AS-BUILT PLANS 12/12/12

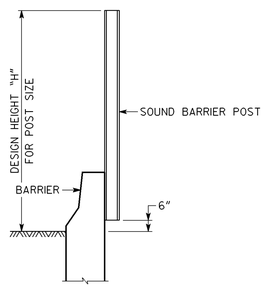
| STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| GA. | | | |

## FOUNDATION DEPTH AND DIAMETER △3

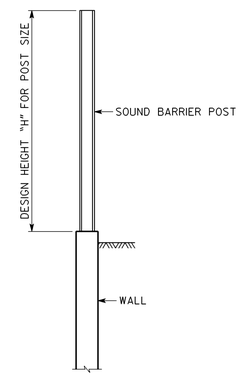
| DESIGN HEIGHT "H" | PIEDMONT (POST SPACING) | | | | | | | | | COASTAL PLAIN (POST SPACING) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10'-0" | | | 15'-0" | | | 20'-0" | | | 10'-0" | | | 15'-0" | | | 20'-0" | | |
| | DEPTH | DIAMETER | CORNER POST DIAMETER | DEPTH | DIAMETER | CORNER POST DIAMETER | DEPTH | DIAMETER | CORNER POST DIAMETER | DEPTH | DIAMETER | CORNER POST DIAMETER | DEPTH | DIAMETER | CORNER POST DIAMETER | DEPTH | DIAMETER | CORNER POST DIAMETER |
| 6'-0" | 4'-3" | 2'-0" | 2'-6" | 5'-0" | 2'-0" | 2'-6" | 6'-0" | 2'-0" | 2'-6" | 6'-6" | 2'-0" | 3'-0" | 7'-9" | 2'-0" | 3'-0" | 8'-9" | 2'-0" | 3'-0" |
| 8'-0" | 5'-3" | 2'-0" | 2'-6" | 6'-3" | 2'-0" | 2'-6" | 7'-3" | 2'-0" | 3'-0" | 7'-9" | 2'-0" | 3'-0" | 9'-0" | 2'-0" | 3'-0" | 10'-3" | 2'-0" | 3'-0" |
| 10'-0" | 6'-3" | 2'-0" | 2'-6" | 7'-6" | 2'-0" | 3'-0" | 8'-6" | 2'-0" | 3'-0" | 8'-9" | 2'-0" | 3'-0" | 10'-3" | 2'-0" | 3'-0" | 11'-6" | 2'-0" | 3'-0" |
| 12'-0" | 7'-3" | 2'-0" | 3'-0" | 8'-6" | 2'-0" | 3'-0" | 8'-9" | 2'-6" | 3'-6" | 9'-9" | 2'-0" | 3'-0" | 11'-6"" | 2'-0" | 3'-0" | 11'-9" | 2'-6" | 3'-6" |
| 14'-0" | 8'-3" | 2'-0" | 3'-0" | 8'-6" | 2'-6" | 3'-6" | 9'-9" | 2'-6" | 3'-6" | 10'-6" | 2'-0" | 3'-0" | 11'-9" | 2'-6" | 3'-6" | 12'-9" | 2'-6" | 3'-6" |
| 16'-0" | 7'-9" | 2'-6" | 3'-6" | 9'-6" | 2'-6" | 3'-6" | 10'-6" | 2'-6" | 3'-6" | 10'-6" | 2'-6" | 3'-6" | 12'-9" | 2'-6" | 3'-6" | 13'-9" | 2'-6" | 3'-6" |
| 18'-0" | 8'-6" | 2'-6" | 3'-6" | 10'-3" | 2'-6" | 3'-6" | 11'-6" | 2'-6" | 3'-6" | 11'-3" | 2'-6" | 3'-6" | 13'-6" | 2'-6" | 3'-6" | 14'-9" | 2'-6" | 3'-6" |
| 20'-0" | 9'-3" | 2'-6" | 3'-6" | 11'-3" | 2'-6" | 3'-6" | 12'-6" | 2'-6" | 3'-6" | 12'-0" | 2'-6" | 3'-6" | 14'-6" | 2'-6" | 3'-6" | 15'-9" | 2'-6" | 3'-6" |
| 22'-0" | 10'-0" | 2'-6" | 3'-6" | 12'-0" | 2'-6" | 3'-6" | 13'-6" | 2'-6" | 4'-0" | 12'-9" | 2'-6" | 3'-6" | 15'-0" | 2'-6" | 3'-6" | 15'-6" | 3'-0" | 4'-0" |
| 24'-0" | 10'-6" | 2'-6" | 3'-6" | 12'-9" | 2'-6" | 4'-0" | 14'-9" | 2'-6" | 4'-0" | 13'-6" | 2'-6" | 3'-6" | 15'-9" | 2'-6" | 4'-0" | 16'-3" | 3'-0" | 4'-0" |
| 26'-0" | 11'-3" | 2'-6" | 3'-6" | 13'-6" | 2'-6" | 4'-0" | 15'-9" | 2'-6" | 4'-0" | 14'-0" | 2'-6" | 3'-6" | 16'-6" | 2'-6" | 4'-0" | 16'-3" | 3'-6" | 4'-0" |
| 28'-0" | 12'-0" | 2'-6" | 3'-6" | 14'-3" | 2'-6" | 4'-0" | 15'-3" | 3'-0" | 4'-6" | 14'-6" | 2'-6" | 3'-6" | 16'-0" | 3'-0" | 4'-0" | 16'-0" | 4'-0" | 4'-6" |
| 30'-0" | 12'-6" | 2'-6" | 4'-0" | 15'-3" | 2'-6" | 4'-0" | 16'-0" | 3'-0" | 4'-6" | 15'-0" | 2'-6" | 4'-0" | 15'-9" | 3'-6" | 4'-0" | 16'-0" | 4'-6" | 4'-6" |

## POST SUMMARY

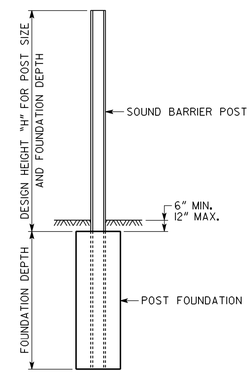
| DESIGN HEIGHT "H" | TYPE B PANELS | | | | | TYPE C, F AND G PANELS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | GROUND MOUNTED (POST SPACING) | | | WALL MOUNTED | BARRIER MOUNTED | GROUND MOUNTED (POST SPACING) | | | WALL MOUNTED | BARRIER MOUNTED |
| | 10'-0" | 15'-0" | 20'-0" | 10'-0" | 10'-0" | 10'-0" | 15'-0" | 20'-0" | 10'-0" | 10'-0" |
| 6'-0" | W8X10 | W8X10 | W10X12 | W8X10 | W8X24 | W10X22 | W10X22 | W10X22 | W10X22 | W8X24 |
| 8'-0" | W8X10 | W10X12 | W12X14 | W8X10 | W8X24 | W10X22 | W10X22 | W10X22 | W10X22 | W8X24 |
| 10'-0" | W10X12 | W12X16 | W12X19 | W10X12 | W8X24 | W10X22 | W10X22 | W10X22 | W10X22 | W8X24 |
| 12'-0" | W12X14 | W12X19 | W14X22 | W10X15 | W8X24 | W10X22 | W10X22 | W12X26 | W10X22 | W8X24 |
| 14'-0" | W12X19 | W14X22 | W14X30 | W10X19 | W8X24 | W10X22 | W12X26 | W14X30 | W10X22 | W8X24 |
| 16'-0" | W14X22 | W14X30 | W14X34 | W10X22 | W8X24 | W12X26 | W14X30 | W14X34 | W10X22 | W8X24 |
| 18'-0" | W14X26 | W14X34 | W14X43 | W10X26 | W8X31 | W12X26 | W14X34 | W14X43 | W10X26 | W8X31 |
| 20'-0" | W14X30 | W14X43 | W14X53 | W10X33 | W10X33 | W14X30 | W14X43 | W14X53 | W10X33 | W10X33 |
| 22'-0" | W14X34 | W14X48 | W14X61 | W10X39 | W10X39 | W14X34 | W14X48 | W14X61 | W10X39 | W10X39 |
| 24'-0" | W14X38 | W14X61 | W14X74 | W10X45 | W12X40 | W14X38 | W14X61 | W14X74 | W10X45 | W12X40 |
| 26'-0" | W14X43 | W14X61 | W14X82 | | W12X45 | W14X43 | W14X61 | W14X82 | | W12X45 |
| 28'-0" | W14X53 | W14X74 | W14X90 | | | W14X53 | W14X74 | W14X90 | | |
| 30'-0" | W14X61 | W14X82 | W14X109 | | | W14X61 | W14X82 | W14X109 | | |



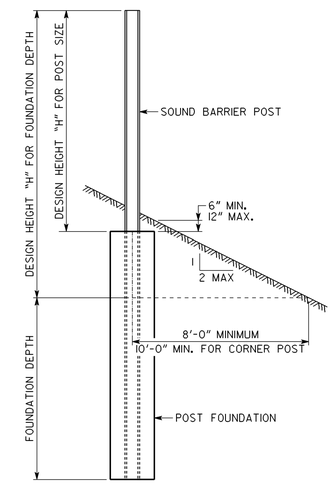

BARRIER MOUNTED SOUND BARRIER



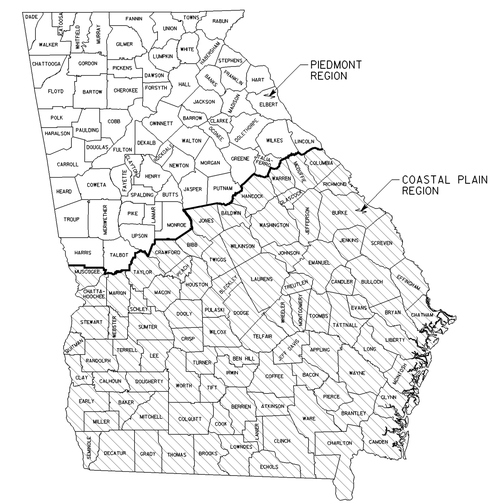

WALL MOUNTED SOUND BARRIER

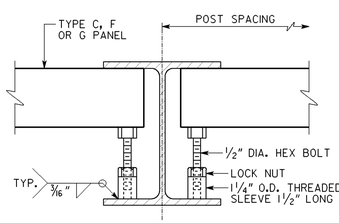



GROUND MOUNTED SOUND BARRIER

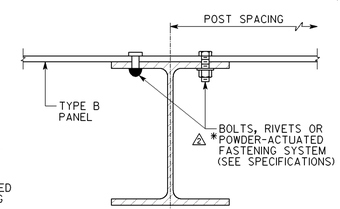



GROUND MOUNTED SOUND BARRIER




NOTE: 1/2" DIA. BOLTS SHALL BE LONG ENOUGH TO RETAIN PANEL.




△2 * - FASTENERS SHALL BE STAINLESS STEEL OR SHALL BE GALVANIZED AS PER ASTM A-153 OR ZINC COATED AS PER ASTM B-695 CLASS 50.

PANEL ATTACHMENT DETAILS
NO SCALE

NOTES: ALL NUTS, BOLTS, WASHERS, PLATES, INSERTS, ANGLES AND HARDWARE REQUIRED FOR CONSTRUCTING SOUND BARRIERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A-123 OR A-153. SELF-TAPPING SCREWS SHALL BE IN ACCORDANCE WITH △1 SECTION 624 OF THE DOT SPECIFICATIONS. THREADS FOR NUTS, INSERTS AND THREADED SLEEVES SHALL BE UNC CLASS 2B. THREADS FOR BOLTS AND THREADED RODS SHALL BE UNC CLASS 2A. WASHERS SHALL BE COMPATIBLE WITH NUTS AND BOLTS.

POSTS FOR BARRIER MOUNTED AND WALL MOUNTED SOUND BARRIER SHALL BE AT 10'-0" SPACING.

POST SHALL BE ASTM A-36, GALVANIZED AFTER ALL FABRICATION IS COMPLETE. ALL POSTS SHALL BE PLUMB.

BARRIER MOUNTED SOUND BARRIERS ACROSS BRIDGES SHALL BE TYPE B PANELS AND SHALL BE 12'-0" MAXIMUM.

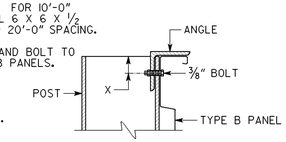
CONCRETE: POST FOUNDATION ----- CLASS A, $f'_c$ = 3000 PSI

REINFORCEMENT STEEL -------- GRADE 60, $f_y$ = 60,000 PSI

NOTE: L 4 X 4 X 3/8 FOR 10'-0" SPACING AND L 6 X 6 X 1/2 FOR 15'-0" AND 20'-0" SPACING.

PAINT ANGLE AND BOLT TO MATCH TYPE B PANELS.

X = 1 5/8" FOR L 4 X 4 X 3/8 AND 2 1/2" FOR L 6 X 6 X 1/2.




ANGLE ATTACHMENT DETAILS
NO SCALE

| △4 △4 △4 | | | |
|---|---|---|---|
| SWW | REVISED TABLE | 1-08-08 | |
| DLC | REVISED NOTE | 9-6-05 | |
| DLC | REVISED NOTE | 2-24-05 | |
| BY | REVISION | DATE | |

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAIL

SOUND BARRIER
FOUNDATION AND POST DETAILS

SCALE 3/8"=1'-0"(UNLESS NOTED) MAY 2004

DESIGNED JPT/DLC
DRAWN DLC
CHECKED SWW
DESIGN GROUP SWW

REVIEWED JPT/MCD
APPROVED PVL

NUMBER
N-1A
PAGE 1OF 2

THE LPA GROUP
TRANSPORTATION CONSULTANTS
3595 ENGINEERING DRIVE
NORCROSS, GEORGIA 30092
(770) 263-9118

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: INNOVATIVE PROGRAM DELIVERY
CONSTRUCTION DETAILS

DRAWING No.
40-049