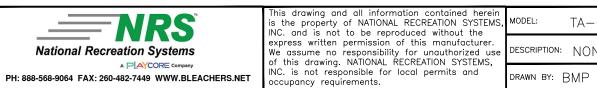
# **TA-0327PRF**

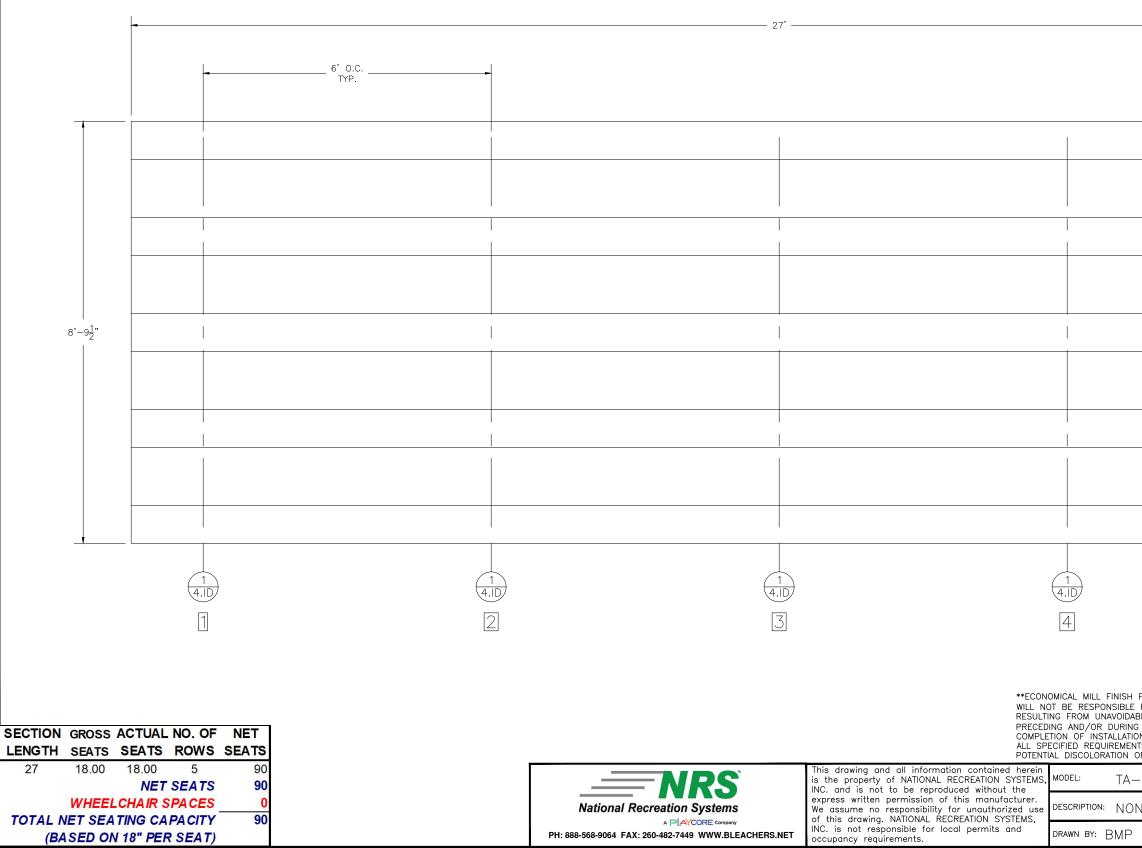
## NON-ELEV. ALUM 3 ROW x 27'-0" TIERED BLEACHER

RECOMMENDED TOOLS						
SOCKET WRENCH	POP RIVET GUN	CORDLESS DRILL				
½" DEEP WELL SOCKET	LEVEL	¾6" DRILL BIT				
%6" DEEP WELL SOCKET	RUBBER MALLET	$\%_6$ " drill bit				
TAPE MEASURE	GLOVES	SAFETY GLASSES				

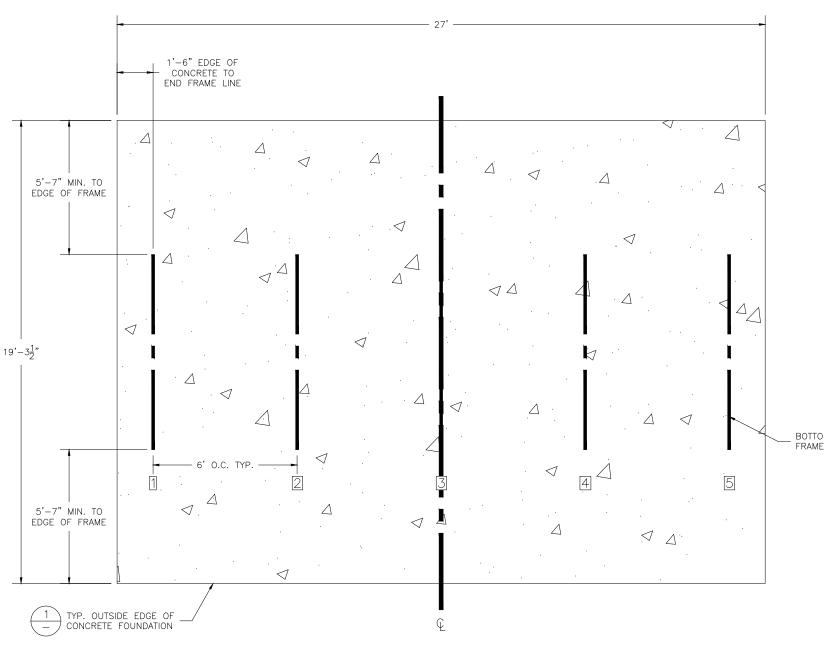


		DRAWING REFERENCE NUMBER: TA-0327PRF				
		DRA	AWING SHEET INDE	ΞX		
		1.CS	COVER SHEET			
		2.TD	SEATING PLAN			
		3.FP	FOUNDATION PLAN			
		4.ID	FRAME IDENTIFICATION			
		5.BA	BLEACHER ASSEMBLY PREP			
		6.BA	BLEACHER ASSEMBLY - BRACING			
		7.BA	BLEACHER ASSEMBLY SECTION VIEW			
		8.AP	ANCHORING PLAN			
		9.PF	PLANK & FRAMING PLAN			
		10.DS	TYPICAL BLEACHER ASSEMBLY DE	TAILS		
-0.	327PRF					
N-	-ELEV. 3 ROW × 2	27'-0"	ASSEMBLY COVER SHE	ET		
	date: 10/16/23 rev	ISION: ()	SCALE: N.T.S. SHEET NUMBER: 1	.CS		

MATERIAL					
FINISHES					
SEAT PLANK	ANODIZED				
FOOT PLANK	MILL FINISH				



				1'-6" T END O.		<b>-</b>	
			(1 (4.1) (4.1)				
FO BLE IN N TS.	DT PLANK AND RISERS HAVE BE R DISCOLORATION OR STAINING CONDENSATION THAT OCCURS ISTALLATION. REMOVAL OF THESI S NOT PART OF THIS CONTRAC A CLEAR ANODIZED FINISH MAY STAINING.	(DARK E DURING E STAINS T BECAU	BLACK, PACKING OR RE ISE STA	BROWN, O G, TRANSP EPLACEMEN INED MILL	R WHIT ORTING NT OF FINISH	E RESIDU AND STO BOARDS U BOARDS U	E) DRAGE, JPON MEET
-0	327PRF						
۷-	ELEV. 3 ROW x 27	-0"	SEAT	ING PL	_AN		
	DATE: 10/16/23 REVISIO	N: ()	SCALE:	N.T.S.	SHEET	NUMBER:	2.TD



### **CONCRETE FOUNDATION SPECIFICATIONS**

#### SCOPE:

Foundation construction is not part of NATIONAL RECREATION SYSTEMS, INC's., scope of work unless noted otherwise in the contract documents. The OWNER shall review the foundation design with local code authorities and coordinate with NRS, Inc.

#### FOUNDATION DESIGN & ANCHORS:

1) The foundation designs are based on the following:

- a) Minimum presumed soil bearing of 2000 psf.
- b) Bleacher frame dead and live load of 700 lbs./ft.
- c) Bleacher frame wind uplift of 250 lbs./ft.
- 2) Unless otherwise specified on the drawings the bleacher frames shall be attached to concrete with a ½" dia. x 3<sup>1</sup>/<sub>4</sub>" wedge type expansion anchor. The anchors shall be embedded a minimum of 21/2" into the concrete. All anchors are to be HILTI Kwik Bolt TZ2 or approved equivalent.

#### CONCRETE SPECIFICATIONS:

#### 1) All concrete construction shall be in accordance with ACI 318.14.

- 2) All concrete shall be air-entrained using an air entraining admixtruing meeting ASTM C620. Total air content: 5%-7% per ASTM C173. 3) All concrete shall have a minimum 28-day strength of Fc=3000psi. Concrete shall have air-entrainment
- 4) A ¼" bituminous expansion joint material shall be placed between strip and slab foundations when adjacent to each other.
- 5) The depressions in the top of the foundations between high spots shall not exceed  $\frac{1}{6}$ " below 10-foot long straightedge. The 10-foot straightedge method used to measure foundation flatness shall be in accordance with ACI 302.1R-04 "Guide for Concrete Floor and Slab Construction".

#### CONCRETE SLAB RECOMMENDED SPECIFICATIONS:

1) Concrete slab shall have a minimum thickness of 5" (some areas may require 6") and placed on 4" of compacted gravel or compacted sub base.

2) NRS. INC., recommends that the concrete slab be reinforced with 6x6-W2.1xW2.1 welded wire fabric at 11/3" concrete cover from the top. In lieu of welded wire fabric, steel fiber substitution requires OWNER approval and his understanding of potential maintenance issues.

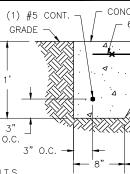
3) Contractor may substitute blended fiber reinforcing, provided the blend consists of multifilament polypropylene fibers and cold drawn steel wire fibers. Novamesh 950 or approved equivalent, applied at a dosage rate of 5lb/CY unless specified otherwise or a different recommendation is made by the manufacturer. 4) Crack control joints shall be sawed into slab to form approximate square patterns. The maximum spacing for control

joints shall not exceed 13'-6", UNLESS INDICATED OTHERWISE. The bleacher frames shall not be set on control joints. The designer shall contact NRS to coordinate joint spacing requirements with the specific bleacher design. The slab may be sloped a maximum of 1/8 inch per foot for drainage. The maximum overall out of level slope for the

slab perpendicular to the seats (front to rear) shall not exceed 2" and parallel to the seats (end to end) shall not exceed 4".



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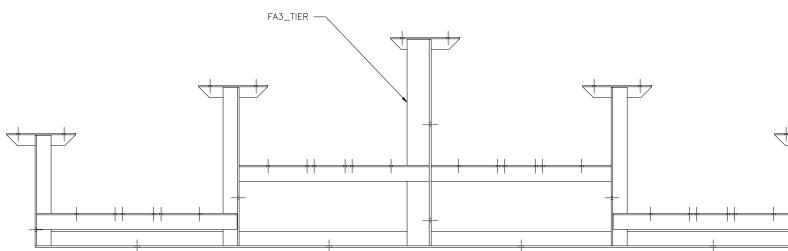
TA-

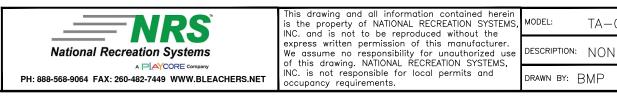
1) CONCRETE SLAB

SECTION	② CONTROL JOINT DETAIL				
A COMPACTED SAND OR GRAVEL	N.T.S.				
-0327PRF					
N-ELEV. 3 ROW x 27'-0" FOUNDATION PLAN					
date: 10/16/23	REVISION: 0 SCALE: N.T.S. SHEET NUMBER: 3.FP				

BOTTOM EDGE OF FRAME LINE, TYP.







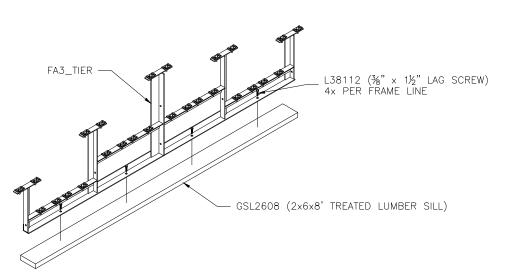
-0327PRF					
N-ELEV. 3 ROW × 27'-0" FRAME IDENTIFICATION					
DATE: 10/16/23 REVISION: 0 SCALE: N.T.S. SHEET NUMBER: 4.1D					

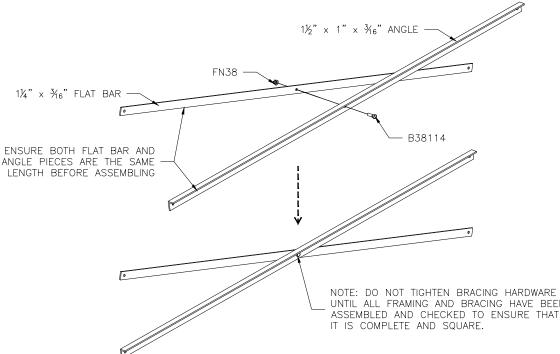


#### PRE-ASSEMBLE X-BRACE PAIR(S)

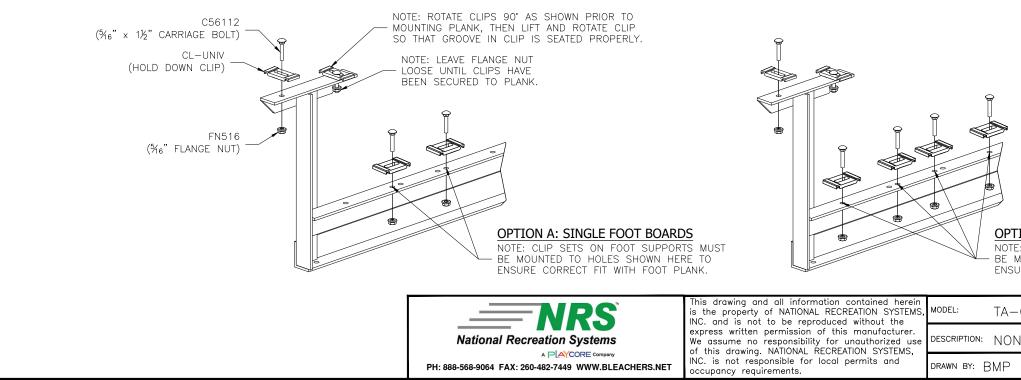
#### (OPTIONAL) ATTACH GROUND SILLS \*

\*NOT ALL BLEACHERS WILL RECEIVE GROUND SILLS. IF YOUR UNIT DOES NOT INCLUDE THIS FEATURE, SKIP THIS STEP.





ONCE FRAMING IS COMPLETE, PRE-ASSEMBLE CLIP SETS ON BLEACHER FRAMES

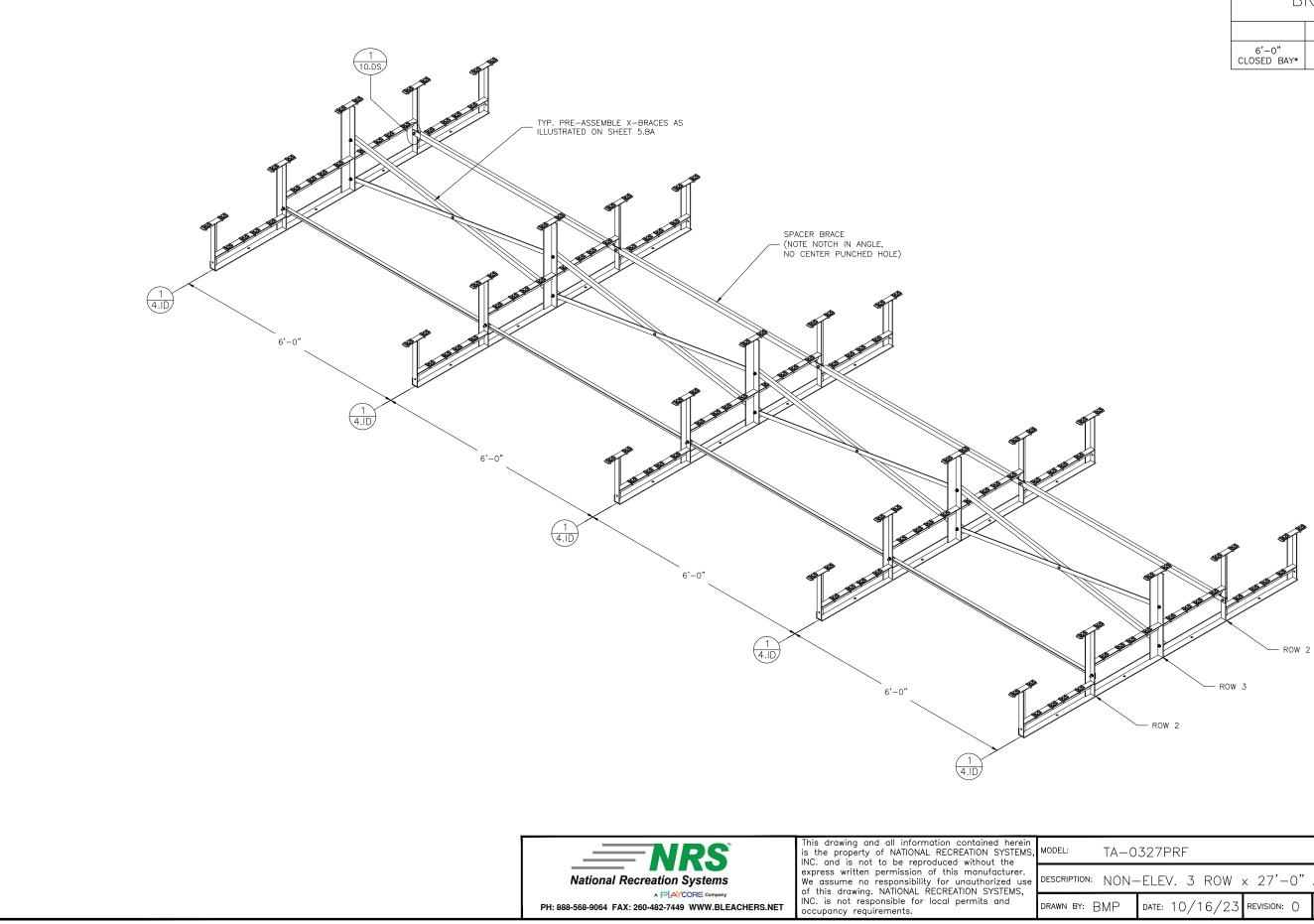


UNTIL ALL FRAMING AND BRACING HAVE BEEN ASSEMBLED AND CHECKED TO ENSURE THAT

#### OPTION B: DOUBLE FOOT BOARDS

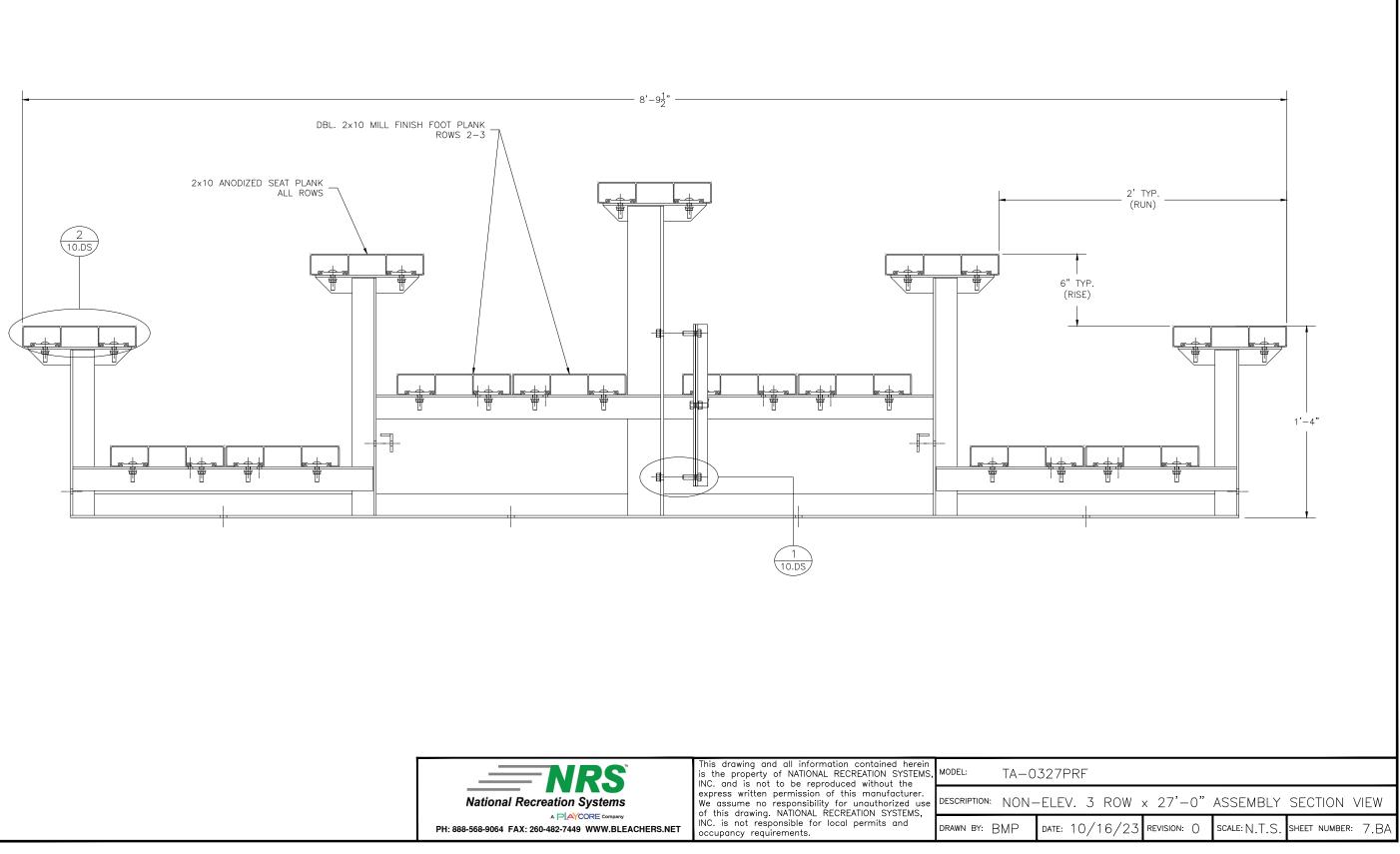
NOTE: CLIP SETS ON FOOT SUPPORTS MUST BE MOUNTED TO HOLES SHOWN HERE TO ENSURE CORRECT FIT WITH FOOT PLANK.

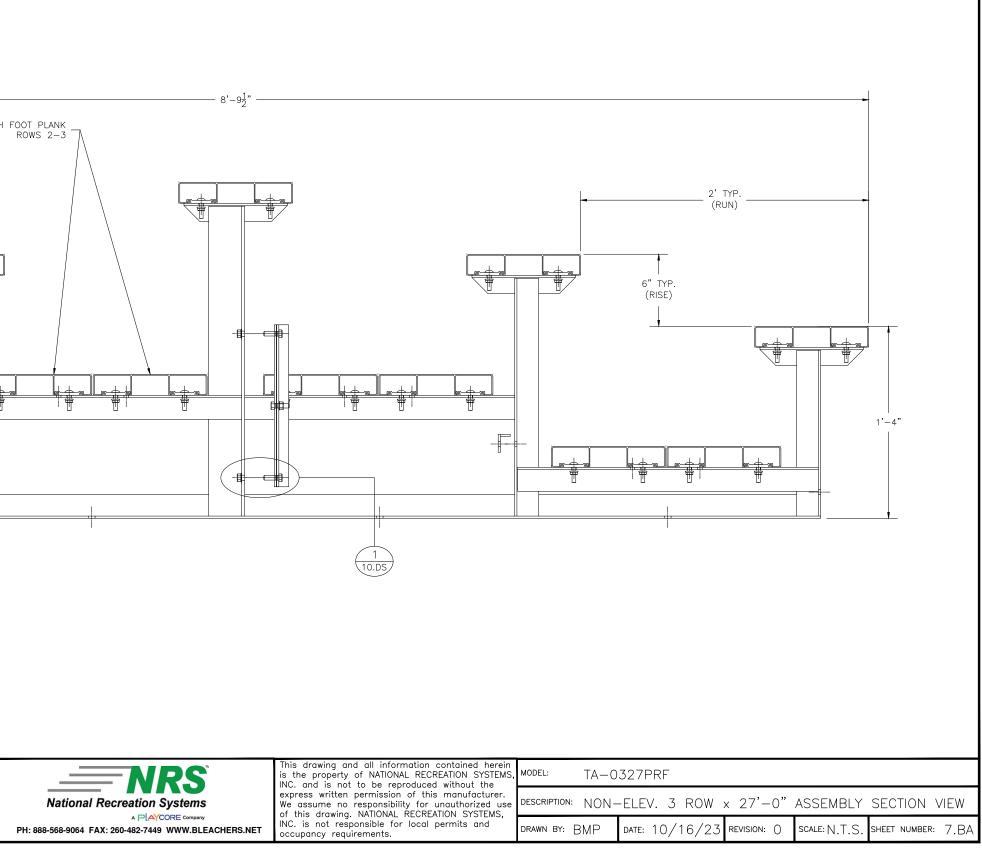
-0	327PRF					
N-	N-ELEV. 3 ROW x 27'-0" ASSEMBLY PREP					
	date: 10/1	6/23	REVISION: ()	SCALE: N.T.S.	SHEET NUMBER:	5.BA

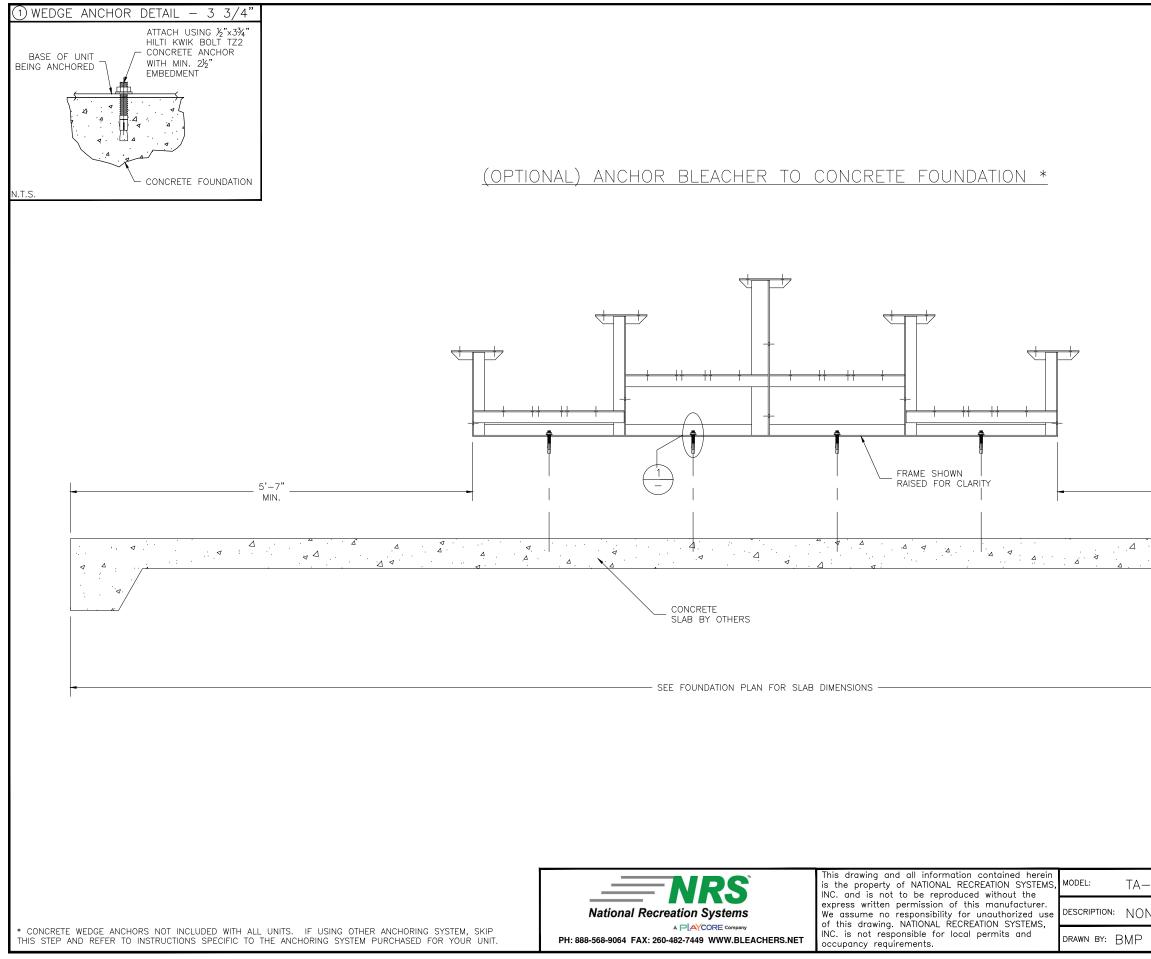


ROW 2 ROW 3   6'-0" 6'-1½" 6'-2½"   CLOSED BAY* SPACER BRACE X-BRACE	BRACING CHART					
6'-0" 6'-1½" 6'-2½" CLOSED BAY* SPACER BRACE X-BRACE	ROW 2 ROW 3					
	6'-0" CLOSED BAY*					

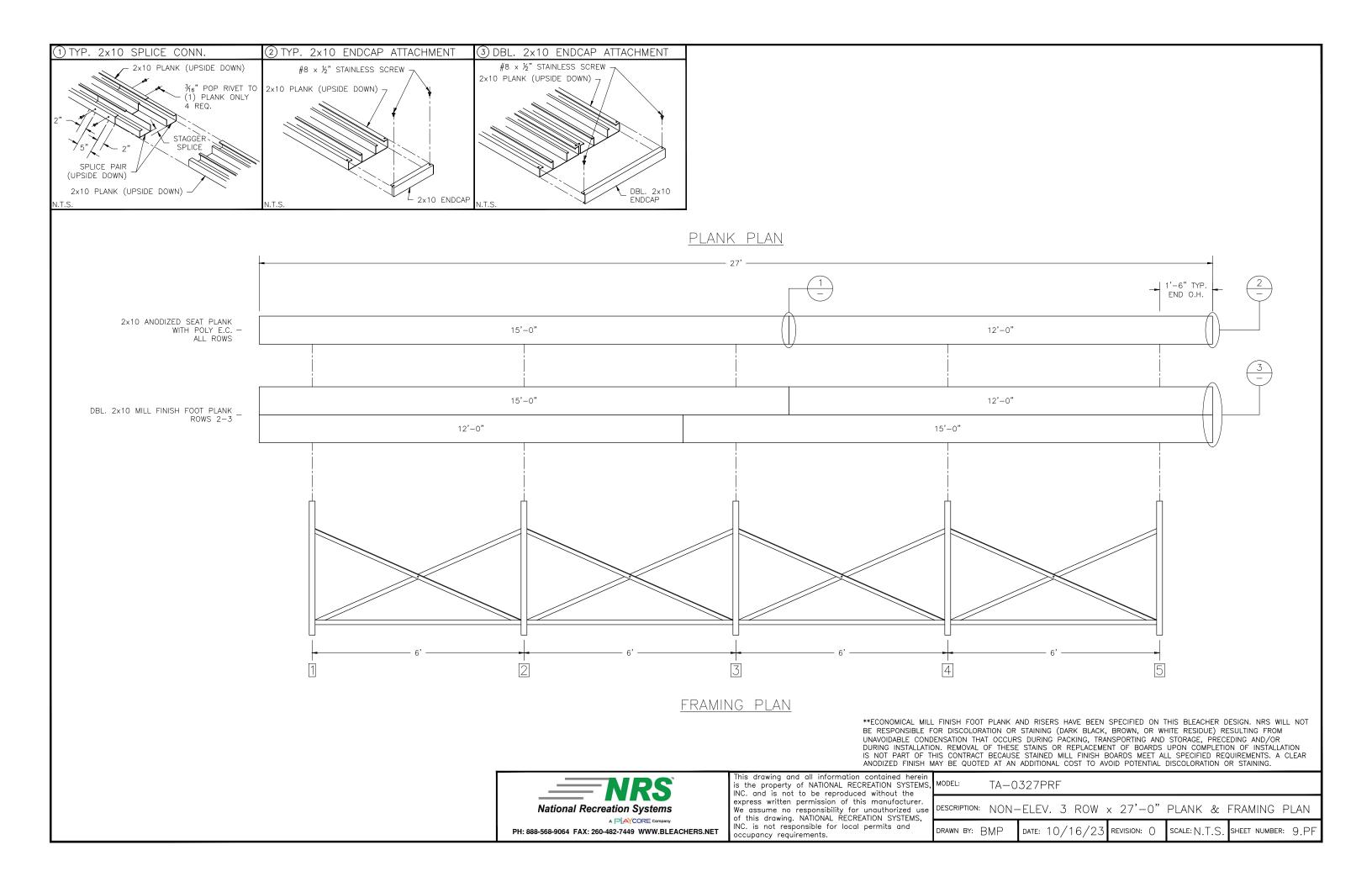
-0327PRF						
)N-	-ELEV. 3 ROW :	× 27'-0"	ASSEMBLY	- BRACIN	G	
)	date: 10/16/23	REVISION: ()	scale: N.T.S.	SHEET NUMBER:	6.BA	

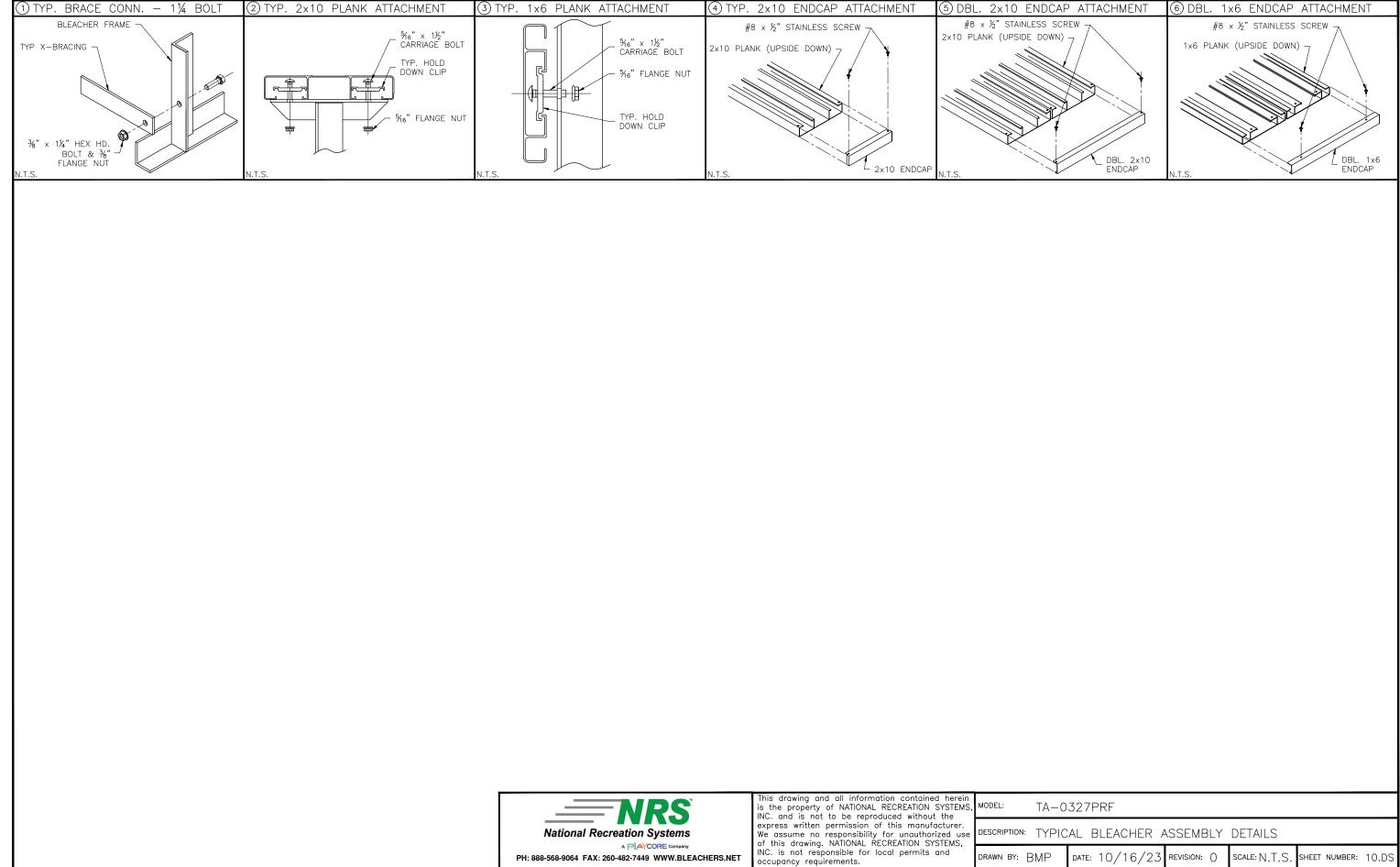






	_ 5'-7" MIN.				
а. Д	A.g	4		Δ	
)327PRF					
-ELEV. 3 R	OW BLEAC	HER ANG	CHORING	; PLAN	





-0	-0327PRF						
PIC	PICAL BLEACHER ASSEMBLY DETAILS						
	date: 10/16/23	REVISION: ()	SCALE: N.T.S.	SHEET NUMBER:	10.DS		