ORIGINATION FORM

Proposed Revisions to a Standard Plans Index (Please provide all information – Incomplete forms will be returned)

Date: July 8, 2019 Originator: Cheryl Hudson	Standard Plans: Index Number: 534-200 Sheet Number (s): 1 Index Title: Noise Walls - (Precast)
Commentary / Background:	
Other Affected Offices / Documents: (Provided Notices Documents Provided Notices Documents Provided Notices Documents Provided Notices Provided Notice	rovide name of responsible personnel)
	am Mgmt. Bulletin Y FY-Standard Plans (Next Release)

NOTES

- 1. Work this Index with the Noise Wall Data Tables, and Wall Control Drawings in the Plans.
 - A. Prestressed concrete posts with equivalent strength resistance may be substituted for conventionally reinforced precast posts shown in this index when approved as part of a Producer's Quality Control Plan.
 - B. Producer shop drawings for prestressed concrete post designs must be approved by the State Structures Design Office prior to inclusion in the Quality Control Plan.
- 2. Construct Noise Walls in accordance with the requirements of Specification Section 534, and Augers Cast Piles in accordance with Specification Section 455.
- 3. Field verify the location of all overhead and underground services shown in the Wall Control Drawings.
- 4. Wall Height is the nominal height of the walls above finished grade. The Wall Embedment Depth for design is 1'-0". The actual embedment depth may vary plus or minus 6" along the length of the wall.
- 5. Post Spacing in this Index are nominal, and are measured from centerline to centerline of the auger cast piles. Actual post spacing may vary as shown in the Wall Control Drawings.
- 6. Panels:
 - A. The sum of the individual stacked panel heights is the Wall Height plus 1'-0" (embedment depth).
 - Where special graphics are required, locate the horizontal panel joints
 outside of the graphics where possible, hold horizontal panel joints at a constant elevation.
 - C. Side Installed Panels are only permitted when reduced overhead clearance between posts prohibits installing panels from the top.
 - 1. For Flush Face panels, install panel into posts from the roadway (front back face of the wall. Recessed panels may be installed from the back face
 - 2. After panels are installed and centered between posts, grout between both panel ends and the adjoining posts (see Sheets 4 and 5 for details).
 - D. Individual panel heights should be between 6'-0" and 12'-0" tall. The minimum panel height is 4'-0" and may be used where overbead clearance is limited or where graphic panels are required on shorter walls.
- 7. Concrete And Grout:
 - A. Concrete Class and Compressive Strength for:
 - 1. Precast Panels, Posts, and Post Caps: Class IV
 - 2. Cast-In-Place Collars: Class IV
 - B. Minimum Compressive Strength for form removal and handling of posts and panels:
 - 1. 2.500 psi for horizontally cast post and panels
 - 2. 2,000 psi for vertically cast panels or when tilt-up tables are used for horizontally cast panels.
 - C. Grout for Auger Cast Piles:
 - 1. Maximum Working Compressive Strength = 2,000 psi
 - 2. Minimum 28 day strength = 5,000 psi
- 8. Reinforcing Steel:
 - A. In addition to the requirements of Specification Section 415, tie post and pile stirrups at the following locations as a minimum:
 - 1. Post Stirrups Tie at all four corner bars and at every third interior bar
 - 2. Pile Stirrups Tie to the main vertical reinforcing at alternate intersections for circular configurations and at the four corners and at every third interior bar intersection for rectangular configurations.
 - B. Provide 2" concrete cover unless noted otherwise.
- 9. Casting Tolerances for precast panels and posts:
 - A. Overall Height and Width: +/- 1/3"
 - B. Thickness: +/- 1/4"
 - C. Plane of side mold: +/- 1/16"
 - D. Openings: $\pm \frac{1}{2}$ "
 - E. Out of Square: 1/8" per 6 ft., but not more than 3/8"total along any side
 - F. Warping: 1/16" per foot distance to nearest corner
 - G. Bowing: 1/240 panel dimension
 - H. Surface Smoothness for Type "A" Smooth Surface Texture Option: +/- 1/16"

- 10. Provide Plain or Fiber Reinforced Bearing Pads meeting the requirements of Specification Section 932 for Ancillary Structures.
 - A. For Collar Bearing Points provide.
 - 1. 4"x 4"x ½" Fiber Reinforced Pads;
 - 2. Plain Pads may be substituted for Fiber Reinforced Pads when sufficient bearing area is available on the concrete collar for the
 - a. 10' Post Spacing: 4"x 4"x ½"
 - b. 20' Post Spacing and Wall Height < 17 feet: 4"x 4"x ½"
 - c. 20' Post Spacing and Wall Height ≥ 17 feet: 4"x 5"x ½
 - B. At panel bearing points between stacked panels, use Plain or Fiber Reinforced Bearing Pads.

5/20/19

GENERAL NOTES

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SHEET

REVISION

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LAST

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