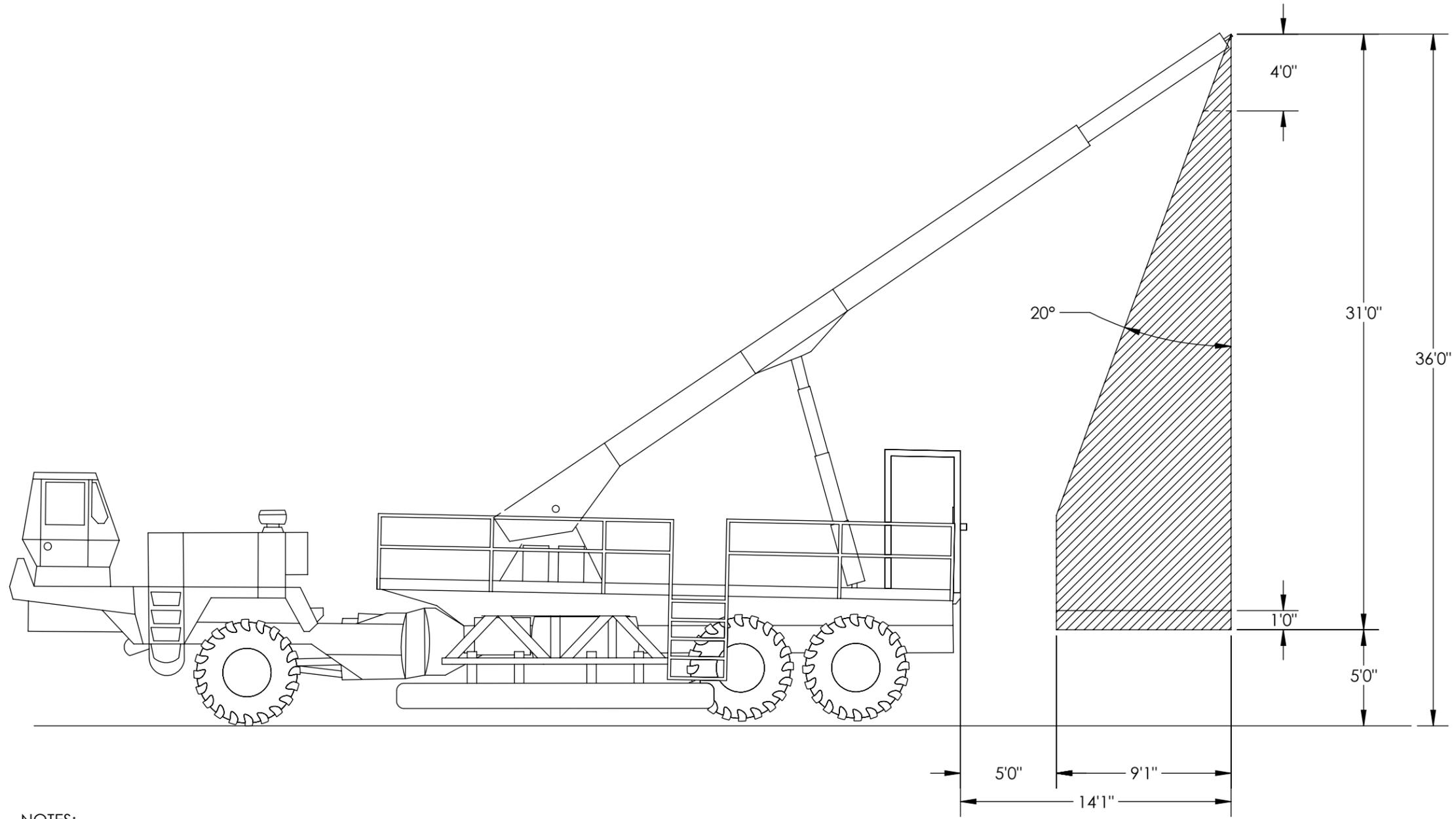


NOTES:

1. 5' MINIMUM CLEARANCE REQUIRED BETWEEN PAYLOAD AND GROUND SURFACE
2. 4' MINIMUM CLEARANCE REQUIRED BETWEEN PIN AND ROTATOR/SWIVEL (IF APPLICABLE)
3. LOWEST 1' OF PAYLOAD ENVELOPE FOR NON-RIGID ANTENNA ONLY

COLUMBIA SCIENTIFIC BALLOON FACILITY				
TOLERANCES	DECIMAL .XX ± .01 .XXX ± .005	DRAWN BY: J. Lang	DATE: 3/3/2005	TITLE: Antarctica Launch Vehicle, Max Height
	FRACTIONAL ± 1/32	CHECKED BY: E. Klein	DATE: 3/3/2005	
	ANGULAR ± .05	APPROVED BY: E. Klein	DATE: 3/3/2005	DWG. NO. OM-300-170-0-SW
SCALE: 1:75	SHEET: 1 OF 1	PROJECT NAME: BOSS (Max Launch Height)		
<b>NOT QUALIFIED FOR MANNED FLIGHT</b>	<b>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</b>	MATERIAL:		



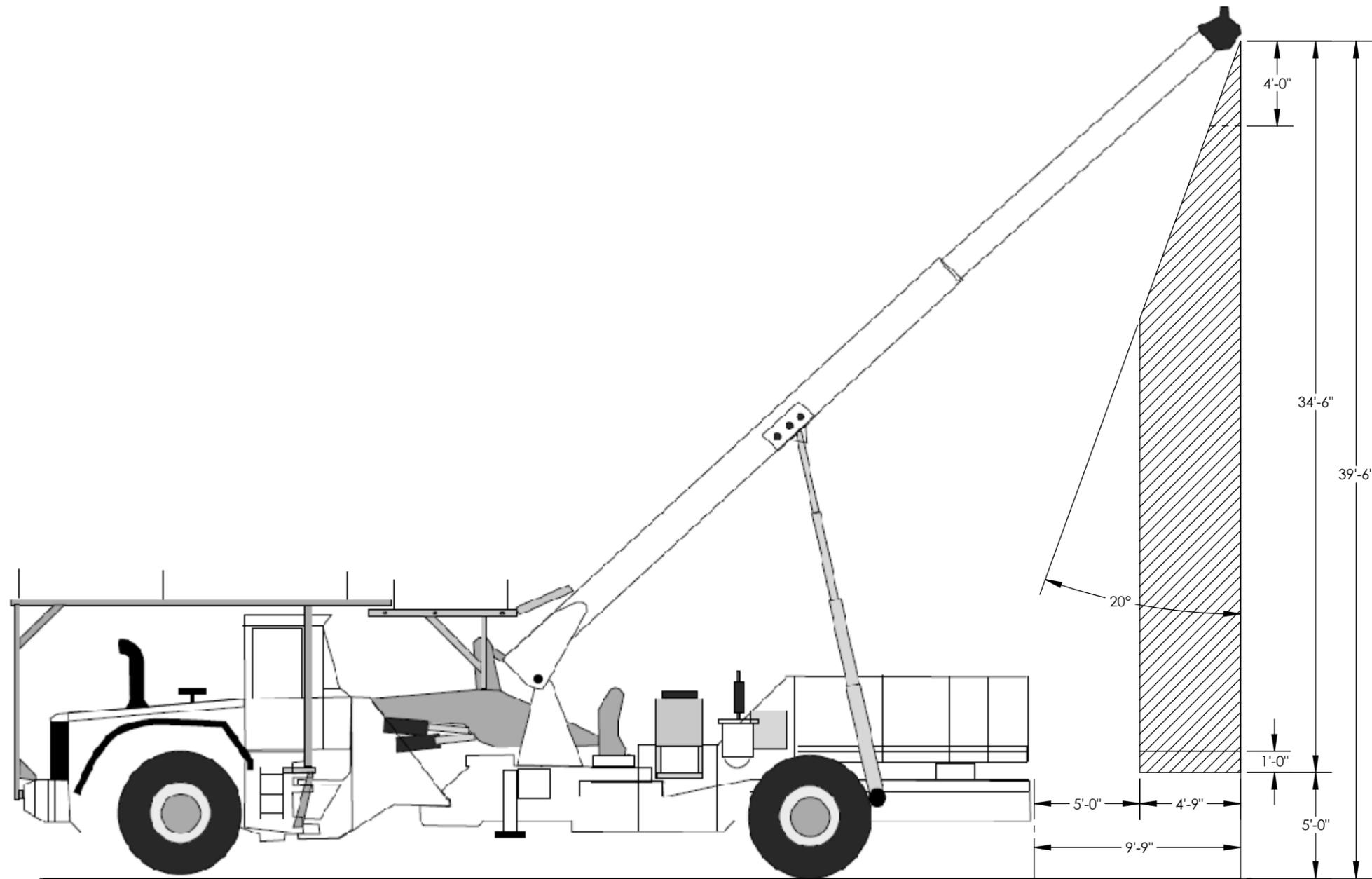
NOTES:

1. 5' MINIMUM CLEARANCE REQUIRED BETWEEN PAYLOAD AND GROUND SURFACE
2. 4' MINIMUM CLEARANCE REQUIRED BETWEEN PIN AND ROTATOR/SWIVEL (IF APPLICABLE)
3. LOWEST 1' OF PAYLOAD ENVELOPE FOR NON-RIGID ANTENNA ONLY

**COLUMBIA SCIENTIFIC  
BALLOON FACILITY**



TOLERANCES	DECIMAL .XX ± .01 .XXX ± .005	DRAWN BY: J. Lang	DATE: 3/3/2005	TITLE: <b>Antarctica Launch Vehicle, 36' Height</b>	
	FRACTIONAL ± 1/32	CHECKED BY: E. Klein	DATE: 3/3/2005		
	ANGULAR ± .05	APPROVED BY: E. Klein	DATE: 3/3/2005	DWG. NO. <b>OM-300-171-SW</b>	REV. <b>B</b>
SCALE: 1:75	SHEET: 1 OF 1	PROJECT NAME: BOSS (36' Launch Height)			
<b>NOT QUALIFIED FOR MANNED FLIGHT</b>	<b>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</b>		MATERIAL:		



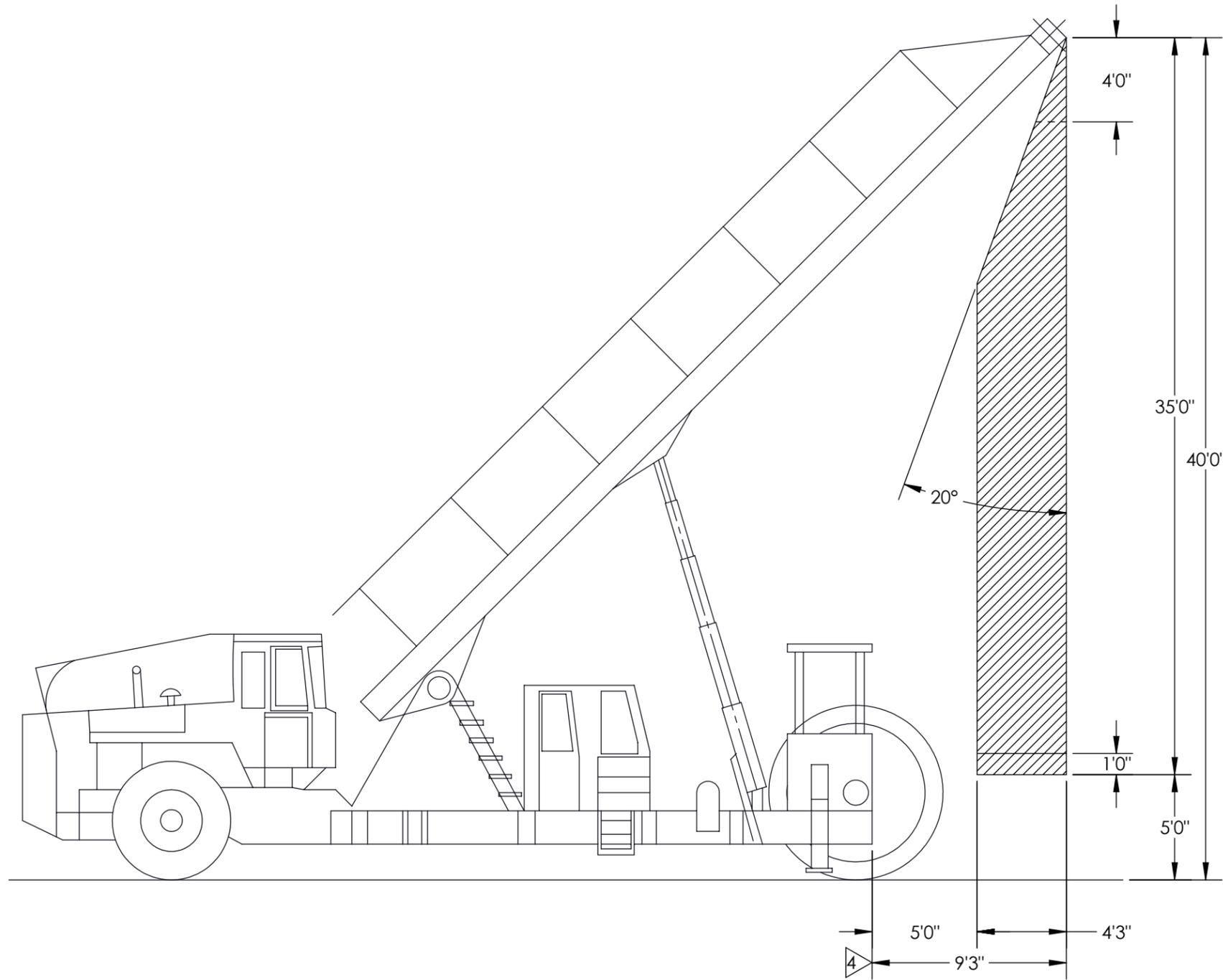
NOTES:

1. 5' MINIMUM CLEARANCE REQUIRED BETWEEN PAYLOAD AND GROUND SURFACE
2. 4' MINIMUM CLEARANCE REQUIRED BETWEEN PIN AND ROTATOR/SWIVEL (IF APPLICABLE)
3. LOWEST 1' OF PAYLOAD ENVELOPE FOR NON-RIGID ANTENNA ONLY

## COLUMBIA SCIENTIFIC BALLOON FACILITY



TOLERANCES	DECIMAL	DRAWN BY:	DATE:	TITLE: Sweden Launch Vehicle	
	$\pm 0.01$	J. Marsh	3/16/2021		
	FRACTIONAL	CHECKED BY:	DATE:	DWG. NO.	REV.
$\pm 1/32$	H. Franco	3/16/2021	OM-300-172-SW	B	
ANGULAR	APPROVED BY:	DATE:	PROJECT NAME:		
$\pm 0.1$	J. Marsh	3/22/2021	Hercules (Max Launch Height)		
SCALE: -		<b>NOT QUALIFIED FOR MANNED FLIGHT</b>		MATERIAL:	
<b>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</b>					



BOOM HEIGHT	CLEARANCE
25'	20'
30'	17'
35'	13'6"
40' AS SHOWN	9'3" AS SHOWN
41'	8'

NOTES:

1. 5' MINIMUM CLEARANCE REQUIRED BETWEEN PAYLOAD AND GROUND SURFACE
2. 4' MINIMUM CLEARANCE REQUIRED BETWEEN PIN AND ROTATOR/SWIVEL (IF APPLICABLE)
3. LOWEST 1' OF PAYLOAD ENVELOPE FOR NON-RIGID ANTENNA ONLY
4. SEE BOOM HEIGHT / LATERAL CLEARANCE TABULATION FOR ALTERNATE PIN HEIGHTS (SUBTRACT 3' IF PAYLOAD IS WIDER THAN WHEEL SPAN = 18'6")

<b>COLUMBIA SCIENTIFIC BALLOON FACILITY</b>						
TOLERANCES	DECIMAL .XX ± .01 .XXX ± .005	DRAWN BY: J. Lang	DATE: 3/3/2005	Big Bill (MLV) Launch Vehicle		
	FRACTIONAL ± 1/32	CHECKED BY: E. Klein	DATE: 3/3/2005			
	ANGULAR ± .05	APPROVED BY: E. Klein	DATE: 3/3/2005	DWG. NO. <b>OM-300-173-SW</b>	REV. <b>B</b>	
SCALE: 1:75	SHEET: 1 OF 1	PROJECT NAME: MLV (Palestine & Ft. Sumner)				
<b>NOT QUALIFIED FOR MANNED FLIGHT</b>	<b>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</b>			MATERIAL:		