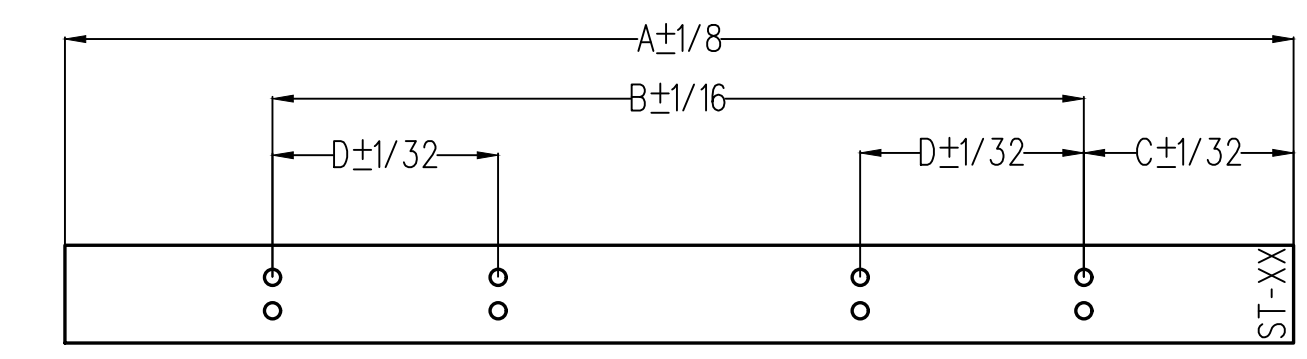


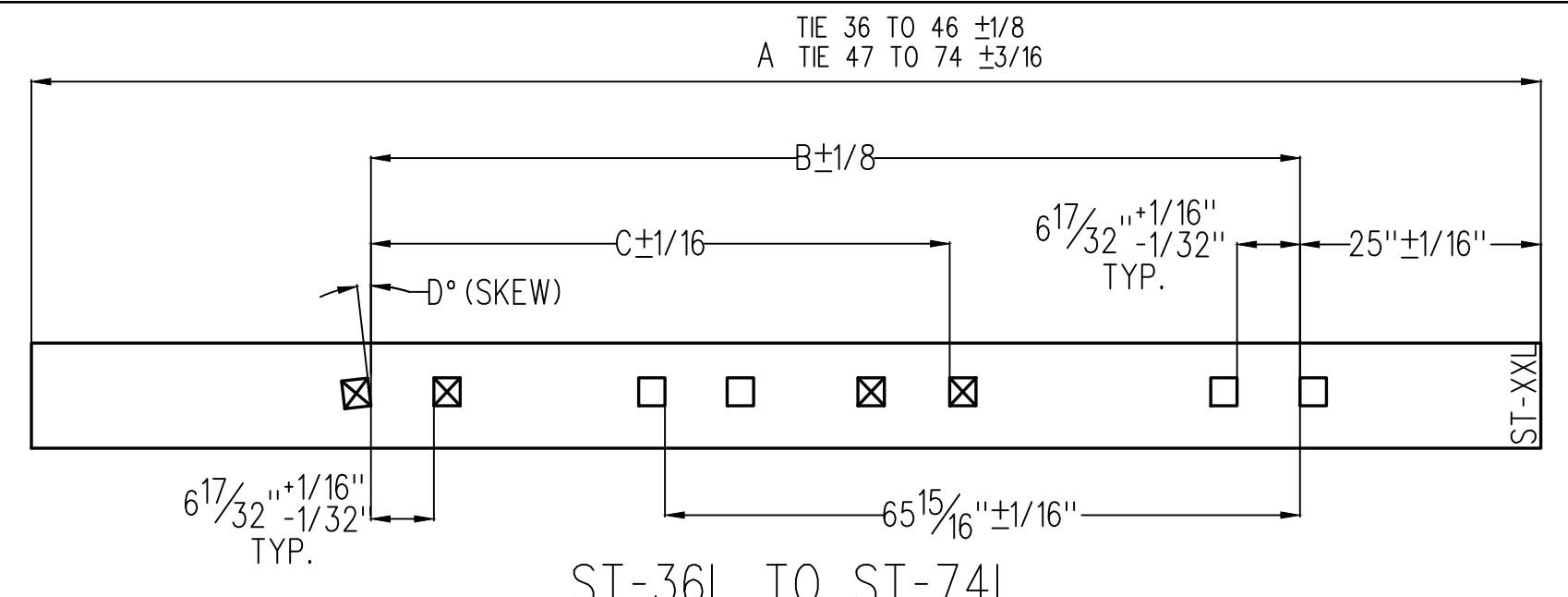
ST-33L, 34L & 35L

TIE NO.	A	B	NO req.
ST-33L	10'-6"	76-5/8"	1
ST-34L	10'-6"	77-7/32"	1
ST-35L	"	77-13/16"	1

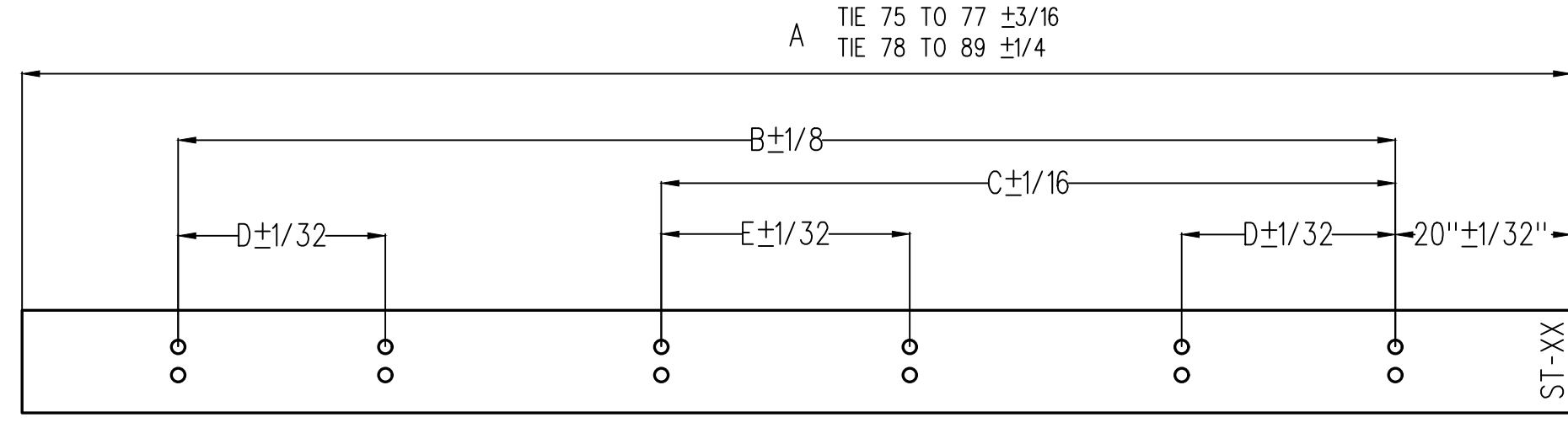


ST-A & ST-3 TO ST-32

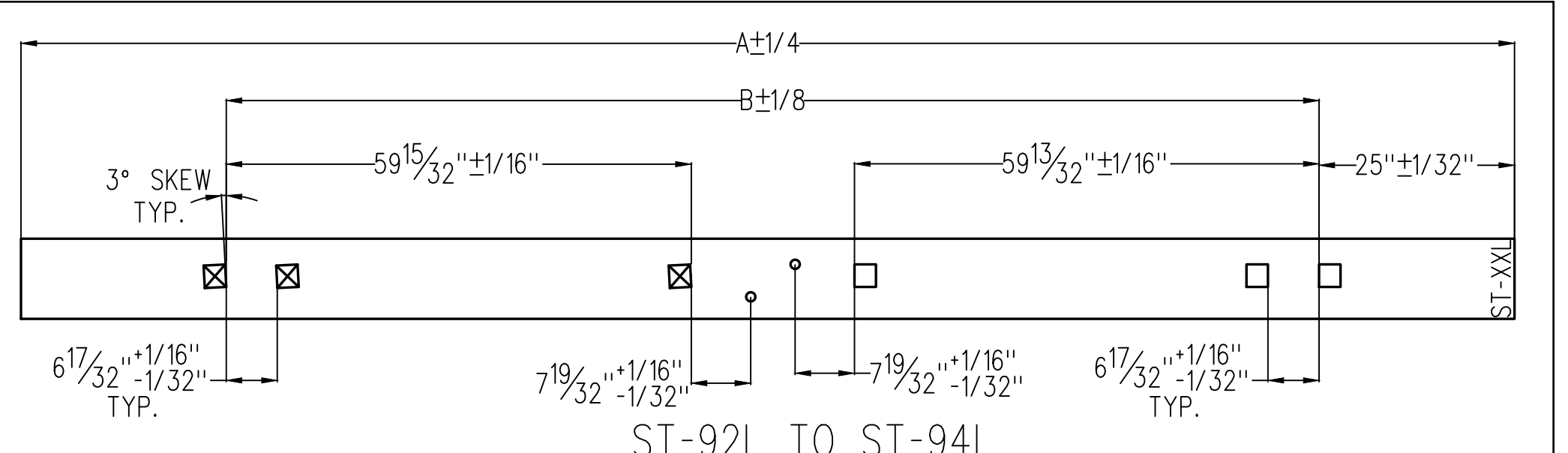
TIE NO.	A	B	C	D	NO req.	TIE NO.	A	B	C	D	NO req.
ST-A	10'-0"	83-5/32"	18-7/16"	23-3/4"	2	ST-18	10'-0"	87-1/8"	16-3/8"	23-7/8"	1
ST-3	"	83-1/2"	16-3/8"	23-7/8"	1	ST-19	10'-0"	80-1/16"	20"	20-1/4"	1
ST-4	"	76-11/32"	20"	20-1/4"	1	ST-20	10'-6"	87-3/4"	16-3/8"	23-7/8"	1
ST-5	"	83-27/32"	16-3/8"	23-7/8"	1	ST-21	10'-6"	80-23/32"	20"	20-1/4"	1
ST-6	"	76-23/32"	20"	20-1/4"	1	ST-22	10'-6"	81-3/32"	20"	20-1/4"	1
ST-7	"	76-29/32"	20"	20-1/4"	1	ST-23	10'-6"	88-25/32"	16-3/8"	23-7/8"	1
ST-8	"	84-15/32"	16-3/8"	23-7/8"	1	ST-24	10'-6"	81-13/16"	20"	20-1/4"	1
ST-9	"	77-11/32"	20"	20-1/4"	1	ST-25	10'-6"	82-3/16"	20"	21-1/2"	1
ST-10	"	77-9/16"	20"	20-1/4"	1	ST-26	10'-6"	82-21/32"	20"	21-1/2"	1
ST-11	"	85-5/32"	16-3/8"	23-7/8"	1	ST-27	10'-6"	83-5/32"	20"	21-1/2"	1
ST-12	"	78-1/16"	20"	20-1/4"	1	ST-28	10'-6"	83-21/32"	20"	21-1/2"	1
ST-13	"	85-21/32"	16-3/8"	23-7/8"	1	ST-29	10'-6"	84-5/32"	20"	26-1/4"	1
ST-14	"	78-19/32"	20"	20-1/4"	1	ST-30	10'-6"	84-11/16"	20"	26-1/4"	1
ST-15	"	78-7/8"	20"	20-1/4"	1	ST-31	10'-6"	85-1/4"	20"	26-1/4"	1
ST-16	"	86-1/2"	16-3/8"	23-7/8"	1	ST-32	10'-6"	85-13/16"	20"	26-1/4"	1
ST-17	"	79-15/32"	20"	20-1/4"	1						



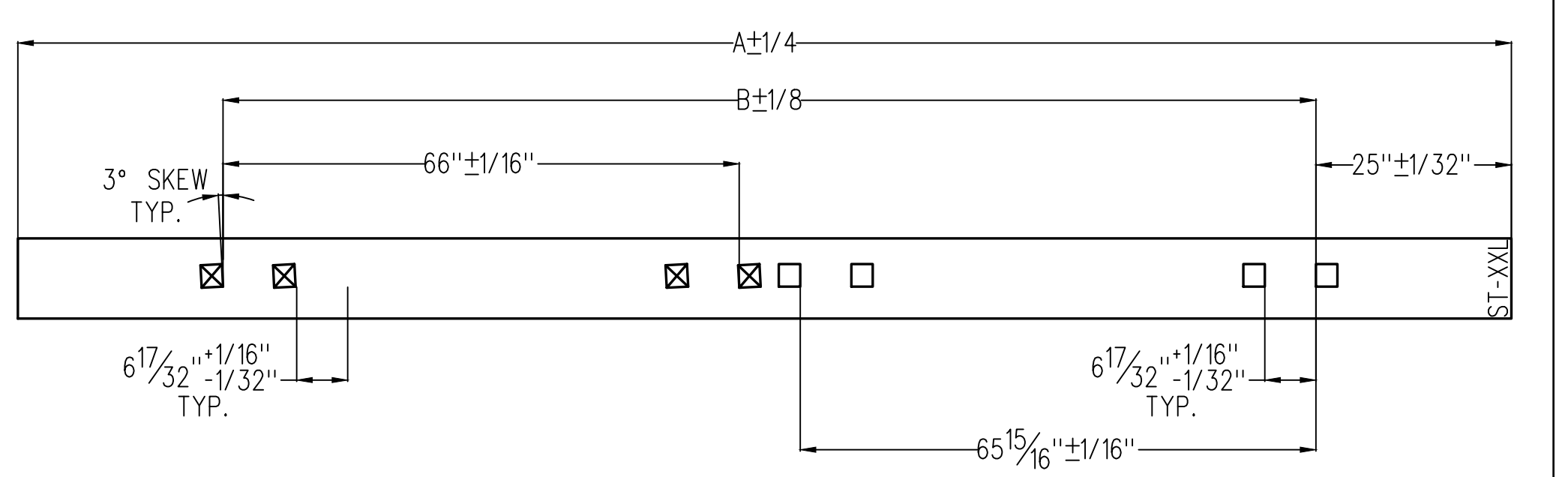
TIE NO.	A	B	C	D(SKEW)	NO req.	TIE NO.	A	B	C	D(SKEW)	NO req.
ST-36L	10'-6"	78-7/16"	65-31/32"	2°	1	ST-56L	11'-6"	94"	65-31/32"	2°	1
ST-37L	"	79-3/32"	"	"	1	ST-57L	"	94-29/32"	"	"	1
ST-38L	"	79-3/4"	"	"	1	ST-58L	"	95-7/8"	"	"	1
ST-39L	"	80-13/32"	"	"	1	ST-59L	12'-0"	96-13/16"	"	"	1
ST-40L	"	81-3/32"	"	"	1	ST-60L	"	97-13/16"	"	"	1
ST-41L	"	81-25/32"	"	"	1	ST-61L	"	98-25/32"	"	"	1
ST-42L	"	82-1/2"	"	"	1	ST-62L	"	99-13/16"	"	"	1
ST-43L	"	83-7/32"	"	"	1	ST-63L	"	100-13/16"	"	"	1
ST-44L	"	83-31/32"	"	"	1	ST-64L	12'-6"	101-27/32"	66"	3°	1
ST-45L	"	84-23/32"	"	"	1	ST-65L	"	102-7/8"	"	"	1
ST-46L	11'-0"	85-1/2"	"	"	1	ST-66L	"	103-31/32"	"	"	1
ST-47L	"	86-9/32"	"	"	1	ST-67L	"	105-1/32"	"	"	1
ST-48L	"	87-1/16"	"	"	1	ST-68L	"	106-1/8"	"	"	1
ST-49L	"	87-7/8"	"	"	1	ST-69L	"	107-1/4"	"	"	1
ST-50L	"	88-23/32"	"	"	1	ST-70L	"	108-3/8"	"	"	1
ST-51L	"	89-9/16"	"	"	1	ST-71L	13'-0"	109-1/2"	"	"	1
ST-52L	"	90-9/16"	"	"	1	ST-72L	"	110-21/32"	"	"	1
ST-53L	11'-6"	91-9/32"	"	"	1	ST-73L	"	111-13/16"	"	"	1
ST-54L	"	92-5/32"	"	"	1	ST-74L	"	113"	"	"	1
ST-55L	"	93-1/16"	"	"	1						



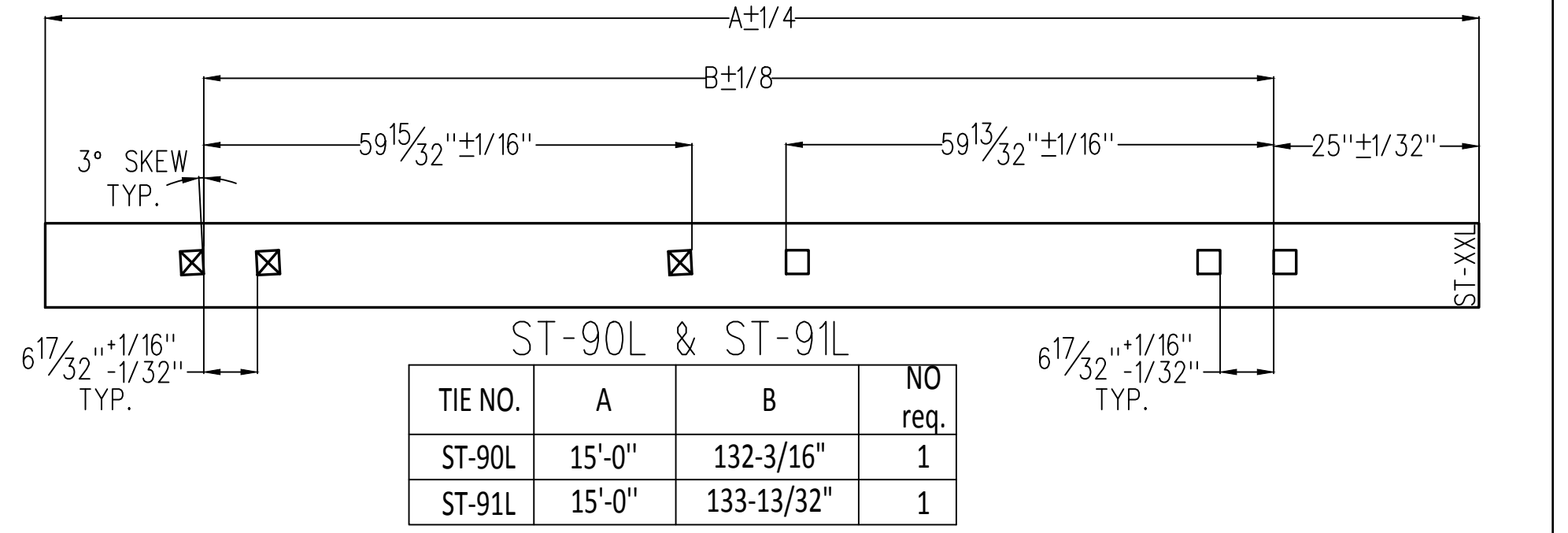
TIE NO.	A	B	C	D	E	NO req.
ST-75	13'-6"	123-7/8"	75-13/16"	25-3/4"	27-3/4"	1
ST-76	"	125-1/16"	"	21-1/2"	"	1
ST-77	14'-0"	126-9/32"	"	25-3/4"	25-1/4"	1
ST-78	"	127-15/32"	"	21-1/2"	"	1
ST-79	"	128-21/32"	79-1/8"	25-3/4"	26-3/4"	1
ST-80	"	129-7/8"	"	21-1/2"	"	1
ST-81	14'-6"	131-1/16"	"	25-3/4"	"	1
ST-82	"	133-9/32"	81-5/8"	21-1/2"	29-1/4"	1
ST-83	"	133-15/32"	"	25-3/4"	"	1
ST-84	"	134-21/32"	"	21-1/2"	"	1
ST-85	"	135-7/8"	"	25-3/4"	"	1
ST-86	"	137-1/16"	86-11/32"	21-1/2"	31-3/4"	1
ST-87	15'-0"	138-9/32"	"	25-3/4"	"	1
ST-88	"	139-15/32"	"	21-1/2"	"	1
ST-89	"	140-21/32"	"	25-3/4"	"	1



TIE NO.	A	B	NO req.
ST-92L	15'-0"	134-19/32"	1
ST-93L	"	135-13/16"	1
ST-94L	"	137"	1



TIE NO.	A	B	NO req.	TIE NO.	A	B	NO req.
ST-95L	15'-0"	138-3/16"	1	ST-107L	16'-6"	152-19/32"	1
ST-96L	15'-6"	139-13/32"	1	ST-108L	"	153-13/16"	1
ST-97L	"	140-19/32"	1	ST-109L	"	155"	1
ST-98L	"	141-13/16"	1	ST-110L	"	156-3/16"	1
ST-99L	"	143"	1	ST-111L	17'-0"	157-13/32"	1
ST-100L	"	144-3/16"	1	ST-112L	"	158-19/32"	1
ST-101L	16'-0"	145-13/32"	1	ST-113L	"	159-13/16"	1
ST-102L	"	146-19/32"	1	ST-114L	"	161"	1
ST-103L	"	147-13/16"	1	ST-115L	"	162-3/16"	1
ST-104L	"	149"	1	ST-116L	"	163-13/32"	1
ST-105L	"	150-3/16"	1	ST-117L	"	164-19/32"	1
ST-106L	16'-6"	151-13/32"	1				



TIE NO.	A	B	NO req.
ST-90L	15'-0"	132-3/16"	1
ST-91L	15'-0"	133-13/32"	1

METRIC CONVERSION: 1 inch=25.4mm, 1 foot=304.8mm

1	18/07/27	ADDED IMPERIAL TO METRIC CONVERSION NOTE	
No.	Date	Revision	By Approved
Standard		CONCRETE TIES FOR NO.20 ALL WELDED T/O 136LB. R.E. RAIL	
Drawn	MG	Checked	GGG
Approved		VP Engineering & Asset Management	
Date		Plan Number	Rev
DEC 15, 2017		GTS-2009	1
REFERENCE: TS-2009			Sheet 1 OF 1

