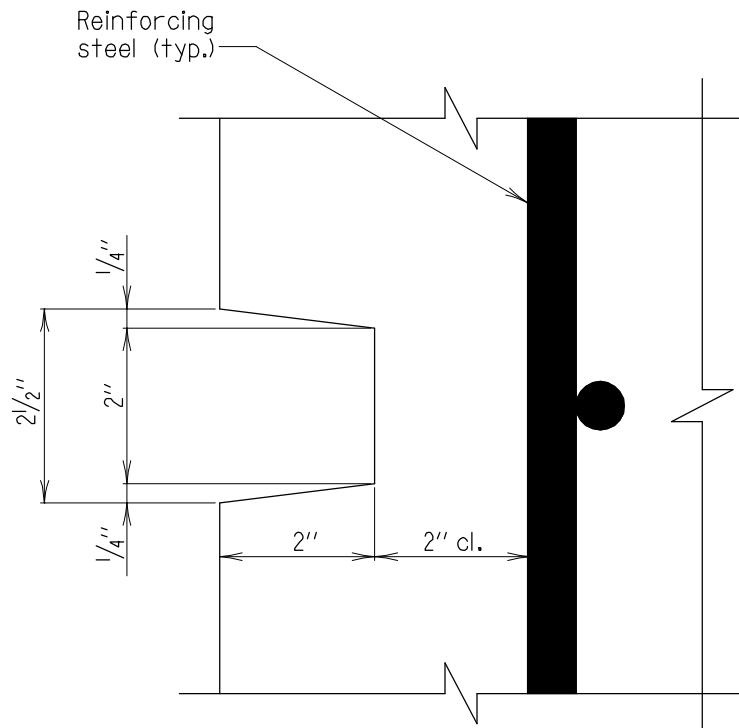


Chapter 08

AESTHETICS
(AES)

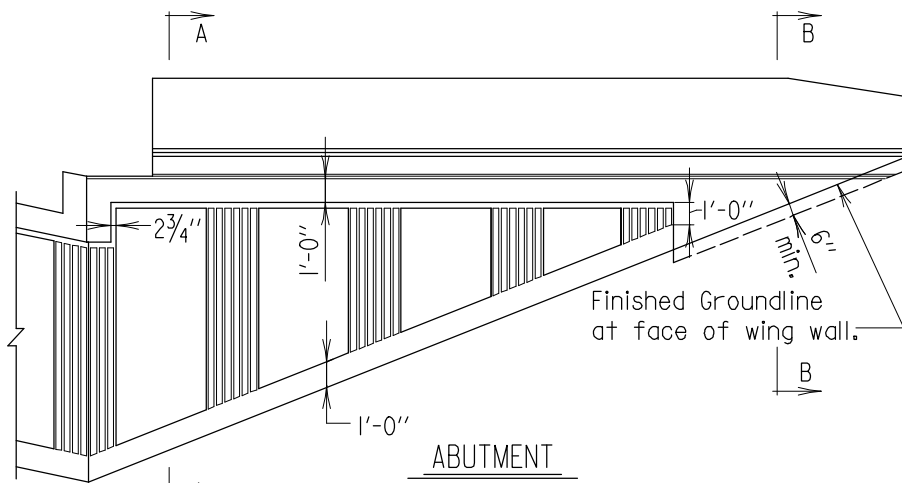


GROOVE DETAIL

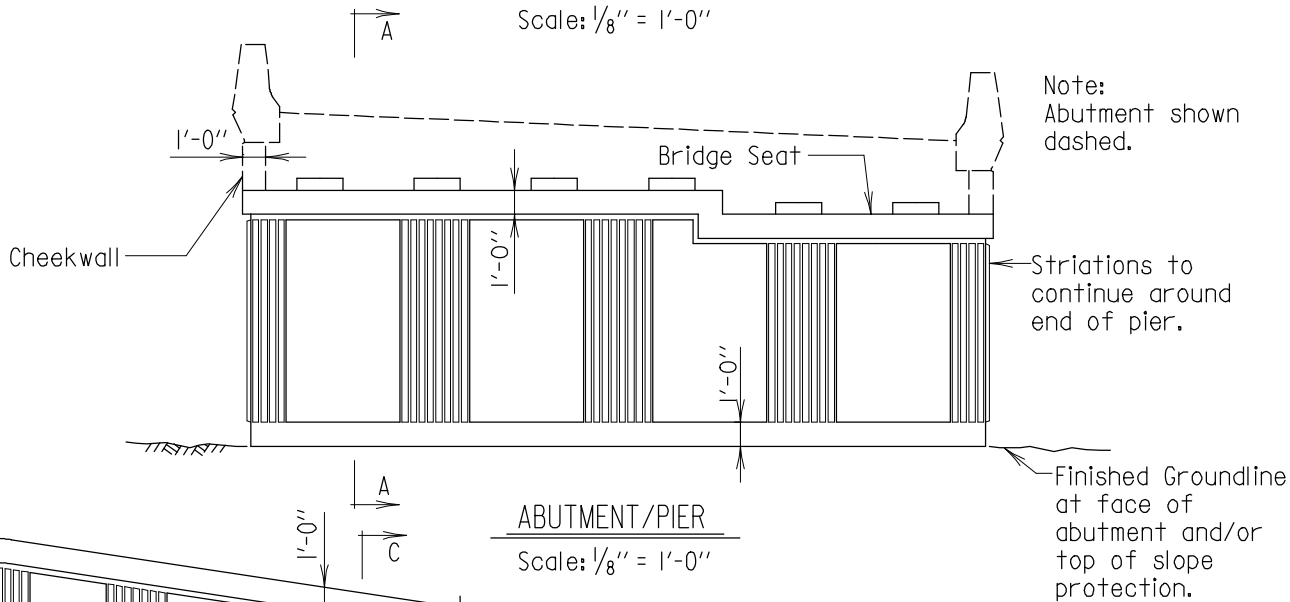
Scale: None

APPROVAL
<i>E.S. Fisher</i> DIRECTOR OFFICE OF STRUCTURES
DATE: 03-14-1994
VERSION
1.0

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF STRUCTURES	
GROOVE DETAIL FOR SUBSTRUCTURE ELEMENTS	
DETAIL NO. AES-101	SHEET <u>1</u> OF <u>1</u>

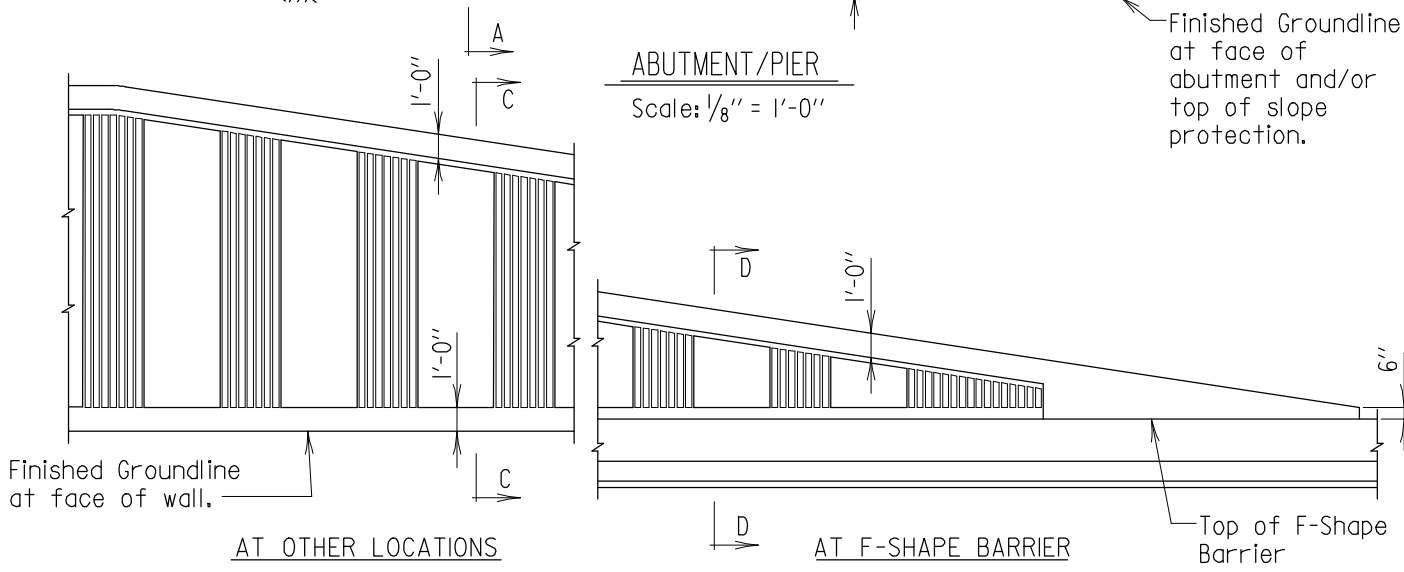


**ABUTMENT
WING WALL**
Scale: 1/8" = 1'-0"



ABUTMENT/PIER
Scale: 1/8" = 1'-0"

Note:
Abutment shown dashed.



RETAINING WALL
Scale: 1/8" = 1'-0"

- Notes:
1. Special layouts may be necessary at certain locations. If details are shown on other Contract Drawings such limitations will take priority over these standards.
 2. These striations shall only be used on bridge substructure elements and retaining walls, where specifically called for on Contract Drawings.
 3. Cost of all striations, complete-in-place, to be included in other pertinent Contract items.
 4. Contraction and expansion joints shall always be located in striated areas.

APPROVAL	
L. S. Friedman DIRECTOR OFFICE OF STRUCTURES	
DATE: 10-22-2003	
VERSION	
1.0	

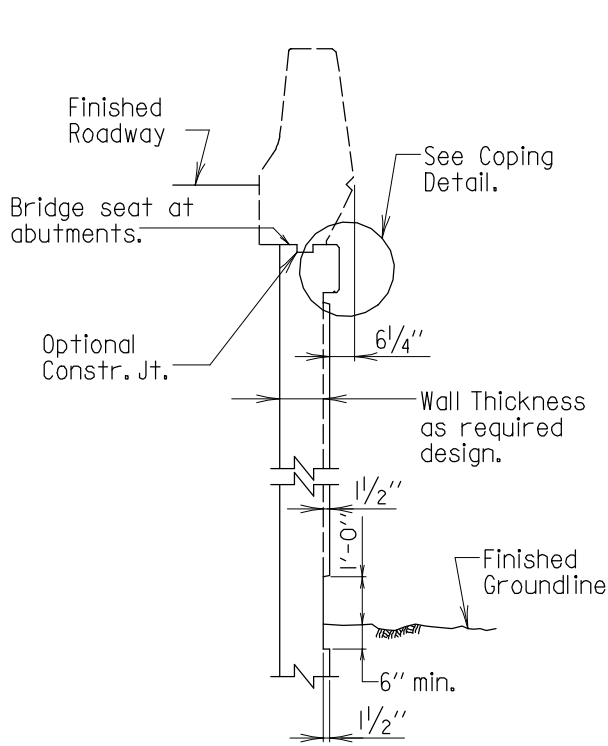
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF STRUCTURES

TRAPEZOIDAL STRIATION DETAILS FOR
BRIDGE SUBSTRUCTURE UNITS
AND RETAINING WALLS

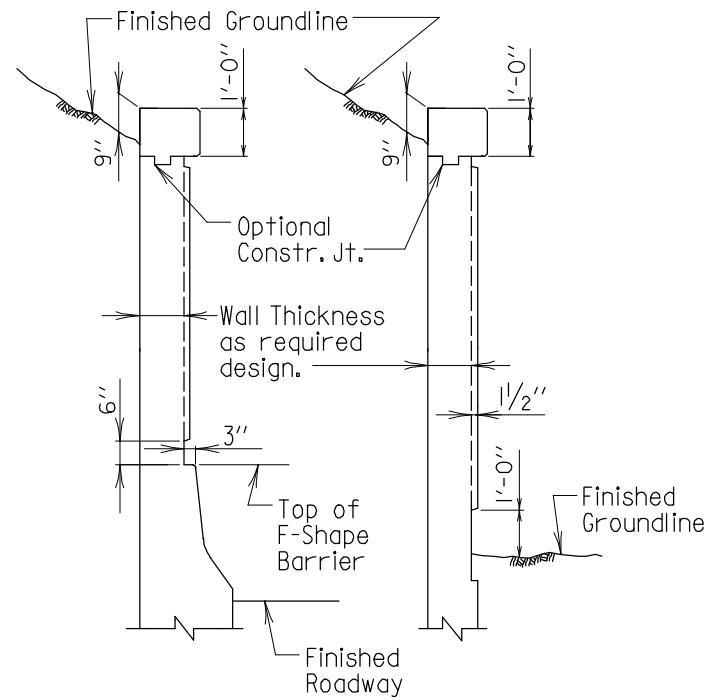
DETAIL NO. AES-201

SHEET 1 OF 2

ESTHETICS

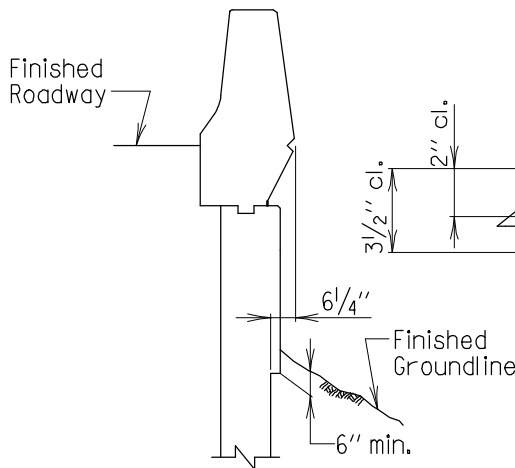


SECTION A-A
Scale: 1/4" = 1'-0"

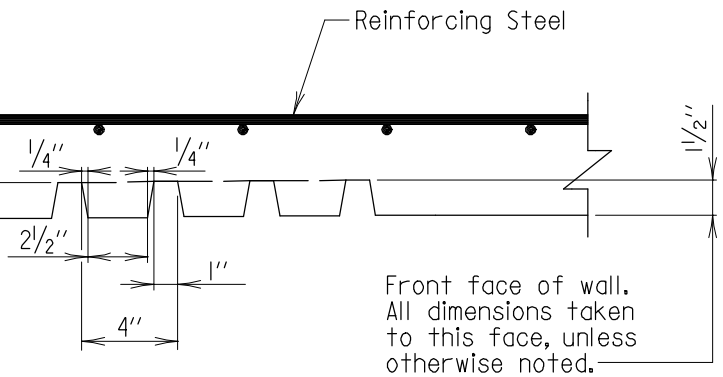


SECTION D-D
RETAINING WALL
WITH JERSEY BARRIER
Scale: 1/4" = 1'-0"

SECTION C-C
RETAINING WALL
AT OTHER LOCATIONS
Scale: 1/4" = 1'-0"

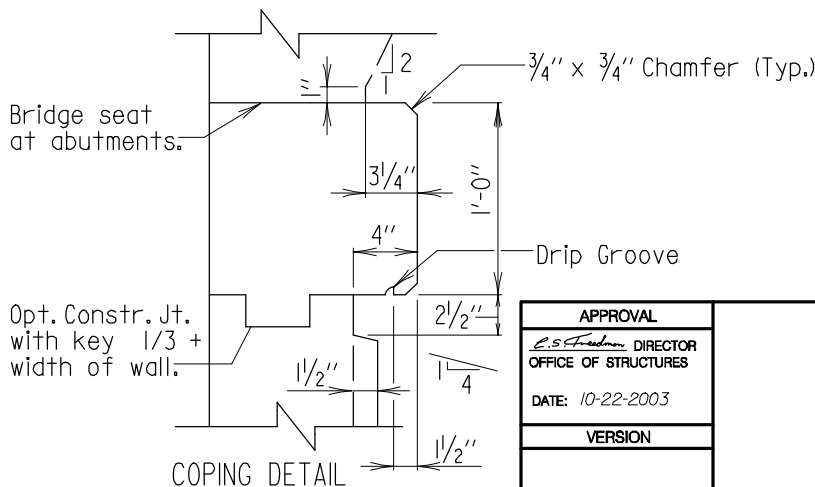


SECTION B-B
Scale: 1/4" = 1'-0"



FORMBOARD PATTERN DETAIL
Scale: 1/2" = 1'-0"

Front face of wall.
All dimensions taken
to this face, unless
otherwise noted.



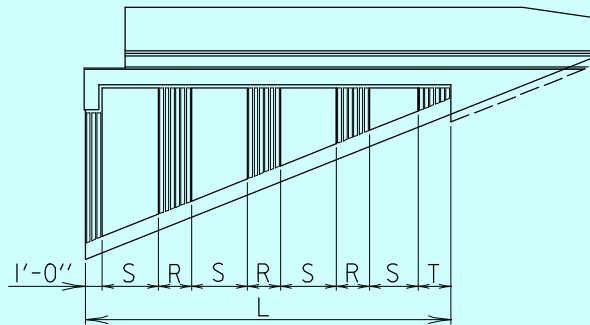
COPING DETAIL
Scale: 1" = 1'-0"

APPROVAL	
<i>L.S. Friedman</i>	DIRECTOR
OFFICE OF STRUCTURES	
DATE: 10-22-2003	
VERSION	
1.0	

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF STRUCTURES	
TRAPEZOIDAL STRIATION DETAILS FOR BRIDGE SUBSTRUCTURE UNITS AND RETAINING WALLS	
DETAIL NO. AES-201	SHEET 2 OF 2

STRUCTURE INVENTORY

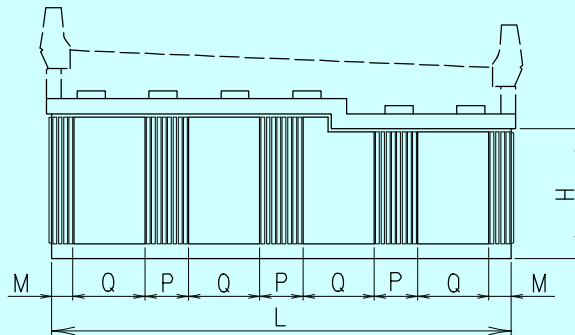
For wing walls
 $S \approx \frac{4}{3} T \approx 2R$



$S = 1/N (L - 1'-0'' - T - (N-1)R)$
 N=Number of Plain Panels
 R=Intermediate Striated Panel Dimension
 T=End Striated Panel Dimension
 S=Plain Panel Length
 L=Adjusted Length of Abutment Face (See AES-203)

ABUTMENT
WING WALL
 Scale:None

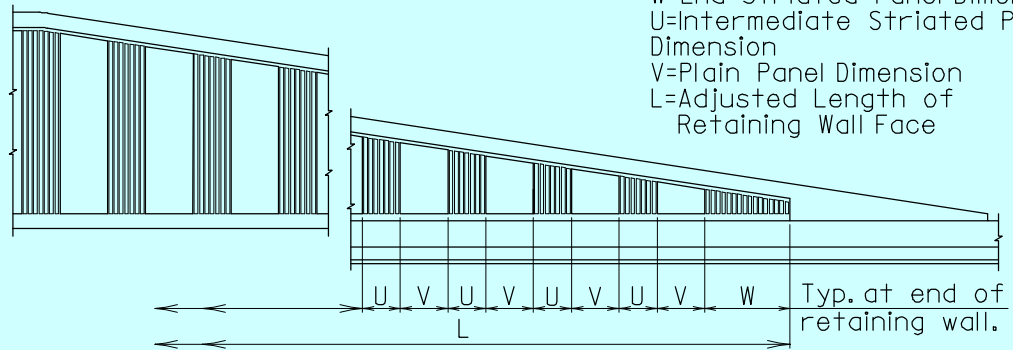
For abutments/piers
 $Q \approx 2P \approx 4M$



$Q = 1/N (L - 2M - (N-1)P)$
 N=Number of Plain Panels
 M=End Striated Panel Dimension
 P=Intermediate Striated Panel Dimension
 Q=Plain Panel Dimension
 L=Adjusted Length of Abutment Face (See AES-203)

ABUTMENT/PIER
 Scale:None

For retaining walls
 $W \approx \frac{5}{4} V \approx \frac{5}{3} U$



$V = 1/N (L - 2W - (N-1)U)$
 N=Number of Plain Panels
 W=End Striated Panel Dimension
 U=Intermediate Striated Panel Dimension
 V=Plain Panel Dimension
 L=Adjusted Length of Retaining Wall Face

RETAINING WALL
 Scale:None

* FOR OFFICE USE ONLY *

APPROVAL <i>L.S. Friedman</i> DIRECTOR OFFICE OF STRUCTURES DATE: 10-22-2003
VERSION 1.0

STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF STRUCTURES
 TRAPEZOIDAL STRIATION LAYOUT FOR
 BRIDGE SUBSTRUCTURE UNITS
 AND RETAINING WALLS

DETAIL NO. AES-202
 SHEET 1 OF 1

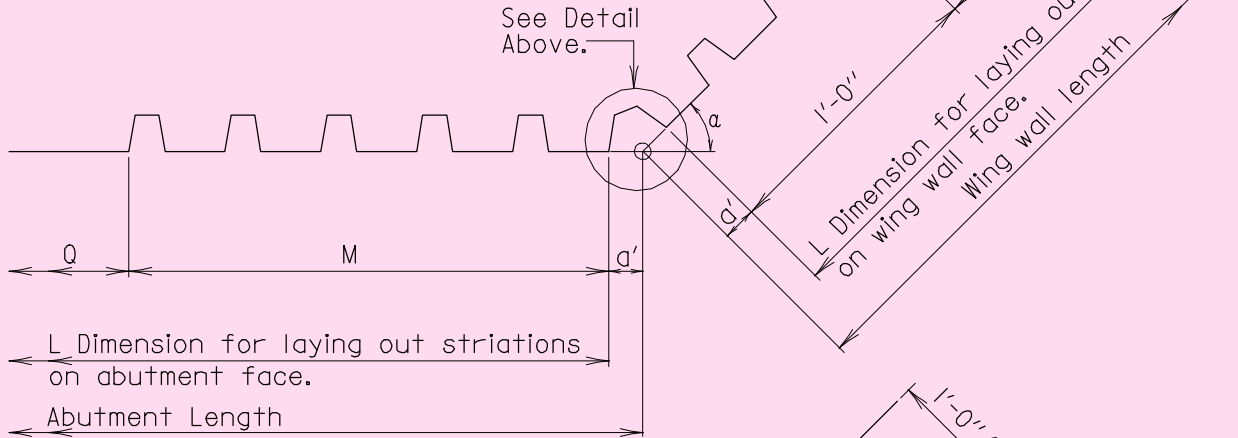
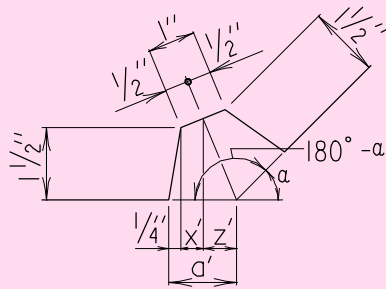
$$a' = x' + z' + \frac{1}{4}''$$

$$x' = \frac{1}{2}'' \cos \frac{\alpha}{2}$$

$$y' = \frac{1}{2}'' \sin \frac{\alpha}{2}$$

$$z' = (\frac{1}{2}'' + y') \tan \frac{\alpha}{2}$$

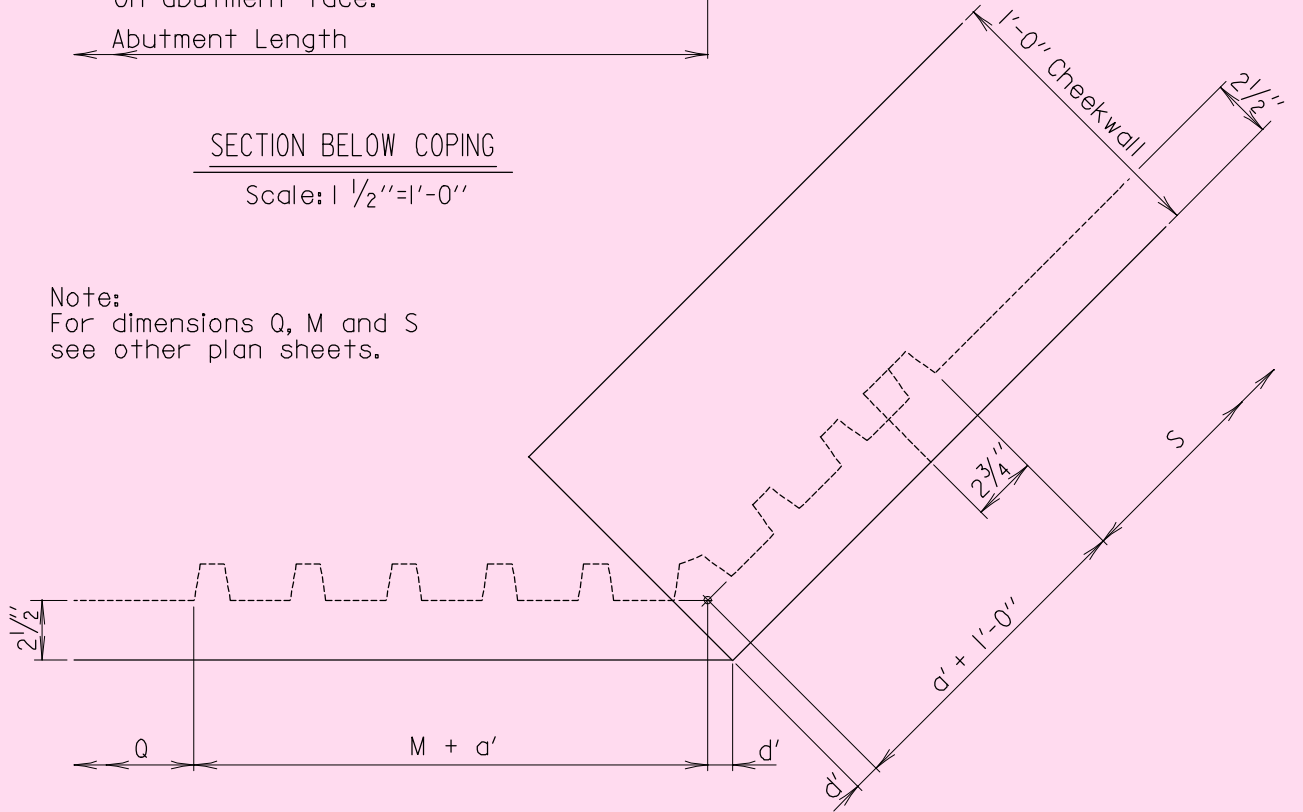
$$d' = 2 \frac{1}{2}'' \tan \frac{\alpha}{2}$$



SECTION BELOW COPING

Scale: $1 \frac{1}{2}'' = 1'-0''$

Note:
For dimensions Q, M and S
see other plan sheets.



SECTION THRU COPING

Scale: $1 \frac{1}{2}'' = 1'-0''$

Location				
a'				
d'				

APPROVAL
<i>L.S. Friedman</i> DIRECTOR OFFICE OF STRUCTURES
DATE: 01-22-2001
VERSION
1.0

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF STRUCTURES

TRAPEZOIDAL STRIATION CORNER DETAILS
SQUARE AND OBTUSE CORNER

DETAIL NO. AES-203

SHEET 1 OF 2

$$\beta = (90 + a) \div 2$$

$$a = z + x + \frac{1}{4}''$$

$$b = (9'' + a) \div \tan a$$

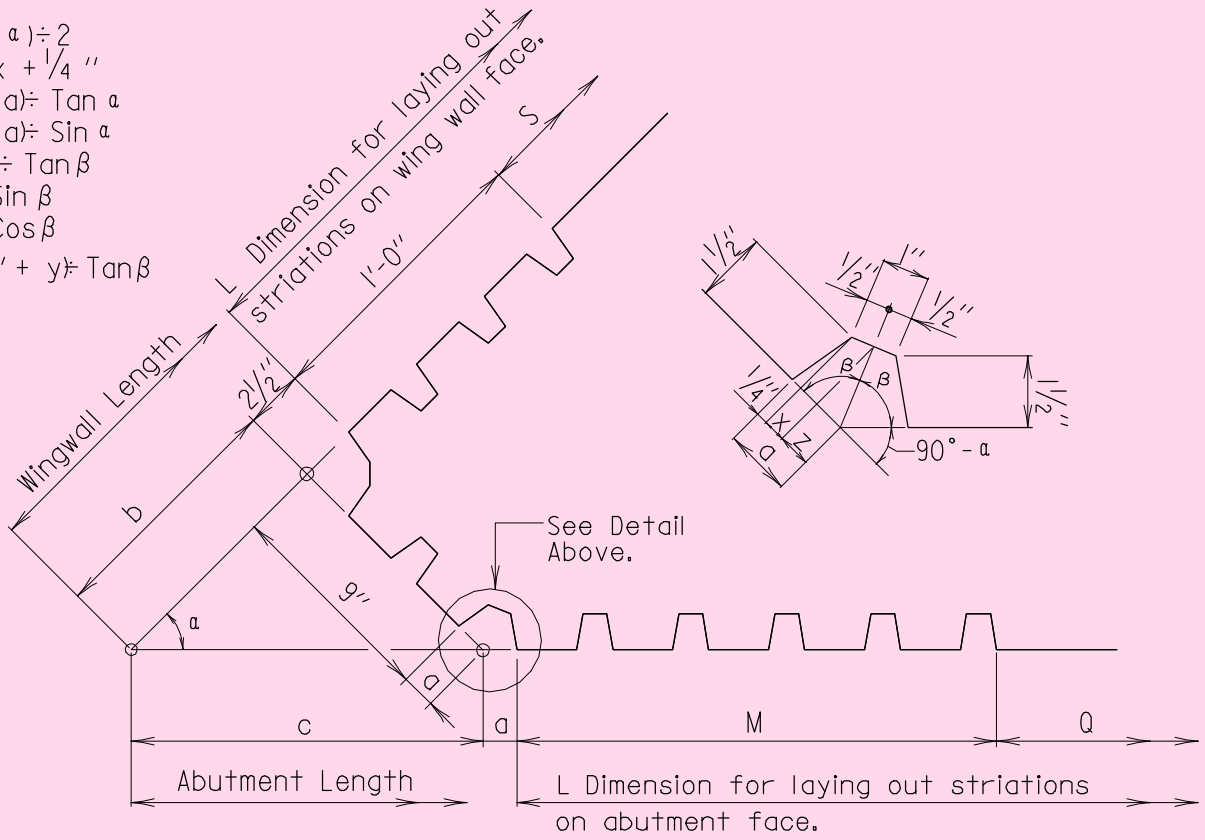
$$c = (9'' + a) \div \sin a$$

$$d = 2\frac{1}{2}'' \div \tan \beta$$

$$x = \frac{1}{2}'' \sin \beta$$

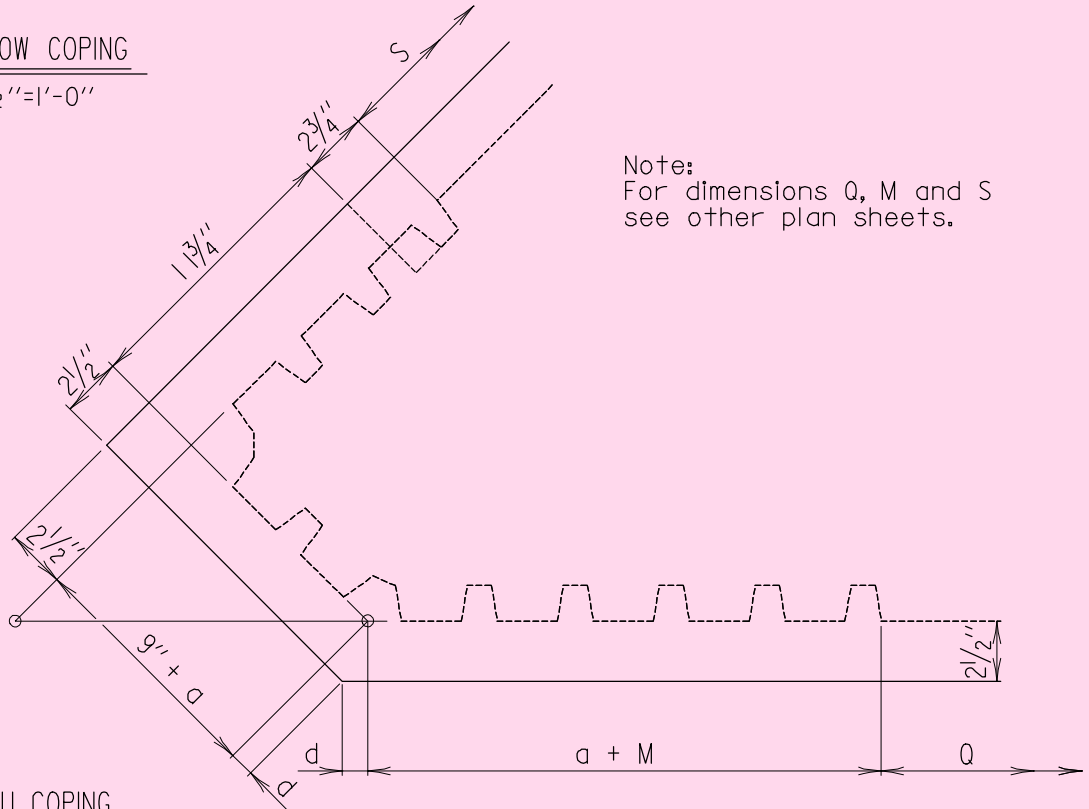
$$y = \frac{1}{2}'' \cos \beta$$

$$z = (1\frac{1}{2}'' + y) \div \tan \beta$$



SECTION BELOW COPING

Scale: 1 1/2" = 1'-0"



Note:
For dimensions Q, M and S see other plan sheets.

SECTION THRU COPING

Scale: 1 1/2" = 1'-0"

Location				
a				
b				
c				
d				

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<i>LS Fisher</i> DIRECTOR OFFICE OF STRUCTURES
DATE: 01-22-2001
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TRAPEZOIDAL STRIATION CORNER DETAILS
ACUTE CORNER

DETAIL NO. AES-203

SHEET 2 OF 2