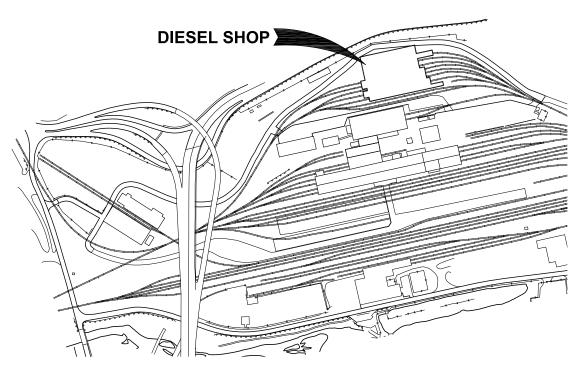


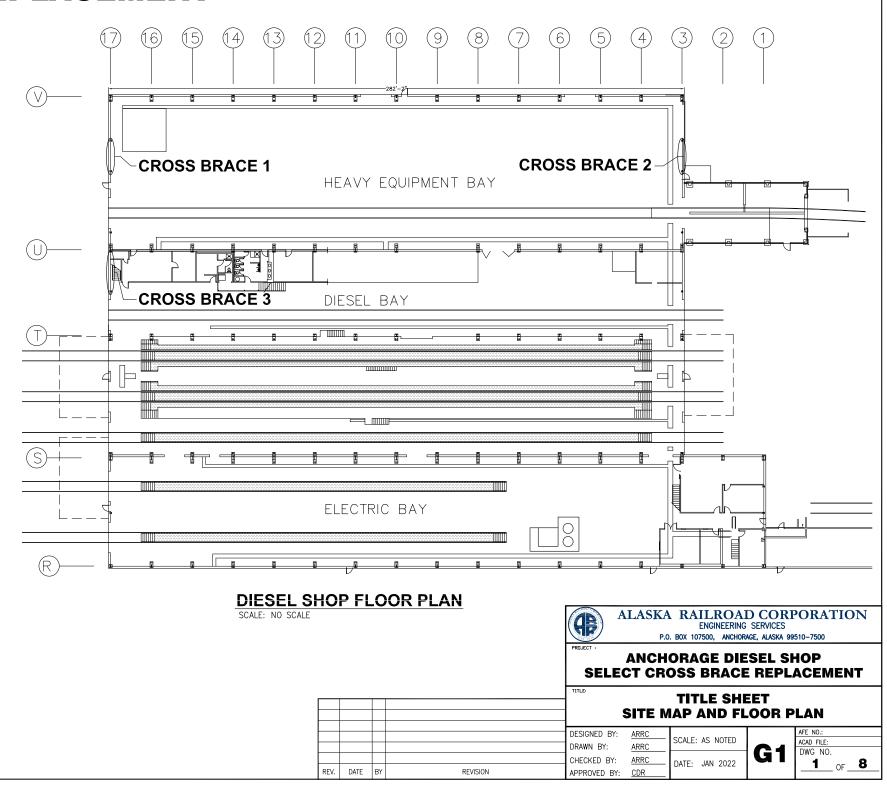
Alaska Railroad Corporation

2022 ANCHORAGE DIESEL SHOP BUILDING 26 SELECT CROSS BRACE REPLACEMENT



SITE MAP ACCESS GAINED AT 485 OCEAN DOCK ROAD

DRAWING INDEX:			
DRAWING NO.	DESCRIPTION		
1 - G1	TITLE SHEET (THIS DRAWING)		
2 - S1	SPECIFICATIONS AND INSTRUCTION		
3 - S2	CROSS BRACE 1 & 2 - ELEVATION, PLATE & ANGLE DETAILS		
4 - S3	CROSS BRACE 1 & 2 - ELEVATION DETAILS		
5 - S4	CROSS BRACE 1 & 2 - PLATE AND ANGLE DETAILS		
6 - S5	CROSS BRACE 3 — ELEVATION, ELEVATION & ANGLE DETAILS		
7 - S6	CROSS BRACE 3 — ELEVATION DETAILS		
8 - S7	CROSS BRACE 3 - PLATE AND ANGLE DETAILS		



DOCUMENTS INCORPORATED INTO THE SPECIFICATION BY REFERENCE:

- A. ASTM A36, STANDARD SPECIFICATION FOR CARBON STRUCTURAL STEEL.
- B. ASTM A3125, STD. SPECIFICATION FOR HIGH STRENGTH STRUCTURAL BOLTS.
- C. ASTM A563, STD. SPECIFICATION FOR CARBON AND ALLOY STEEL NUTS
- D. ASTM F436, STD. SPECIFICATION FOR HARDENED STEEL WASHERS.

MATERIALS:

- A. STRUCTURAL STEEL: ALL SHAPES AND PLATES ASTM A36. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE SECTION SIZE, OR ALTERNATIVE MATERIAL SPECIFICATION, SUBJECT TO ARRC ACCEPTANCE AND APPROVAL.
- B. BOLTS: ASTM F3125 GRADE A325 TYPE 1
- C. NUTS: ASTM A563DH
- D. WASHERS: ASTM F436 TYPE 1

COATINGS:

A. ALL STEEL SHALL RECEIVE PRIMER COATING. SHERWIN WILLIAMS STEEL SPEC SHOPCOAT PRIMER, GRAY COLOR, OR APPROVED EQUAL APPLIED PER MANUFACTURE'S INSTRUCTIONS.

SUBMITTALS:

- A. SUBMITTALS LISTED BELOW MUST BE PROVIDED AND APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE COMMENCING FABRICATION WORK:
 - 1. MANUFACTURER CERTIFICATES FOR ALL MATERIALS STATING COMPLIANCE WITH APPLICABLE SPECIFICATION.
 - 2. STEEL COATING.

CROSS BRACE MEMBER REPLACEMENT:

- A. EXISTING STEEL AND WALL SHEATHING IS ASSUMED TO BE COATED WITH LEAD BASED PAINT. DUST WITHIN BUILDINGS MAY CONTAIN ASBESTOS. AVOID CREATING DUST FROM OPERATIONS. WHEN DUST REMOVAL IS NECESSARY, USE WET METHODS. DO NOT USE COMPRESSED AIR TO BLOW DIRT OR DEBRIS WITHIN SHOPS.
- B. WORK WITHIN OFFICE WILL NEED TO BE PERFORMED OUTSIDE OF NORMAL OFFICE HOURS (6 AM TO 2 PM, MONDAY THROUGH FRIDAY) AND MEASURES WILL NEED TO BE TAKEN TO AVOID SPREADING WORK RELATED DUST THROUGHOUT OFFICE.
- C. COORDINATE WITH SHOP PERSONNEL AND LOCK OUT/TAG OUT OVERHEAD CRANE WHEN WORKING WITHIN CRANE TRAVEL AREA FOR EACH SHIFT.

- D. REMOVE RIVETS INDICATED IN DRAWINGS. AVOID DAMAGING OR REMOVING EXCESS STEEL FROM EXISTING PLATES OR COLUMNS THAT ARE TO REMAIN IN SERVICE. WHEN SHEARING OR GRINDING OFF RIVETS, PERFORM WORK FROM SIDE WHERE STEEL MEMBER IS TO BE REPLACED.
- E. CONTRACTOR MAY USE SHOPS COMPRESSED AIR AT CONTRACTOR'S RISK.
- F. INSTALL 3/4 INCH DIAMETER BOLTS WITH NUT AND WASHER, IN PLACE OF RIVETS, SECURING USING TURN OF NUT METHOD. PLACE WASHER UNDER TURNED ELEMENT.
- G. ALL NEW HOLES ARE TO BE 13/16 INCH DIAMETER UNLESS OTHERWISE INDICATED.
- H. PAINT NEW STEEL EXCEPT WITHIN THREE (3) INCHES OF HOLES ON CONTACT FACES. CUT ANGLES TO LENGTH.
- I. INSTALL NEW STEEL; AVOID HAVING MORE THAN ONE BRACE LEG OUT OF SERVICE AT ONE TIME. ALL BRACE ELEMENTS INCLUDING FASTENERS, EXISTING OR NEW, SHALL BE IN PLACE AT END OF SHIFT
- J. MATCH EXISTING ANGLE ORIENTATION WHEN INSTALLING NEW.
- K. TOUCH-UP-PAINT STEEL AROUND BOLTS AND AS REQUIRED FOLLOWING INSTALLATION.
- L. STEEL REMOVED AND CUT OFFS WILL REMAIN RAILROAD PROPERTY AND ARE TO BE SET ASIDE AT DESIGNATED AREAS. EXISTING ANGLES, THAT ARE TO BE REPLACED, MAY BE CUT INTO MULTIPLE PIECES TO EASE REMOVAL.

SAFETY:

- A. CONTRACTOR SHALL, AT A MINIMUM, COMPLY WITH THE FOLLOWING:
 - 1. PERSONNEL SHALL HAVE AND WEAR AT ALL TIMES WHEN WORKING IN ALASKA RAILROAD RAILYARD: HARD HAT, SAFETY GLASSES, HIGH VISIBILITY VEST, SAFETY TOE WORK BOOTS AND COVID FACE MASK. OUTDOORS, MASK IS REQUIRED WHEN WORKING WITHIN SIX (6) FEET OF ANOTHER PERSON.
 - 2. COMPLY WITH FALL PROTECTION REQUIREMENTS WHEN WORKING AT HEIGHTS IN BUILDING AND FROM LIFTS OR SCAFFOLDING.
 - 3. PROVIDE LOCK OUT/TAG OUT FOR ELECTRICALLY OPERATED EQUIPMENT WITHIN THEIR SCOPE OF WORK. COORDINATE LOCK OUT WITH SHOP FOREMAN.
 - 4. DO NOT PARK ON OR WITHIN SIX (6) FEET OF RAILROAD TRACKS.
 - 5. COORDINATE WITH OWNER'S REPRESENTATIVE FOR PROTECTION WHEN WORKING ON OR WITHIN SIX (6) FEET OF RAILROAD TRACKS.
 - 6. CORDON OFF INTERIOR AND EXTERIOR AREAS BELOW WORK WHERE THERE IS RISK OF FALLING DEBRIS, TOOLS OR OTHER MATERIALS. COORDINATE CORDONING WITH OWNER'S REPRESENTATIVE.



ALASKA RAILROAD CORPORATION

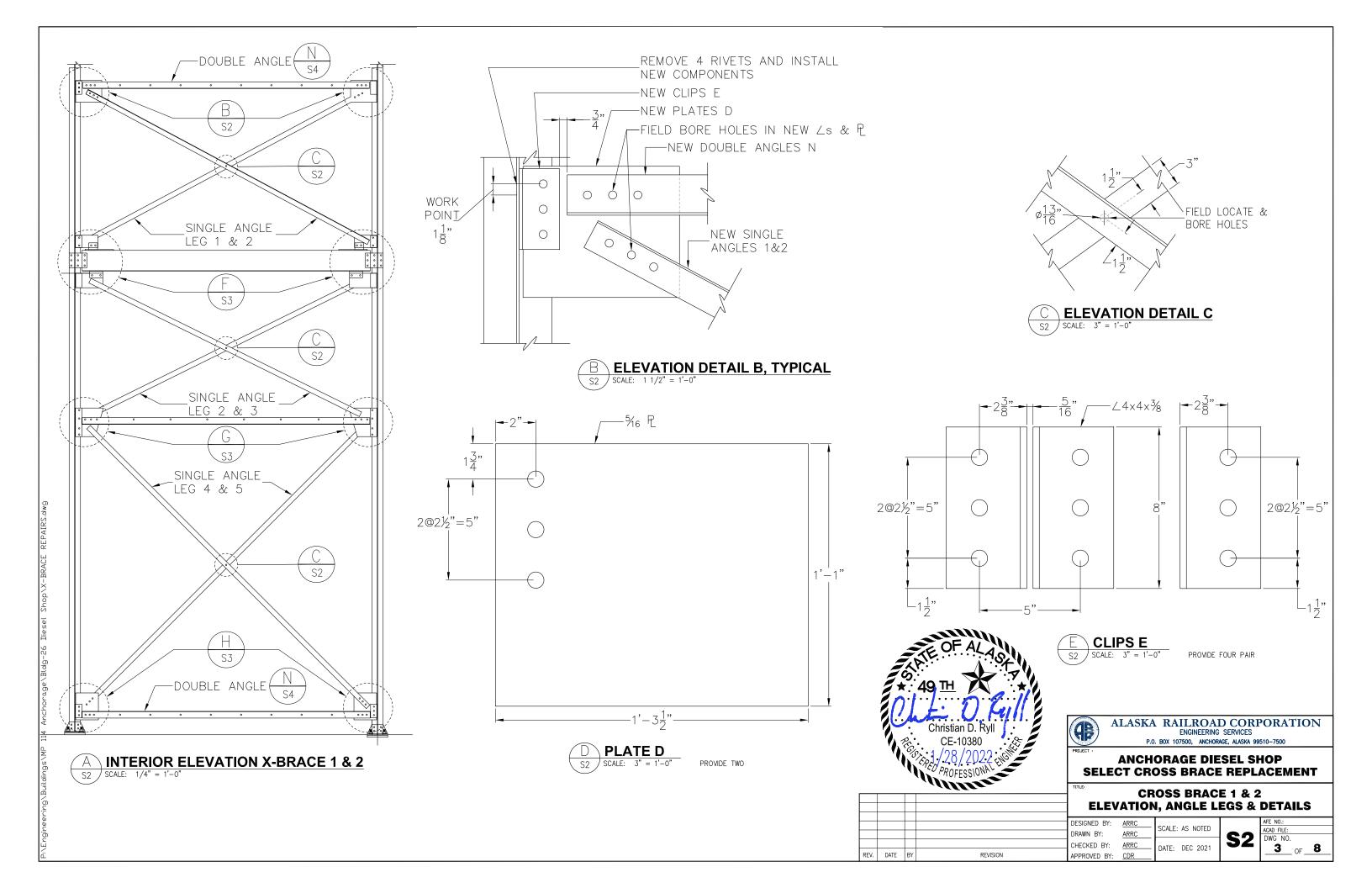
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510–7500

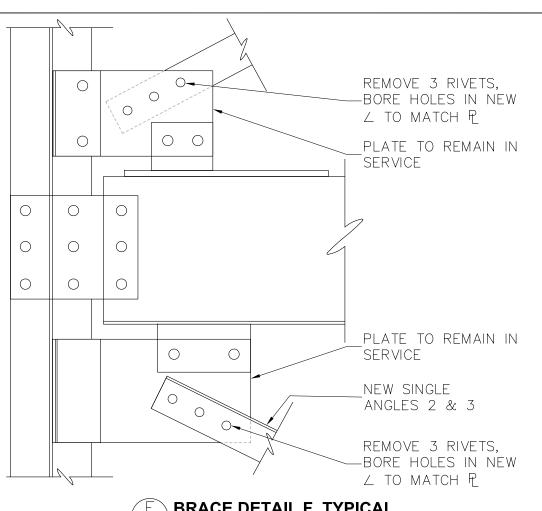
ANCHORAGE DIESEL SHOP

SELECT CROSS BRACE REPLACEMENT
SPECIFICATIONS AND INSTRUCTION

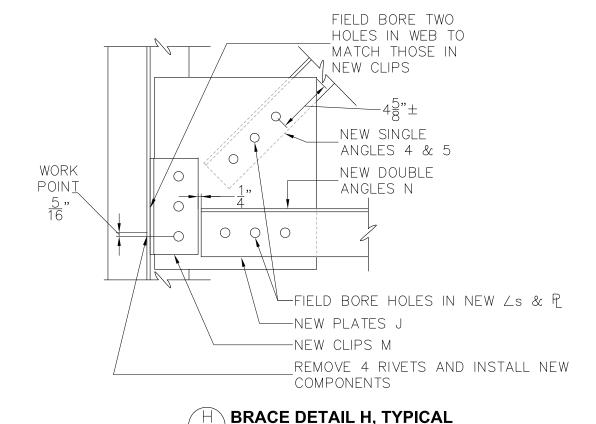
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				CHECKED BY: ARRC	DATE: DEC 2021
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ACAD FILE:
DWG NO.
2 OF 8

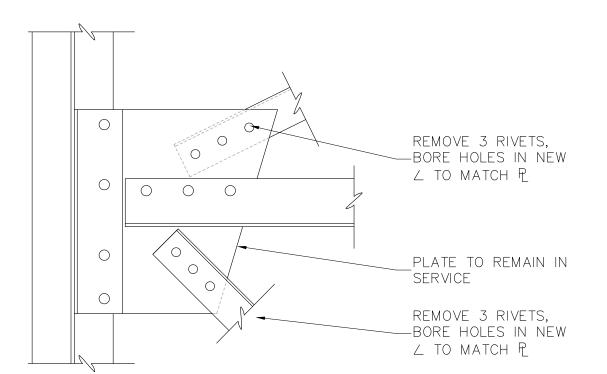




BRACE DETAIL F, TYPICAL S3 | SCALE: 1 1/2" = 1'-0'



S3 | SCALE: 1 1/2" = 1'-0"



BRACE DETAIL G, TYPICAL



4

ALASKA RAILROAD CORPORATION ENGINEERING SERVICES

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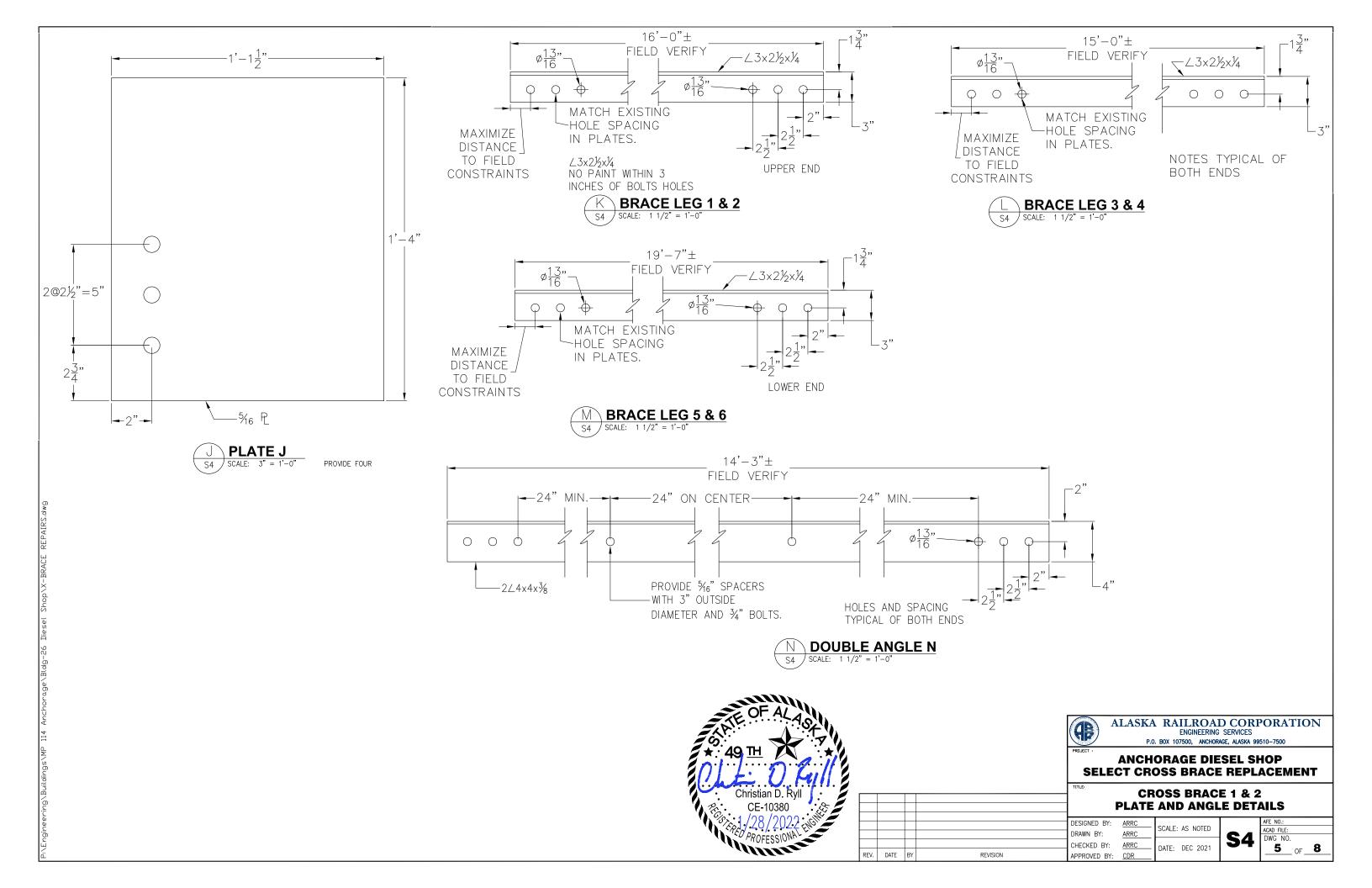
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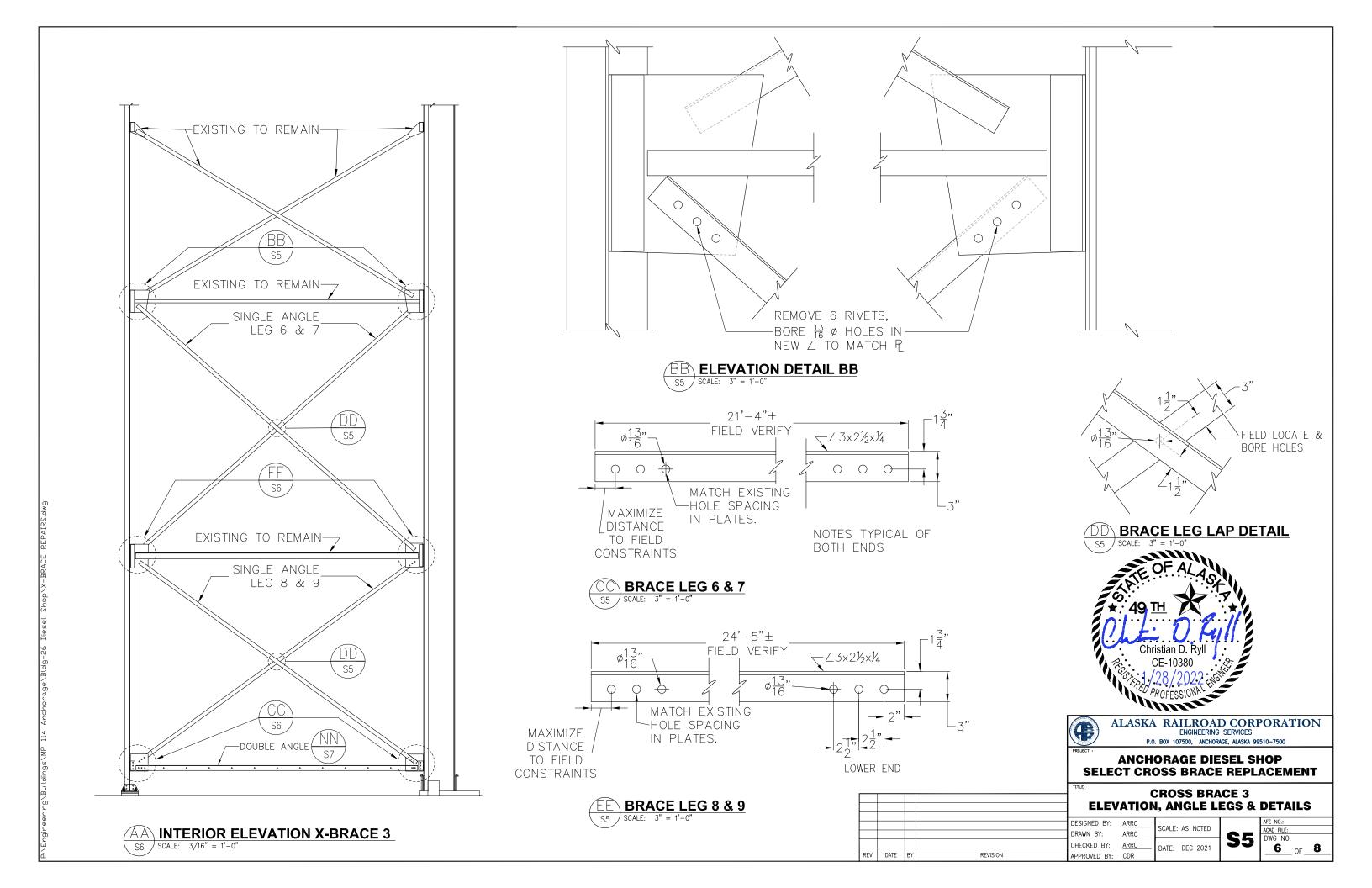
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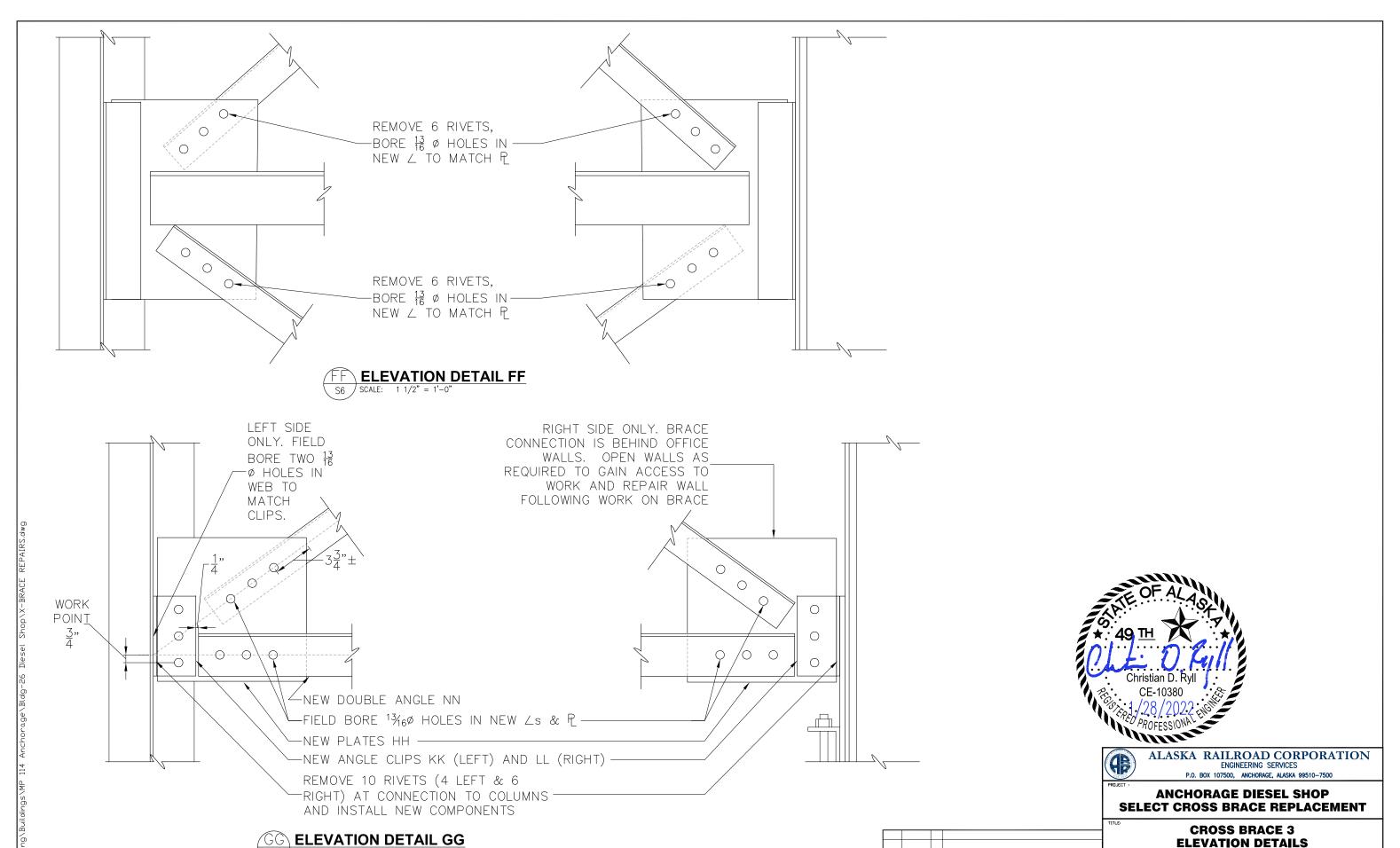
ANCHORAGE DIESEL SHOP SELECT CROSS BRACE REPLACEMENT

CROSS BRACE 1 & 2 ELEVATION DETAILS

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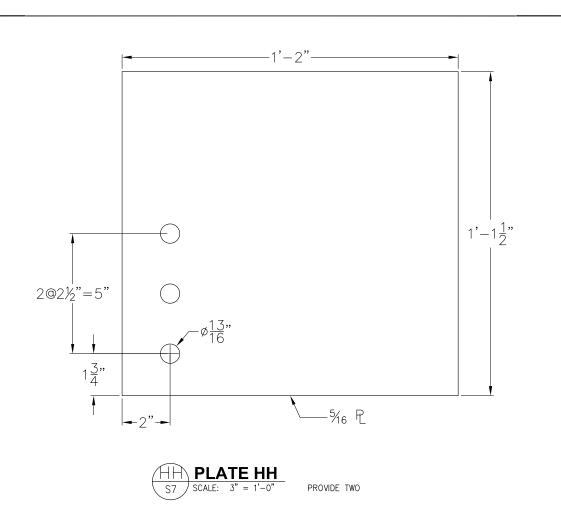


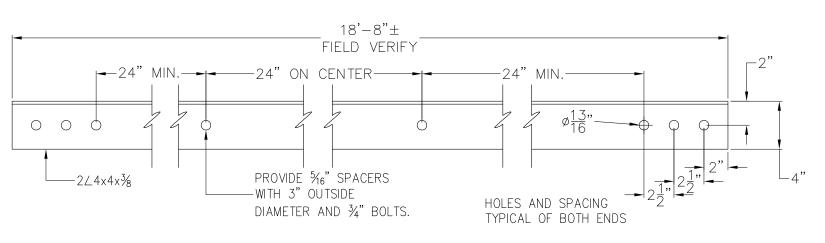




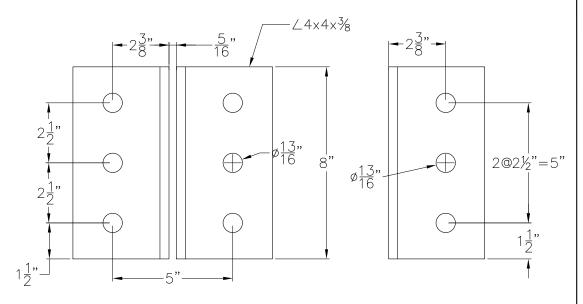
S6 | SCALE: 1 1/2" = 1'-0"

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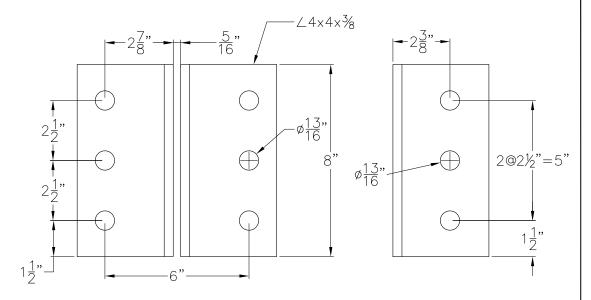




NN DOUBLE ANGLE NN S7 SCALE: $1 \frac{1}{2}$ " = 1'-0" PROVIDE TWO PAIR



CLIPS KK
S7 SCALE: 3" = 1'-0" PROVIDE ONE PAIR







REVISION

REV. DATE BY



ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

ANCHORAGE DIESEL SHOP SELECT CROSS BRACE REPLACEMENT

CROSS BRACE 3
PLATES AND ANGLES DETAILS

DESIGNED BY:	ARRC	SCALE: AS NOTED	ı
DRAWN BY:	ARRC	SCALE, AS NOTED	l
CHECKED BY:	ARRC	DATE: DEC 2021	ı
APPROVED BY:	CDR	DAIL. DEG 2021	l

ACAD FILE: DWG NO. **8**_ or_**8**

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ALASKA RAILROAD CORPORATION

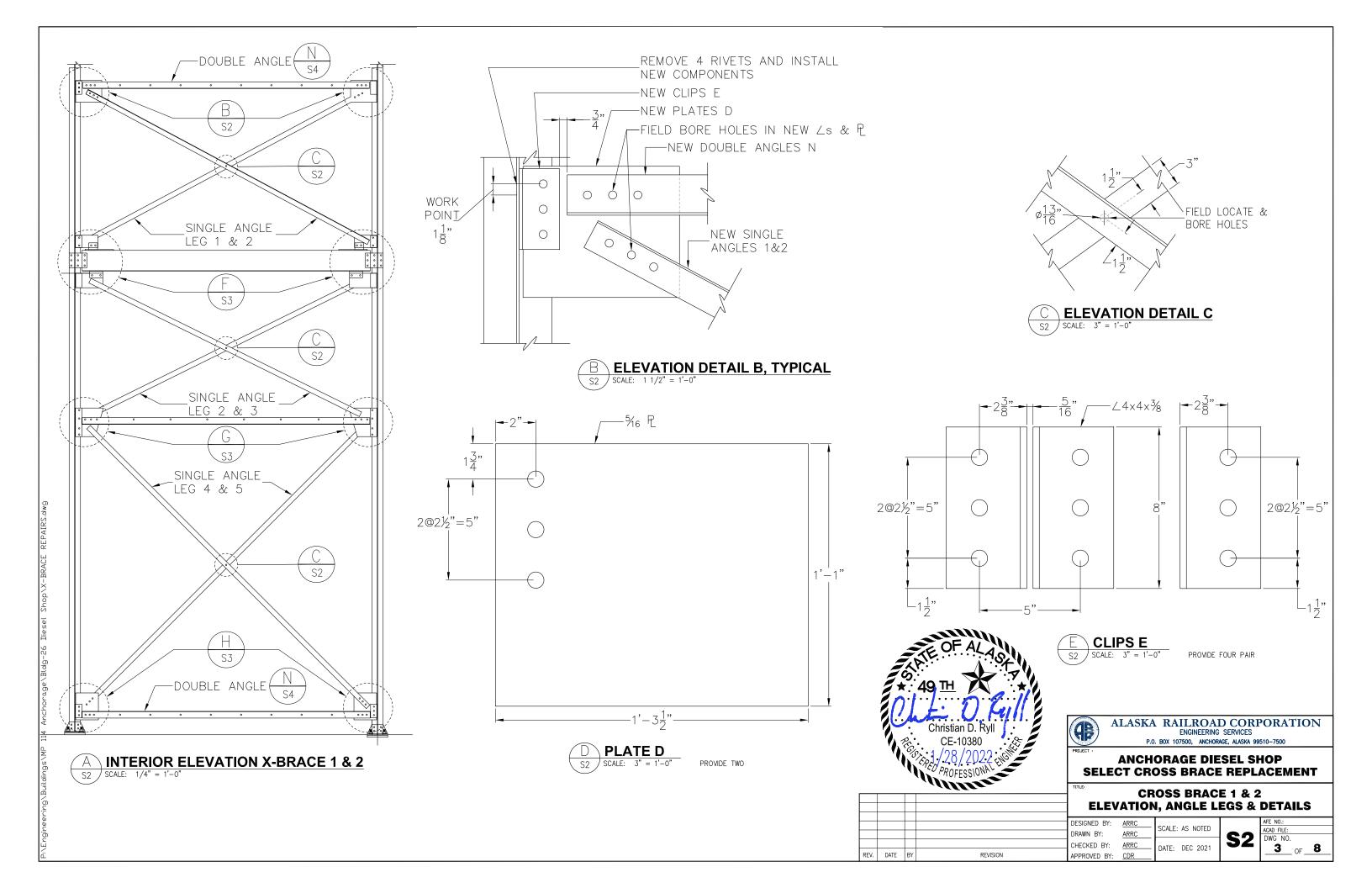
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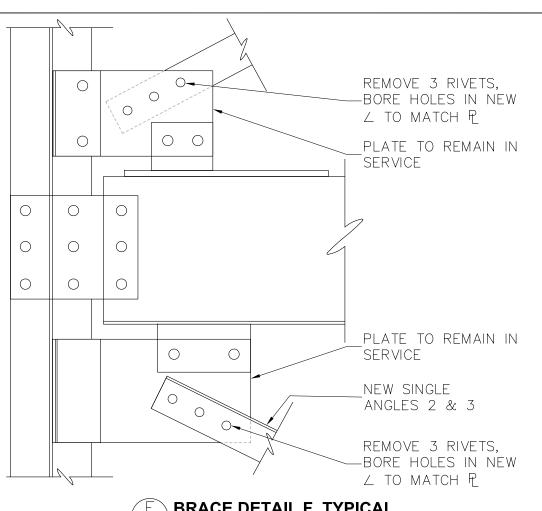
ANCHORAGE DIESEL SHOP

SELECT CROSS BRACE REPLACEMENT
SPECIFICATIONS AND INSTRUCTION

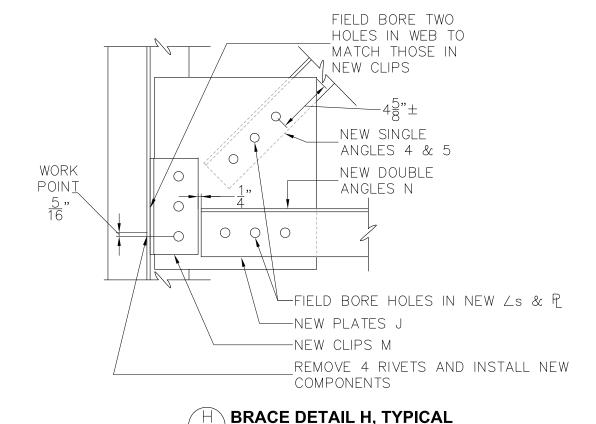
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				CHECKED BY: ARRC	DATE: DEC 2021
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ACAD FILE:
DWG NO.
2 OF 8

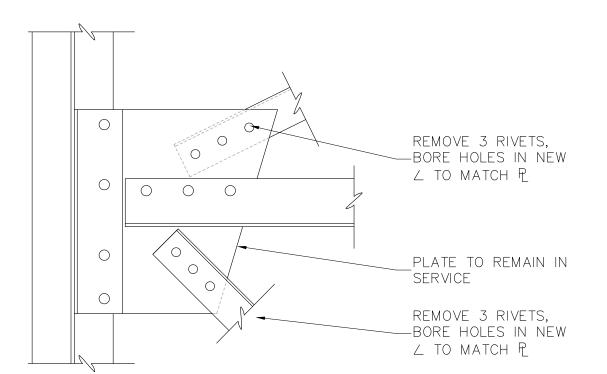




BRACE DETAIL F, TYPICAL S3 | SCALE: 1 1/2" = 1'-0'



S3 | SCALE: 1 1/2" = 1'-0"



BRACE DETAIL G, TYPICAL



4

ALASKA RAILROAD CORPORATION ENGINEERING SERVICES

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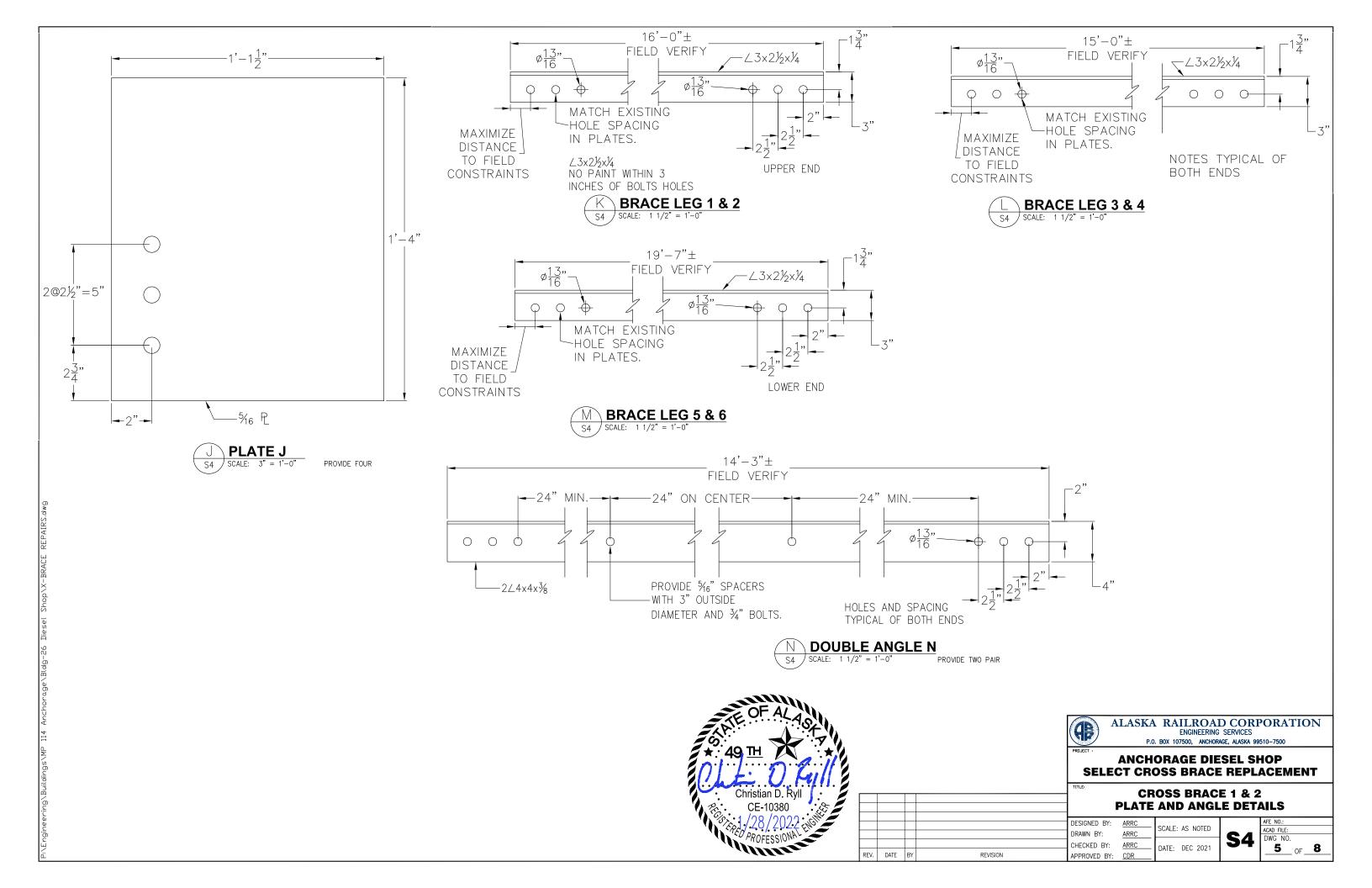
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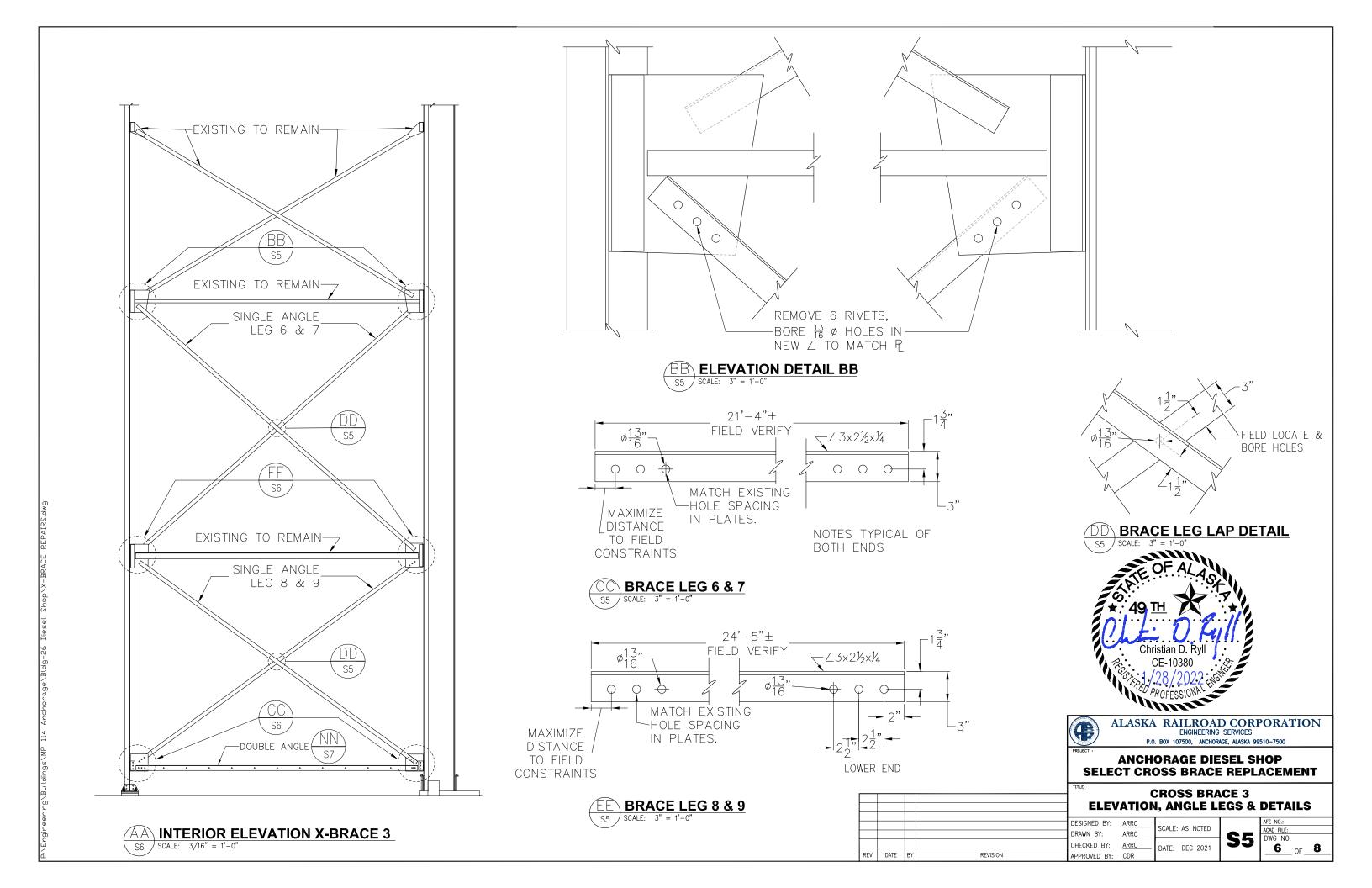
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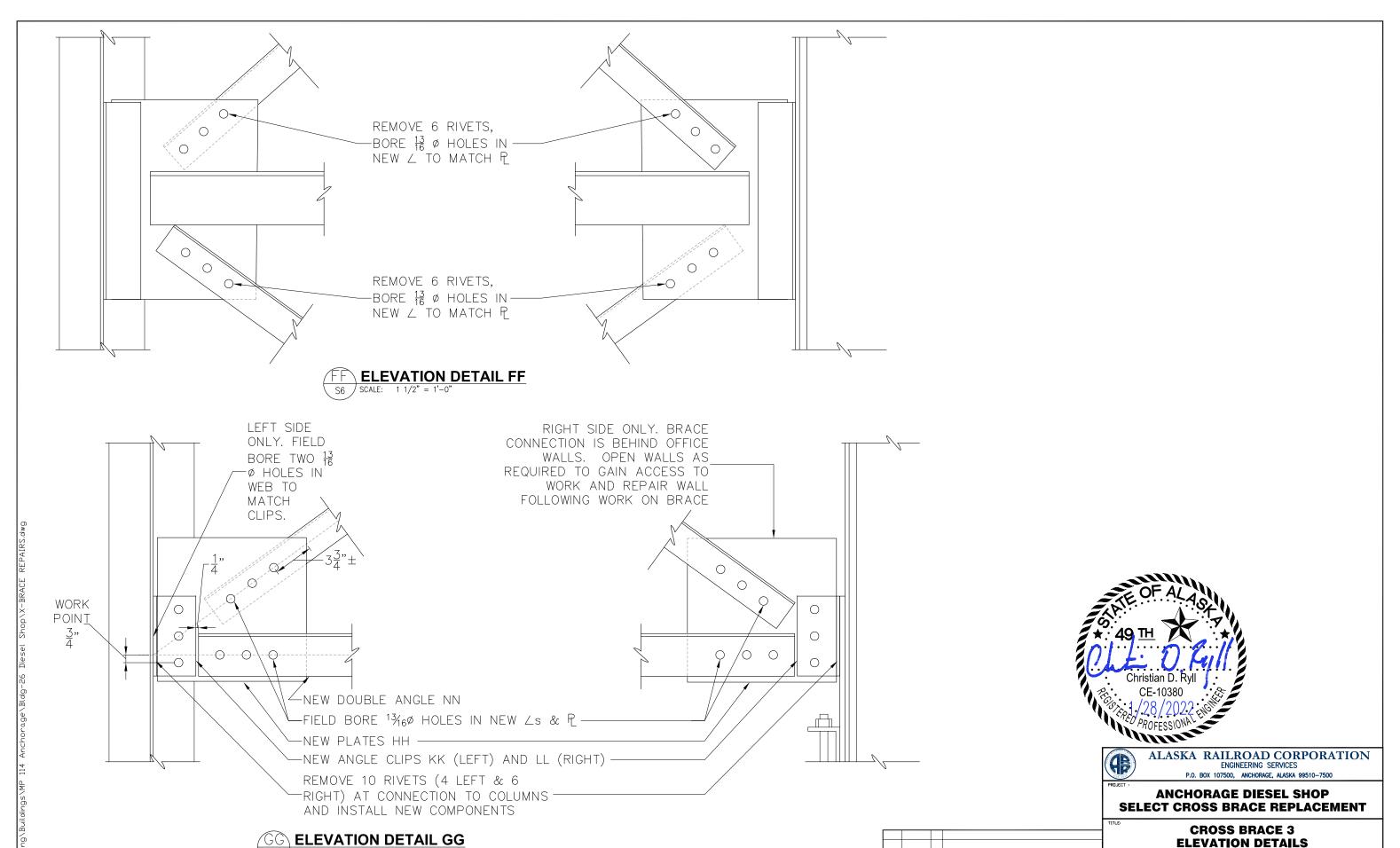
ANCHORAGE DIESEL SHOP SELECT CROSS BRACE REPLACEMENT

CROSS BRACE 1 & 2 ELEVATION DETAILS

DESIGNED BY: SCALE: AS NOTED DRAWN BY: S3 DWG NO. ARRC CHECKED BY: ARRC DATE: DEC 2021 REV. DATE BY REVISION APPROVED BY: CDR

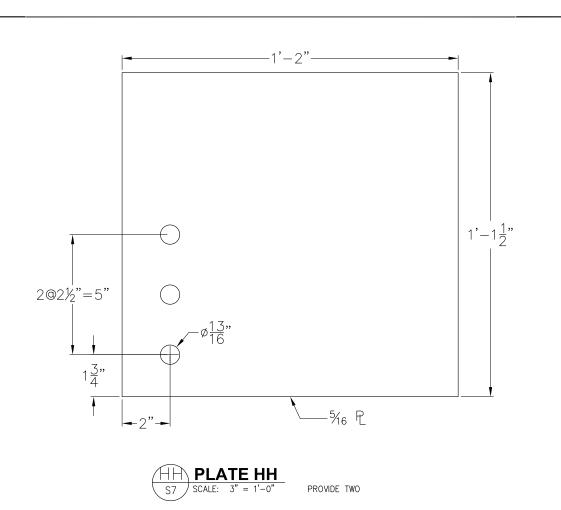


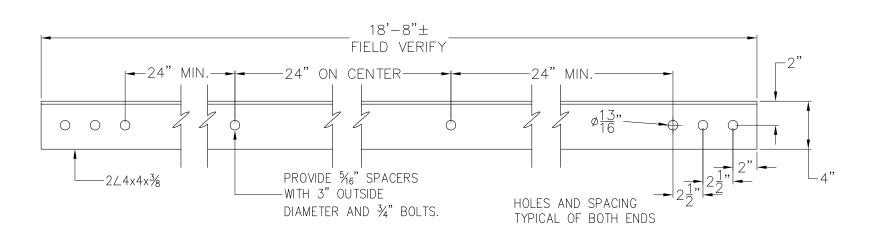




S6 | SCALE: 1 1/2" = 1'-0"

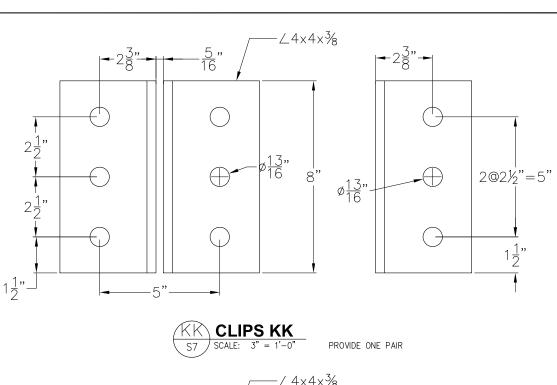
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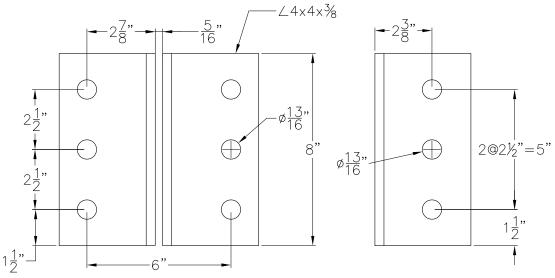




NN DOUBLE ANGLE NN

S7 | SCALE: 1 1/2" = 1'-0"





CLIPS LL SCALE: 3" = 1'-0"



ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

PROVIDE ONE PAIR

ANCHORAGE DIESEL SHOP SELECT CROSS BRACE REPLACEMENT

CROSS BRACE 3
PLATES AND ANGLES DETAILS

			DESIGNED BY:	ARRC	SCALE: AS NOTED	
			DRAWN BY:	ARRC	SCALL. AS NOTED	1
			CHECKED BY:	ARRC	DATE: DEC 2021	İ١
DATE	BY	REVISION	APPROVED BY:	CDR	DATE. DEG 2021	

ACAD FILE: DWG NO. **8**_ or_**8**