



GENERAL WARNINGS AND CAUTIONARY STATEMENTS **COLLAPSIBLE BOLLARDS**

In order to safely and effectively use any TrafficGuard Direct product, please read and understand the General Warnings and Cautionary Statements contained below. If you have any questions about any of these General Warnings and Cautionary Statements, or about any aspect of TrafficGuard Direct's products or literature, please contact TrafficGuard Direct at 877-727-7347, or email at sales@trafficguard.net.



Read and fully understand the Installation Instructions before attempting to install any TrafficGuard Direct bollard product.



Substitution of components may impair the proper function of TrafficGuard Direct bollard products. If you need replacement parts, please contact TrafficGuard Direct at the number and email above.



With collapsible bollard products, always ensure that the lock pin is locked into place whether the bollard is in the upright or down position.



WARNING: FAILURE TO LOCK THE LOCK PIN IN PLACE ON COLLAPSIBLE BOLLARDS MAY CAUSE THE BOLLARD TO FALL – ALWAYS LOCK THE LOCK PIN IN PLACE WITH A PADLOCK.



Replacement lock pins are available for purchase at TrafficGuard Direct. For purchase of replacement lock pins, or and other components, please contact TrafficGuard Direct at the number or email above.



CAUTION: LOCK PIN MUST ALWAYS BE SECURED WITH PADLOCK WHEN BOLLARD IS UPRIGHT OR IN DOWN POSITION.



For Maximum effectiveness of TrafficGuard Direct bollard products, be sure to properly maintain bollards by replacing any damaged, corroded or missing components, and reapply paint as required to maximize visibility.



In order to ensure visibility of bollards, be sure to apply all decals that are provided with the product, and in the manner recommended by TrafficGuard Direct.


If in doubt **CALL** Traffic Guard Direct 877-727-7347

INSTALLATION INSTRUCTIONS FOR:

(HDHB & LPHDHB)

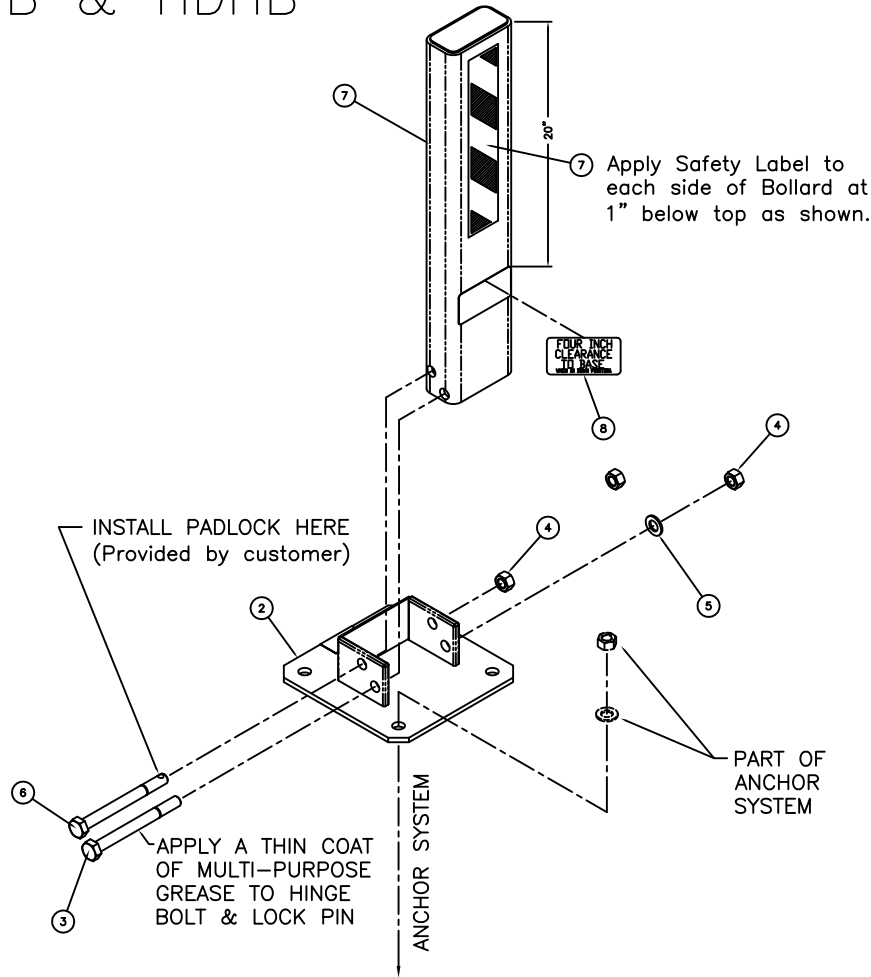
LOW PROFILE HEAVY DUTY HINGED BOLLARD

1. Verify that all Low Profile Heavy Duty Hinged Bollard parts are in the shipment package as shown on the "Bill of Material".
 2. Provide Low Profile Heavy Duty Hinged Bollard Anchor System (see included Anchor System Drawing-BAS) of your choice at a location to suit your specific needs.
 3. Install LPHDHB Base (Item 2) true and level on your selected Anchor System using the flat washers and hex nuts included in your Anchor System Kit. Use S.S. shims to level if needed. Torque hex nuts to Minimum 100 ft-lbs for Anchor Systems CPAS and ESAS. Torque hex nuts for other Anchor Systems to Manufacturers Specification.
 4. Install LPHDHB Post (Item 1) to LPHDHB Base (Item 2) using Hinge Bolt (Item 3), Flat Washer (Item 5), and Hex Nut (Item 4) as shown. Tack Weld Hex Nut to Hinge Bolt or Chisel Hinge Bolt Threads such that Hex Nut cannot be easily removed.
 5. Install Locking Pin thru UP Position Bollard Post, and install Padlock where shown. A Hex Nut (Item 4) is included in case a padlock is not available.
 6. Install the four Labels at the locations shown.
 7. Check the functional operation of the Low Profile Heavy Duty Hinged Bollard.
- * Note: S.S. shims, tools, grease, and padlocks are not provided.

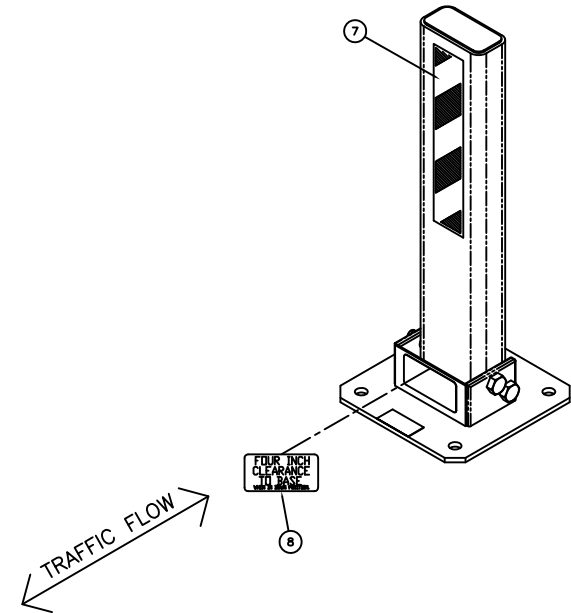
LOW PROFILE HEAVY DUTY HINGED BOLLARD		THIRD ANGLE PROJECTION 	TrafficGuard®	
ASSEMBLY DRAWING		Do not scale from drawing	P.O. Box 201, Geneva, IL 60134	
ZABEL ENGINEERING CONSULTING ENGINEERS 800 South Riverside Av., Aurora, IL 60009 Tel: 630-589-0080 Fax: 630-589-1097		Design by	SIZE	Toll Free: 877-727-7347 Fax: 800-814-7194
Rev.	by	Date	Description	Assembly Shipping Weight
1				70.64 Pounds
		Checked by	Scale	Drawing Name
			3"=1'	LPHDHB A2
		Drawing Date		9-25-2002
		Sheet		2 of 2
		Drawing Dimension		34" x 22"
		Copyright		2002

This Drawing shall not be used nor reproduced except when authorized in writing by TrafficGuard.

LPHDHB & HDHB



BILL OF MATERIAL			
ITEM	PART #	DESCRIPTION	QTY.
1	LPHDHB1	LPHDHB POST	1
2	LPHDHB2	LPHDHB BASE	1
3	0010	#3/4" x 8" HEX HEAD HINGE BOLT - 18-8 SS	1
4	0008	#3/4" HEX NUT - 18-8 SS	2
5	0009	#3/4" FLAT WASHER - TYPE A NARROW - 18-8 SS	1
6	2007	#3/4" x 8" HEX HEAD LOCKING PIN - 18-8 SS	1
7	0107	SAFETY LABEL 3" x 12"	2
8	0102	FOUR INCH CLEARANCE LABEL	2



LOW PROFILE HEAVY DUTY HINGED BOLLARD		THIRD ANGLE PROJECTION		TrafficGuard® P.O. Box 201, Geneva, IL 60134 Toll Free: 877-727-7347 Fax: 800-814-7194
ASSEMBLY DRAWING		Do not scale from drawing		
Rev.	By	Date	Description	Action by Drawn: WJC Checked: GJM Size: D Assembly Shipping Weight: 70.64 Pounds Drawing Number: LPHDHB2
1	wjc	1.28.10	Safety Label replace arrows	Scale: 3"=1' Drawing Date: 9-25-2002 Sheet: 2 of 2 Drawing dimension = 34" x 25"

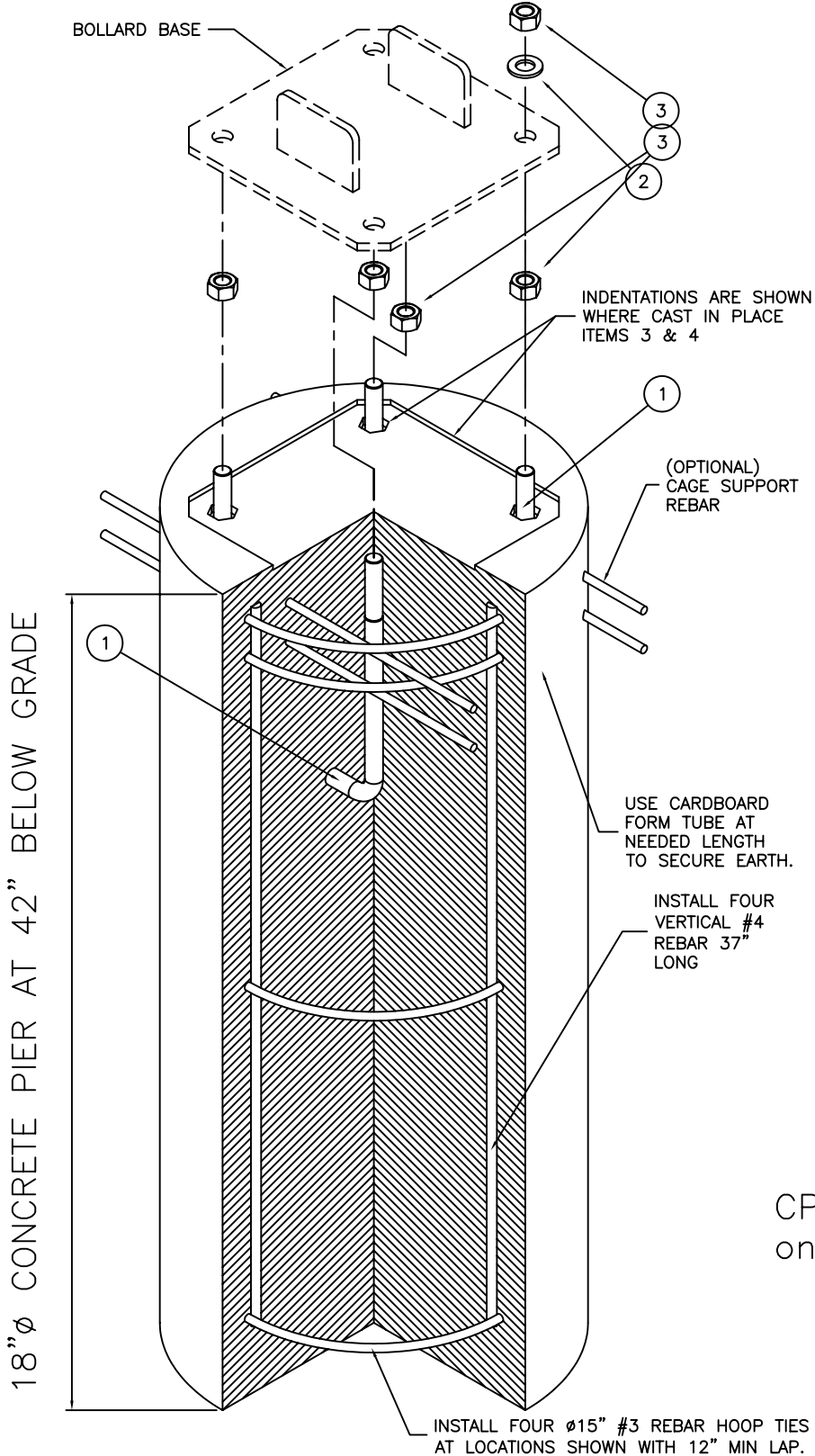
This Drawing shall not be used nor reproduced except when authorized in writing by TrafficGuard. Copyright 2002

BILL OF MATERIAL

ITEM	PART #	DESCRIPTION	QTY.
*	9001	CPAS KIT - INCLUDES THE FOLLOWING PART NUMBERS	*
1	0002	Ø3/4" x 12" TYPE L ANCHOR BOLT-H.D.G.	4
2	0007	Ø3/4" TYPE A FLAT NARROW WASHER GALVANIZED STEEL	4
3	0006	Ø3/4" HEX NUT GALVANIZED STEEL	8

NOTE: CONCRETE, FORM AND REBAR PROVIDED BY OTHERS

FOR MODELS:
 HDHB
 LPHDHB
 DHB
 DHB-SL



CPAS Included
only if ordered

CONCRETE PIER ANCHOR SYSTEM (CPAS)