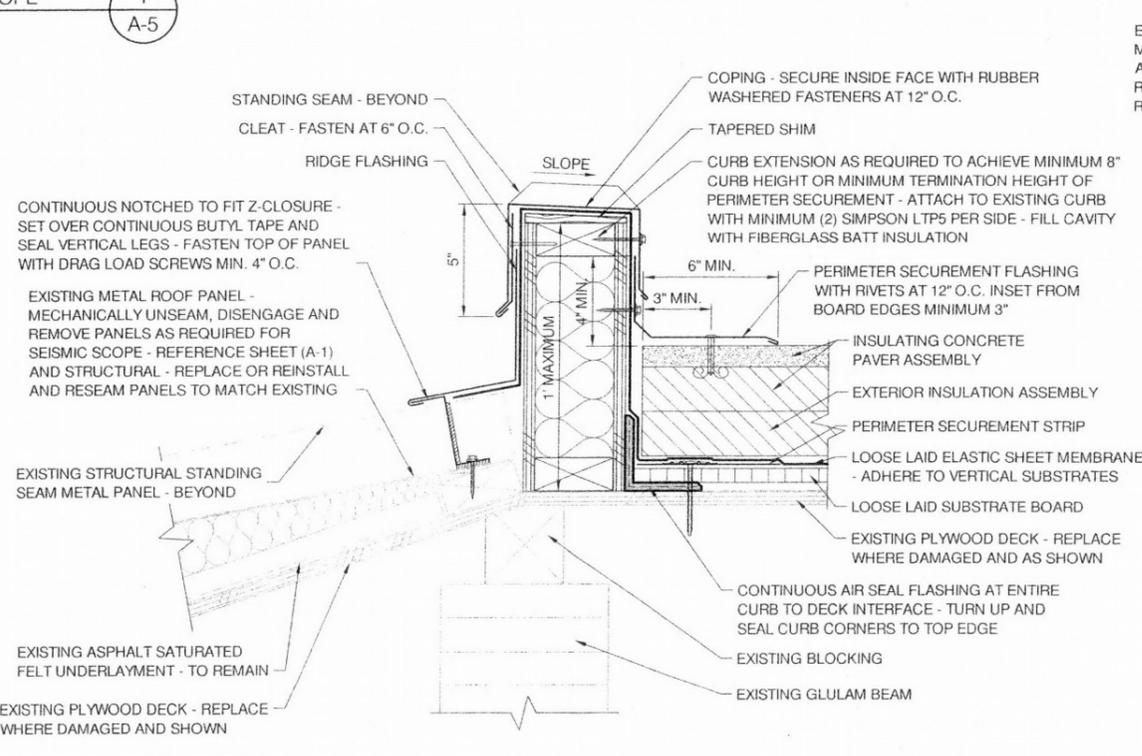
DIVIDING WALL - LOW SLOPE TO STEEP SLOPE
SCALE: 3" = 1'-0"
1
A-5



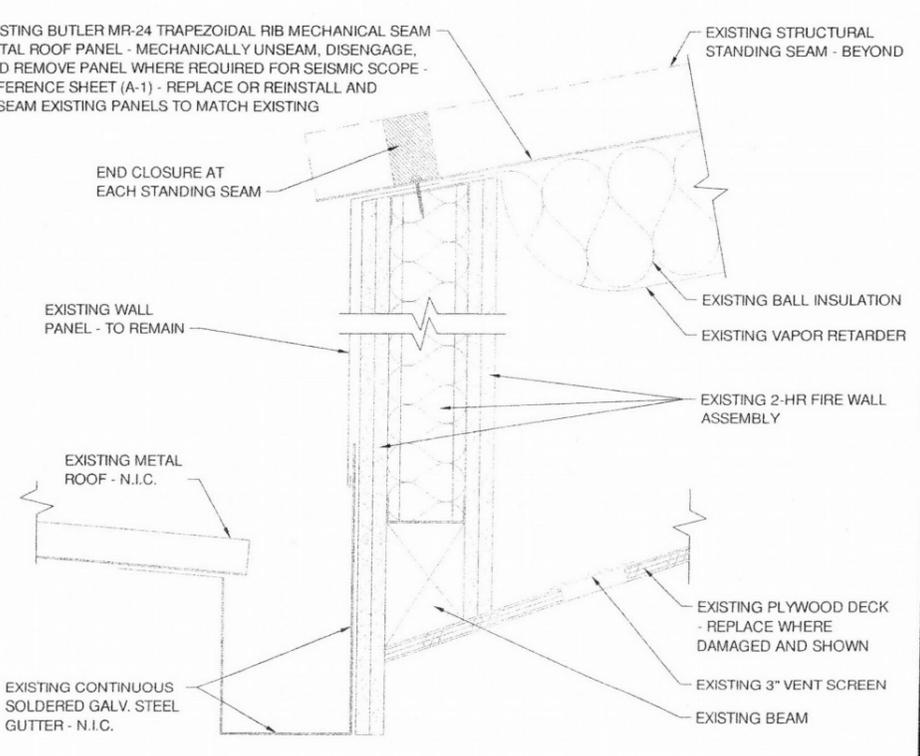
FIREWALL FLASHING - LOW SLOPE
SCALE: 3" = 1'-0"
2
A-5



SKYLIGHT FLASHING
SCALE: 3" = 1'-0"
3
A-5



RIDGE FLASHING - STEEP SLOPE
SCALE: 3" = 1'-0"
4
A-5



EAVE FLASHING - STEEP SLOPE
SCALE: 3" = 1'-0"
5
A-5

DATE	BY	REVISIONS	APPVD	CKD	NO.	DATE	BY	REVISIONS	APPVD	CKD

PORT OF PORTLAND
PORTLAND, OREGON



2013009
DESIGN NUMBER

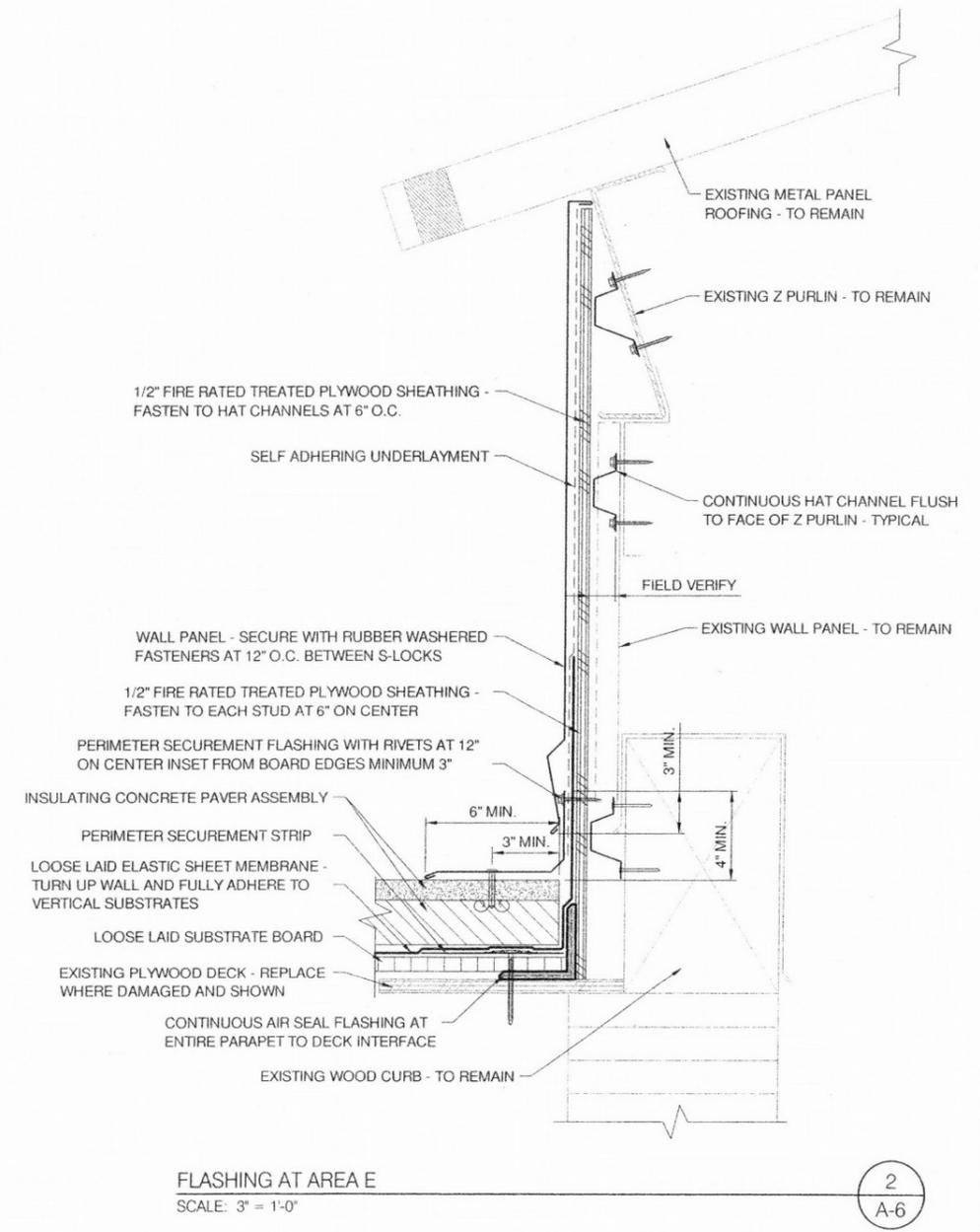
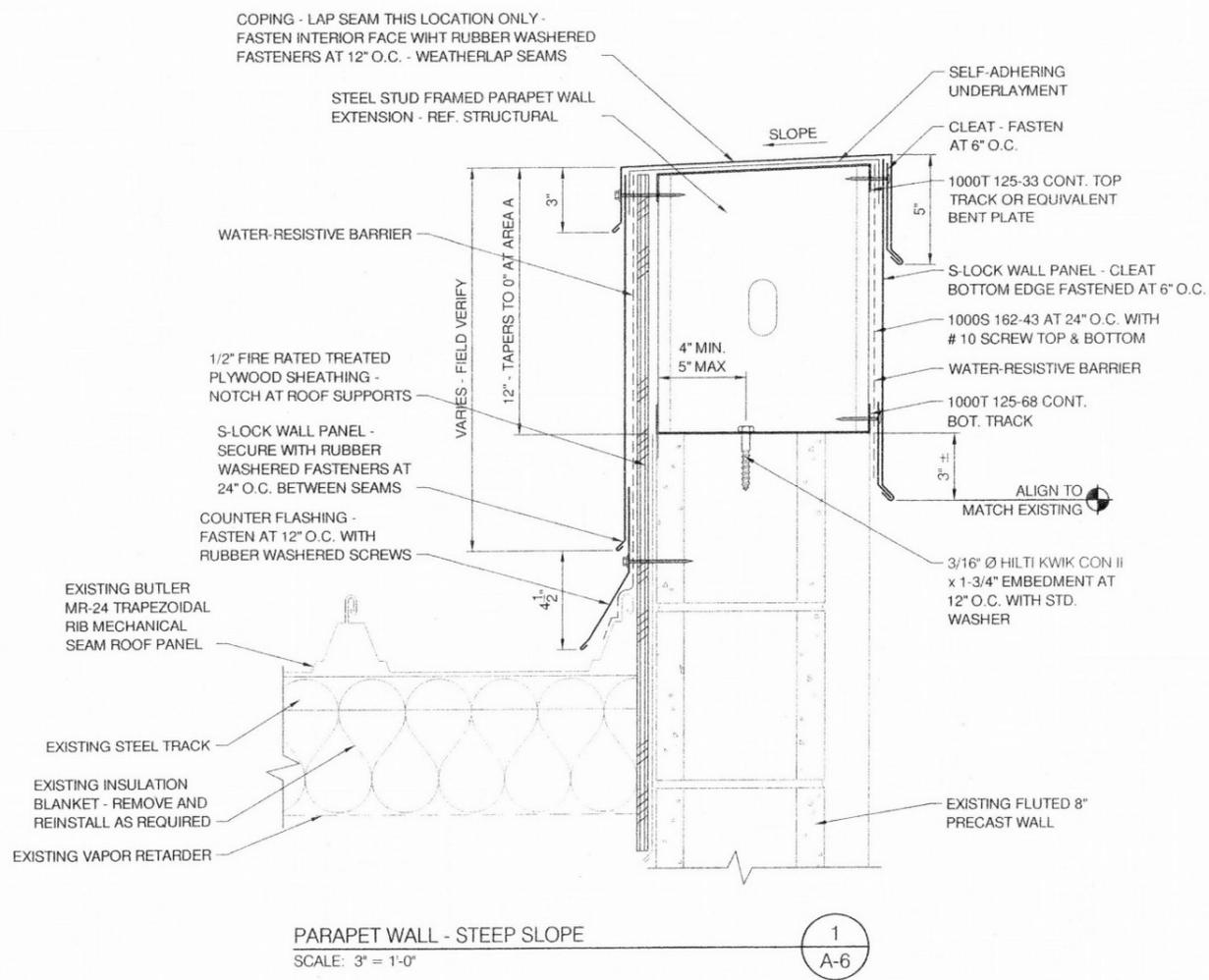
101527
PROJECT NUMBER

1158 SE GRAND AVENUE, SUITE 300
PORTLAND, OREGON 97214
PH: 503.283.8759 FAX: 503.283.8806

DESIGNED BY	B. RYAN
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	JUNE 2013
SCALE	3" = 1'-0"

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
ROOF REPAIR & SEISMIC UPGRADES
DETAILS - BUILDING 7113

SUBMITTED BY	T. WHARTON	TYPE	CD	DRAWING NO.	PDX 2013-513
			6/13	(A-5)	



DATE	BY	REVISIONS	APP'VD	CK'D	NO.	DATE	BY	REVISIONS	APP'VD	CK'D



PORT OF PORTLAND
PORTLAND, OREGON

1138 SW GRAVE ROAD, SUITE 200
PORTLAND, OREGON 97214
PH: 503.280.8776 FAX: 503.280.8800

2013D009
DESIGN NUMBER

101527
PROJECT NUMBER

PROFESSIONAL
ROOF
CONSULTANTS

DESIGNED BY: B. RYAN

DRAWN BY: T. BERTRAND

CHECKED BY: B. RYAN

DATE: JUNE 2013

SCALE: 3" = 1'-0"

PORTLAND INTERNATIONAL AIRPORT

MAINTENANCE FACILITY, BUILDINGS 7113 & 7115

ROOF REPAIR & SEISMIC UPGRADES

DETAILS - BUILDING 7113

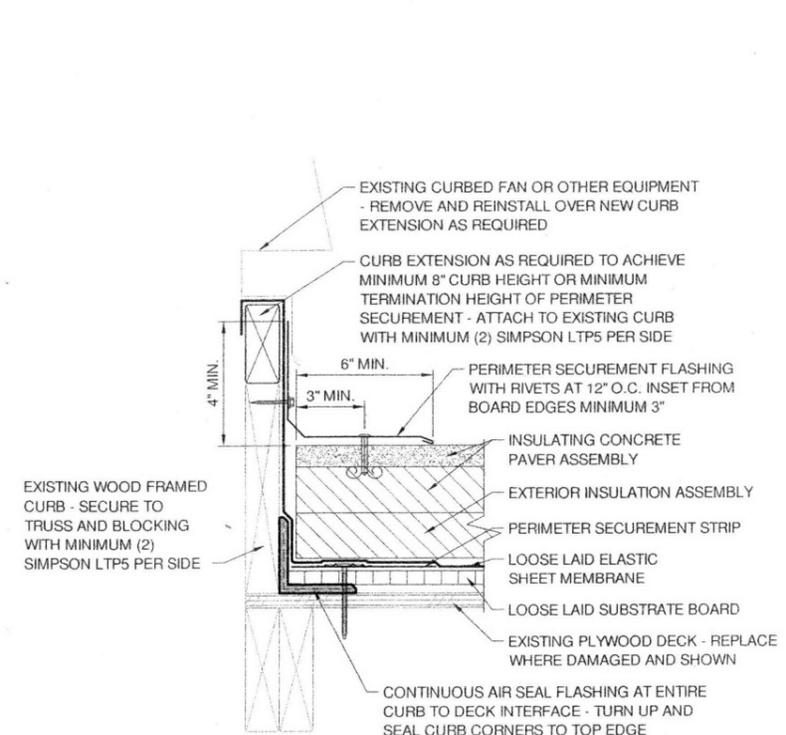
SUBMITTED BY: T. WHARTON

TYPE: CD

DRAWING NO.: PDX 2013-513

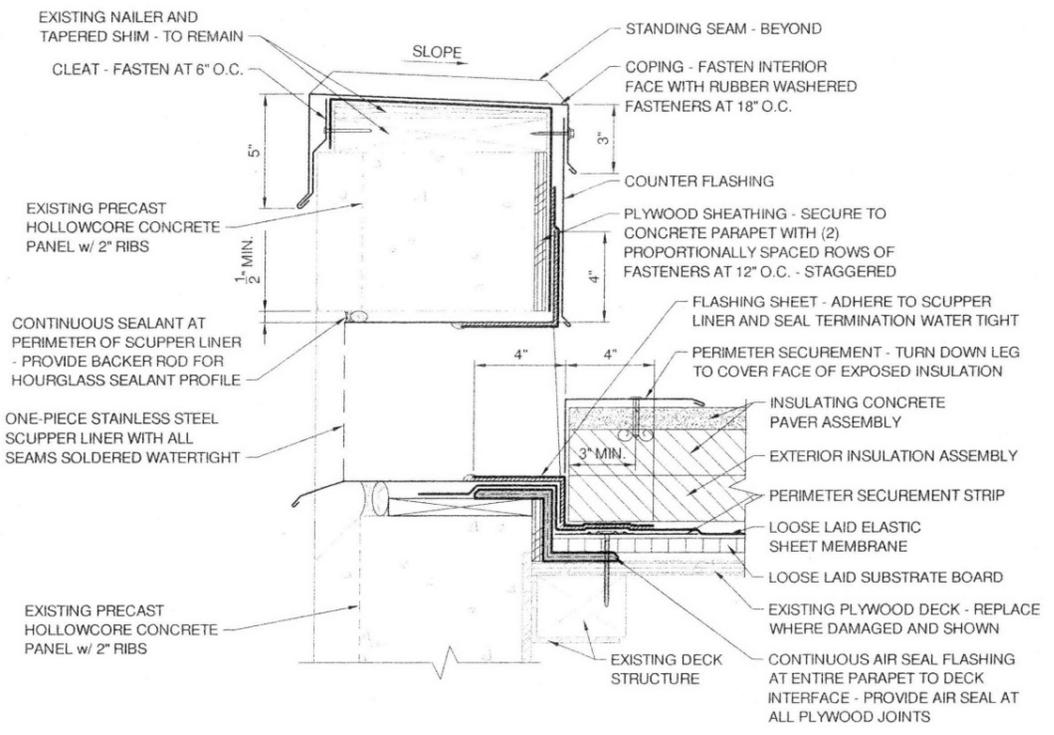
7/13

(A-6)



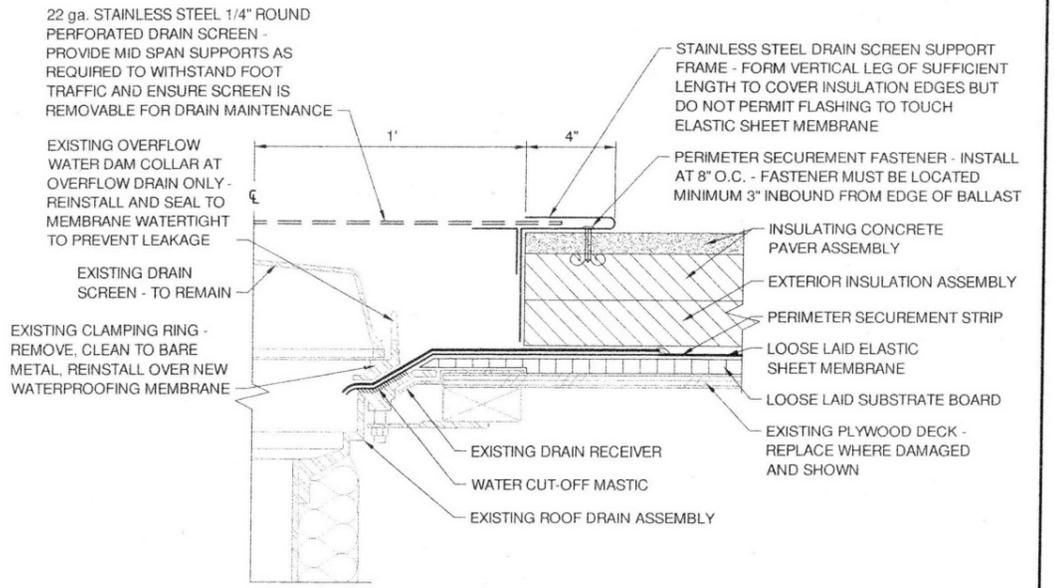
TYPICAL CURB FLASHING
SCALE: 3" = 1'-0"

1
A-7



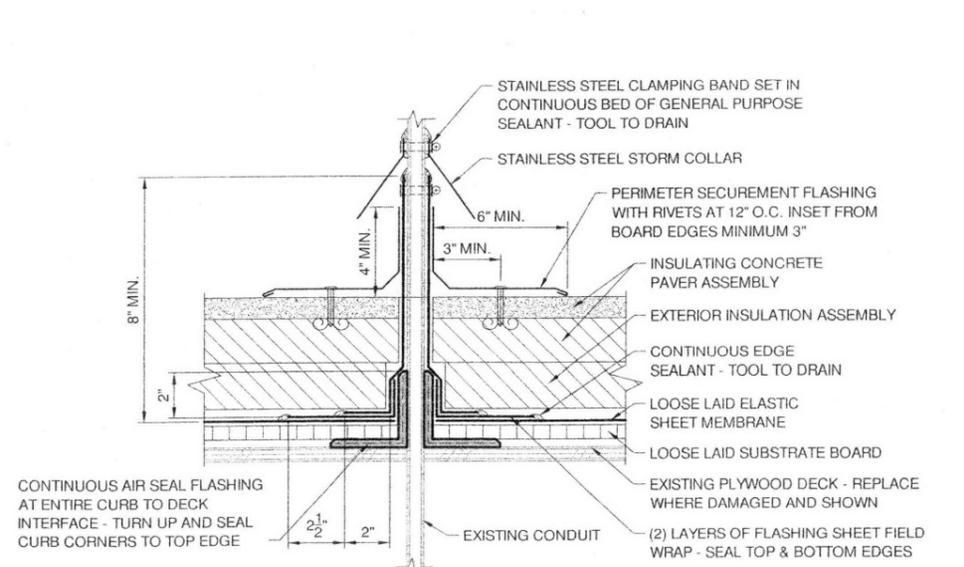
TYPICAL OVERFLOW SCUPPER
SCALE: 3" = 1'-0"

2
A-7



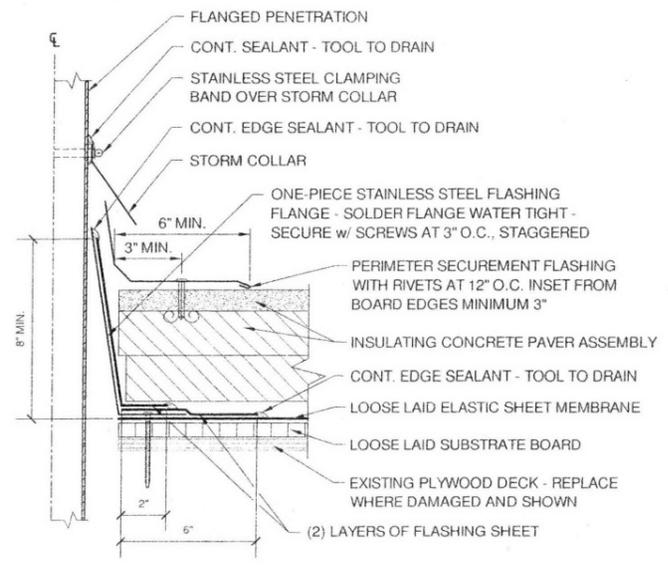
TYPICAL ROOF DRAIN
SCALE: 3" = 1'-0"

3
A-7



TYPICAL CONDUIT / PIPE PENETRATION
SCALE: 3" = 1'-0"

4
A-7



TYPICAL FLANGED PENETRATION
SCALE: 3" = 1'-0"

5
A-7

DATE	BY	REVISIONS	APP'VD	CK'D	NO.	DATE	BY	REVISIONS	APP'VD	CK'D

PORT OF PORTLAND
PORTLAND, OREGON

1108 51 22ND AVENUE, SUITE 300
PORTLAND, OREGON 97214
PH: 503.286.8754 FAX: 503.286.8866

2013D009
DESIGN NUMBER

101527
PROJECT NUMBER

DESIGNED BY	B. RYAN
DRAWN BY	T. BERTRAND
CHECKED BY	B. RYAN
DATE	JUNE 2013
SCALE	3" = 1'-0"

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
ROOF REPAIR & SEISMIC UPGRADES
DETAILS - TYPICAL

SUBMITTED BY	T. WHARTON	TYPE	CD	DRAWING NO.	PDX 2013-513	8/13	(A-7)
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GENERAL STRUCTURAL NOTES

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THESE DRAWINGS INTO THEIR SHOP DRAWINGS AND WORK.

THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.

CODE REQUIREMENTS:
ALL NEW CONSTRUCTION SHALL CONFORM TO THE 2010 OREGON STRUCTURAL SPECIALTY CODE (OSSC), BASED ON THE 2009 INTERNATIONAL BUILDING CODE (IBC).

EXISTING CONDITIONS:
ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS SHALL BE FIELD VERIFIED. THE CONTRACTOR SHALL NOTIFY THE PORT OF ANY SIGNIFICANT DISCREPANCIES FROM CONDITIONS SHOWN ON THE DRAWINGS.

ASSUMED FUTURE CONSTRUCTION:
VERTICAL: NONE
HORIZONTAL: NONE

DESIGN CRITERIA:
DESIGN WAS BASED ON THE STRENGTH AND DEFLECTION CRITERIA OF THE OSSC.

DESIGN CRITERIA:

WIND CRITERIA			
BASIC WIND SPEED			
MAIN WIND FORCE RESISTING SYSTEM	95 MPH (3-SECOND GUST) PER ASCE 7-05		
COMPONENTS AND CLADDINGS	95 MPH (3-SECOND GUST) PER ASCE 7-05		
EXPOSURE	C		
IMPORTANCE FACTOR	I _w = 1.0		
GUST/INTERNAL PRESSURE	G _{Cpi} = +/- 0.18		
SEISMIC CRITERIA			
OCCUPANCY CATEGORY	II		
SEISMIC DESIGN CATEGORY	D		
SITE CLASS	D		
IMPORTANCE FACTOR	I _e = 1.0		
MCE SPECTRAL ACCELERATION	S _s = 0.918	S ₁ = 0.318	
SITE COEFFICIENT	F _a = 1.13	F _v = 1.76	
DESIGN SPECTRAL ACCELERATION	S _{DS} = 0.693	S _{D1} = 0.374	
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PER ASCE 7-05, SECTION 12.8		

DESIGN AND DETAILING FOR NEW ELEMENTS WAS BASED ON CRITERIA FOR SEISMIC DESIGN CATEGORY D. ALL WELDED CONNECTIONS SHALL BE CONSIDERED "SEISMIC CRITICAL". REFER TO THE PROJECT SPECIFICATIONS FOR DETAILING, INSTALLATION, TESTING AND INSPECTION REQUIREMENTS FOR SEISMIC CRITICAL WELDS.

STRUCTURAL OBSERVATION:
THE STRUCTURAL ENGINEER OF RECORD (SER) WILL PERFORM STRUCTURAL OBSERVATION BASED ON THE REQUIREMENTS OF THE OSSC AT THE STAGES OF CONSTRUCTION LISTED BELOW. CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE AND ACCESS FOR THE SER TO PERFORM THESE OBSERVATIONS.

STRUCTURAL OBSERVATION PROGRAM

ITEM	SER (2)	COMMENTS
AS REQUIRED TO ADDRESS STRUCTURAL ISSUES	X	REF. NOTES 1, 3, 4

PROGRAM FOOTNOTES:

- CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE SER IN ADVANCE.
- SER - STRUCTURAL ENGINEER OF RECORD.
- A FIELD REPORT WILL BE SUBMITTED TO THE BUILDING DEPARTMENT FOLLOWING EACH SITE VISIT.
- STRUCTURAL OBSERVATION IS FOR THE GENERAL CONFORMANCE OF THE STRUCTURAL DRAWING. SPECIAL INSPECTION IS STILL REQUIRED.

SPECIAL INSPECTION:
SPECIAL INSPECTION WILL BE PROVIDED BY THE OWNER BASED ON THE REQUIREMENTS OF THE OSSC AS SUMMARIZED IN THE SPECIAL INSPECTION PROGRAM. CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE AND ACCESS FOR THE SPECIAL INSPECTOR TO PERFORM THESE INSPECTIONS.

SUBMITTALS:

ITEM	SUBMITTALS (1, 2)	COMMENTS
STRUCTURAL STEEL	X	
LIGHT GAUGE METAL FRAMING	X	
STEEL FASTENERS	X	

FOOTNOTES:

- SHOP DRAWINGS SHALL BE SUBMITTED TO THE PORT PRIOR TO FABRICATION AND CONSTRUCTION OF STRUCTURAL ITEMS. IF THE SHOP DRAWINGS DIFFER FROM OR ADD TO THE DESIGN OF THE STRUCTURAL DRAWINGS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF OREGON. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE PORT AND ARE SUBJECT TO REVIEW AND ACCEPTANCE OF THE STRUCTURAL ENGINEER.
- FIELD ENGINEERED DETAILS DEVELOPED BY THE CONTRACTOR THAT DIFFER FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF OREGON AND SHALL BE SUBMITTED TO THE PORT PRIOR TO CONSTRUCTION.

STRUCTURAL STEEL STRUCTURAL STEEL SHALL BE:

ASTM A572, GRADE 50	PLATES WHERE NOTED
ASTM A36	PLATES AND ANGLES, EXCEPT AS NOTED

DESIGN, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH THE "AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" WITH "COMMENTARY" AND THE "CODE OF STANDARD PRACTICE", WITH EXCEPTIONS NOTED IN SPECIFICATIONS.

WELDING SHALL CONFORM TO THE AWS CODES FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A WELDED PROCEDURE SPECIFICATION (WPS) AS REQUIRED IN AWS D1.1 AND APPROVED BY THE STRUCTURAL ENGINEER. THE WPS VARIABLES SHALL BE WITHIN THE PARAMETERS ESTABLISHED BY THE FILLER-METAL MANUFACTURER.

ALL WELDS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH (CVN) TOUGHNESS OF 20 FT-LBS AT 0 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION.

WELDS SHALL BE MADE USING E70XX ELECTRODES AND SHALL BE 3/16" MINIMUM, UNLESS OTHERWISE NOTED. WELDING SHALL BE BY AWS CERTIFIED WELDERS MEETING CITY OF PORTLAND STANDARDS.

STATEMENT OF SPECIAL INSPECTIONS AND TESTING

TABLE 1 REQUIRED STRUCTURAL SPECIAL INSPECTIONS

SYSTEM or MATERIAL	INSPECTION				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY		
			Continuous	Periodic	
STEEL					
FABRICATION OF STRUCTURAL ELEMENTS	1704.2			X	REFER TO INSPECTION OF FABRICATOR REQUIREMENTS
MATERIAL VERIFICATION OF STRUCTURAL STEEL	1704.3 2203.1	ASTM A6 AISC 360 A3.1		X	CERTIFIED MILL TEST REPORTS
MATERIAL VERIFICATION OF ANCHOR BOLTS AND THREADED RODS	1704.3	AISC 360 A3.4		X	MANUFACTURER'S CERTIFIED TEST REPORTS
MATERIAL VERIFICATION OF WELD FILLER METALS	1704.3	AISC 360 A3.5		X	MANUFACTURER'S CERTIFIED TEST REPORTS
VERIFYING USE OF PROPER WPS'S				X	COPY OF WELDING PROCEDURE SPECIFICATIONS
VERIFYING WELDER QUALIFICATIONS				X	COPY OF QUALIFICATION CARDS
SINGLE PASS FILLET WELDS LESS THAN OR EQUAL TO 5/16"				X	
COLD-FORMED STEEL FRAMING					
MATERIAL VERIFICATION OF WELD FILLER METALS				X	MANUFACTURER'S CERTIFIED TEST REPORTS
VERIFYING USE OF PROPER WPS'S	1704.3.1	AWS D1.3 SECTION 7		X	COPY OF WELDING PROCEDURE SPECIFICATIONS
VERIFYING WELDER QUALIFICATIONS				X	COPY OF QUALIFICATION CARDS
WELDED CONNECTIONS	1704.3.2	AWS D1.3 SECTION 7		X	ALL WELDS VISUALLY INSPECTED PER AWS D1.3.7.1
POST INSTALLED CONCRETE ANCHORS					
INSTALLATION IN HARDENED CONCRETE AND COMPLETED MASONRY	1703.4.2 1704.13.3	ICC EVALUATION REPORT		X	SPECIAL INSPECTIONS APPLY TO ANCHOR PRODUCT NAME, TYPE, AND DIMENSIONS, HOLE DIMENSIONS, COMPLIANCE WITH DRILL BIT REQUIREMENTS, CLEANLINESS OF THE HOLE AND ANCHOR, ADHESIVE EXPIRATION DATE, ANCHOR/ADHESIVE INSTALLATION, ANCHOR EMBEDMENT, AND TIGHTENING TORQUE
WOOD					
FASTENERS AT HIGH-LOAD DIAPHRAGM CONNECTIONS	1704.6.1, TABLE 2306.3.2			X	VERIFY NAIL OR STAPLE DIAMETER AND LENGTH, NUMBER OF FASTENER LINES AND SPACING BETWEEN FASTENERS IN EACH LINE AND AT EDGE MARGINS

TABLE 2 - REQUIRED SPECIAL INSPECTIONS for SEISMIC RESISTANCE

SYSTEM or MATERIAL	INSPECTION				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY		
			Continuous	Periodic	
WOOD					
CONNECTIONS FOR DIAPHRAGM CHORDS, COLLECTORS, BRACING, AND SHEAR WALL ANCHORAGE AND HOLD-DOWNS				X	ALL CONNECTIONS VISUALLY INSPECTED
FASTENING OF DIAPHRAGM AND SHEAR WALL SHEATHING WITH EDGE NAILING < 4"				X	

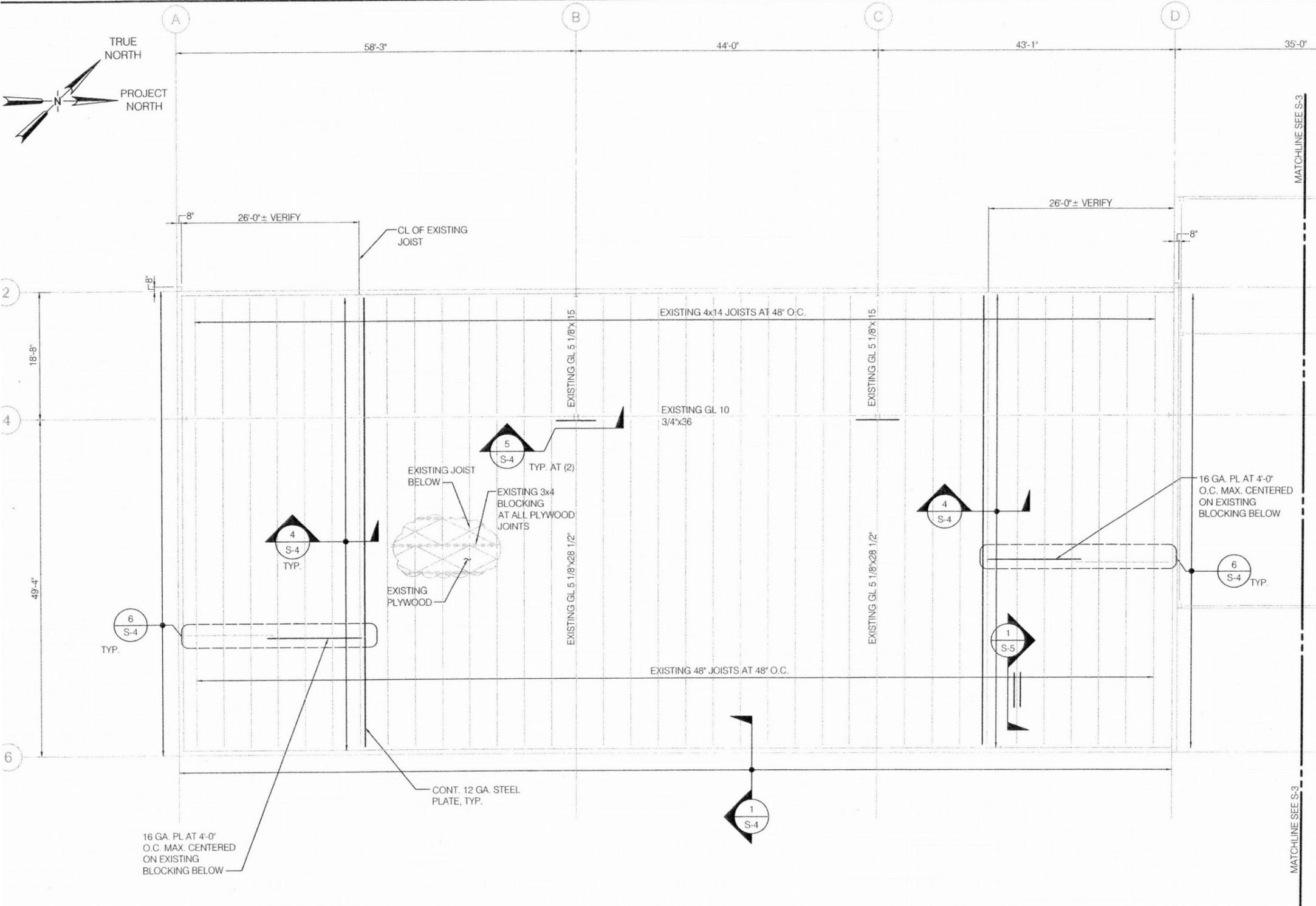
STATEMENT OF SPECIAL INSPECTION NOTES:

- SPECIAL INSPECTIONS SHALL CONFORM TO SECTION 1704 OF THE 2010 OSSC. REFER TO TABLES 1 AND 2 FOR SPECIAL INSPECTION REQUIREMENTS.
- THE SPECIAL INSPECTOR SHALL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION AND NOTED IN THE INSPECTION REPORTS.
- THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER, CONTRACTOR, AND THE PORT. THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT STATING THAT INDICATION THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED AND IS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THAT ALL DISCREPANCIES NOTED IN THE INSPECTION REPORTS HAVE BEEN CORRECTED.

ABBREVIATIONS

A.B.	ANCHOR BOLT	MAX.	MAXIMUM
ACI	AMERICAN CONCRETE INSTITUTE	MFR.	MANUFACTURER
ADDL.	ADDITIONAL	MIN.	MINIMUM
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION INCORPORATED	MISC.	MISCELLANEOUS
ALT.	ALTERNATE	MT	MAGNETIC PARTICLE TESTING
ARCH.	ARCHITECT	(N)	NEW
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	NOM.	NOMINAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	NO.	NUMBER
AWS	AMERICAN WELDING SOCIETY	N.T.S.	NOT TO SCALE
BLDG.	BUILDING	O.C.	ON CENTER
BOT.	BOTTOM	O.D.	OUTSIDE DIAMETER
C.G.	CENTER OF GRAVITY	OPP.	OPPOSITE
C.J.P.	COMPLETE JOINT PENETRATION	OWJ	OPEN WEB JOIST
CL.	CENTERLINE	P/C	PRECAST
CLR.	CLEAR	PCF	POUNDS PER CUBIC FOOT
COL.	COLUMN	PERIM.	PERIMETER
CONC.	CONCRETE	PL.	PLATE
CONN.	CONNECTION	P.P.	PARTIAL PENETRATION
CONSTR.	CONSTRUCTION	PSF	POUNDS PER SQUARE FOOT
CONT.	CONTINUOUS	PSI	POUNDS PER SQUARE INCH
DIA. Ø	DIAMETER	R. RAD.	RADIUS
DIAG.	DIAGONAL	REINF.	REINFORCING
D.L.	DEAD LOAD	SCHED.	SCHEDULE
DWG.	DRAWING	S.C.	SLIP CRITICAL
EL.	ELEVATION	SIM.	SIMILAR
EQ.	EQUAL	SLRS	SEISMIC LOAD
EXIST.(E)	EXISTING	SPEC.	SPECIFICATION
EXP.	EXPANSION	STD.	STANDARD
EXT.	EXTERIOR	STRUCT.	STRUCTURAL
FT.	FOOT	SYM.	SYMMETRICAL
GA.	GAUGE	THRU.	THROUGH
GALV.	GALVANIZED	TRANS.	TRANSVERSE
GL.	GLULAM	TJ	TRUSS JOIST
HORIZ.	HORIZONTAL	TYP.	TYPICAL
IBC	INTERNATIONAL BUILDING CODE	U.N.O.	UNLESS NOTED OTHERWISE
ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS	UT	ULTRASONIC TESTING
ICC	INTERNATIONAL CODE COUNCIL	VERT.	VERTICAL
I.D.	INSIDE DIAMETER	WF	WIDE FLANGE
IN.	INCH	W.P.	WORK POINT
K	KIPS	WPS	WELDING PROCEDURE SPECIFICATION
KSF	KIPS PER SQUARE FOOT		
KSI	KIPS PER SQUARE INCH		
LB.	POUND		
L.L.	LIVE LOAD		
LLH	LONG LEG HORIZONTAL		
LLV	LONG LEG VERTICAL		
LOC.	LOCATION		

PORT OF PORTLAND PORTLAND, OREGON												DESIGNED BY: J VODDEN DRAWN BY: B FRENCH CHECKED BY: J VODDEN DATE: JUNE 2013 SCALE: NONE		PORTLAND INTERNATIONAL AIRPORT MAINTENANCE FACILITY, BUILDINGS 7113 & 7115 ROOF REPAIR & SEISMIC UPGRADES GENERAL STRUCTURAL NOTES AND ABBREVIATIONS					
 111 SW 5th Avenue Suite 2000 Portland, Oregon 97204 503-227-3251										20130009 DESIGN NUMBER		101527 PROJECT NUMBER		SUBMITTED BY: T WHARTON		TYPE: CD DRAWING NO: PDX 2013-513		DATE: 9/13 SCALE: (S-1)	



- SHEET NOTES:**
- INDICATES EXISTING STRUCTURE
 - CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION AND ERECTION AND NOTIFY ARCHITECT OF ANY SIGNIFICANT DISCREPANCIES FROM THAT SHOWN ON THE DRAWINGS.
 - ALL EXPOSED FRAMING SHALL BE INSPECTED FOR CRACKS AND DAMAGE BY THE CONTRACTOR AND FINDINGS REPORTED TO THE PORT.

BUILDING 7115 ROOF PLAN
 SCALE: 1/8" = 1'-0"

DATE	BY	REVISIONS	APP'VD	CKD	NO.	DATE	BY	REVISIONS	APP'VD	CKD

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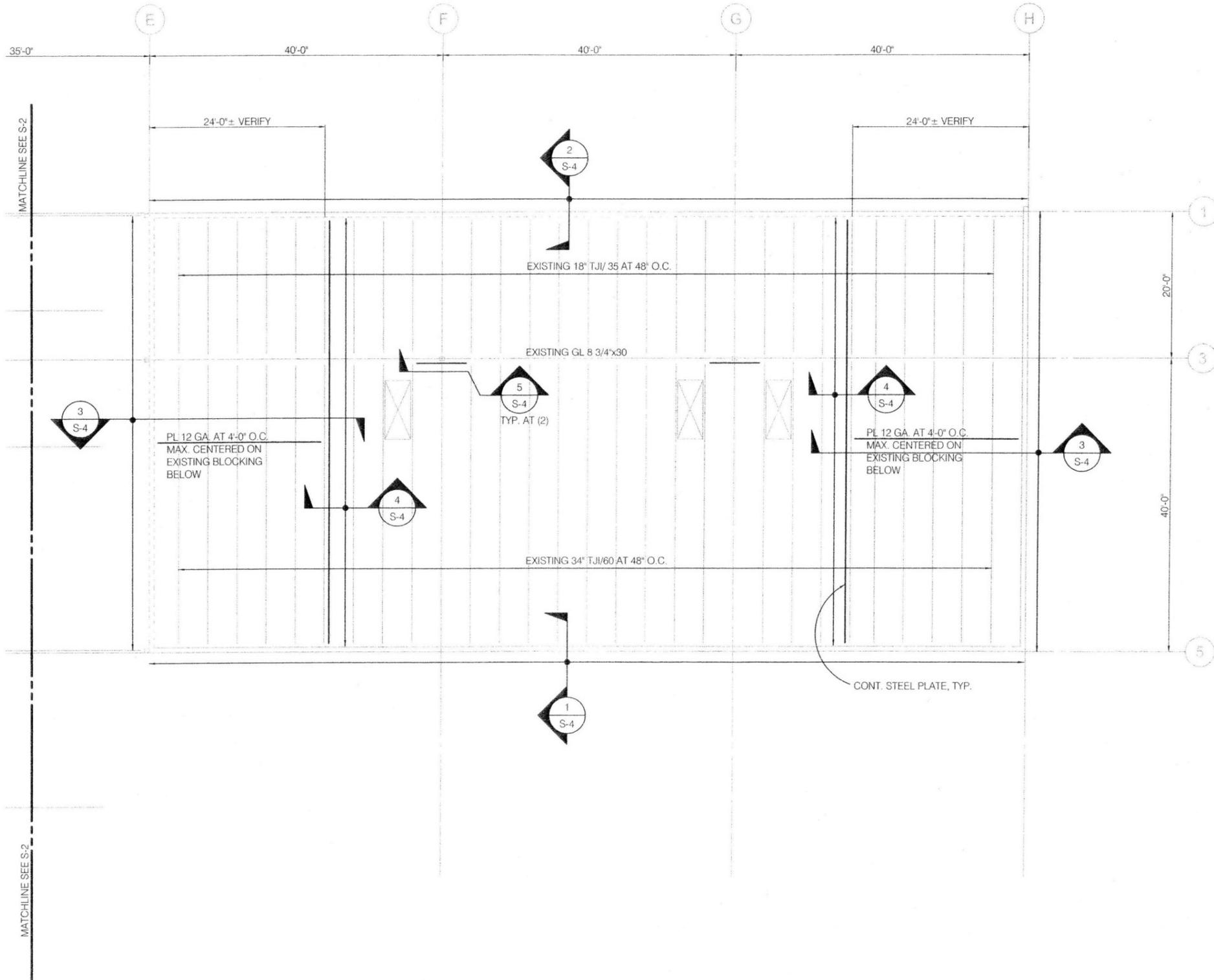
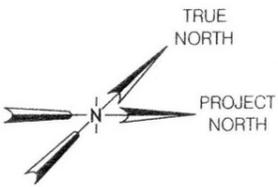
20130009 DESIGN NUMBER
 101527 PROJECT NUMBER

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER
 OREGON
 EXPIRES 06-30-14
 JAMES A. VODDEN

DESIGNED BY: J VODDEN
 DRAWN BY: B FRENCH
 CHECKED BY: J VODDEN
 DATE: JUNE 2013
 SCALE: 1/8" = 1'-0"

PORTLAND INTERNATIONAL AIRPORT
 MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
 ROOF REPAIR & SEISMIC UPGRADES
 BUILDING 7115 ROOF PLAN

SUBMITTED BY: T WHARTON
 TYPE: DRAWING NO.
 CD PDX 2013-513 10/13 (S-2)
 DRAWING SCALE IS REDUCED 50% WHEN SHEET SIZE IS 11" x 17"



- SHEET NOTES:**
- INDICATES EXISTING STRUCTURE
 - CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION AND ERECTION AND NOTIFY ARCHITECT OF ANY SIGNIFICANT DISCREPANCIES FROM THAT SHOWN ON THE DRAWINGS.
 - ALL EXPOSED FRAMING SHALL BE INSPECTED FOR CRACKS AND DAMAGE BY THE CONTRACTOR AND FINDINGS REPORTED TO THE PORT.

BUILDING 7113 ROOF PLAN
SCALE: 1/8" = 1'-0"

1
S-3

DATE	BY	REVISIONS	APPVD	CKD	NO.	DATE	BY	REVISIONS	APPVD	CKD



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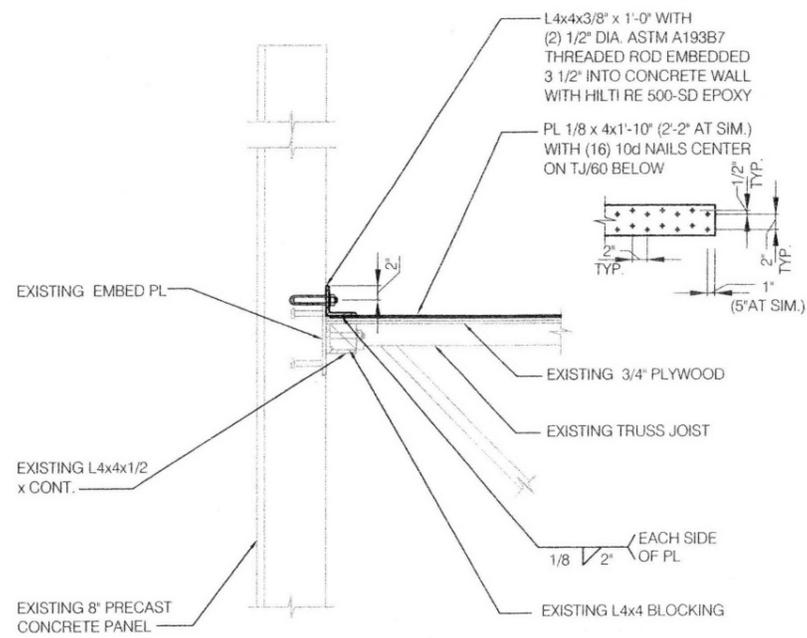
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DRAWN BY: B FRENCH
CHECKED BY: J VODDEN
DATE: JUNE 2013
SCALE: 1/8" = 1'-0"

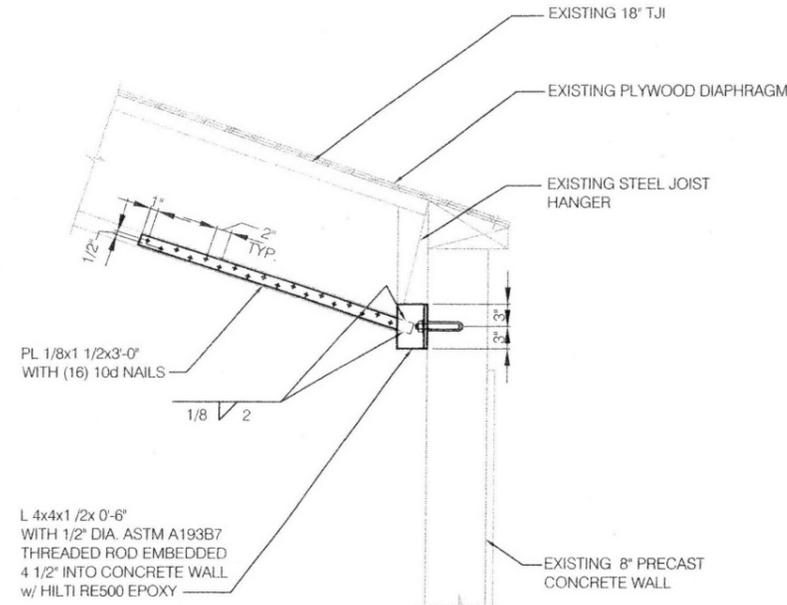
PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
ROOF REPAIR & SEISMIC UPGRADES
BUILDING 7115 ROOF PLAN

SUBMITTED BY: T WHARTON
TYPE: CD
DRAWING NO.: PDX 2013-513
DATE: 11/13
SCALE: (S-3)



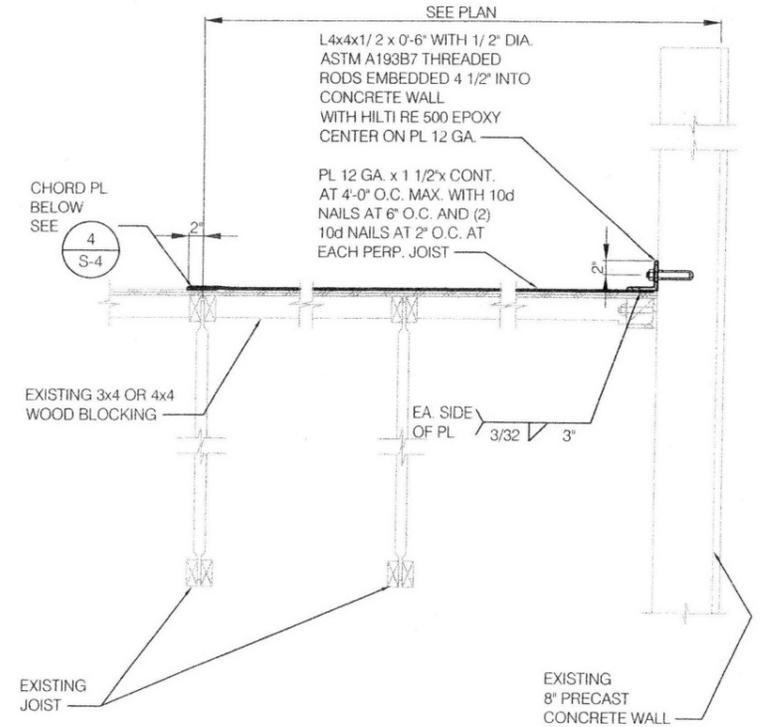
WALL TIE AT ROOF JOIST
SCALE: 1" = 1'-0"

1
S-4



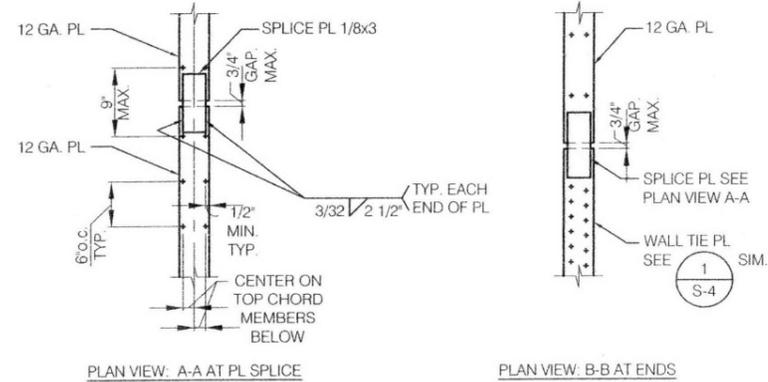
BUILDING 7113 WALL TIE AT ROOF BEAM
SCALE: 1" = 1'-0"

2
S-4



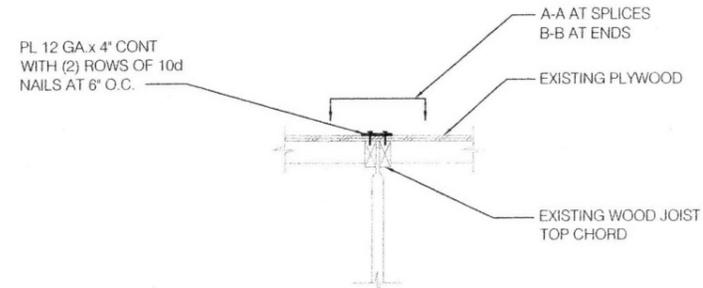
WALL TIES PERPENDICULAR TO JOISTS
SCALE: 1" = 1'-0"

3
S-4



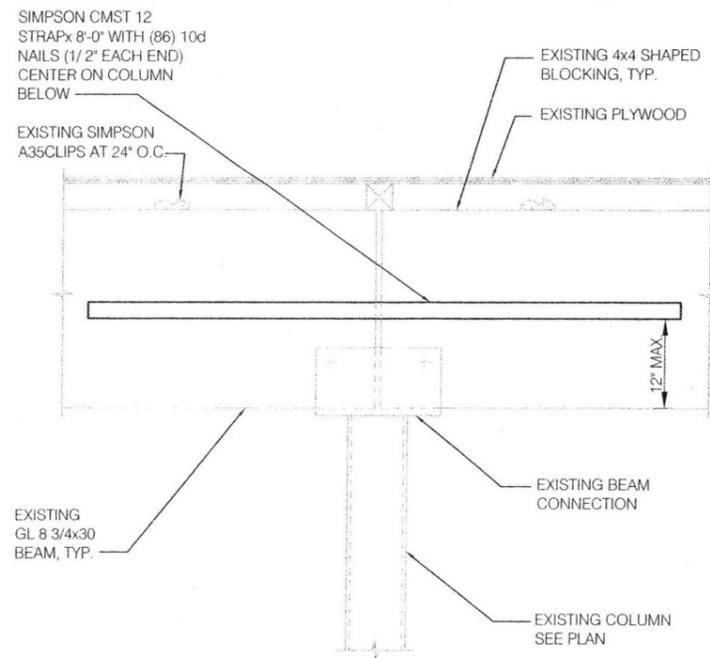
PLAN VIEW: A-A AT PL SPLICE

PLAN VIEW: B-B AT ENDS



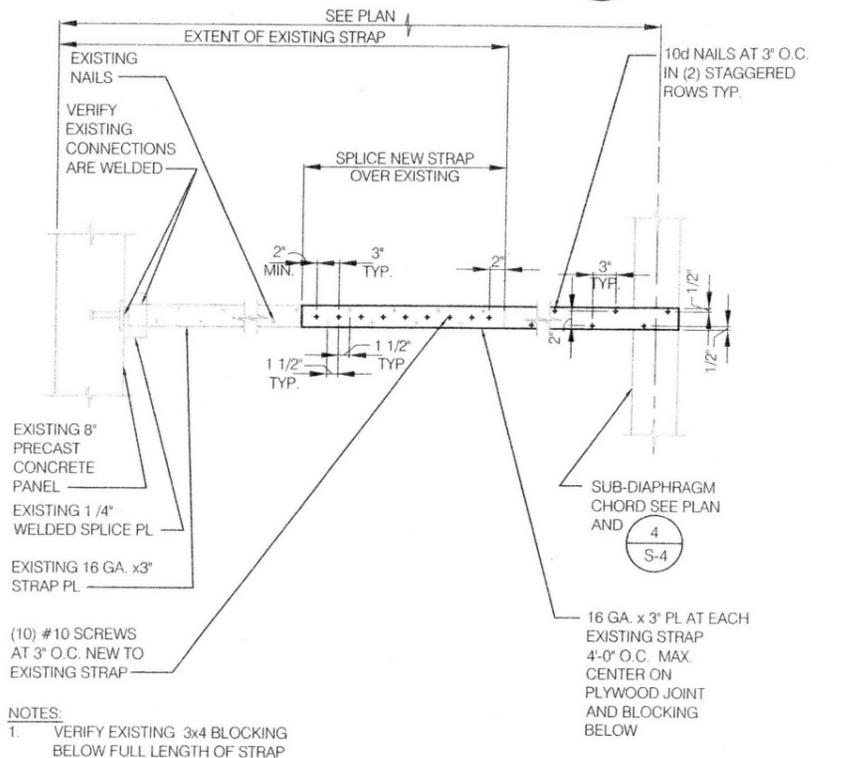
SUB-DIAPHRAGM CHORD DETAIL
SCALE: 1" = 1'-0"

4
S-4



DRAG CONNECTION AT GIRDER SUPPORT
SCALE: 1" = 1'-0"

5
S-4



PLAN VIEW - SUB-DIAPHRGM TIES
SCALE: 1" = 1'-0"

6
S-4

DATE	BY	REVISIONS	APPVD	CKD	NO.	DATE	BY	REVISIONS	APPVD	CKD
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2013D009
DESIGN NUMBER

101527
PROJECT NUMBER

STRUCTURALL
REGISTERED PROFESSIONAL
ENGINEER
65102P

JAMES A. VODDEN
OREGON
SEPT. 25, 2008

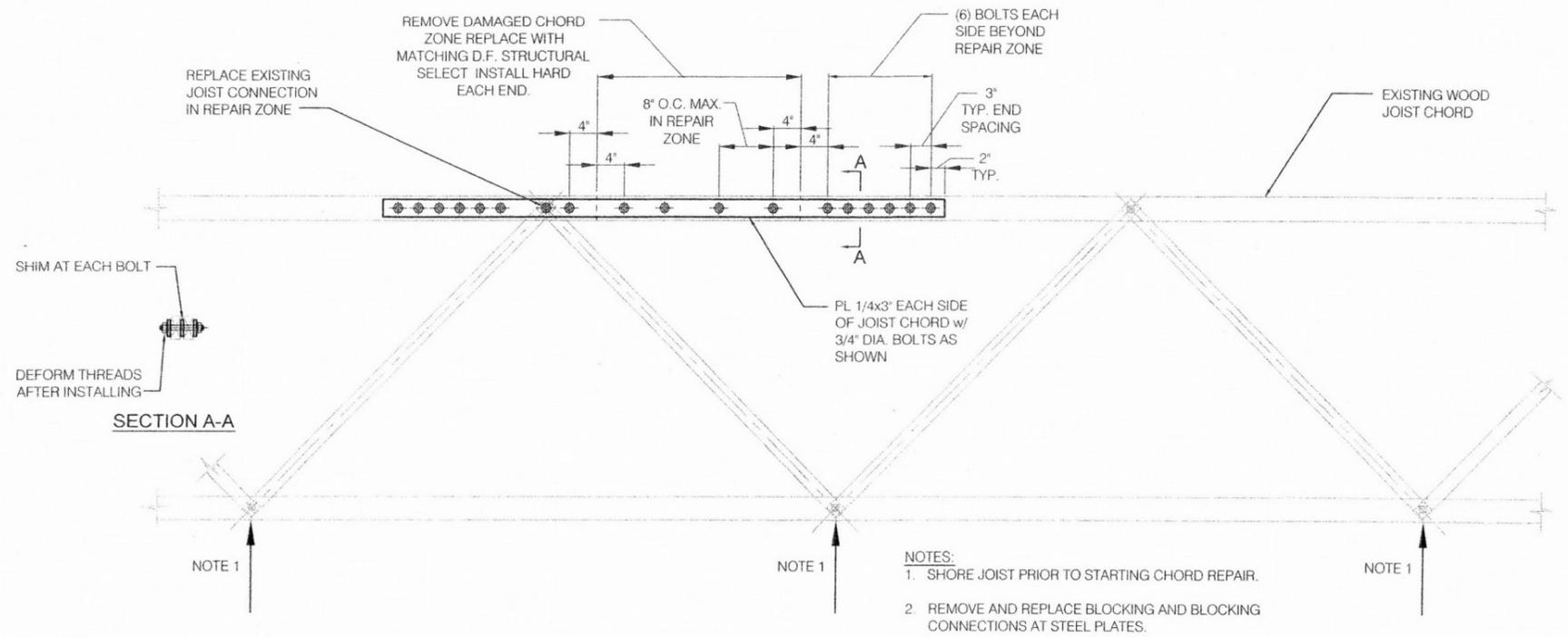
EXPIRES 06-30-14

DESIGNED BY: J. VODDEN
DRAWN BY: B. FRENCH
CHECKED BY: J. VODDEN
DATE: JUNE 2013
SCALE: 1" = 1'-0"

PORTLAND INTERNATIONAL AIRPORT
MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
ROOF REPAIR & SEISMIC UPGRADES
STEEL DETAILS

SUBMITTED BY: T. WHARTON
TYPE: CD
DRAWING NO.: PDX 2013-513
DATE: 12/13
SCALE: (S-4)

DRAWING SCALE IS REDUCED 50% WHEN SHEET SIZE IS 11" x 17"



- NOTES:
1. SHORE JOIST PRIOR TO STARTING CHORD REPAIR.
 2. REMOVE AND REPLACE BLOCKING AND BLOCKING CONNECTIONS AT STEEL PLATES.

ROOF JOIST REPAIR DETAIL
SCALE: 1" = 1'-0"

1
S-5

DATE	BY	REVISIONS	APPVD	CKD	NO.	DATE	BY	REVISIONS	APPVD	CKD



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20130009
DESIGN NUMBER

101527
PROJECT NUMBER



DESIGNED BY: J VODDEN

DRAWN BY: B FRENCH

CHECKED BY: J VODDEN

DATE: JUNE 2013

SCALE: 1" = 1'-0"

PORTLAND INTERNATIONAL AIRPORT

MAINTENANCE FACILITY, BUILDINGS 7113 & 7115
ROOF REPAIR & SEISMIC UPGRADES
STEEL DETAILS

SUBMITTED BY: T WHARTON

TYPE: CD | PDX 2013-513

DRAWING NO.: 13/13 (S-5)