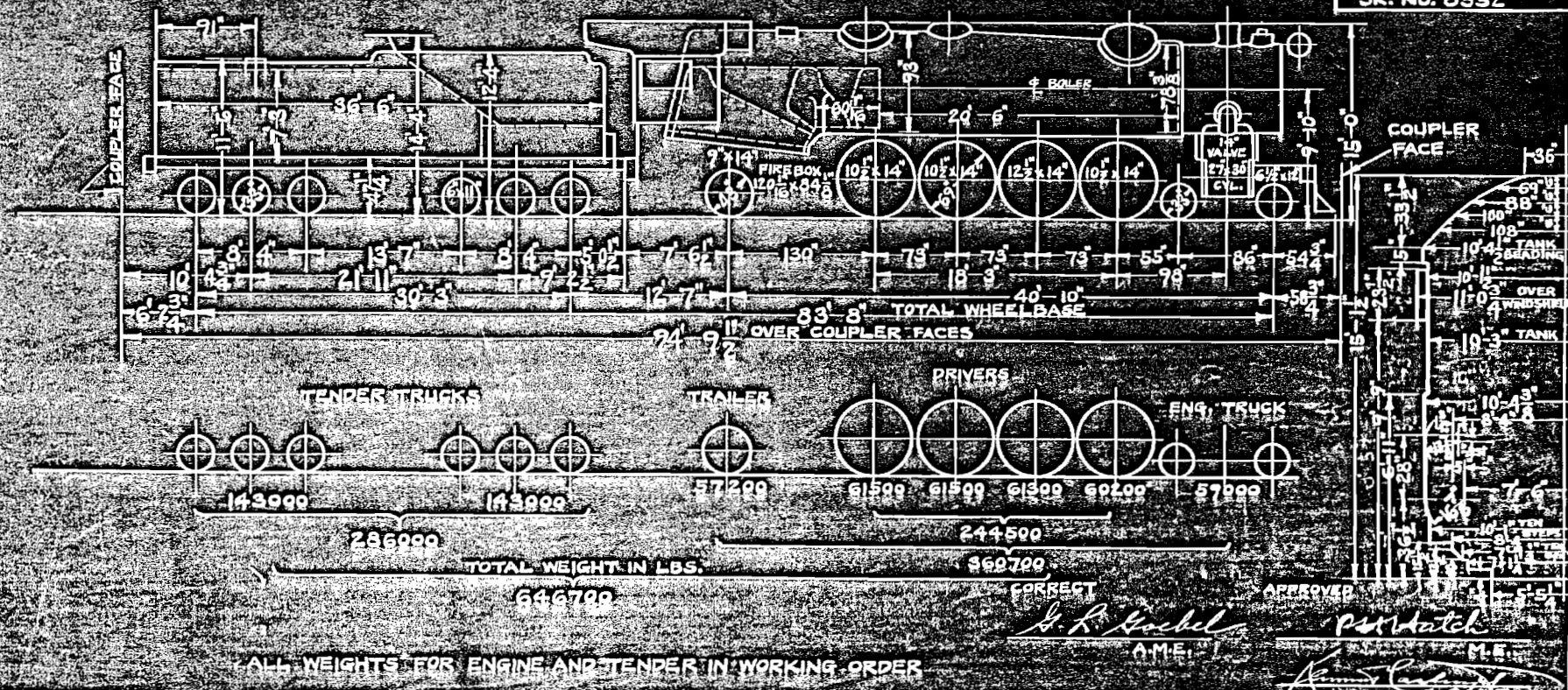


DEC. 18, 1943

S.A. H. S. R. R. CO. OFFICE OF MECH. ENGR.



BOILER		HEATING SURFACE	LENGTH	GAUGE OR THICKNESS	DESIGN DATA	GENERAL DATA
1	BOILER TUBES 201 - SPACING 1 1/8"	2415	20'-6"	2 1/4" 12 MIN.	CALCULATED EVAPORATION LBS. PER HR.	BOILER PRESSURE 250 LBS.
2	BOILER FLUES 40 - SPACING 3/4"	1175	20'-6"	5/2" 10 MIN.	TUBES @ 8.52 LBS. 20575 LBS.	TRACTION EFFORT 67200 LBS.
3	TOTAL TUBES & FLUES	3590			FLUES @ 2.85 LBS. 11585 LBS.	FACTOR OF ADHESION 3.64
4	FIREBOX PROPER	225			FIREBOX @ 55 LBS. 12375 LBS.	MAX. CURVATURE 19'
5	COMBUSTION CHAMBER	101			COMB. CHAMBER @ 55 LBS. 5555 LBS.	ENGR. TRUCK SWING 4 1/2"
6	SYPHONS 2 - FIREBOX 1 - COMB. CHAMBER	95			3 SYPHONS @ 55 LBS. 5225 LBS.	TRAILING TRUCK SWING 6 1/2"
7	TOTAL FIREBOX	421			TOTAL EVAPORATION 55315 LBS.	COAL CAPACITY 18 TONS
8	TOTAL EVAPORATING HEATING SURFACE	2011			STEAM CONSUMPTION (9277 x 20.8) 68160 LBS.	WATER CAPACITY 16000 GAL
9	TOTAL SUPERHEATING HEATING SURFACE	1009			BOILER FACTOR 81%	SUPERHEATER THROTTLE CHAMBERS
10	TUBE SHEETS - FRONT 3/8" - BACK 7/16"				FIREBOX HEATING SURFACE TO GRATE AREA 6.0	VALVE GEAR BAKER
11	GRATE AREA		70.2 SQ. FT.		TOTAL EVAPORATING H.S. TO FIREBOX H.S. 7.5	MAX. CUTOFF 82.9%
12	WEIGHT OF WATER AT 2 1/2" GAUGES				TOTAL EVAPORATING H.S. TO SUPERHEAT. H.S. 9.97	STOKER (L-T) CONVERSION
					ASH PAN AIR OPENING 116%	HEATER BLESICO
					FRAME CENTERS 41" WIDTH OF FRAME 6"	

DR TR CK IN
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