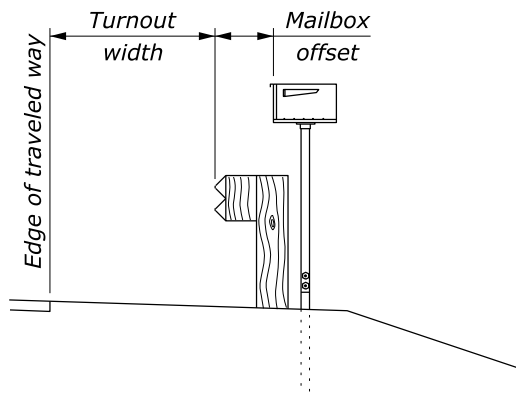
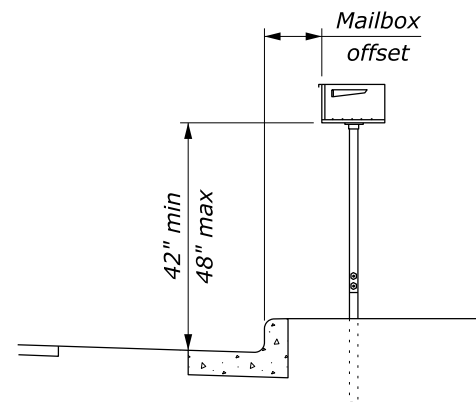


**MAILBOX TURNOUT**



**GUARDRAIL AREAS**

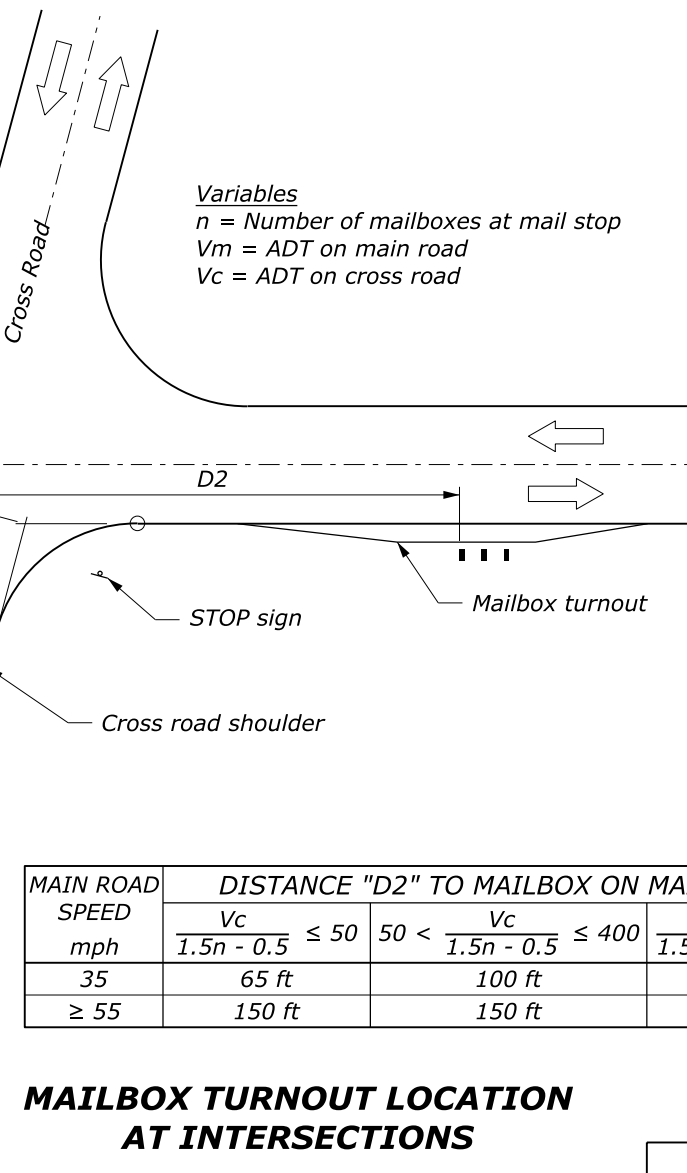


**RESIDENTIAL AREA WITH CURB**

**TYPICAL MAILBOX LOCATIONS**

MAIN ROAD SPEED mph	DISTANCE "D1" TO MAILBOX ON MAIN ROAD	
	$n \times V_c \times V_m \leq 4000$	$n \times V_c \times V_m > 4000$
35	65 ft	200 ft
$\geq 55$	65 ft	295 ft

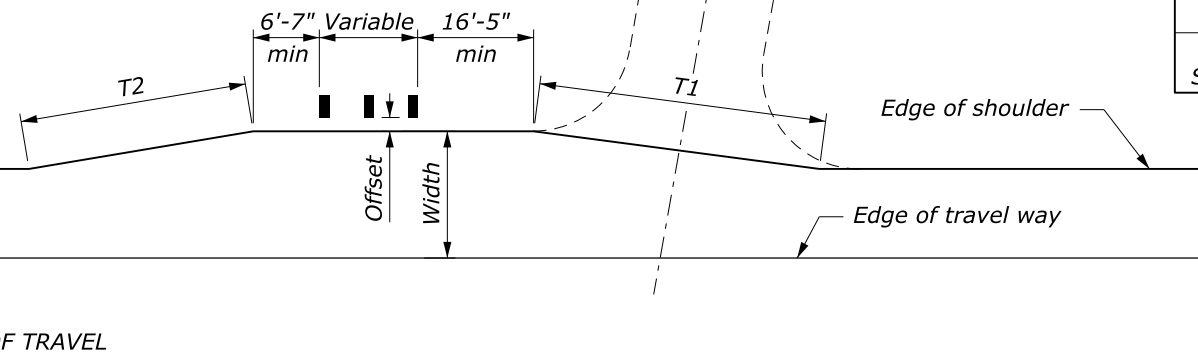
	DISTANCE TO MAILBOX ON CROSS ROAD	
	PREFERRED	MINIMUM
D3	100 ft	65 ft
D4	150 ft	100 ft



**Variables**  
 $n$  = Number of mailboxes at mail stop  
 $V_m$  = ADT on main road  
 $V_c$  = ADT on cross road

MAIN ROAD SPEED mph	DISTANCE "D2" TO MAILBOX ON MAIN ROAD		
	$\frac{V_c}{1.5n - 0.5} \leq 50$	$50 < \frac{V_c}{1.5n - 0.5} \leq 400$	$\frac{V_c}{1.5n - 0.5} > 400$
35	65 ft	100 ft	100 ft
$\geq 55$	150 ft	150 ft	200 ft

SPEED mph	TAPER	
	T1	T2
$\leq 40$	4:1	2.5:1
$> 40$	20:1	12:1



**DIRECTION OF TRAVEL**

**MAILBOX TURNOUT**

NO SCALE

**NOTE:**

1. Move mailbox turnout so that it does not overlap the intersection curve radii.
2. Do not skew mailbox turnouts, however, the adjacent approach may be skewed as shown. Blend the approach radius from the roadway shoulder to the turnout shoulder as shown in the Mailbox Turnout Detail. Place mailboxes on the far side of approach road entrances unless the minimum distances cannot be obtained.
3. The setback and required support also apply to mailbox receptacles. When the newspaper receptacles and mailboxes are mounted in combinations, mount the newspaper receptacle below the bottom surface of the mailbox.
4. Use the same pavement structure for mailbox turnouts as the adjacent roadway section.
5. Mailbox supports shall conform to the requirements of the AASHTO Manual for Assessing Safety Hardware (MASH) or NCHRP Report 350.
6. Posts may be 4 x 4 inch or 4 inch diameter wood posts or 1.5 to 2 inch diameter standard steel or aluminum pipe posts embedded not more than 24 inches in the ground.

MAIN ROAD ADT	TURNOUT WIDTH		MAILBOX OFFSET	
	PREFERRED	MINIMUM	PREFERRED	MINIMUM
$> 10,000$	$> 12'$	8'	6" to 8"	0
1500 - 10,000	12'	8'	6" to 8"	0
400 - 1500	10'	8'	6" to 8"	0
$< 400$	8'	6'	6" to 8"	6"
Residential Street	6'	0	6" to 8"	6"
Residential Street w/curb	Not applicable		8" to 12"	6"

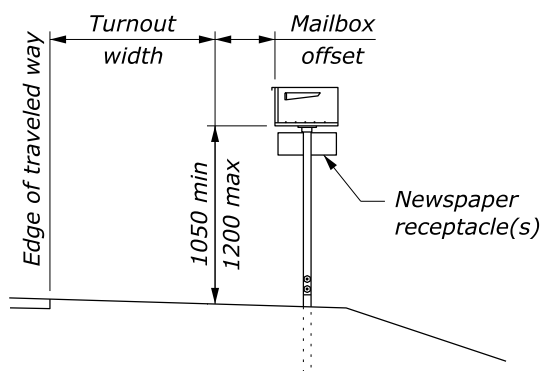
U.S. DEPARTMENT OF TRANSPORTATION, FHWA  
 OFFICE OF FEDERAL LANDS HIGHWAY

**MAILBOX TURNOUT AND INSTALLATION**

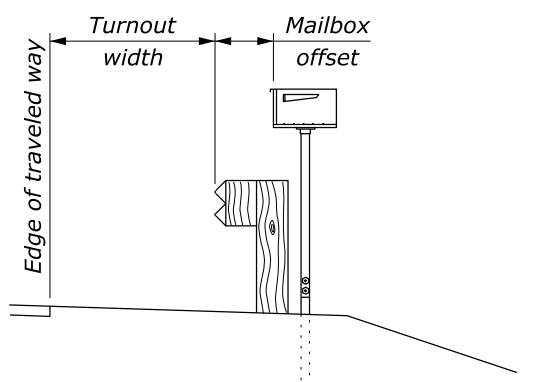
WFLHD DETAIL  
**W646-1**

SPECIFICATION  
 FP-24, FP-14

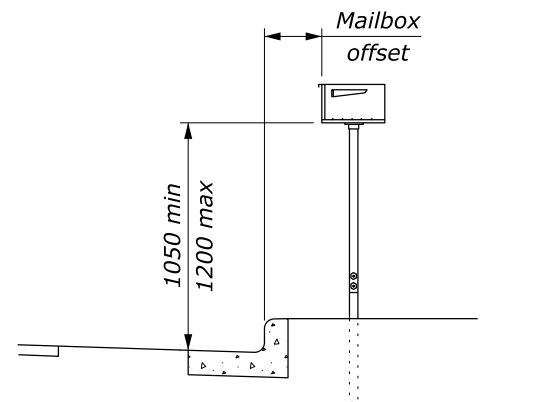
APPROVED FOR USE  
 11/2014



**MAILBOX TURNOUT**



**GUARDRAIL AREAS**



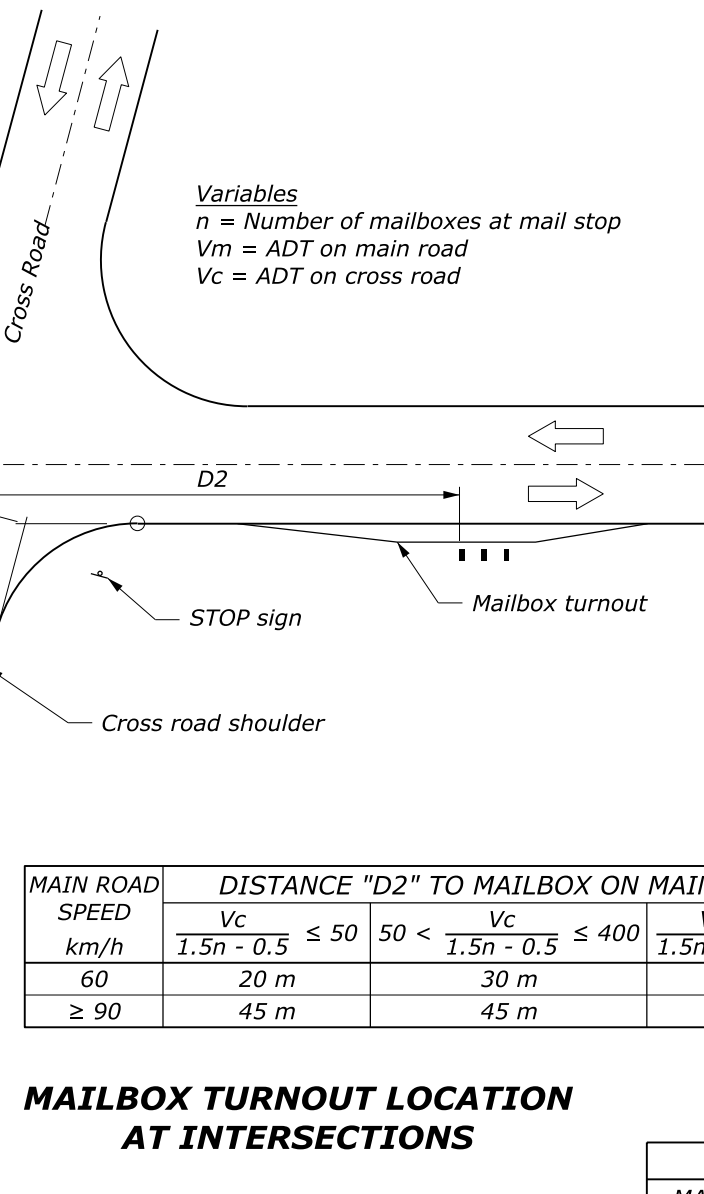
**RESIDENTIAL AREA WITH CURB**

**TYPICAL MAILBOX LOCATIONS**

MAIN ROAD SPEED km/h	DISTANCE "D1" TO MAILBOX ON MAIN ROAD	
	$n \times Vc \times Vm \leq 4000$	$n \times Vc \times Vm > 4000$
60	20 m	60 m
$\geq 90$	20 m	90 m

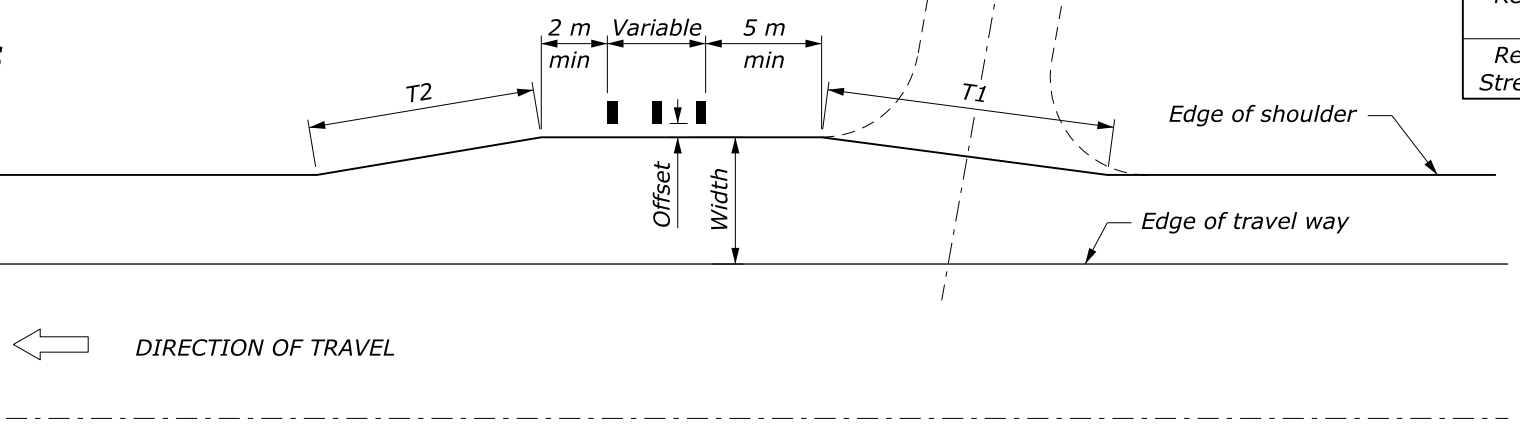
	DISTANCE TO MAILBOX ON CROSS ROAD	
	PREFERRED	MINIMUM
D3	30 m	20 m
D4	45 m	30 m

SPEED km/h	TAPER	
	T1	T2
< 70	4:1	2.5:1
$\geq 70$	20:1	12:1



**MAILBOX TURNOUT LOCATION AT INTERSECTIONS**

MAIN ROAD SPEED km/h	DISTANCE "D2" TO MAILBOX ON MAIN ROAD		
	$\frac{Vc}{1.5n - 0.5} \leq 50$	$50 < \frac{Vc}{1.5n - 0.5} \leq 400$	$\frac{Vc}{1.5n - 0.5} > 400$
60	20 m	30 m	30 m
$\geq 90$	45 m	45 m	60 m



← DIRECTION OF TRAVEL

**MAILBOX TURNOUT**

NO SCALE

**NOTE:**

1. Move mailbox turnout so that it does not overlap the intersection curve radii.
2. Do not skew mailbox turnouts, however, the adjacent approach may be skewed as shown. Blend the approach radius from the roadway shoulder to the turnout shoulder as shown in the Mailbox Turnout Detail. Place mailboxes on the far side of approach road entrances unless the minimum distances cannot be obtained.
3. The setback and required support also apply to mailbox receptacles. When the newspaper receptacles and mailboxes are mounted in combinations, mount the newspaper receptacle below the bottom surface of the mailbox.
4. Use the same pavement structure for mailbox turnouts as the adjacent roadway section.
5. Mailbox supports shall conform to the requirements of the AASHTO Manual for Assessing Safety Hardware (MASH) or NCHRP Report 350.
6. Posts may be 100 x 100 mm or 100 mm diameter wood posts or 38 to 50 mm diameter standard steel or aluminum pipe posts embedded not more than 600 mm in the ground.

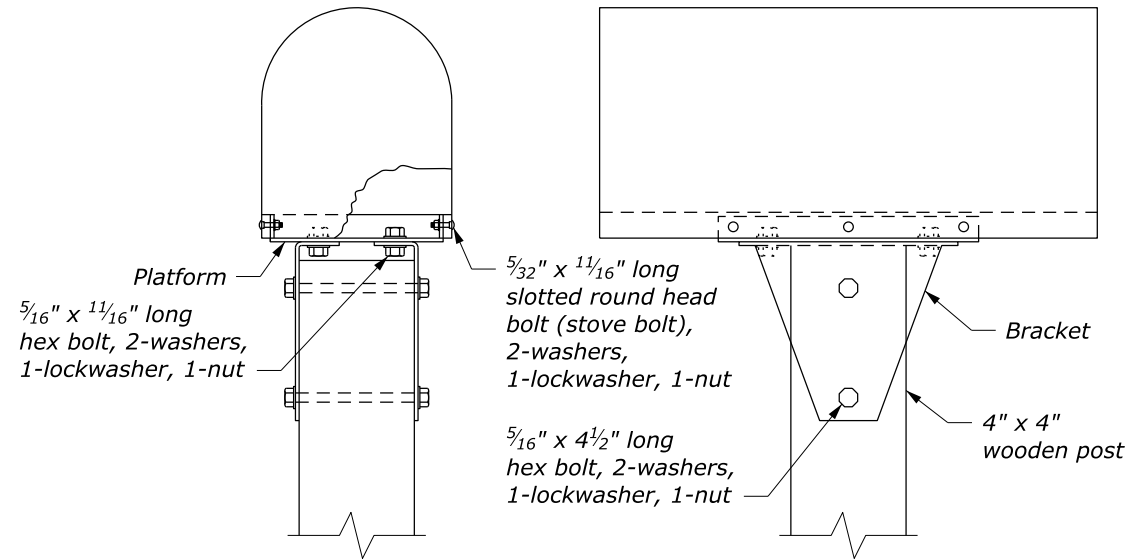
MAIN ROAD ADT	TURNOUT WIDTH		MAILBOX OFFSET	
	PREFERRED	MINIMUM	PREFERRED	MINIMUM
> 10,000	> 3.6 m	2.4 m	150 to 200	0
1500 - 10,000	3.6 m	2.4 m	150 to 200	0
400 - 1500	3.0 m	2.4 m	150 to 200	0
< 400	2.4 m	1.8 m	150 to 200	150
Residential Street	1.8 m	0	150 to 200	150
Residential Street w/curb	Not applicable		200 to 305	150

This drawing contains **Metric** units of measure. Dimensions without units are millimeters.

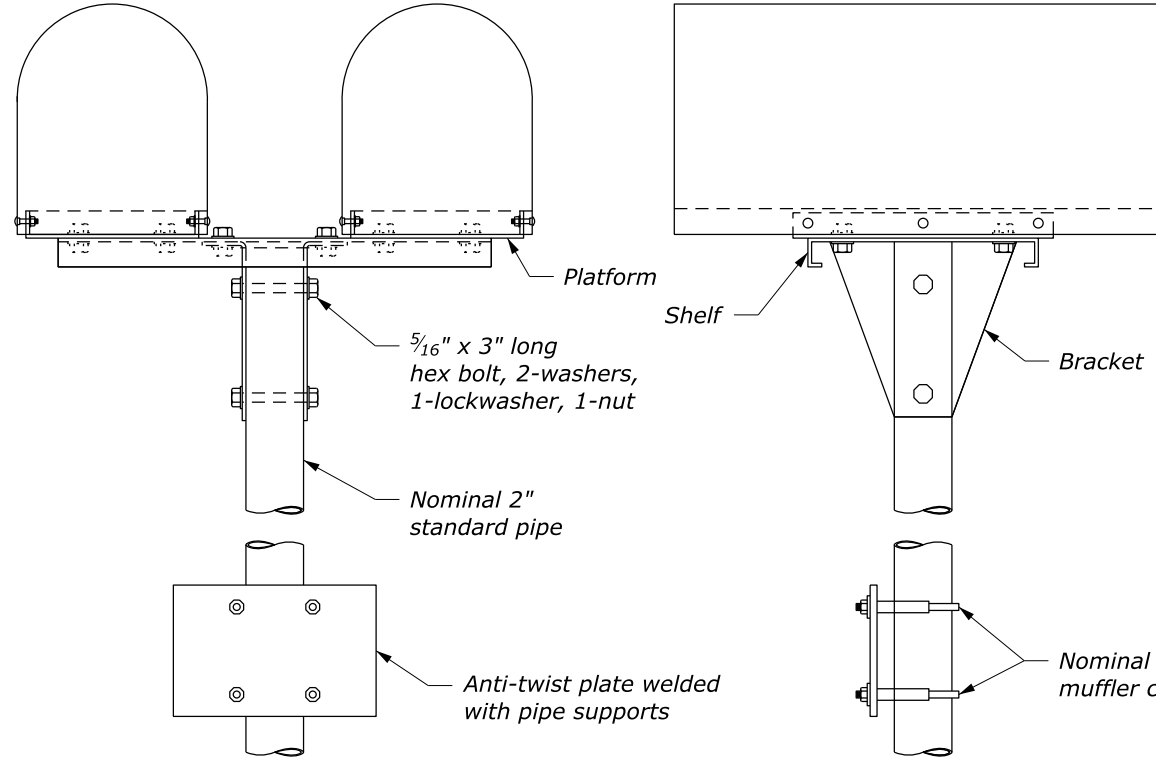
U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFLHD DETAIL WM646-1
<b>MAILBOX TURNOUT AND INSTALLATION</b>	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 11/2014

**NOTE:**

1. Spacing between multiple mailboxes and height of mailbox above ground level are as established by the the U.S. Postal Service. H is usually 3'-4" to 4'-0"

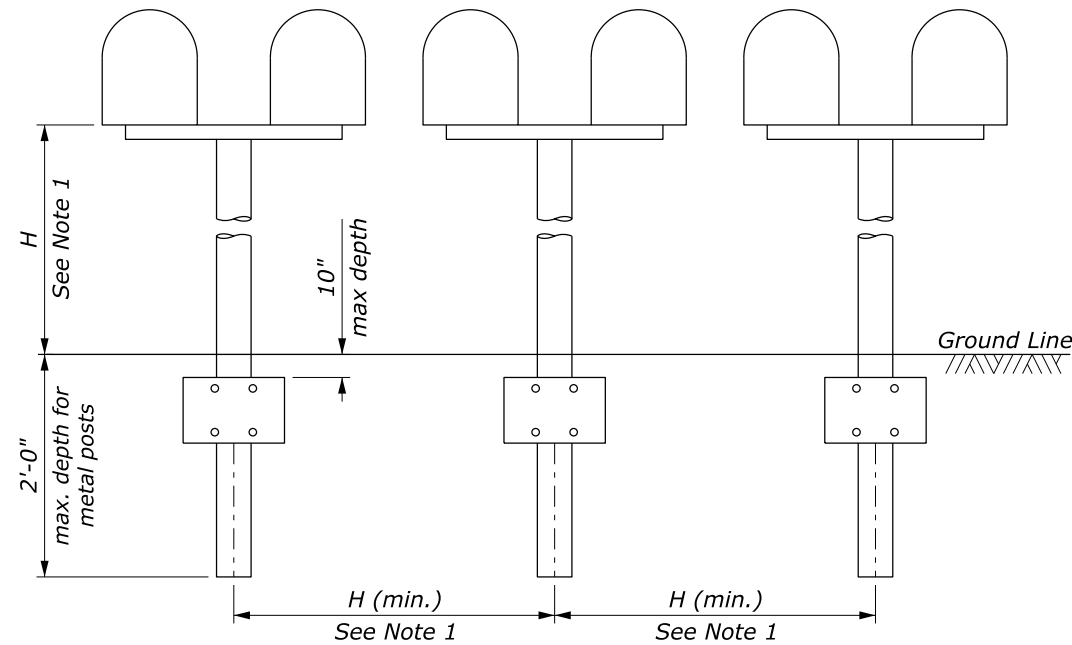


**SINGLE MAILBOX INSTALLATION**

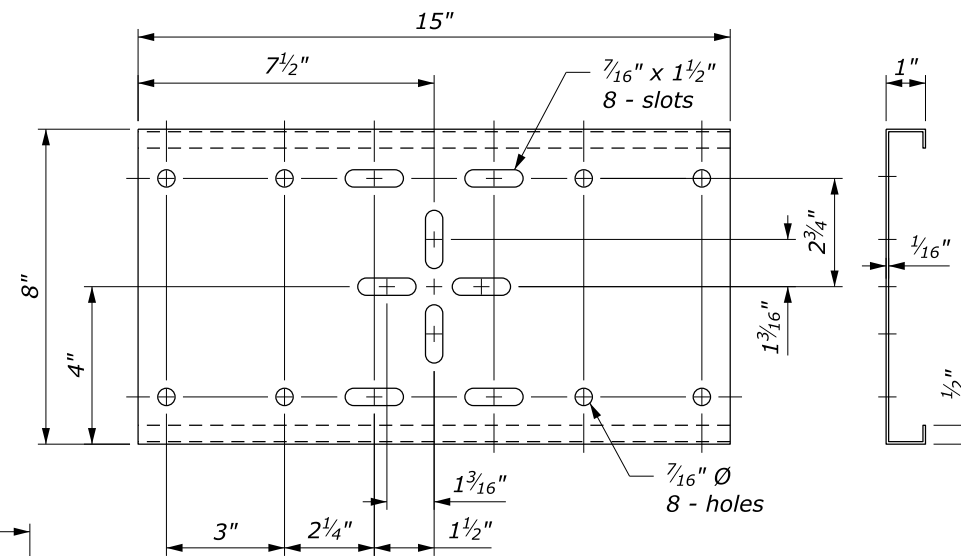


**DOUBLE MAILBOX INSTALLATION**

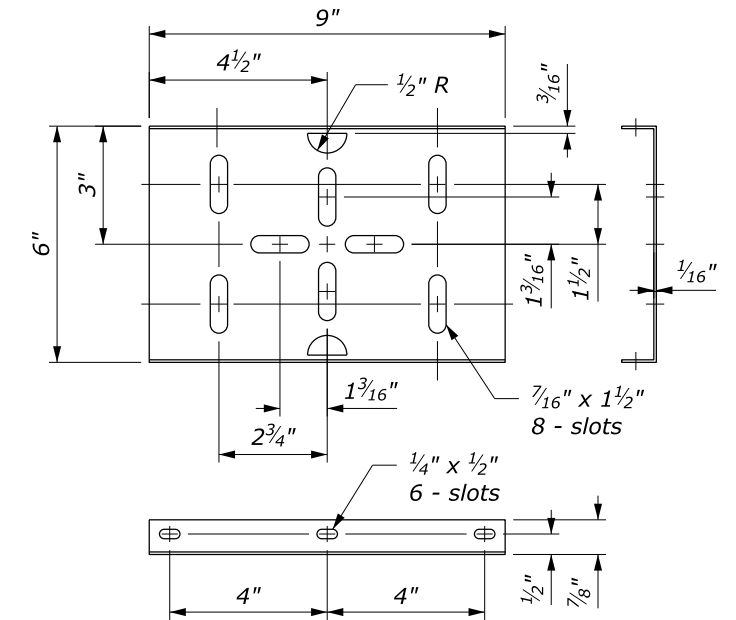
**SPACER**



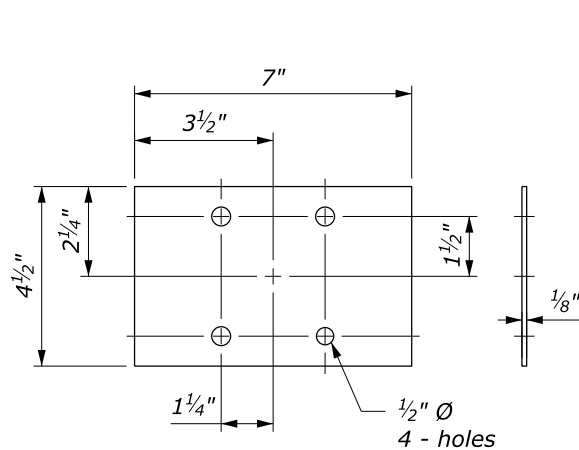
**SPACING FOR MULTIPLE POST INSTALLATION**



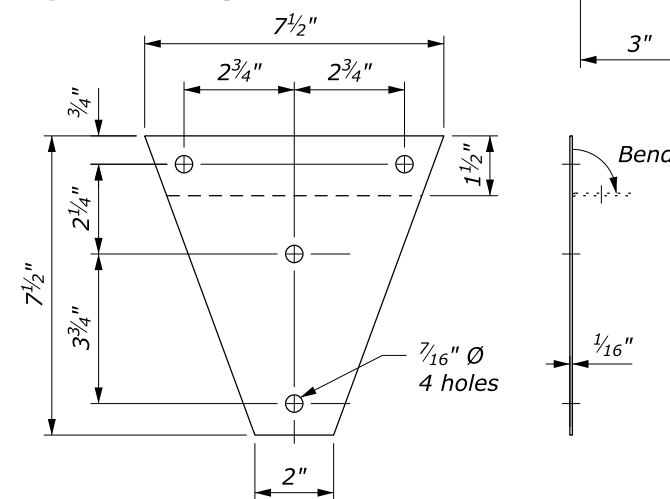
**SHELF**



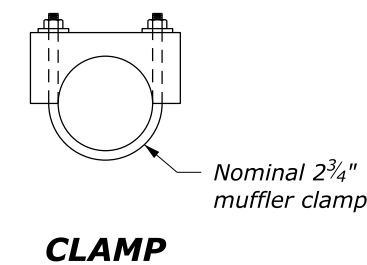
**PLATFORM**



**ANTI-TWIST PLATE**



**BRACKET**



**CLAMP**

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA  
OFFICE OF FEDERAL LANDS HIGHWAY

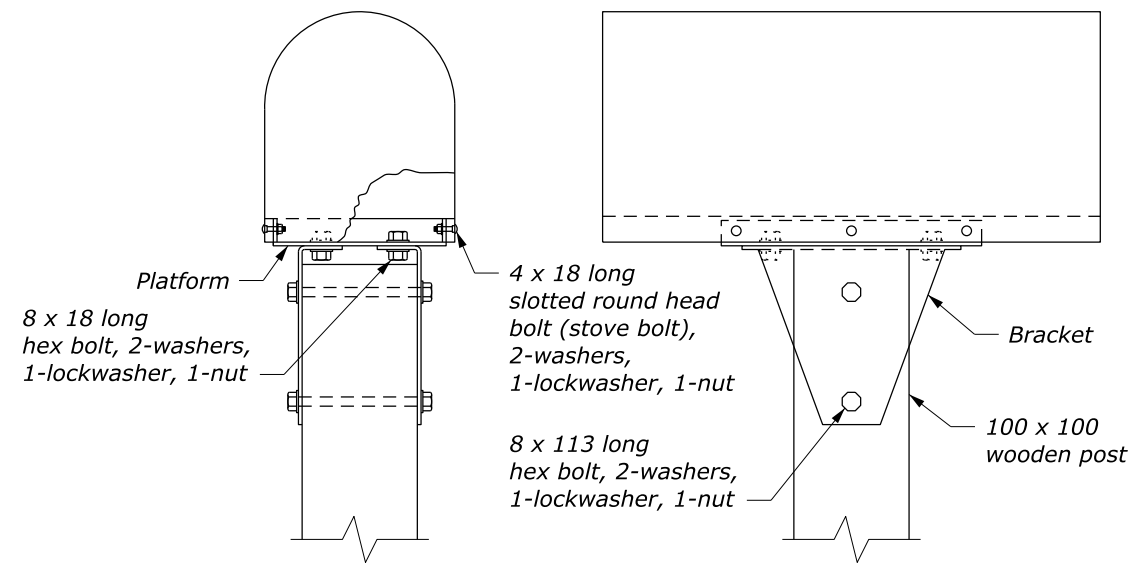
**MAILBOX ASSEMBLY  
SERIES A**

WFLHD DETAIL  
W646-2

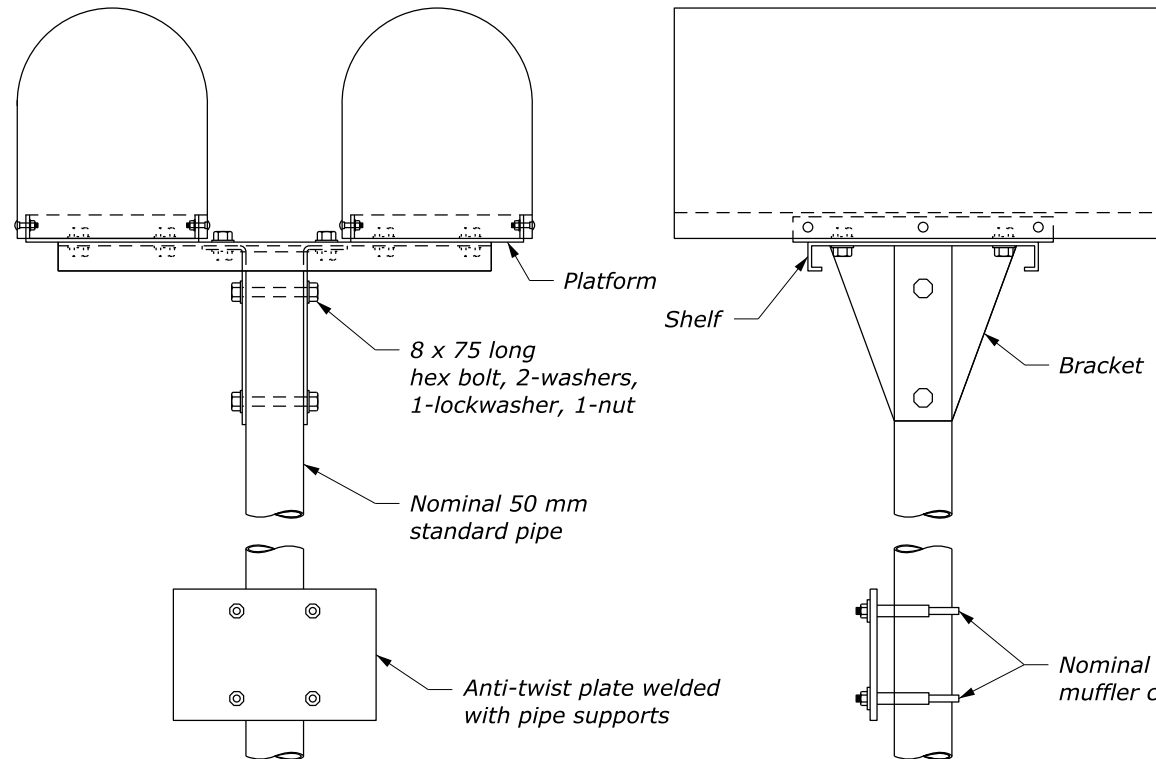
SPECIFICATION  
FP-24, FP-14

APPROVED FOR USE  
11/2014

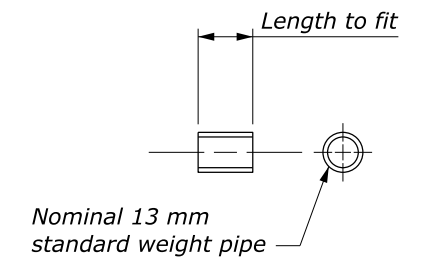
**NOTE:**  
 1. Spacing between multiple mailboxes and height of mailbox above ground level are as established by the the U.S. Postal Service. H is usually 1.0 m to 1.2 m.



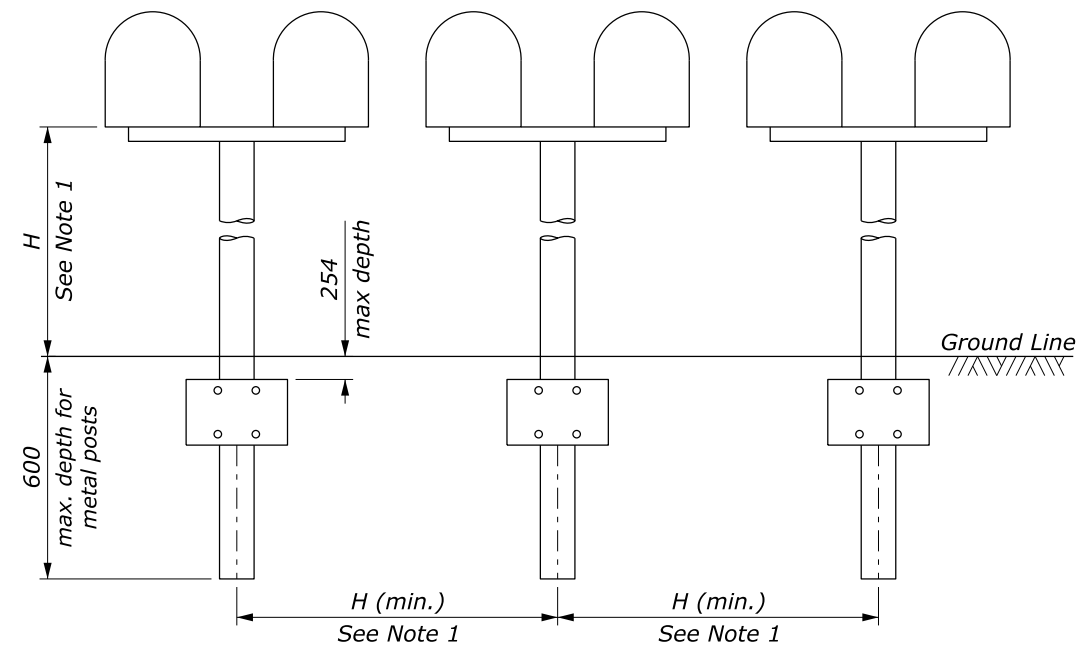
**SINGLE MAILBOX INSTALLATION**



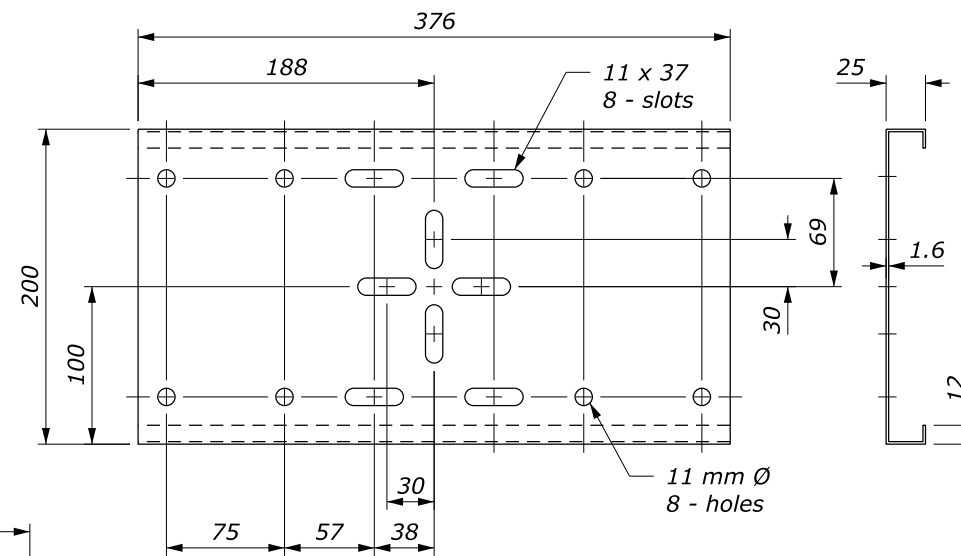
**DOUBLE MAILBOX INSTALLATION**



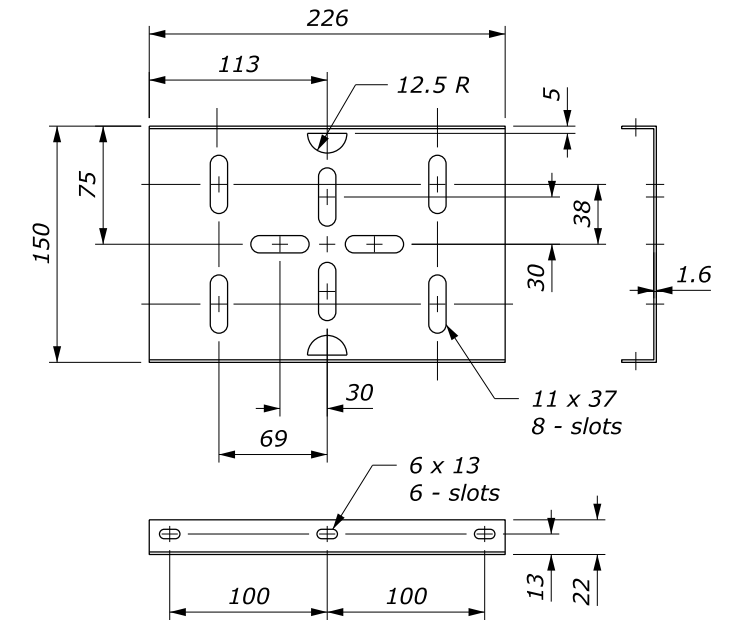
**SPACER**



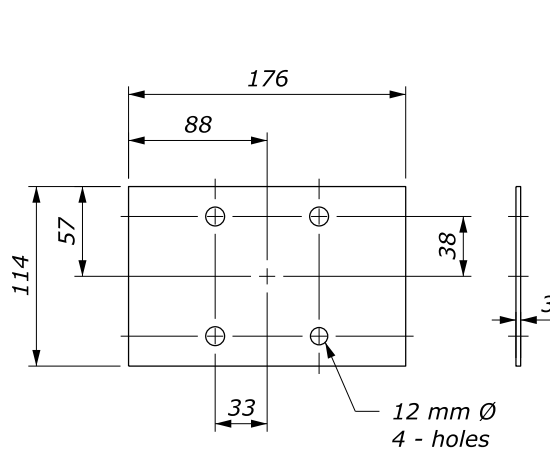
**SPACING FOR MULTIPLE POST INSTALLATION**



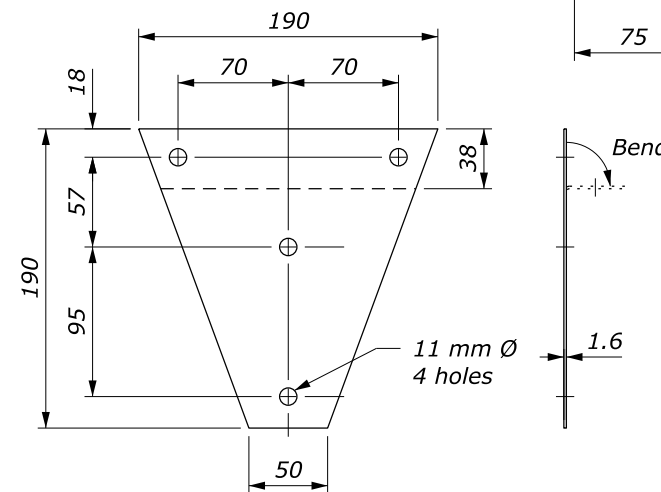
**SHELF**



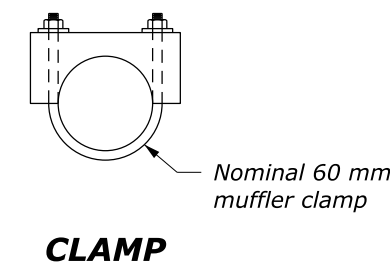
**PLATFORM**



**ANTI-TWIST PLATE**



**BRACKET**



**CLAMP**

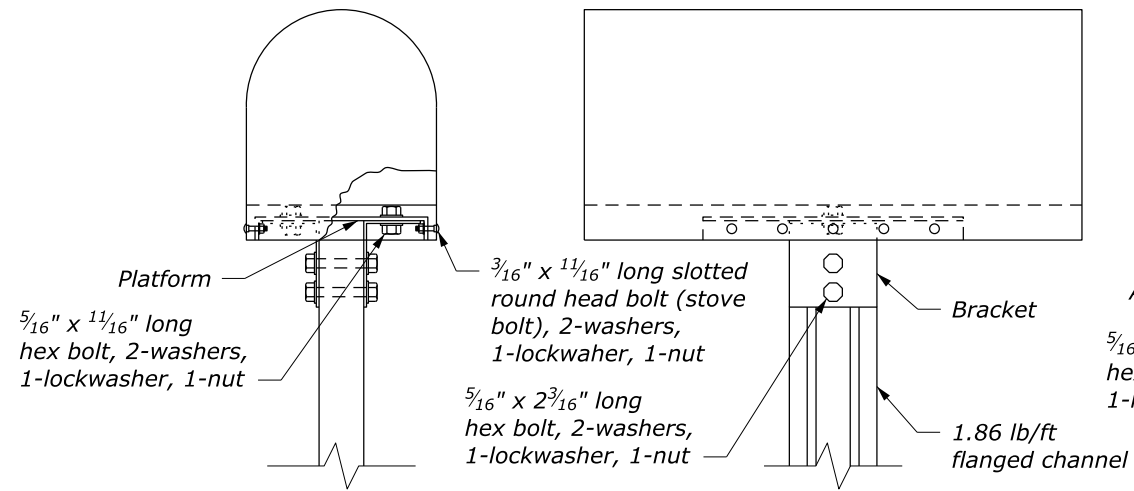
This drawing contains **Metric** units of measure. Dimensions without units are millimeters.

NO SCALE

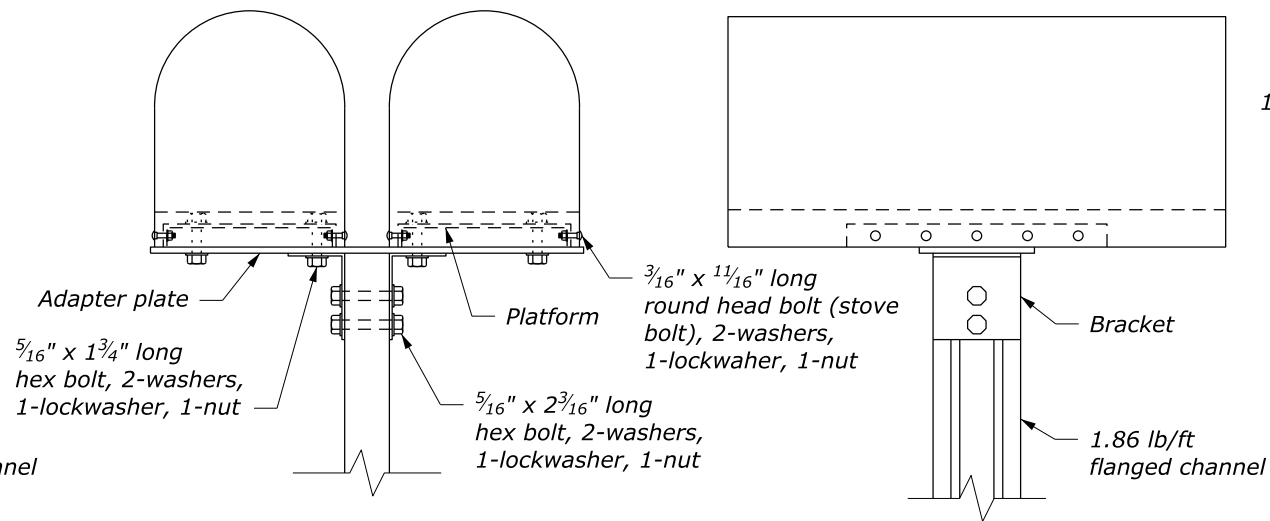
U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFLHD DETAIL WM646-2
<b>MAILBOX ASSEMBLY SERIES A</b>	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 11/2014

**NOTE:**

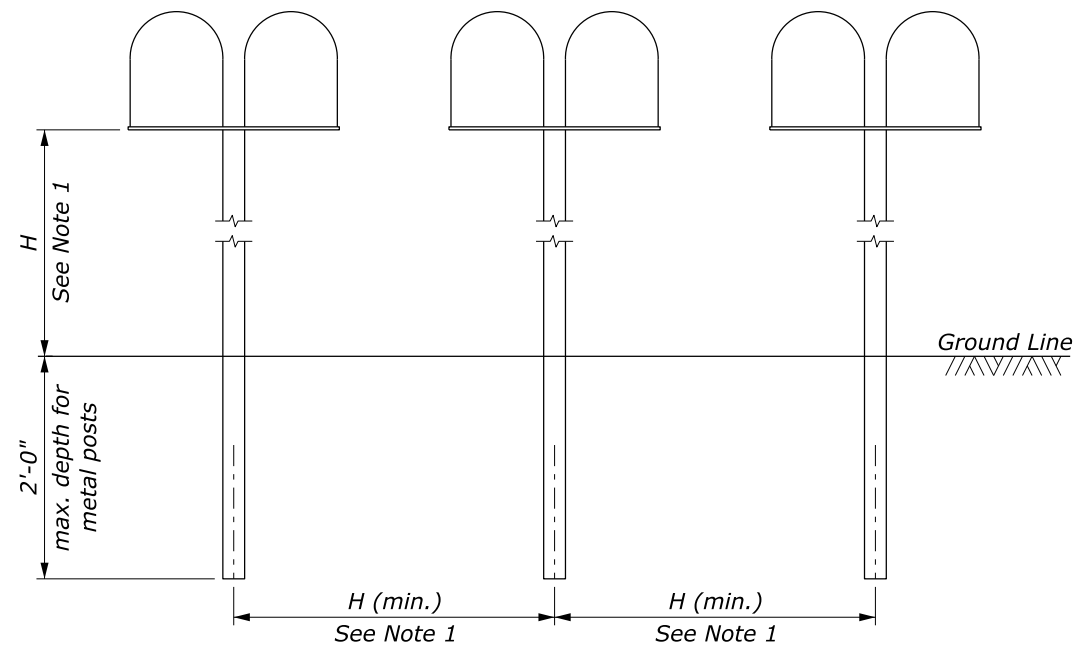
1. Spacing between multiple mailboxes and height of mailbox above ground level are as established by the the U.S. Postal Service. H is usually 3'-4" to 4'-0"



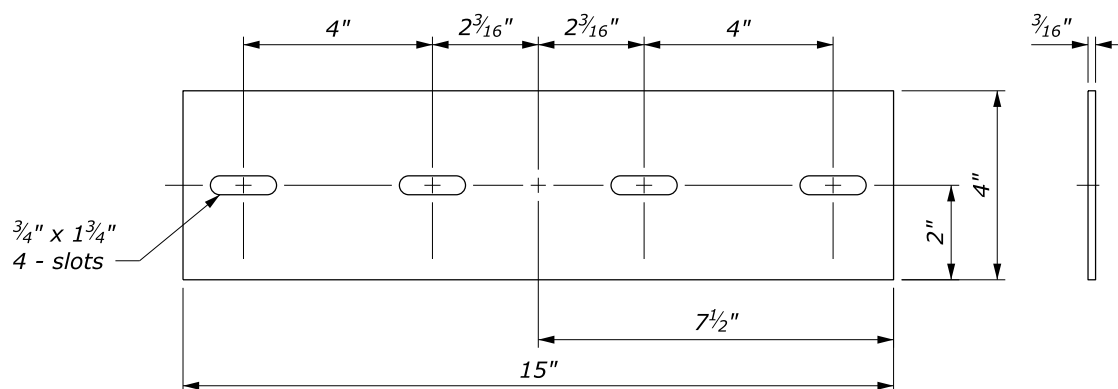
**SINGLE MAILBOX INSTALLATION**



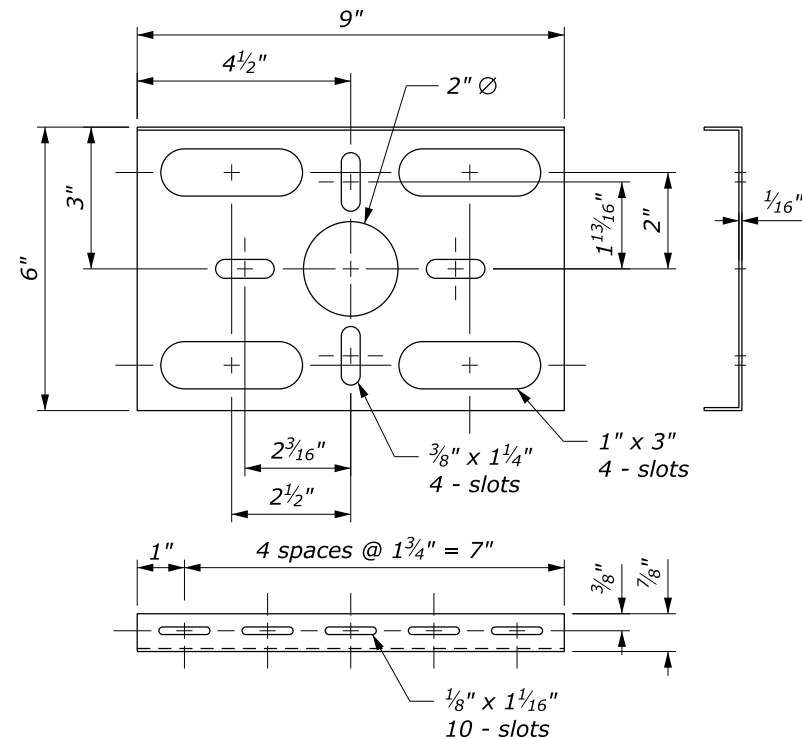
**DOUBLE MAILBOX INSTALLATION**



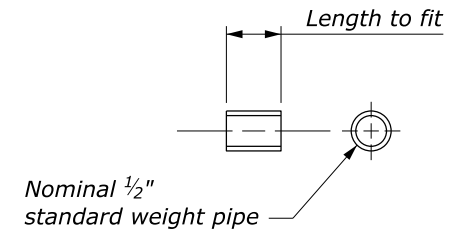
**SPACING FOR MULTIPLE POST INSTALLATION**



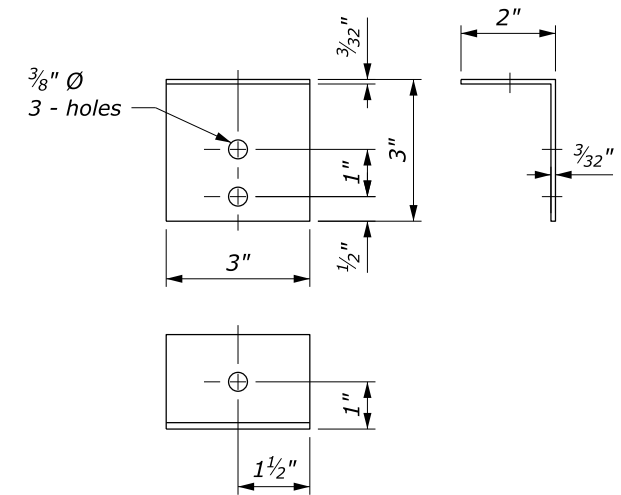
**ADAPTER PLATE**



**PLATFORM**



**SPACER**



**BRACKET**

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA  
OFFICE OF FEDERAL LANDS HIGHWAY

**MAILBOX ASSEMBLY  
SERIES B**

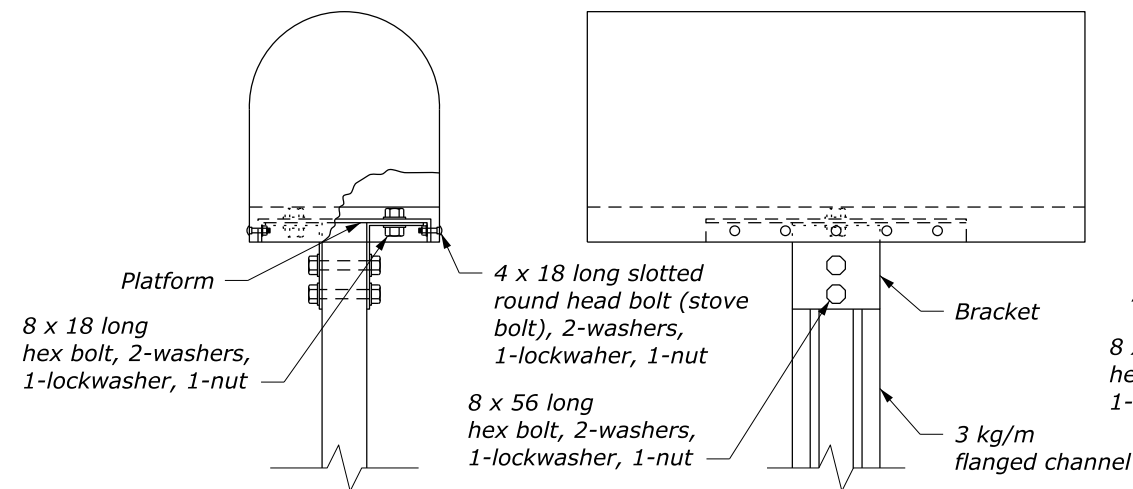
WFLHD DETAIL  
W646-3

SPECIFICATION  
FP-24, FP-14

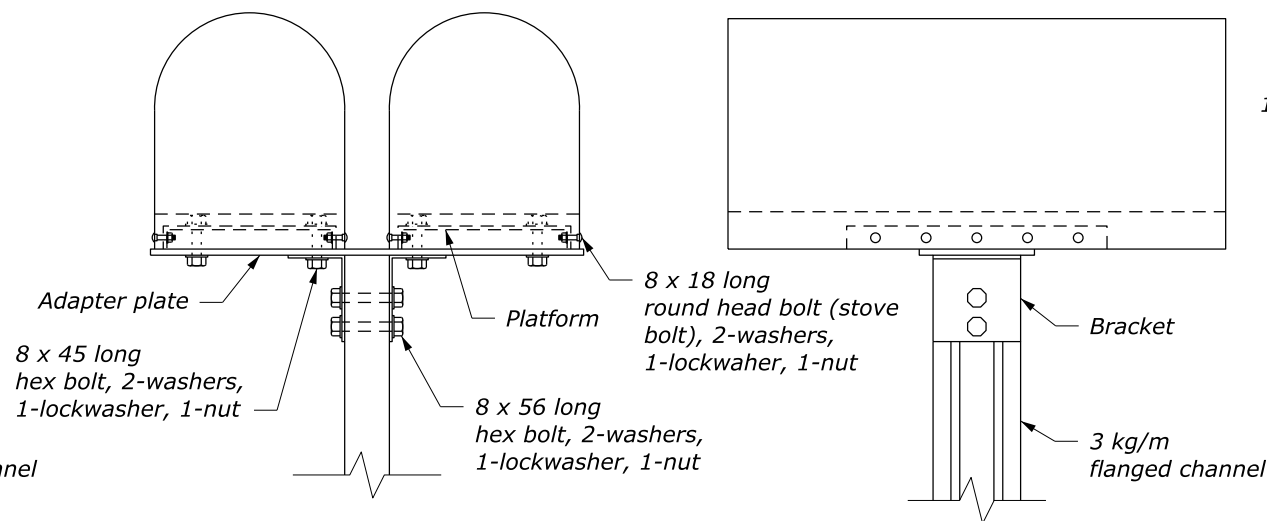
APPROVED FOR USE  
11/2014

**NOTE:**

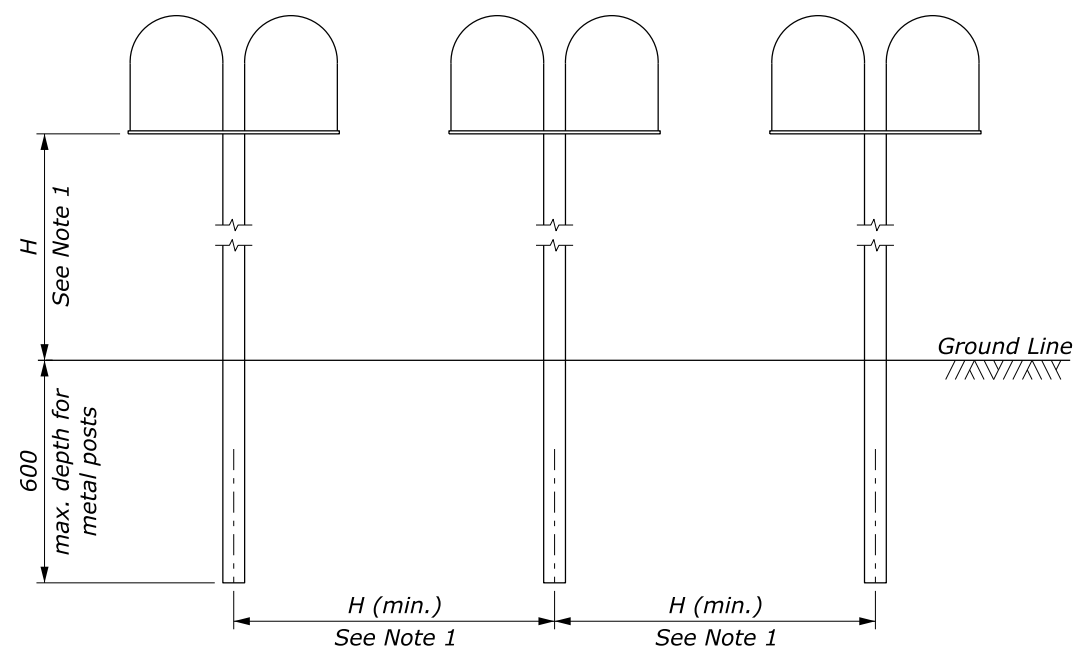
1. Spacing between multiple mailboxes and height of mailbox above ground level are as established by the the U.S. Postal Service. H is usually 1.0 m to 1.2 m.



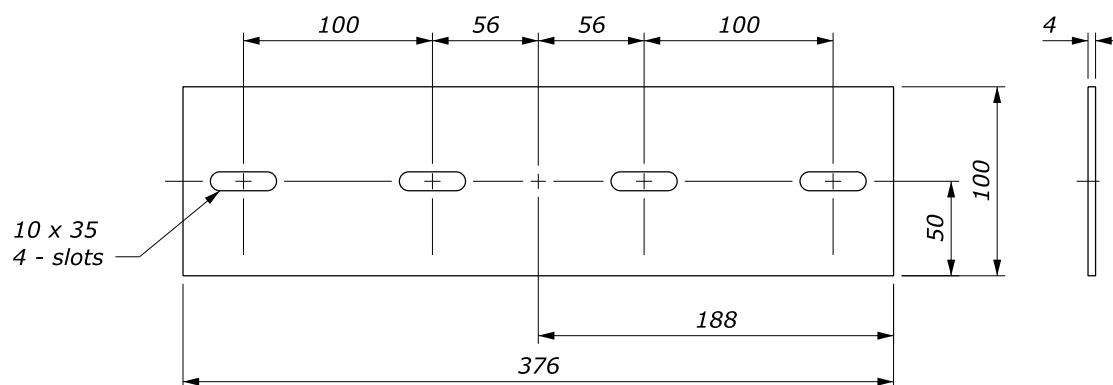
**SINGLE MAILBOX INSTALLATION**



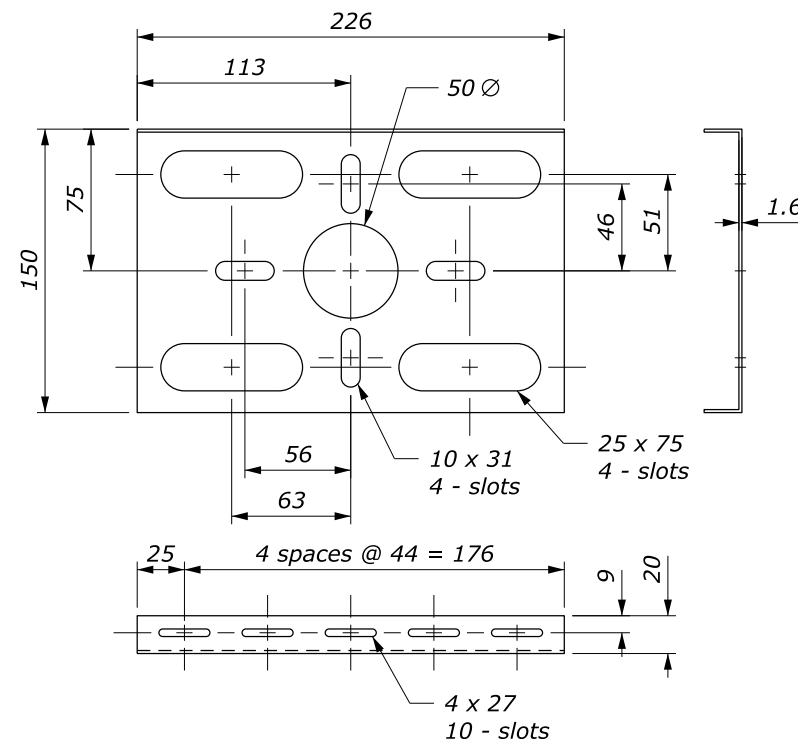
**DOUBLE MAILBOX INSTALLATION**



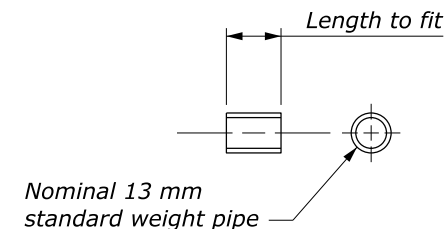
**SPACING FOR MULTIPLE POST INSTALLATION**



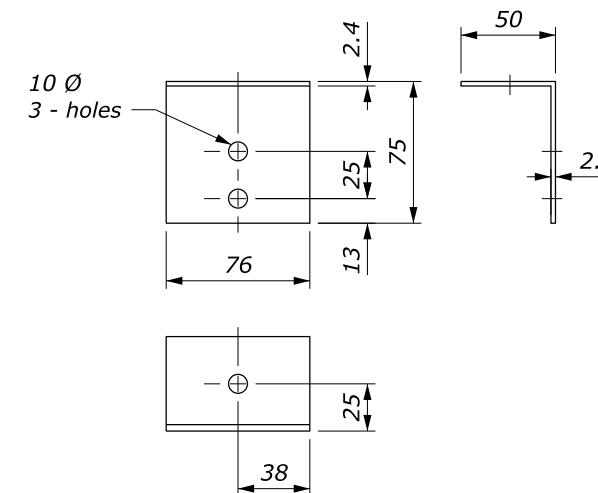
**ADAPTER PLATE**



**PLATFORM**



**SPACER**



**BRACKET**

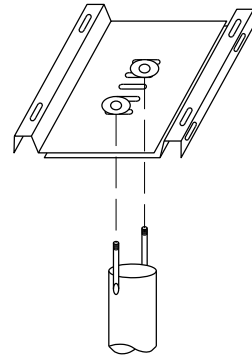
This drawing contains **Metric** units of measure. Dimensions without units are millimeters.

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFLHD DETAIL WM646-3
<b>MAILBOX ASSEMBLY SERIES B</b>	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 11/2014

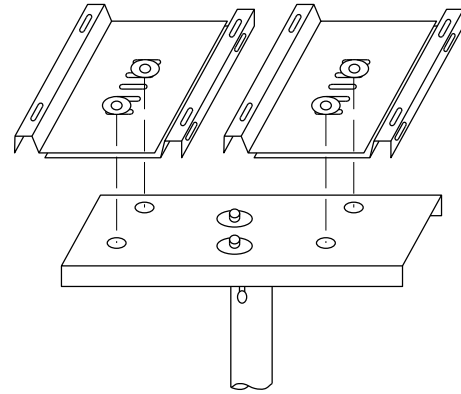
NO SCALE

**NOTE:**

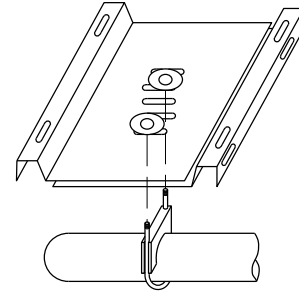
- 1. Opposite orientation with wedge on traffic approach side of post is allowable but not preferred.
- 2. Support frame and foundation are proprietary products commercially available.



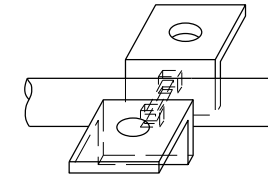
**SINGLE MAILBOX MOUNT**



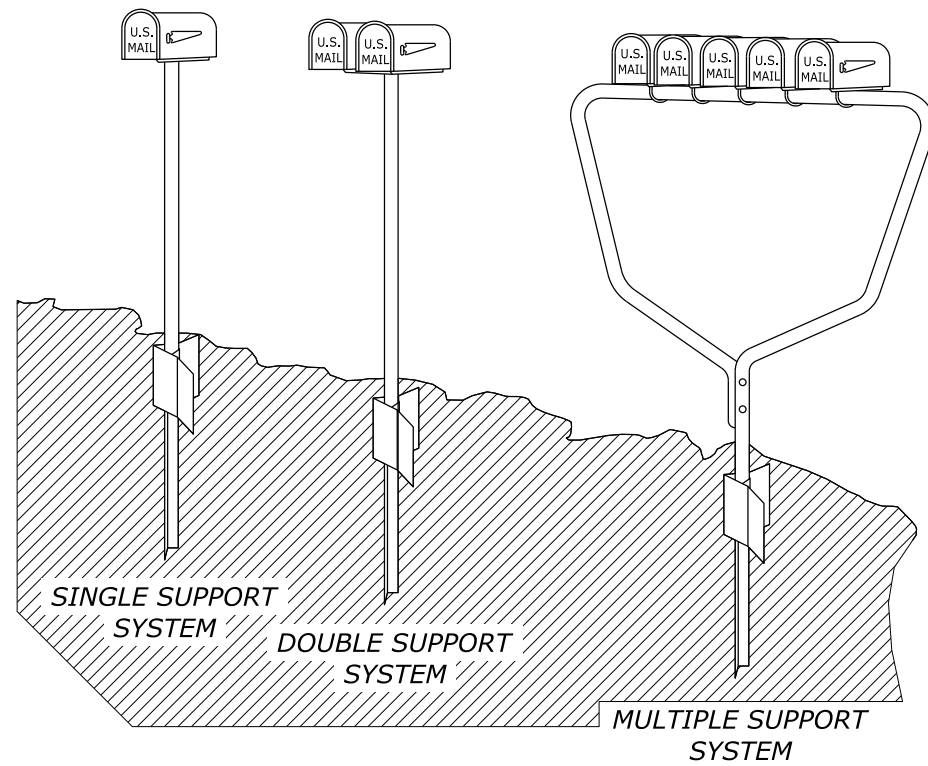
**DOUBLE MAILBOX MOUNT**



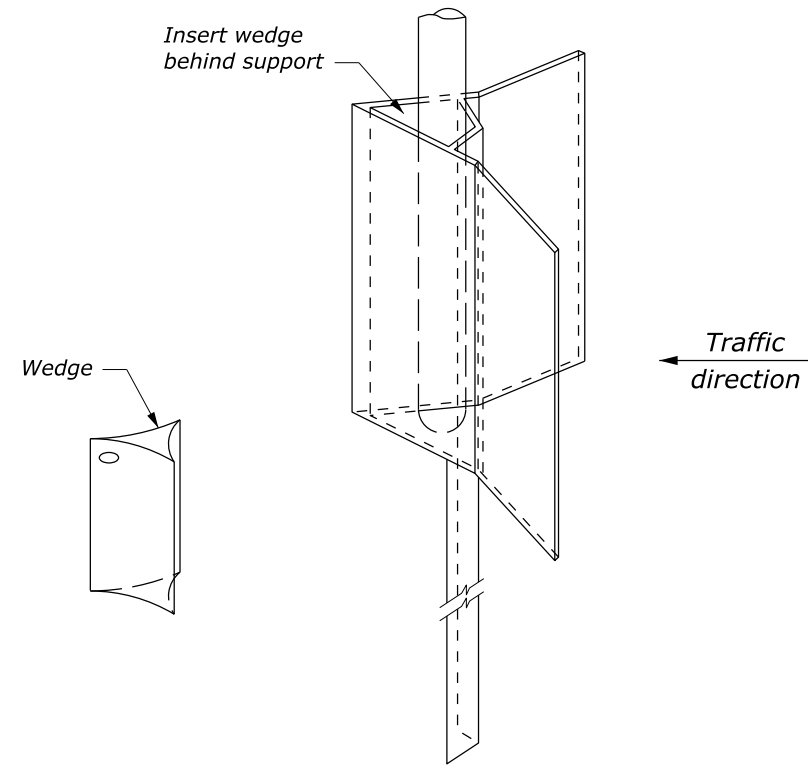
**MULTIPLE MAILBOX MOUNT**



**BRACKET MOUNT ALTERNATIVE**



**MAILBOX SUPPORT SYSTEM**



**SUPPORT FRAME**

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA  
OFFICE OF FEDERAL LANDS HIGHWAY

**MAILBOX ASSEMBLY  
SERIES C**

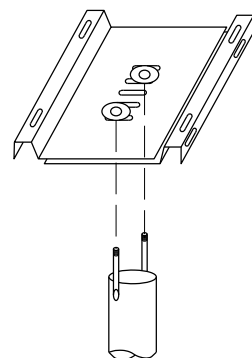
WFLHD DETAIL  
W646-4

SPECIFICATION  
FP-24, FP-14

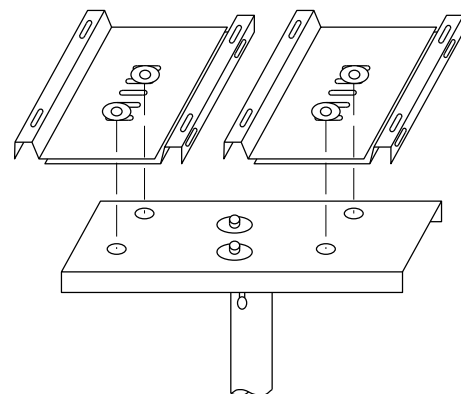
APPROVED FOR USE  
11/2014

**NOTE:**

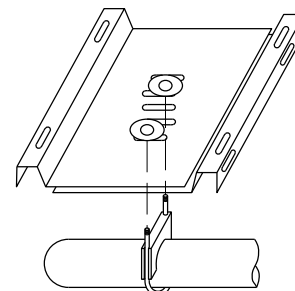
1. Opposite orientation with wedge on traffic approach side of post is allowable but not preferred.
2. Support frame and foundation are proprietary products commercially available.



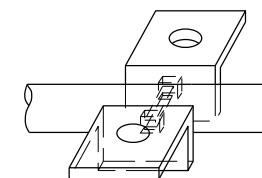
**SINGLE MAILBOX MOUNT**



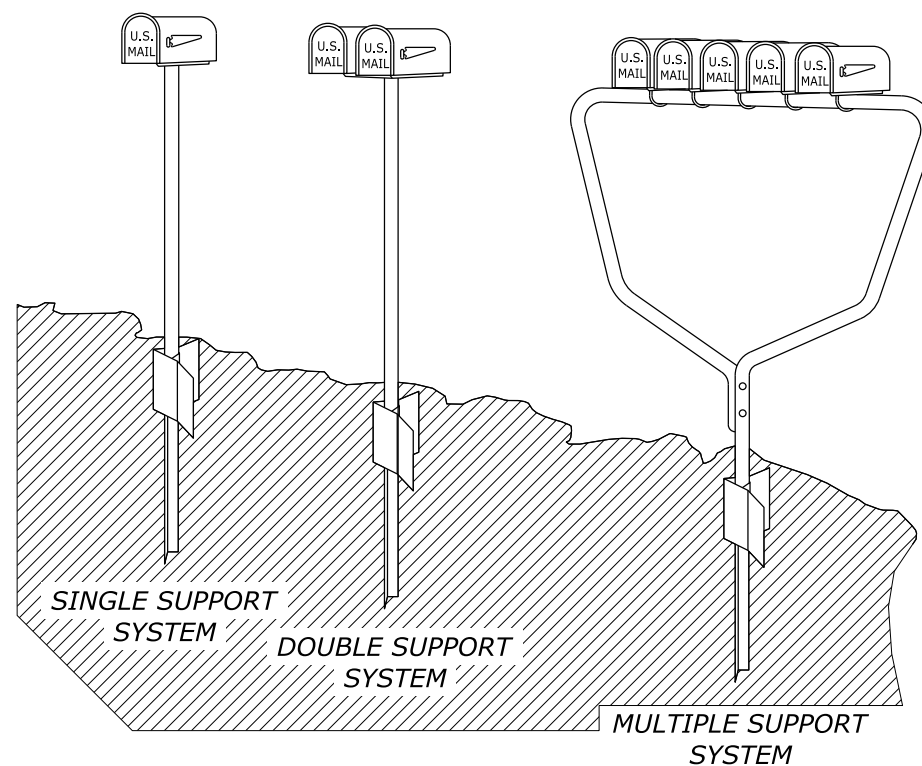
**DOUBLE MAILBOX MOUNT**



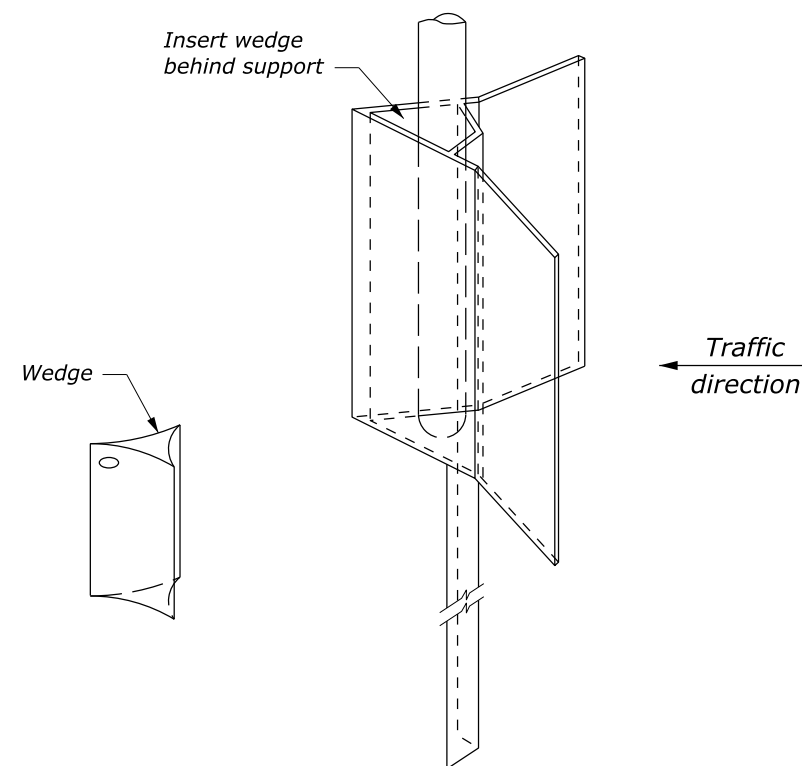
**MULTIPLE MAILBOX MOUNT**



**BRACKET MOUNT ALTERNATIVE**



**MAILBOX SUPPORT SYSTEM**



**SUPPORT FRAME**

This drawing contains **Metric** units of measure. Dimensions without units are millimeters.

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFLHD DETAIL WM646-4
<b>MAILBOX ASSEMBLY SERIES C</b>	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 11/2014