

LIEBHERR LR-1400/2 342,000# UPPER CWT, 95,000# CENTRAL BALAST		
RADIUS (FT)	CAPACITY	LB
55	146,000	66.4
60	140,000	63.6
65	137,000	62.3
70	131,000	59.5
75	123,000	55.9
80	113,000	51.4
85	104,000	47.3
90	97,000	44.1
95	89,500	40.7
100	83,000	37.7

MAX. WIND SPEED: 36 ft/s (11m/s)

LIFT ANALYSIS

LIEBHERR LR-1400/2
342,000# UPPER COUNTERWEIGHT
95,000# CENTRAL BALAST

CAPACITY @ 70' RADIUS = 131,000 LBS

LIFT WEIGHTS:

MAXIMUM LIFTED LOAD = 99,260 LBS

CRANE BLOCK & HOOK = 5,720 LBS

RIGGING = 1,500 LBS

TOTAL LIFT WEIGHT = 102,480 LBS

% OF RATED CAPACITY = $\frac{102,480}{131,000} = 78.23\%$

= 78.23%

GROVE TMS870 18,000# UPPER CWT, OUTRIGGERS FULLY EXTENDED		
RADIUS (FT)	CAPACITY	LB
15	43,300	19.7
20	39,550	18.0
25	33,800	15.4
30	29,200	13.3
35	25,800	11.7
40	22,900	10.4
45	20,000	9.1
50	17,500	8.0
60	12,800	5.8
70	8,500	4.0

LIFT ANALYSIS

GROVE TMS870
18,000# UPPER CWT,
OUTRIGGERS FULLY EXTENDED

CAPACITY @ 60' RADIUS = 12,800 LBS

LIFT WEIGHTS:

MAXIMUM LIFTED LOAD = 8,000 LBS

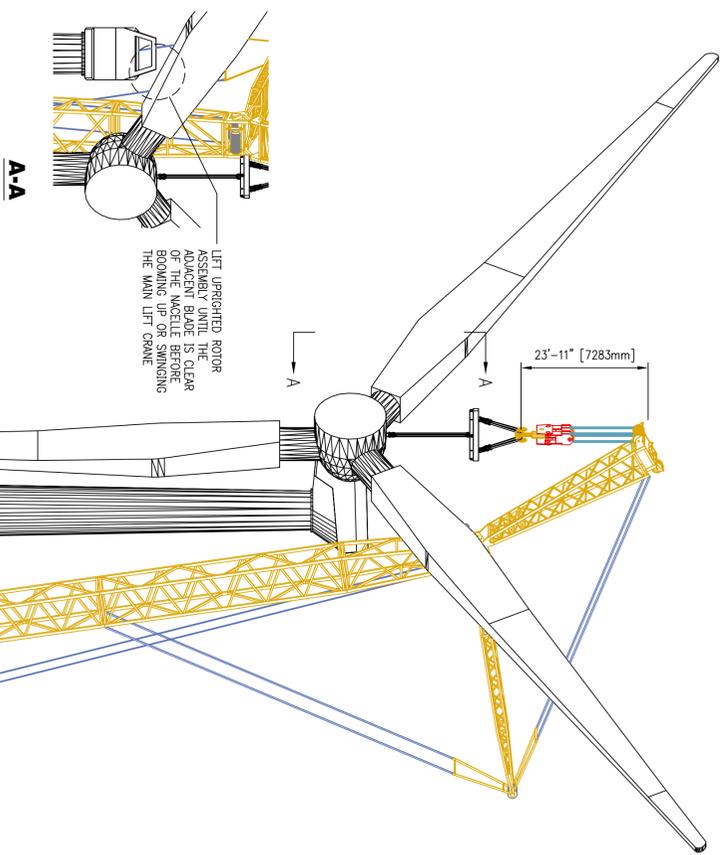
CRANE BLOCK & HOOK = 500 LBS

RIGGING = 200 LBS

TOTAL LIFT WEIGHT = 8,700 LBS

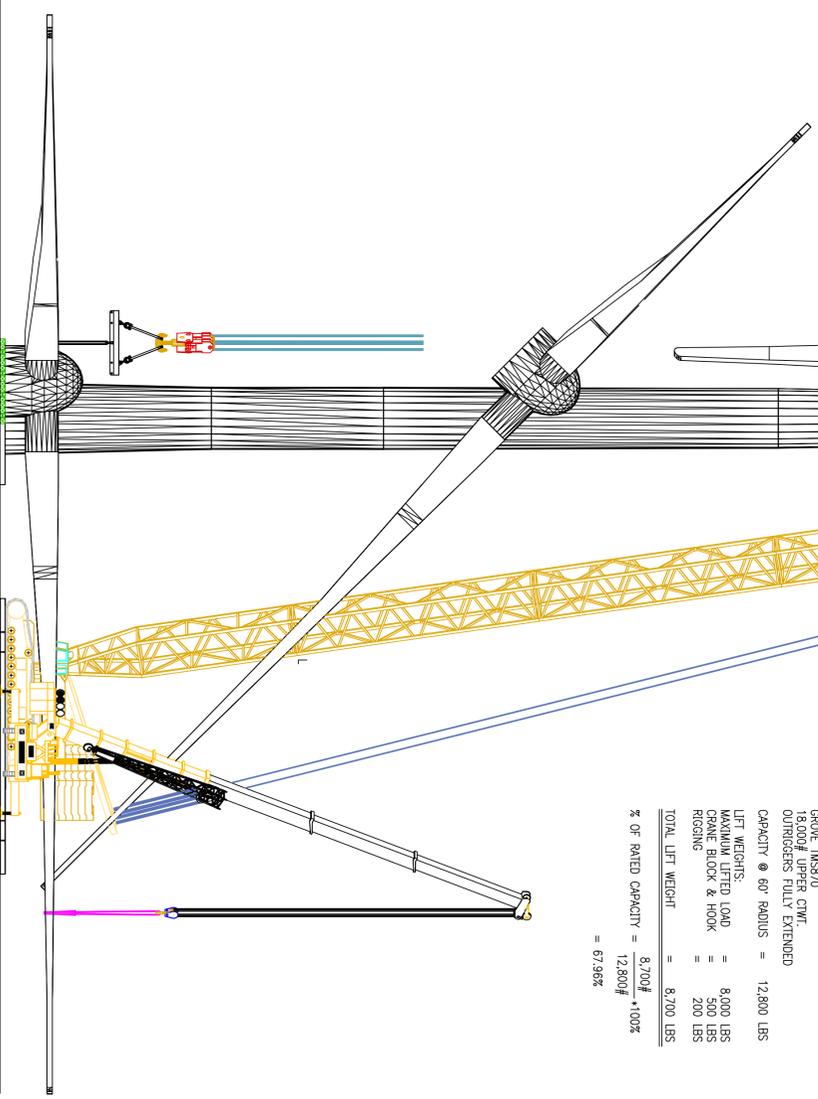
% OF RATED CAPACITY = $\frac{8,700}{12,800} = 67.96\%$

= 67.96%



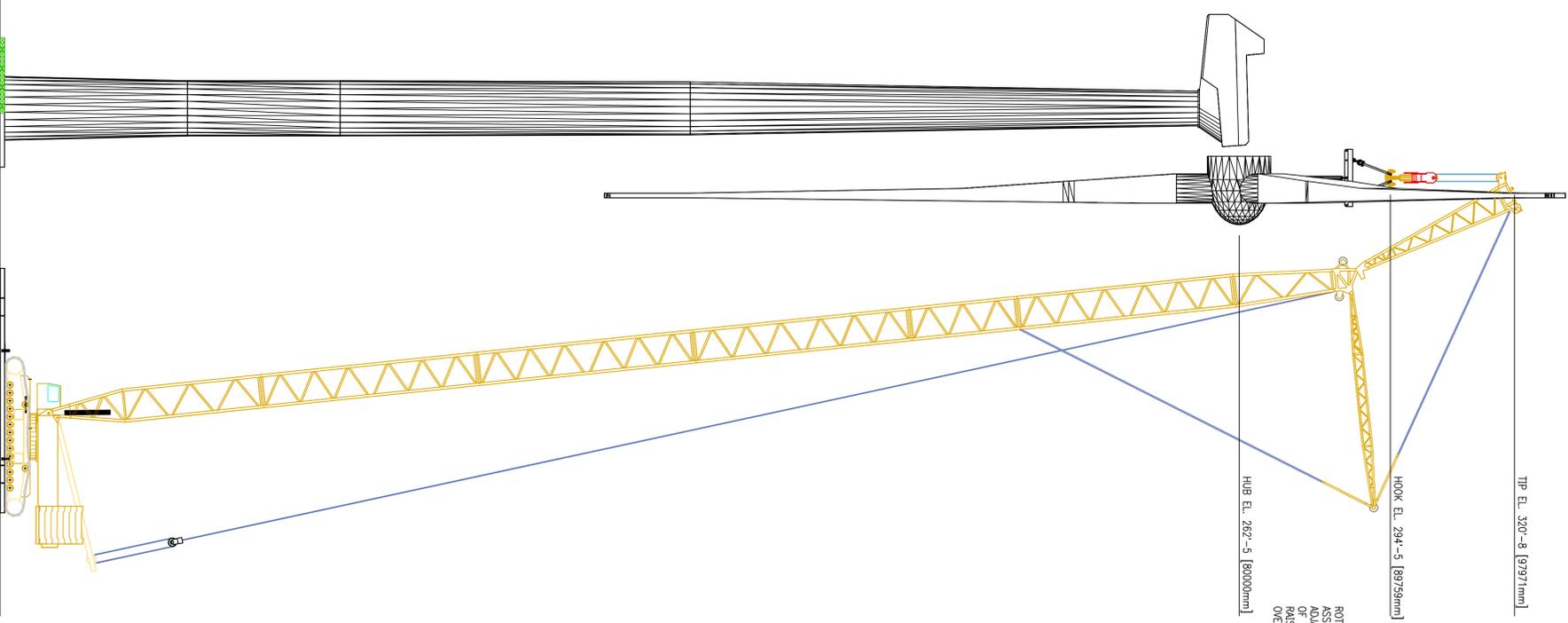
END VIEW - UPRIGHTING OF ROTOR/BLADE ASSY.

SCALE: 1/16"=1'-0"



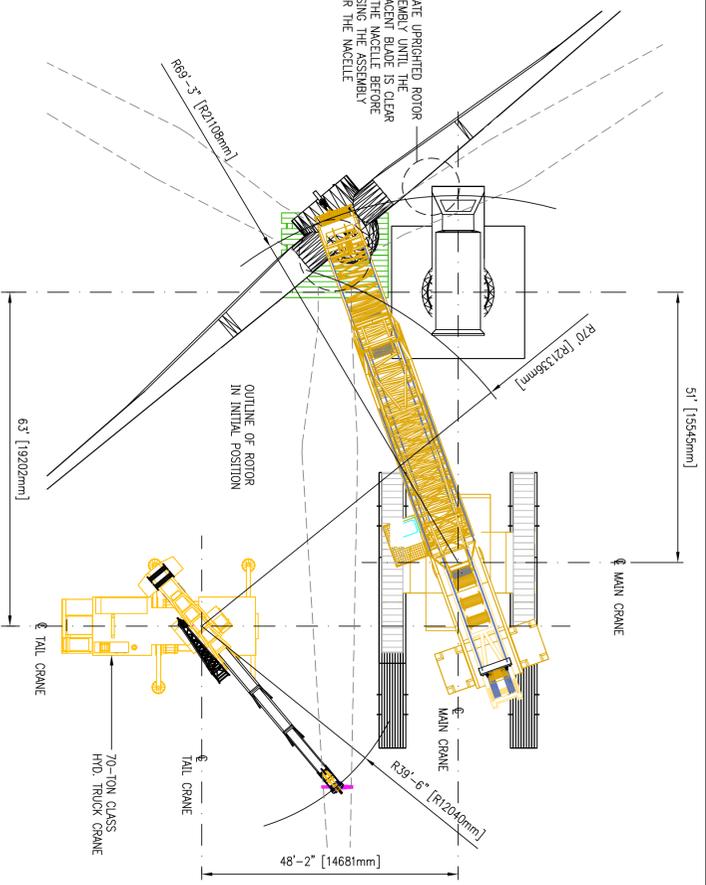
ELEVATION - SETTING OF ROTOR/BLADE ASSY.

SCALE: 1/16"=1'-0"



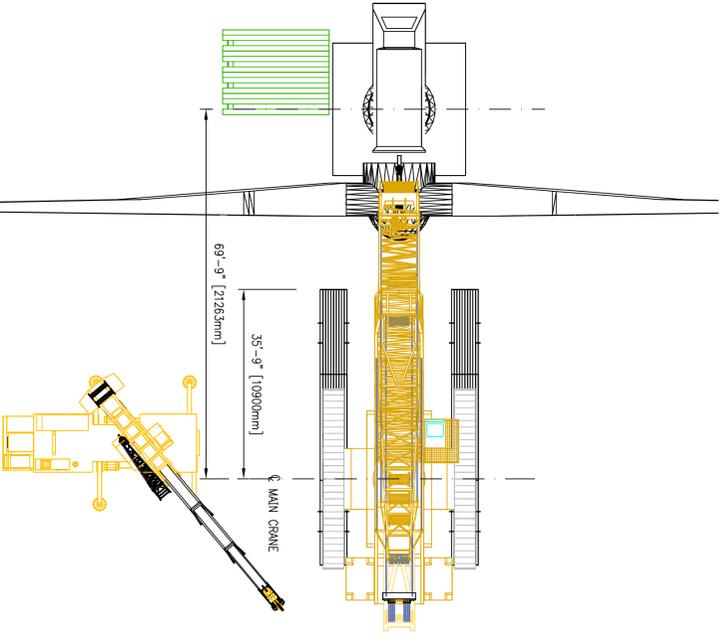
PLAN VIEW - UPRIGHTING OF ROTOR/BLADE ASSY.

SCALE: 1/16"=1'-0"



PLAN VIEW - SETTING OF ROTOR/BLADE ASSY.

SCALE: 1/16"=1'-0"



NOTE:
INFORMATION DERIVED HEREON IS FOR ILLUSTRATIVE PURPOSES ONLY AND IS INTENDED TO CORRELATE THE DESIGN CONCEPT EXPRESSED IN THE CONTRACT DOCUMENTS, CONSISTENT WITH THE CONDITIONS OF THE CONTRACT. THIS DRAWING IS NOT TO BE USED FOR THE DESIGN OR CONSTRUCTION OF ANY MANUFACTURED PRODUCTS, ASSEMBLIES OR COMPONENTS THEREOF FOR THEIR INTENDED PURPOSE. THE DRAWING MAY NOT BE USED FOR ANY DEVIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THIS DRAWING IS ISSUED IN CONFERENCE, AND MAY NOT BE REPRODUCED, DISCLOSED TO THIRD PARTIES OR USED TO MANUFACTURE, WITHOUT WRITTEN PERMISSION FROM FOUR WINDS, LLC.

REVISION DESCRIPTION	ID	DATE
Wind Turbine Erection Details Setting of Rotor Assy. Using Liebherr LR1400/2		
SCALE: As Noted	DRAWN BY: JTC	REVISION
DATE: 1/08/04		

DESIGNED BY: JTC
CHECKED BY: JTC
DATE: 1/08/04

NEG Micon Project
Moulton Power, Canada
FOUR WINDS, LLC
WATERLOO, WISCONSIN

DRAWING NUMBER: **BWP-03**