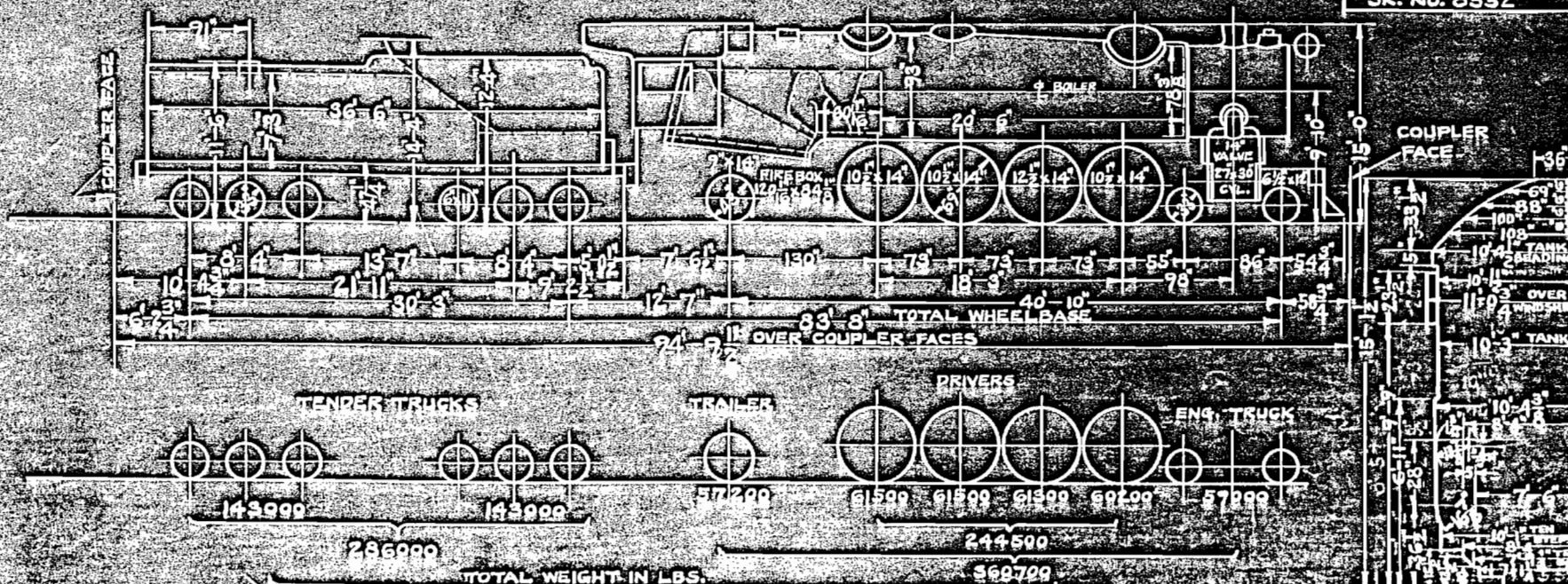


DEC. 16, 1943. OFFICE OF MECH. ENGR.



TENDER TRUCKS

TRAILER

DRIVERS

ENG. TRUCK

143999 143999 57200 61500 61500 61500 61200 57200

286000 244500

TOTAL WEIGHT IN LBS. 568700

646700

CORRECT

APPROVED

J. L. Kachel
A.M.E.

R. H. Hatch
M.E.
James [unclear]
C.M.E.

ALL WEIGHTS FOR ENGINE AND TENDER IN WORKING ORDER

BOILER		HEATING SURFACE	LENGTH	RIA	GAUGE OR THICKNESS	DESIGN DATA	GENERAL DATA
1	BOILER TUBES 20" SPACING 1/16"	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 @ 3.52 LBS. 20575 LBS.	TRACTIVE EFFORT 67200 LBS.
3	TOTAL TUBES & FLUES	3590				FLUES @ 2.86 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.	ENG. TRUCK SWING 4 1/4"
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 13 TONS
8	TOTAL EVAPORATING HEATING SURFACE	4011				STEAM CONSUMPTION (9277 x 20.8) 68160 LBS.	WATER CAPACITY 16000 GALS.
9	TOTAL SUPERHEATING HEATING SURFACE	1009				BOILER FACTOR 81%	SUPERHEATER THROTTLE CHAMBERS
10	TUBE SHEETS - FRONT 7/8" - 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 82.8%
12	WEIGHT OF WATER AT 2 1/2" GAUGES					TOTAL EVAPORATING H.S. TO SUPERHEAT. H.S. 9.7	STOKER (LT-) CONVERSION
						GRATE AREA TO SUPERHEAT. H.S. 116%	HEATER ELESSCO