

**LOCK-OFF PIN CYLINDER**

\* TRAVEL TO FULLY ENGAGE & DISENGAGE  
BEARING PLATES AND HANGER BARS.

**MAIN LIFT CYLINDER NOTES:**

LOADING

DEAD LOAD = 100 kips (EACH CYLINDER)  
DEAD + LIVE LOAD = 200 kips (EACH CYLINDER)

MOVEMENT

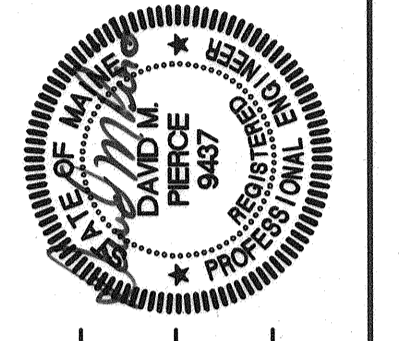
1. PROVIDE RANGE OF MOVEMENT TO MATCH HANGER BAR SLOTS AND FULL TOWER HEIGHT.
2. RAISE OR LOWER AT 3 FT/MINUTE MINIMUM.

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**CONSULTING ENGINEERS**

**Incorporated**

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
PROJECT NUMBER 009215.00  
PIN  
009215.00



SIGNATURE  
P.E. NUMBER  
DATE

PROJ. MANAGER	PAUL POTTLE	BY	DATE
DESIGN-DETAILED	TN	GD	09/01/04
CHECKED-REVIEWED	RJ	DP	09/01/04
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CITY OF PORTLAND  
OCEAN GATEWAY PHASE 1  
CYLINDERS

W309-R