

BUCKNER

HEAVYLIFT CRANES

Build Package – Liebherr LR1600/2– CR6603

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009	Wind Speeds
010	Load Charts

Note: Crane technician MUST verify all information contained in this document matches what is provided by the manufacturer for the specific crane being used. Contact Andy Moore with questions: andym@bucknerheavylift.com Cell: 713 705 5726

PRELIMINARY

PROJECT: LR1600 SDBW 197' + 197'
 LOCATION: -
 BUCKNER CONTACT: Andy Moore, P.E.
 AndyM@BucknerHeavylift.com
 LIFT PLAN BY: Andy Moore, P.E.
 AndyM@BucknerHeavylift.com

DRAWING NOTES:
 Title Page

LR1600/2	
Operating Mode	SDWB
Main Boom Length	60m (197')
Luffing Jib Length	60m (197')
Derrick Length	36m (118')
Superstructure CWT	150t (331k)
Carbody CWT	65t (143k)
Ballast Tray CWT	151t (333k)

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PROJECT: LR1600 SDBW 197' + 197'

LOCATION: -

BUCKNER CONTACT: Andy Moore, P.E.
AndyM@BucknerHeavyLift.com

LIFT PLAN BY: Andy Moore, P.E.
AndyM@BucknerHeavyLift.com

DRAWING NOTES:
Build Sheet

LR1600/2	
Operating Mode	SDWB
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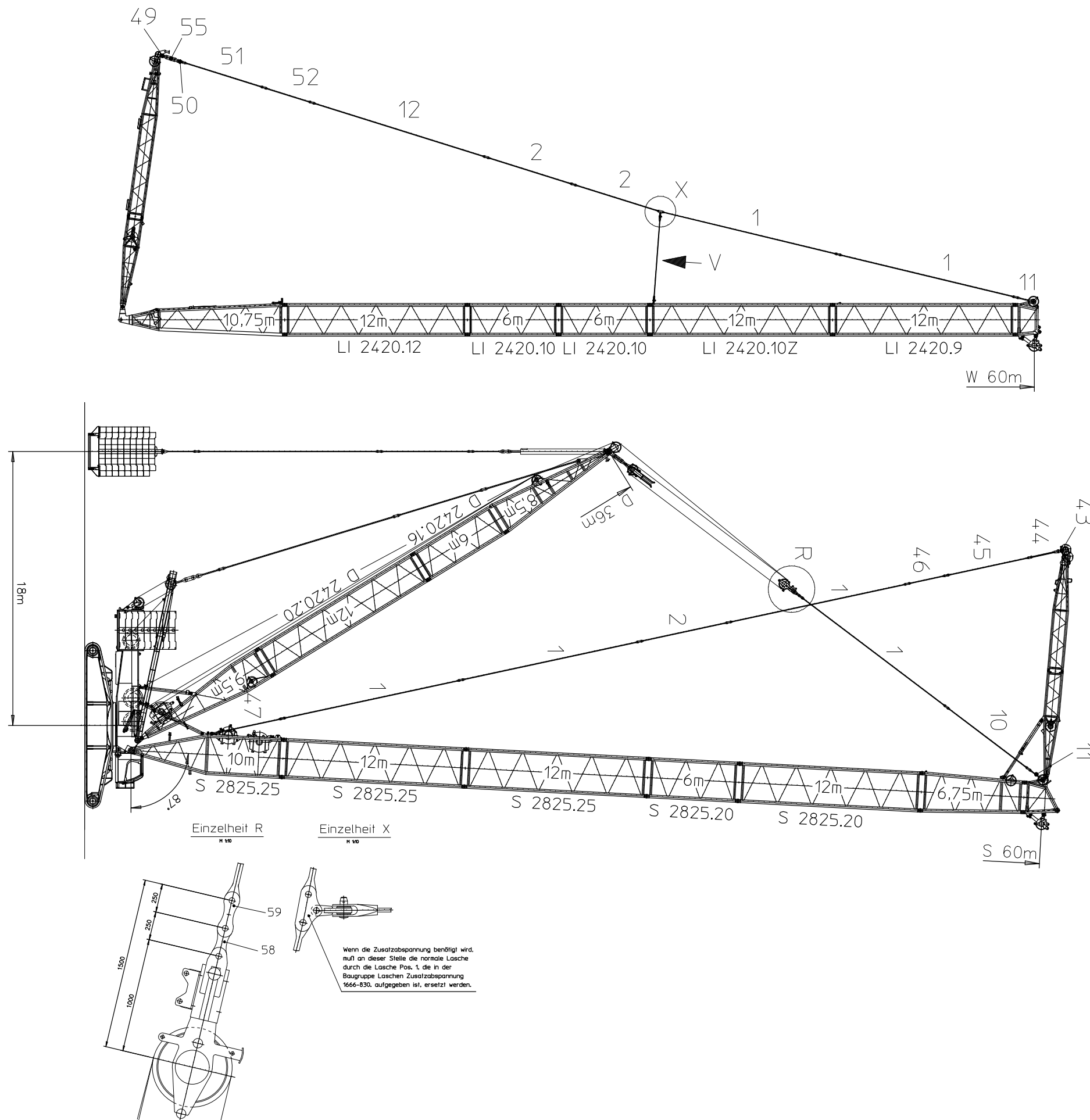
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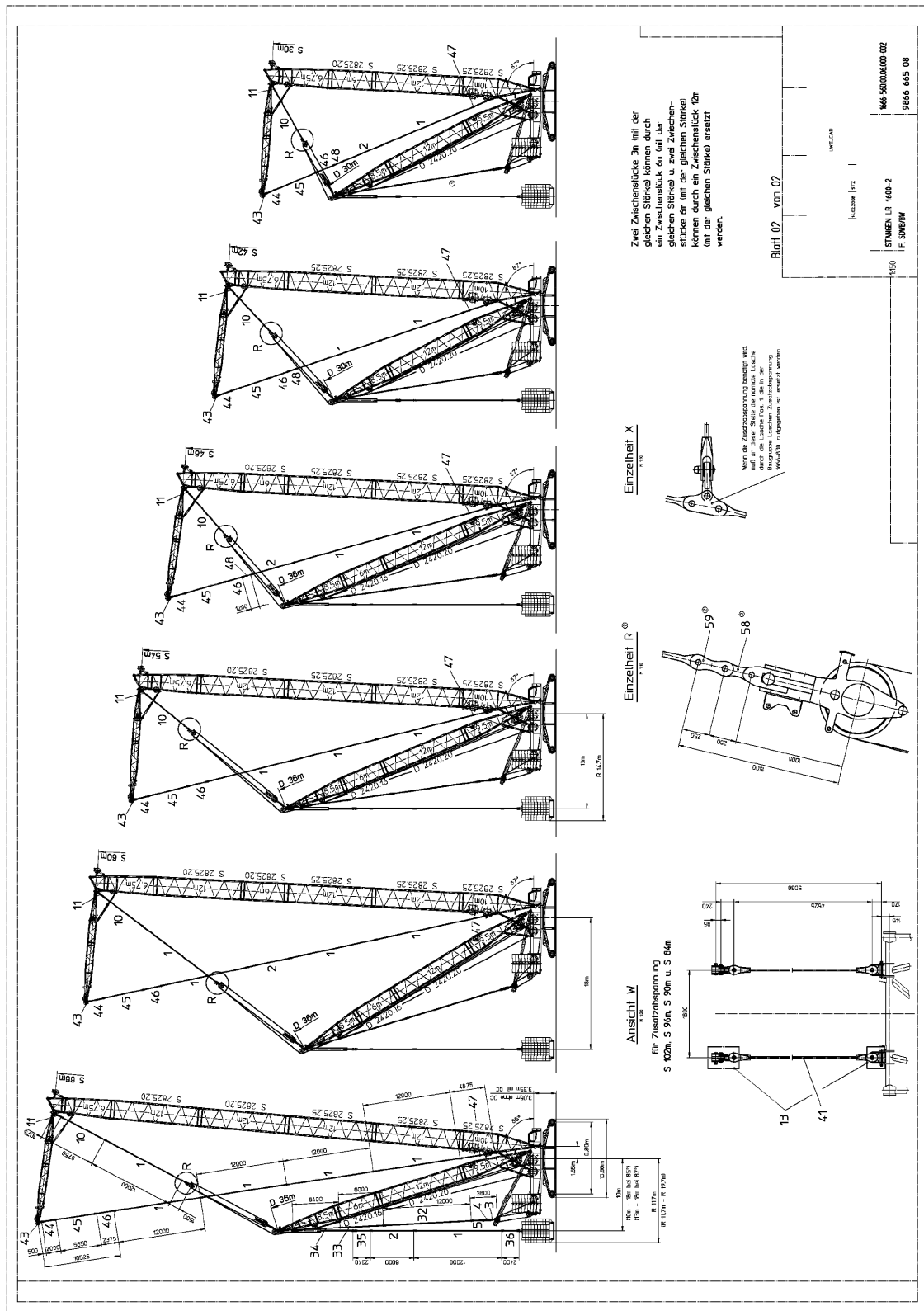
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Pos. Artikel	Bezeichnung	Description
1 964522208	STANGE KPL.	ROD CPL.
2 964344008	STANGE KPL.	ROD CPL.
3 964545608	STANGE KPL.	ROD CPL.
4 10354696	ZUGMESSLASCHE	TENSION DYNAMOMETER
5 964568008	STANGE KPL.	ROD CPL.
10 964867908	STANGE KPL.	ROD CPL.
11 964904208	STANGE KPL.	ROD CPL.
13 915553508	ZUSATZABSPANNUNG	SUPPLEMENTARY GUYING DEVICE
32 964915908	STANGE KPL.	ROD CPL.
33 964859308	STANGE KPL.	ROD CPL.
34 964926808	STANGE KPL.	ROD CPL.
35 964926908	STANGE KPL.	ROD CPL.
36 965019708	STANGE KPL.	ROD CPL.
37 965320508	STANGE KPL.	ROD CPL.
41 915553908	ZUSATZABSPANNUNG	SUPPLEMENTARY GUYING DEVICE
43 964991108	LASCHE KPL.	BRACKET COMPL.
44 965005808	TRAVERSE	CROSSBAR
45 965005408	STANGE KPL.	ROD CPL.
46 965043008	STANGE KPL.	ROD CPL.
47 964703808	STANGE KPL.	ROD CPL.
48 965097008	STANGE KPL.	ROD CPL.
58 964945608	LASCHE KPL.	BRACKET COMPL.
59 965908308	LASCHE KPL.	BRACKET COMPL.
1000 986666508	STANGEN LR 1600-2	RODS/ PULL RODS LR 1600-2

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DRAWING NOTES:
 Rod Plan

LR1600/2	
Operating Mode	SDWB
Main Boom Length	60m (197')
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Carbody CWT	65t (143k)
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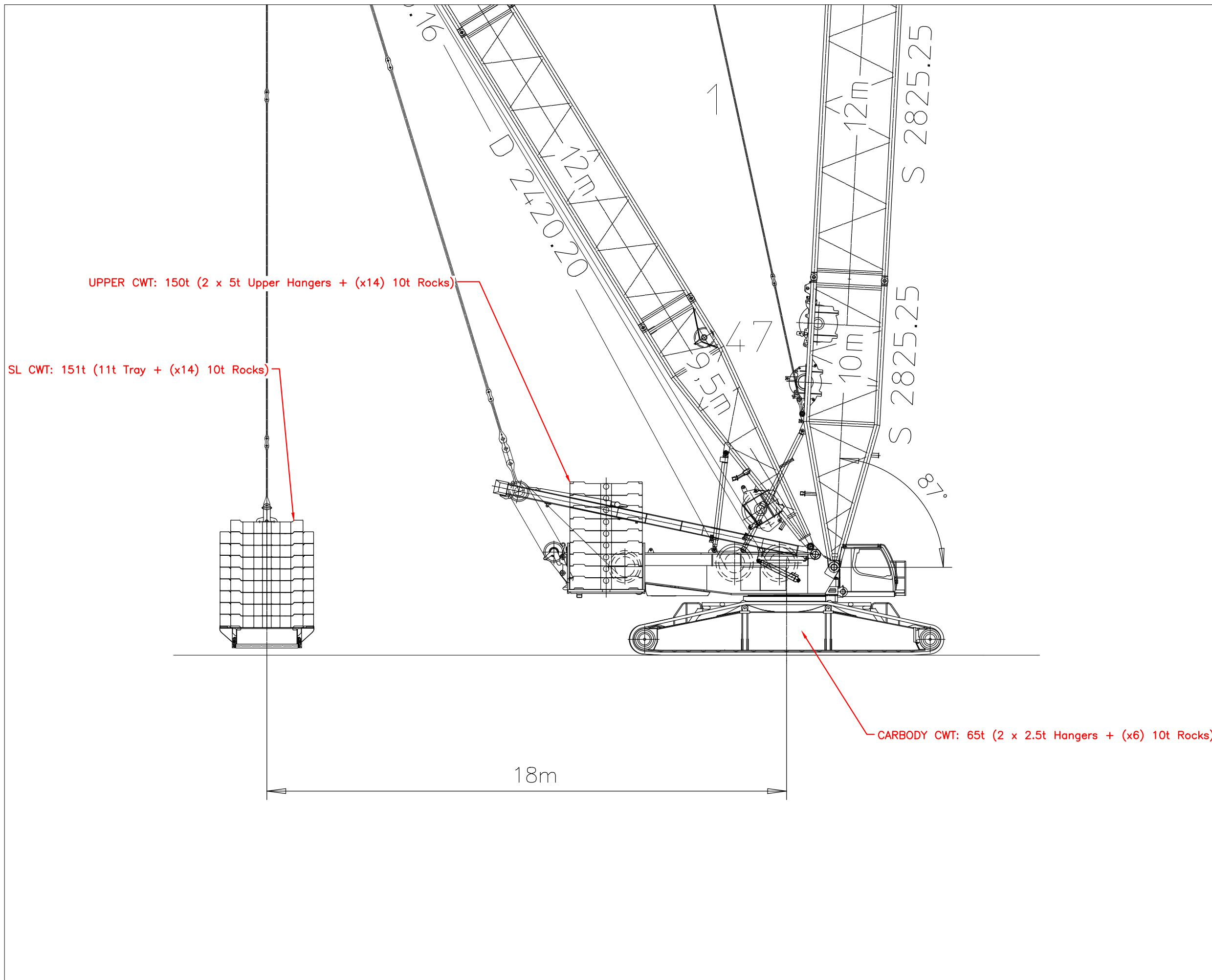
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PROJECT: LR1600 SDBW 197' + 197'

LOCATION: -

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AndyM@BucknerHeavyLift.com

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DRAWING NOTES:
CWT Arrangement

LR1600/2	
Operating Mode	SDWB
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Aux Line (Winch 2)	
3rd Party Rigging 28mmØ	
Parts of Line	0
Reeving Cap. (EN 13000)	0 lb
Block Wt.	(User Dictated) 0 lb

Main Hook Block (Winch 1)	
Hook Block 125DM (3 Sheave) 28mmØ	
Parts of Line	5
Reeving Cap. (EN 13000)	193 300 lb
Block Wt.	(x4 Chk. Wts) 7 700 lb

1.3 Hook block 125 DM (3 rope pulleys / 266.8 kips load)

Reeving	Maximum possible total boom length for following hook block weight:					
	3.3 kips without auxiliary weights	5.5 kips for 2 auxiliary weights	7.7 kips for 4 auxiliary weights	9.9 kips for 6 auxiliary weights	12.1 kips for 8 auxiliary weights	
7	118 ft	197 ft	276 ft	354 ft	394 ft	
6	138 ft	236 ft	335 ft	433 ft	453 ft	
5	157 ft	276 ft	394 ft	512 ft	532 ft	
4	217 ft	374 ft	512 ft	360 ft	360 ft	
3	295 ft	492 ft	630 ft	630 ft	630 ft	
2	453 ft	630 ft	630 ft	630 ft	630 ft	
1	630 ft	630 ft	630 ft	630 ft	630 ft	

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DRAWING NOTES:
Hookblock

LR1600/2	
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PROJECT: LR1600 SDBW 197' + 197'

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DRAWING NOTES:
Reeving (1)

LR1600/2	
Operating Mode	SDWB
Main Boom Length	60m (197')
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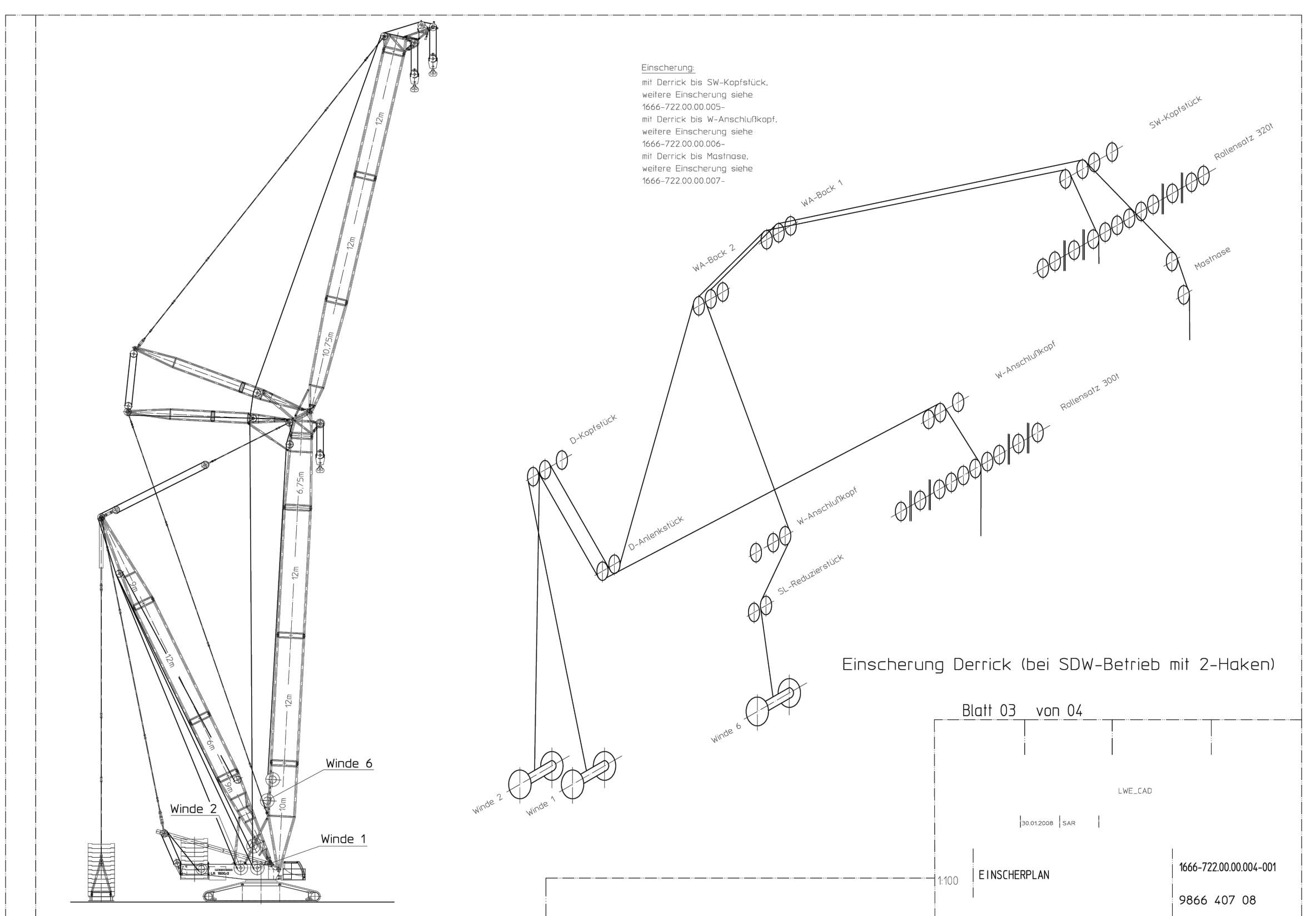
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PROJECT:
LR1600 SDBW 197' + 197'

LOCATION: _____
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AndyM@BucknerHeavyLift.com
LIFT PLAN BY: Andy Moore, P.E.
AndyM@BucknerHeavyLift.com

DRAWING NOTES:
Reeving (2)

LR1600/2	
Operating Mode	SDWB
Main Boom Length	60m (197')
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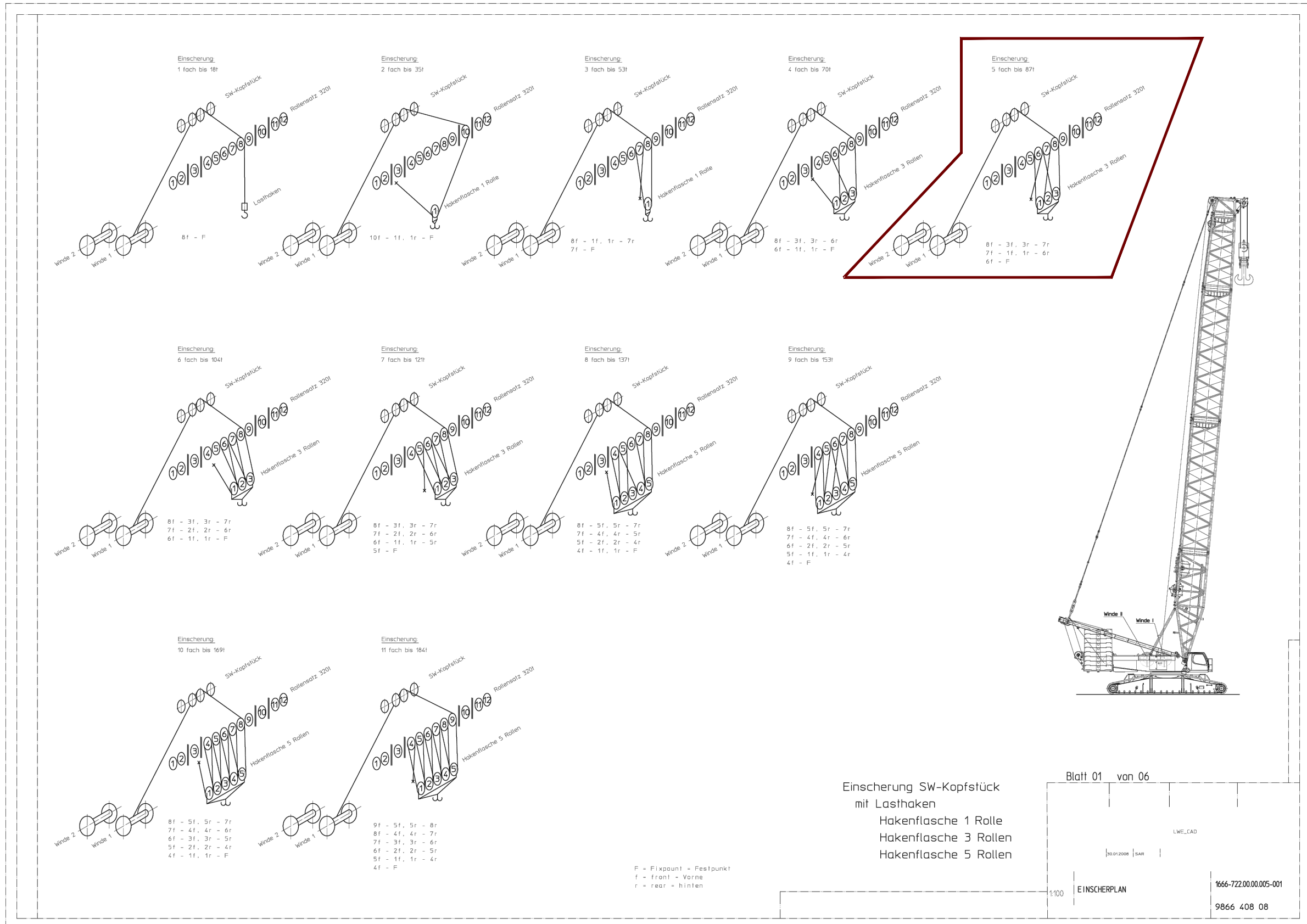
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BUCKNER
HEAVYLIFT CRANES



**SDWB/SDWVB, slewing platform ballast 150t / central ballast 65t
derrick radius 10m, derrick ballast radius 10m**

TAB 181 00 023-00

S-boom: W-connector head with pulley set 300t
W-boom: SW-end section with pulley set 320t
on crawlers 8.70m x 8.40m
without mechanical auxiliary support

System: S 2825.25/20/16
Li 2420.12.5/10/8.8
D 2420.20/16

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SDWB/SDWVB DR 10m / DBR 10m			Required derrick ballast [t] for derrick radius (DR) = derrick ballast radius (DBR) = 10m					
			for a permissible Weight [t] of hook block on W-boom					
			2	6	11	16	20	
S [m]	60	W [m]	12 ^{a)}	130 ^{b)}	150 ^{b)}	190	220	250
			18 ^{a)}	140 ^{b)}	180	220	250	280
			24	130	140	170	190	200
			30	130	150	170	190	200
			36	110	130	150	170	180
			42	100	110	130	150	160
			48	100	100	100	110	120
			54	100	100	100	100	100
			60	120	120	120	120	120
			66	120	120	120	120	120
S [m]	66	W [m]	72	130	130	130	130	130
			78	140	140	140	140	140
			84	150	150	150	150	-
			90	160	160	160	180	-
			96	170	170	170	-	-
			12 ^{a)}	180 ^{b)}	200 ^{b)}	240	280	300
			18 ^{a)}	190 ^{b)}	230	270	310	340
			24	180 ^{b)}	200	220	250	260
			30	180 ^{b)}	200	220	250	260
			36	170	190	210	240	250
42	160	180	200	220	230			
48	140	150	170	190	200			
54	150	150	150	150	160			
60	160	160	160	160	160			
66	170	170	170	170	170			
72	180	180	180	180	180			
78	190	190	190	190	190			
84	200	200	200	200	-			
90	200	200	200	200	-			
96	220	220	220	-	-			

LWE/18150-21-02/en

PROJECT:

LR1600 SDBW 197' + 197'

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DRAWING NOTES:
Erection & Take Down

LR1600/2	
Operating Mode	SDWB
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1 Explanation for wind speed charts

Abbreviation	Description
HA	Main boom length
D	Derrick boom length
HI	Length of moveable and fixed accessories (W = luffing lattice jib; WV = luffing lattice jib, assembled at a fixed angle to the main boom; F = fixed lattice jib)
WHA	Angle data: Main boom to the horizontal Caution : The angle position can be outside of the load charts.
WHI	Angle data of movable and fixed accessories. For movable accessories (W = luffing lattice jib; WV = luffing lattice jib, assembled at a fixed angle to the main boom) the angle to the horizontal is noted. For fixed accessories (F = fixed lattice jib), the intermediate angle between the main boom and fixed jib is noted. Caution : The angle position can be outside of the load charts.
RAD	Radius of hook block to the center of the roller ring connection
HKFL	Maximum hook block weight
OWB	Turntable ballast
ZBL	Central ballast
DRAD	Radius to derrick ballast
VWAB	Maximum permissible wind speed at 360 degree wind direction and applied slewing brakes.
VWABF	Maximum possible wind speed for turning against side wind. Also considered is that with applied slewing brakes, the luffing jib or in main mast operation the main boom can be held in horizontal position (0 degrees) by the slewing brakes against the side wind.
VWRST	Permissible wind speed for take down procedure.

Permissible wind speeds													WAB-TAB18100079-01													
H A	D	H I	W A	W I	R A D	H K F L	O W B	Z B L	D R A D	V W A B	V W A B F	V W R S T	[m]	[m]	[m]	[°]	[°]	[m]	[t]	[t]	[t]	[m]	[m/s]	[m/s]	[m/s]	
S -54	D-36	W-12	60	48	39.1	16.0	150.0	65.0	13	18.4	18.4	12.6														
S -54	D-36	W-18	65	42	40.1	16.0	150.0	65.0	13	18.8	18.8	12.6														
S -60	D-36	W-24	70	58	37.4	16.0	150.0	65.0	13	19.0	19.0	12.6														
S -60	D-36	W-30	75	29	45.2	16.0	150.0	65.0	13	17.9	17.9	12.6														
S -60	D-36	W-36	75	47	44.0	16.0	150.0	65.0	13	17.4	17.4	12.6														
S -60	D-36	W-42	75	55	43.6	16.0	150.0	65.0	13	16.9	16.9	12.6														
S -60	D-36	W-48	75	63	41.5	16.0	150.0	65.0	13	16.3	16.3	12.6														
S -60	D-36	W-54	80	48	50.4	16.0	150.0	65.0	13	15.5	15.5	12.6														
S -60	D-36	W-60	80	57	47.1	16.0	150.0	65.0	13	15.1	15.1	12.6														
S -60	D-36	W-66	80	61	46.5	16.0	150.0	65.0	13	14.7	14.7	12.6														
S -60	D-36	W-72	80	65	45.0	16.0	150.0	65.0	13	14.3	14.3	12.6														
S -60	D-36	W-78	80	67	45.0	16.0	150.0	65.0	13	13.8	13.8	12.6														
S -60	D-36	W-84	85	60	51.2	16.0	150.0	65.0	13	13.2	13.2	12.6														
S -60	D-36	W-90	85	63	50.1	16.0	150.0	65.0	13	13.0	13.0	12.6														
S -60	D-36	W-96	85	64	51.3	11.0	150.0	65.0	13	13.4	12.7	12.6														
S -60	D-36	W-12	65	49	37.3	16.0	150.0	65.0	13	18.8	18.8	12.6														
S -60	D-36	W-18	70	44	37.3	16.0	150.0	65.0	13	19.6	19.6	12.6														
S -66	D-36	W-24	75	19	43.0	16.0	150.0	65.0	13	17.9	17.9	12.6														
S -66	D-36	W-30	75	46	41.8	16.0	150.0	65.0	13	17.5	17.5	12.6														
S -66	D-36	W-36	75	58	40.2	16.0	150.0	65.0	13	17.1	17.1	12.6														
S -66	D-36	W-42	75	63	40.3	16.0	150.0	65.0	13	16.2	16.2	12.6														
S -66	D-36	W-48	80	47	48.0	16.0	150.0	65.0	13	15.6	15.6	12.6														
S -66	D-36	W-54	80	54	47.1	16.0	150.0	65.0	13	15.2	15.2	12.6														
S -66	D-36	W-60	80	60	45.5	16.0	150.0	65.0	13	14.8	14.8	12.6														
S -66	D-36	W-66	80	65	43.5	16.0	150.0	65.0	13	14.5	14.5	12.6														
S -66	D-36	W-72	80	68	42.6	16.0	150.0	65.0	13	13.9	13.9	12.6														
S -66	D-36	W-78	85	57	52.1	16.0	150.0	65.0	13	13.5	13.5	12.6														
S -66	D-36	W-84	85	61	50.4	16.0	150.0	65.0	13	13.1	13.1	12.6														
S -66	D-36	W-90	85	64	49.2	16.0	150.0	65.0	13	12.7	12.7	12.6														
S -66	D-36	W-96	85	65	50.3	11.0	150.0	65.0	13	13.1	12.6	12.6														
S -66	D-36	W-12	70	51	34.1	16.0	150.0	65.0	13	19.6	19.6	12.6														
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PROJECT:

LR1600 SDBW 197' + 197'

LOCATION:

BUCKNER CONTACT:

Andy Moore, P.E.

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LIFT PLAN BY:

Andy Moore, P.E.

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DRAWING NOTES:

Wind Speeds

LR1600/2

Operating Mode	SDWB
Main Boom Length	60m (197')
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Derrick Length	36m (118')
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Ballast Tray CWT	151t (333k)

PRELIMINARY

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Revisions

All Sheets Same Revision Level

Rev.	Date	Description
000	09.19.2024	Preliminary Planning & Initial Layout
001	----	----
002	----	----
003	----	----
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