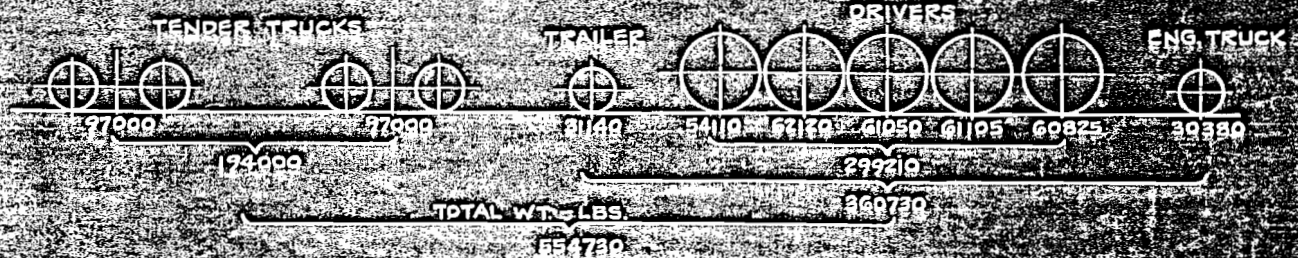
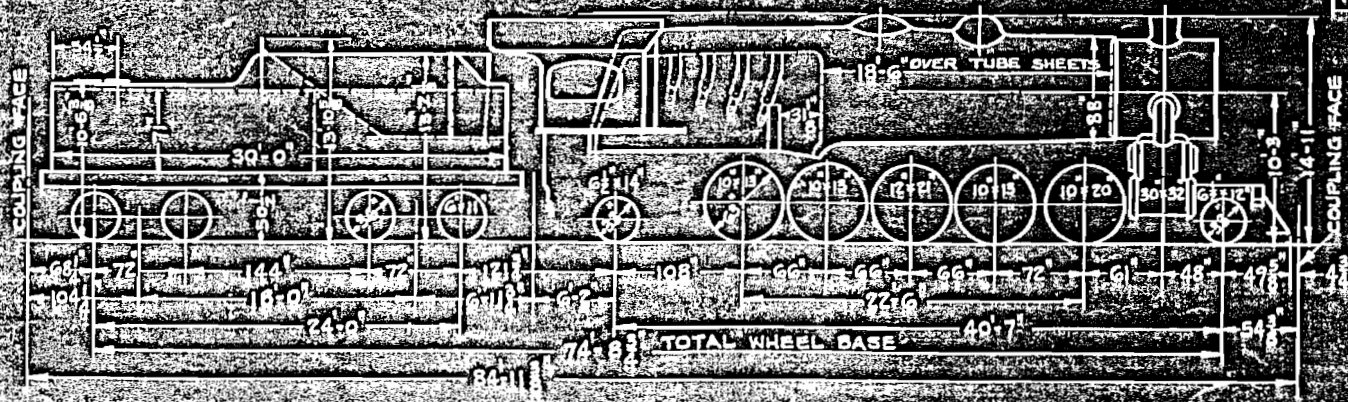


N.Y. N.H. & H.R.R.CO. OFFICE OF MECH. ENGR. DEC. 17, 1942.

FIREBOX SIDE
737.165

TENDER W-11-B
ENG. NO'S 3204, 3207, 3238
3244, 3245
CLASS L-1-a
TYPE "HA" SUPERHEATER
CIRCULATORS
FEEDWATER HEATER
DIAGRAM
SK. NO. 3490



ALL WEIGHTS FOR ENGINE AND TENDER IN WORKING ORDER

CORRECT
S. L. Smith
ASST. M.E.

APPROVED
[Signature]
M.E.

ITEM	BOILER				DESIGN DATA				GENERAL DATA	
	HEATING SURFACE	LENGTH	GAUGE OR THICK.	DESIGN DATA	DESIGN DATA	DESIGN DATA	DESIGN DATA	GENERAL DATA	GENERAL DATA	
1	BOILER TUBES @ 27 1/2" SPACING 3/4"	2982'	18'-6"	2 1/2"	12 MIN.	CALCULATED EVAPORATION LBS./HR.	27700 LBS.	BOILER PRESSURE	200 LBS.	
2	BOILER FLUES @ 52" SPACING 3/4"	1378'	18'-6"	5 1/2"	10 MIN.	TUBES @ 9.29 LBS.	27700 LBS.	TRACTIVE EFFORT	77800 LBS.	
3	TOTAL TUBES & FLUES	4360'				FLUES @ 10.44 LBS.	14390 LBS.	FACTOR OF ADHESION	3.85	
4	FIREBOX PROPER	279'				CIRCULATORS @ 55 LBS.	3190 LBS.	MAX. CURVATURE	16"	
5	COMBUSTION CHAMBER					COMBUSTION CHAMBER		ENGINE TRUCK SWING	6'	
6	CIRCULATORS - 4	58'				FIREBOX @ 35 LBS.	15345 LBS.	TRAILING TRUCK SWING	4 1/2'	
7	TOTAL FIREBOX	337'				TOTAL EVAPORATION	60625 LBS.	COAL CAPACITY	16 TONS	
8	TOTAL EVAPORATING HEATING SURFACE	4697'				ST. CONSUMPTION (3244 X 20.8)	67500 LBS.	WATER CAPACITY	10000 GALS.	
9	TOTAL SUPERHEATING HEATING SURFACE	14.68'				BOILER FACTOR (3244 X 20.8)	89.8%	VALVE GEAR	ROCKER WITH BEARINGS	
10	TUBE SHEETS - FT 5/8" BK 1/2"					FIREBOX H.S. TO GRATE AREA	4.11	STOKER	STANDARD "HT"	
11	GRATE AREA	82 SQ. FT.				TOTAL H.S. TO FIREBOX H.S.	13.93	MAX. CUTOFF	85.5%	
12	WEIGHT WATER 2 1/2" GAUGES					TOTAL H.S. TO SUPERHEATER H.S.	3.2	THROTTLE-CHAMBERS	DOME TYPE-OUT. CONN.	
						FRAME CTRS. 4 1/2"	FRAME WIDTH 6"	FT. LATERAL DRIV. BOX	1" PLAY	
								SUPERHEATER	TYPE "HA"	
								FRONT END ARR'GT.	THOMPSON	

SK. NO. 3490