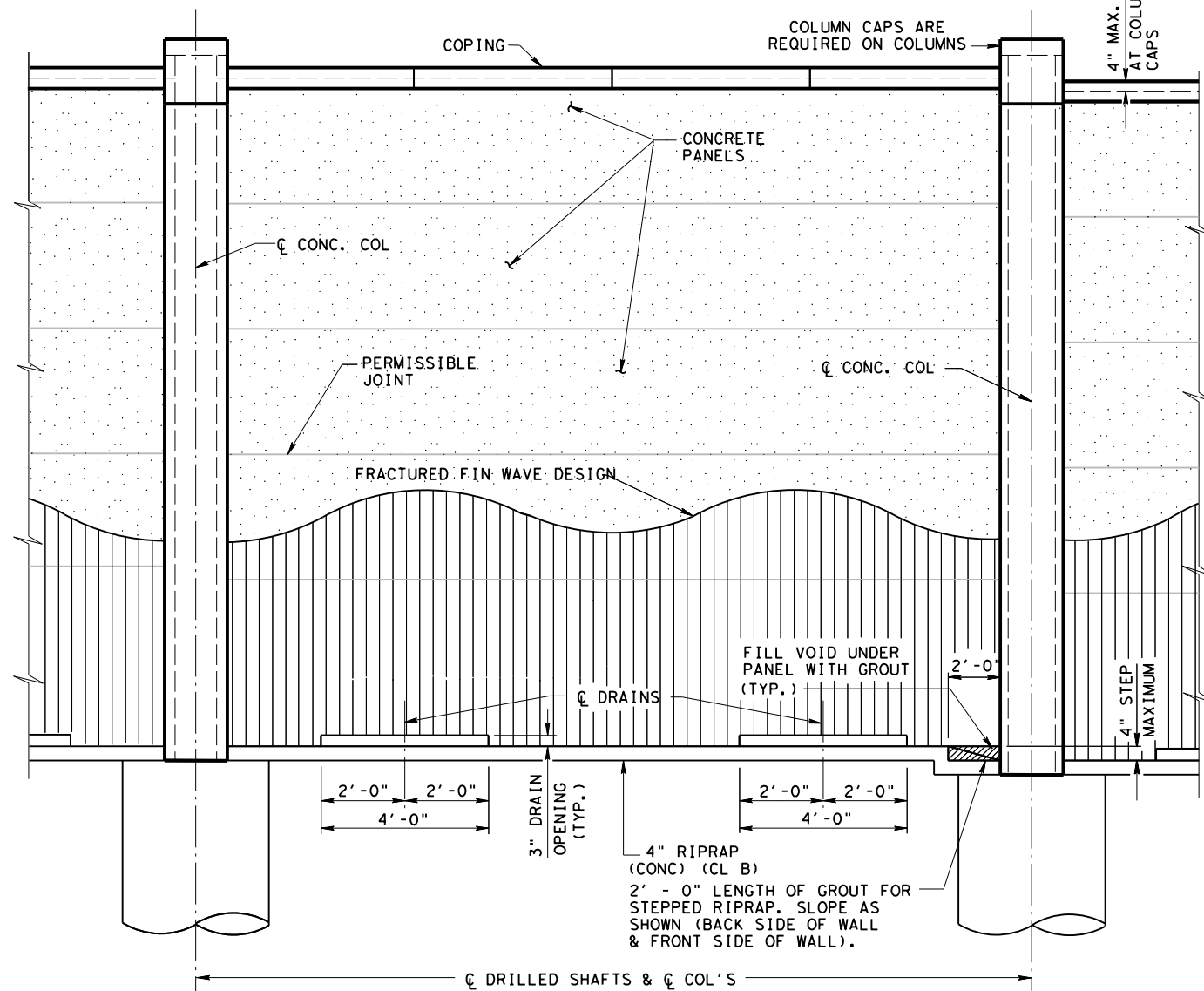
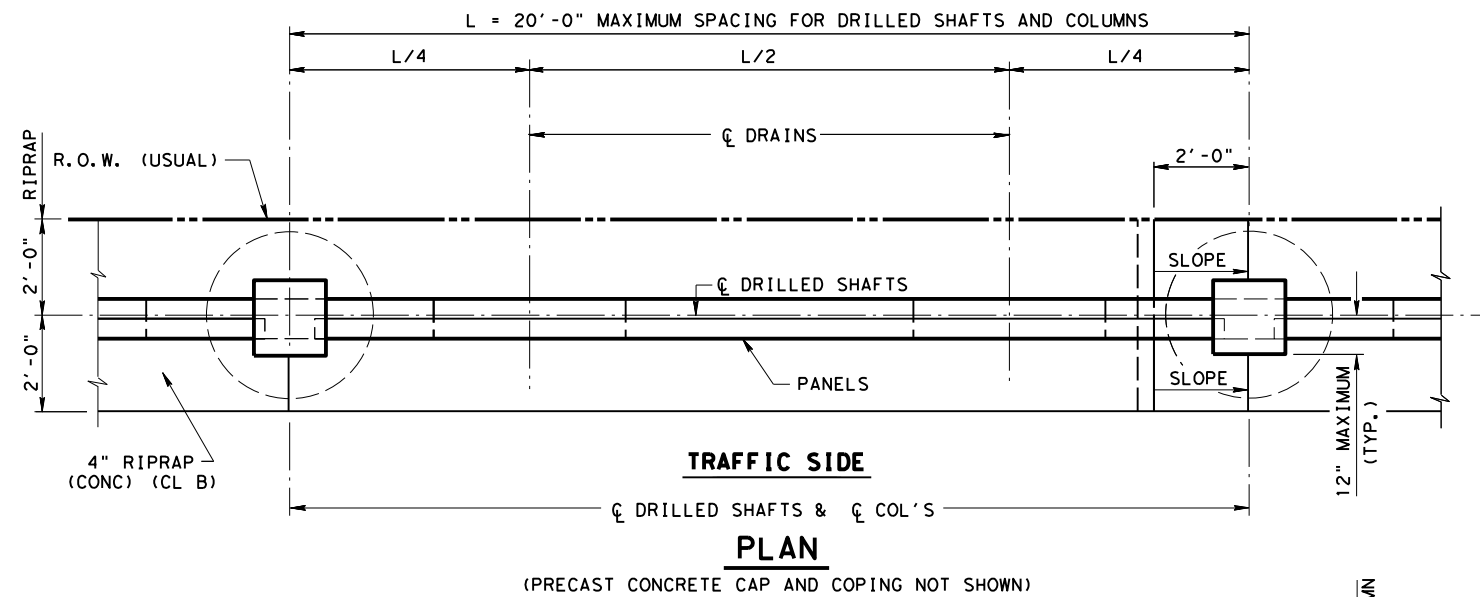


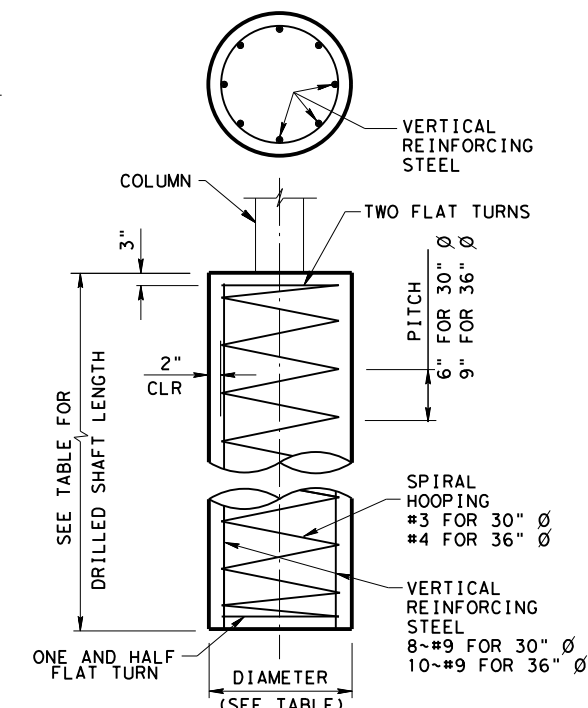
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DATE: FILE:

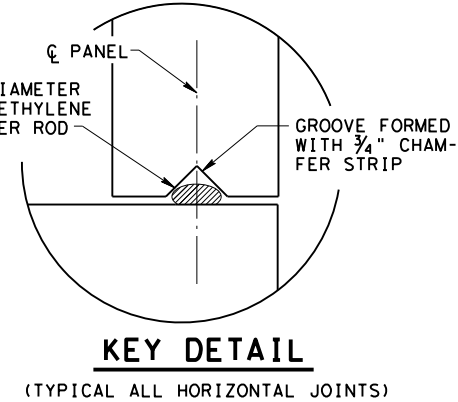
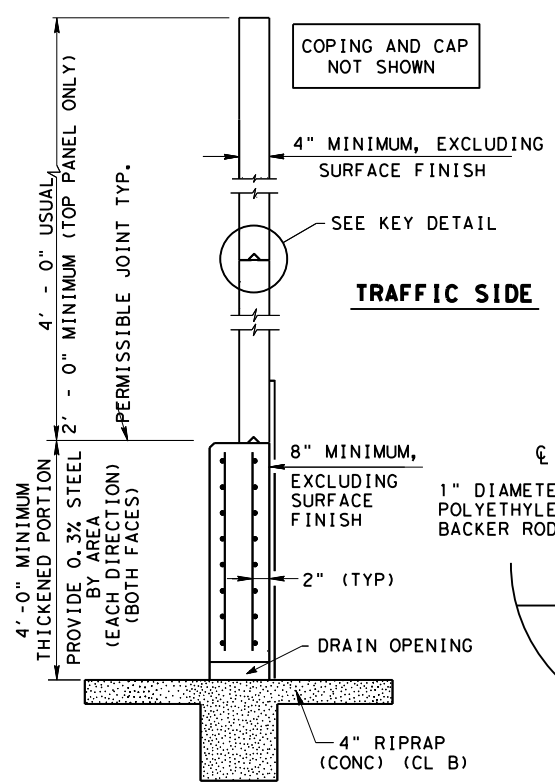


DRILLED SHAFT DESIGN

WALL HEIGHT	DRILLED SHAFT	
	DIAMETER	LENGTH



DRILLED SHAFT DETAIL



PLAN NOTES:

- GENERAL**
DESIGN THE SOUND WALL IN ACCORDANCE WITH CURRENT AASHTO GUIDE SPECIFICATIONS FOR STRUCTURAL DESIGN OF SOUND BARRIERS.
- SURFACE FINISH**
UNLESS OTHERWISE SHOWN IN PLANS, PROVIDE BRUSH CONCRETE OR ASHLAR STONE #12020 TEXTURE FOR THE RESIDENTIAL SIDE OF THE SOUND WALL. PATTERN THE FREEWAY SIDE USING A "FRACTURED FIN" FORMLINER. PROVIDE FORMLINERS USED FOR TEXTURING MADE OF ONE PIECE CONSTRUCTION. JOINTS ARE NOT PERMITTED IN FORMLINERS.
- SEE SHEET 3 OF 3, SOUND WALL DETAILS, OR AS DIRECTED, FOR PAINT COLOR ON RESIDENTIAL AND FREEWAY SIDES.
- PRECAST CONCRETE SEGMENTS**
PRECAST SEGMENTS MAY BE CAST FULL HEIGHT. THE WALL MAY BE CAST MONOLITHICALLY WITH THE COLUMN. GROUT SEGMENTALLY PRECAST COLUMN JOINTS SMOOTH.
- STRUCTURAL STEEL**
GALVANIZE EXPOSED STEEL PARTS IN ACCORDANCE WITH THE ITEM 445 "GALVANIZING". PAINT GALVANIZED STEEL PER ITEM 446. GALVANIZED ANCHOR BOLTS MAY REMAIN UNPAINTED.
- LOADING**
DESIGN THE SOUND WALL TO WITHSTAND A MINIMUM WIND SPEED OF 100 MILES PER HOUR AND FOR EXPOSURE B2.
- CONNECTIONS**
DESIGN CONNECTIONS OF THE SOUND WALL TO THE FOUNDATIONS USING A FACTOR OF SAFETY OF TWO (2) AGAINST WIND LOAD ALONE, IN ADDITION TO OTHER LOAD COMBINATIONS SPECIFIED. ENSURE CONNECTIONS UTILIZING THREADED RODS OR ANCHOR BOLTS CONFORM TO THE REQUIREMENTS OF THE ITEM "ANCHOR BOLTS". ENSURE CONNECTIONS UTILIZING POST TENSIONING CONFORM TO THE REQUIREMENTS OF THE ITEM "PRESTRESSING". NO UNGROUTED TENDONS ARE ALLOWED, EXCEPT PRESTRESSING USED TO TEMPORARILY SECURE THE WALL.
- REINFORCEMENT**
WIRE MESH MAY BE USED IN LIEU OF DEFORMED BARS IN PANELS.
- PAYMENT**
REFER TO ITEM 419 "CONCRETE SOUND (NOISE) WALLS FOR PAYMENT"

- NOTE TO DESIGNER:**
- AT EACH STREET INTERSECTION, CAREFULLY EVALUATE THE SOUND BARRIER WALL LOCATION TO ENSURE COMPLIANCE WITH SIGHT DISTANCE REQUIREMENTS AS SPECIFIED IN THE CURRENT AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS.
 - THE MOST DESIRABLE LOCATION FOR A SOUND WALL IS JUST INSIDE THE RIGHT-OF-WAY OR OUTSIDE THE CLEAR ZONE WITH THE FACE OF THE SOUND WALL LOCATED 6' OR MORE FROM THE FACE OF CURB.
 - PROVIDE RIPRAP BETWEEN THE ROW AND BACK OF SOUND BARRIER WALL WHEN PRACTICAL TO REDUCE FUTURE MAINTENANCE. RIPRAP IS PAID FOR UNDER ITEM 432.
 - THE DRILLED SHAFT DESIGN TABLE NEEDS TO BE FILLED IN BY THE DESIGNER. DRILLED SHAFTS ARE PAID FOR UNDER ITEM 416 "DRILLED SHAFTS".
 - THIS SHEET MUST BE SIGNED AND SEALED BY THE DESIGN ENGINEER.
 - PLACE SOUND WALLS SO AS NOT TO ALTER THE FLOW OF STORM WATER RUNOFF.

DELETE BEFORE SUBMITTAL

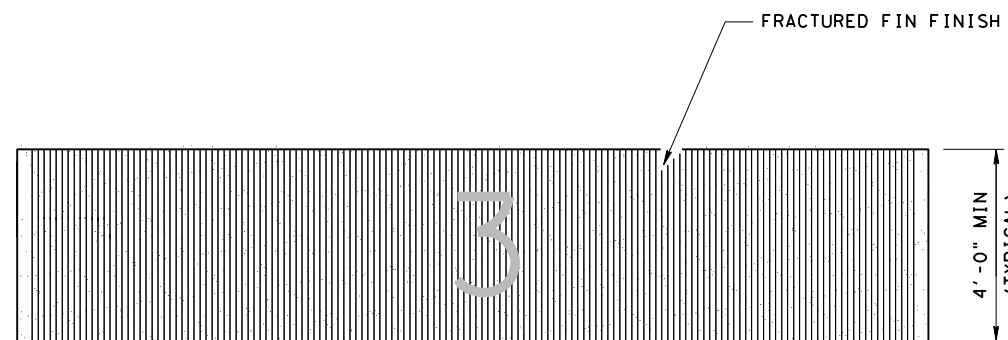
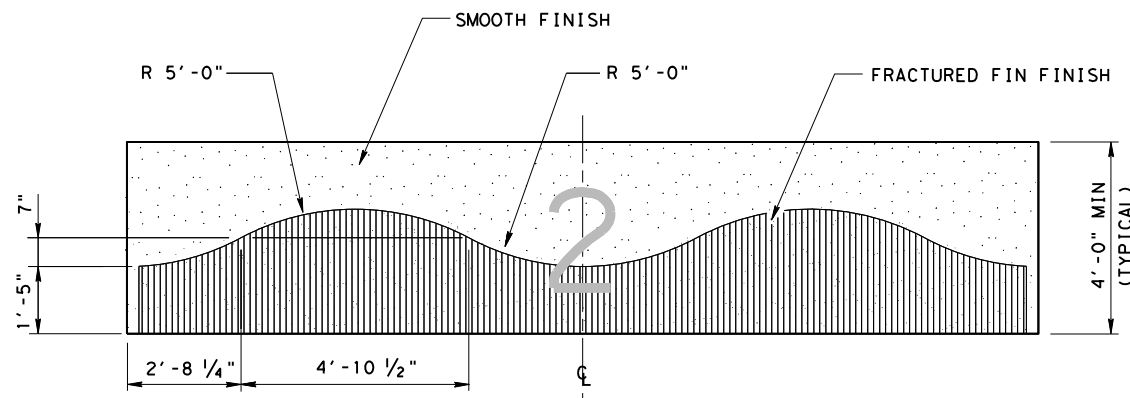
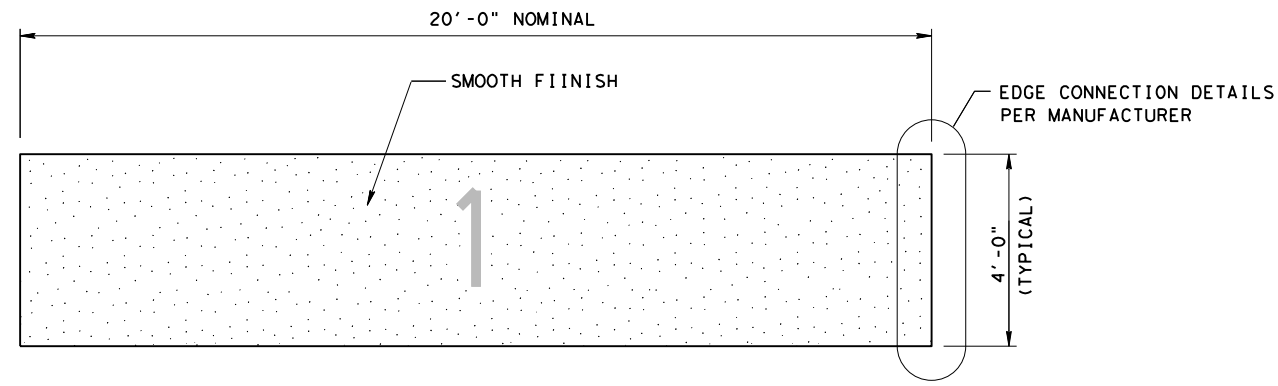
Texas Department of Transportation
Bridge Houston District Standard

SOUND WALL DETAILS WAVE SCHEME

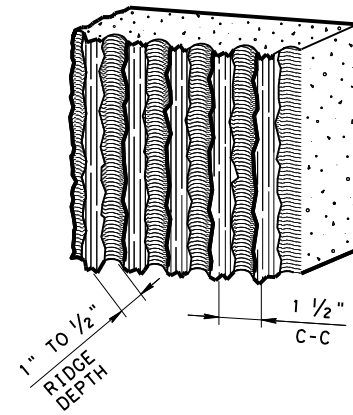
SWD-WS-25 (HOU)

FILE: SWD-WS-25 (HOU).DGN	DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT
© TXDOT April 2025	CONT	SECT	JOB	HIGHWAY
REVISIONS				
12/2010: Update bottom panel steel requirements.				
09/2014: Usual added to ROW.				
06/2017: Removed Min. Slope Blend				
04/2025: 2024 Spec Updates				

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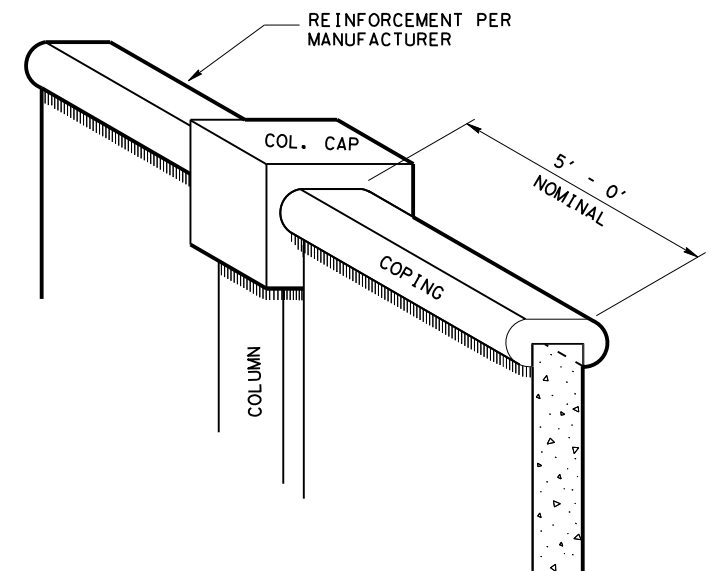
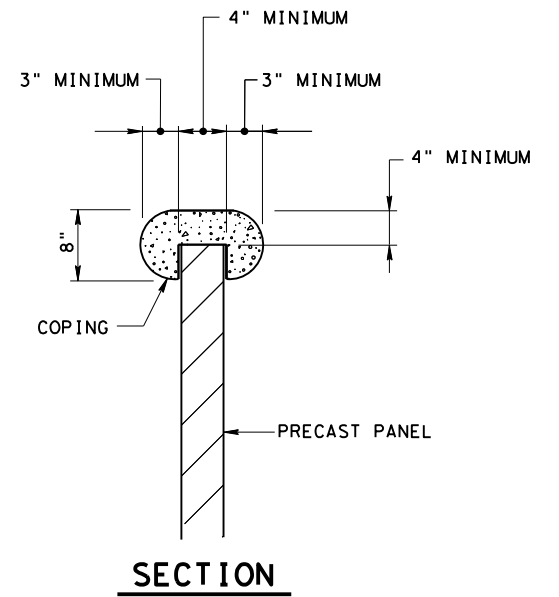


PANEL ELEVATIONS FREEWAY SIDE
(RESIDENTIAL SIDE TO BE BRUSH CONCRETE OR ASHLAR STONE #12020)

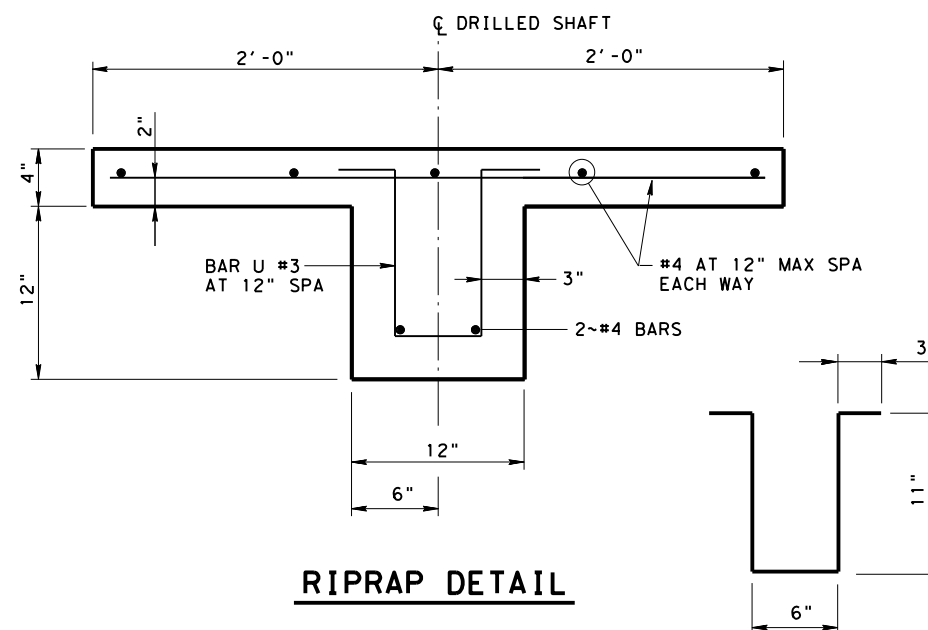


FRACTURED FIN PATTERN
PRECAST CONCRETE PANEL (FREEWAY SIDE)

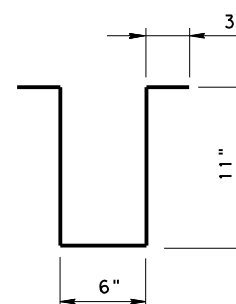
FRACTURED FIN PATTERN	
FORM LINER NO	MFG
#109	SCOTTSYSTEM, INC.
#373	GREENSTREAK
#16950	FITZGERALD FORMLINERS
OR EQUAL ~ SUBJECT TO APPROVAL	



PRECAST CONCRETE COPING
N. T. S.



RIPRAP DETAIL



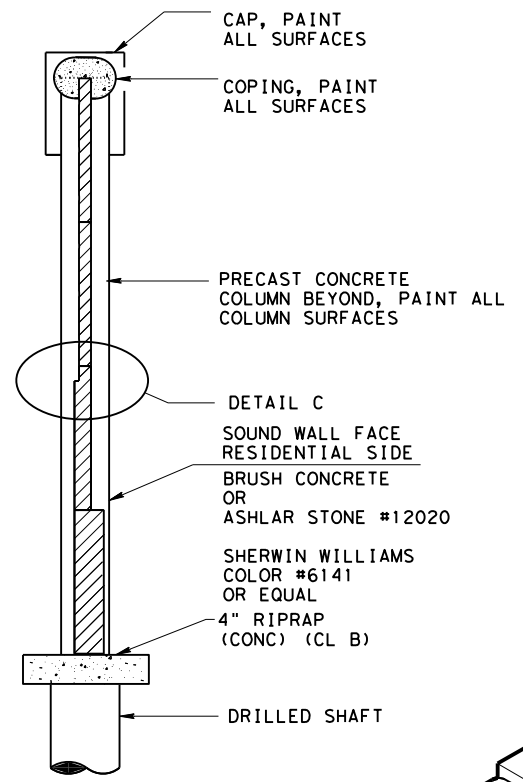
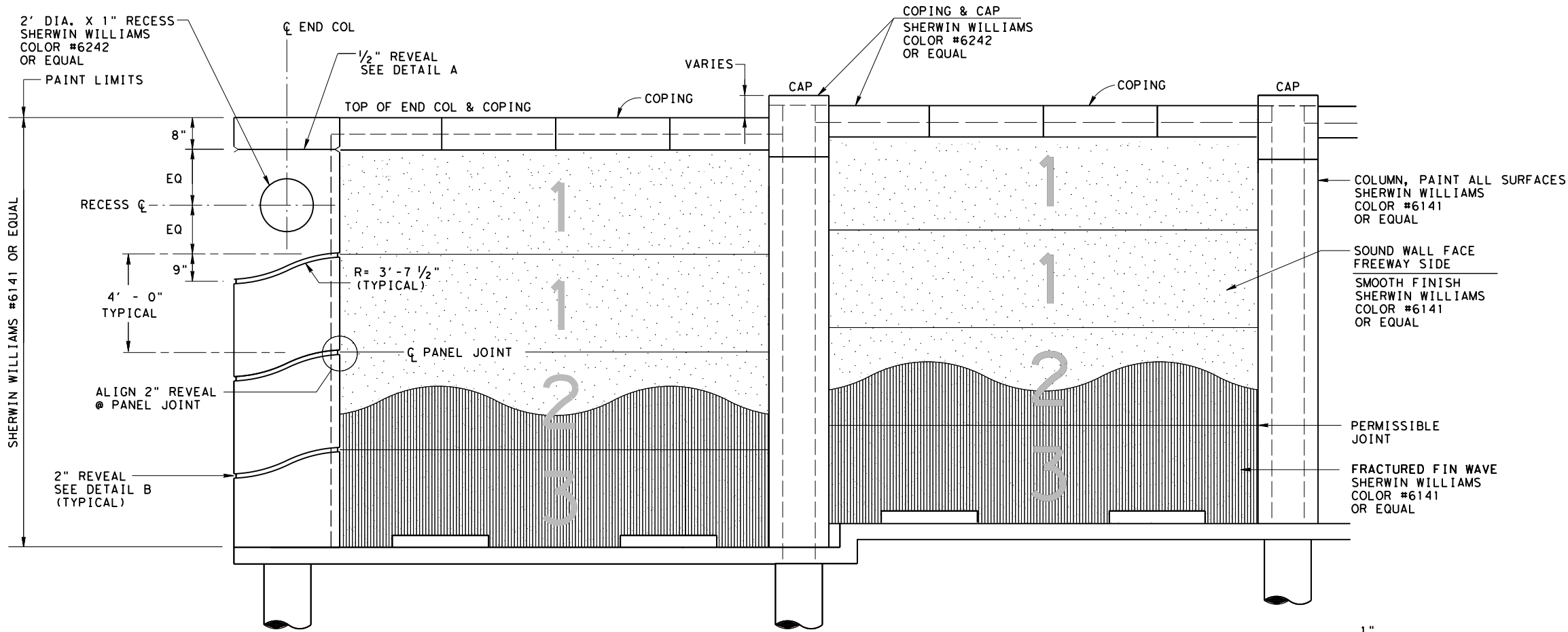
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SOUND WALL DETAILS
WAVE SCHEME

SWD-WS-25 (HOU)

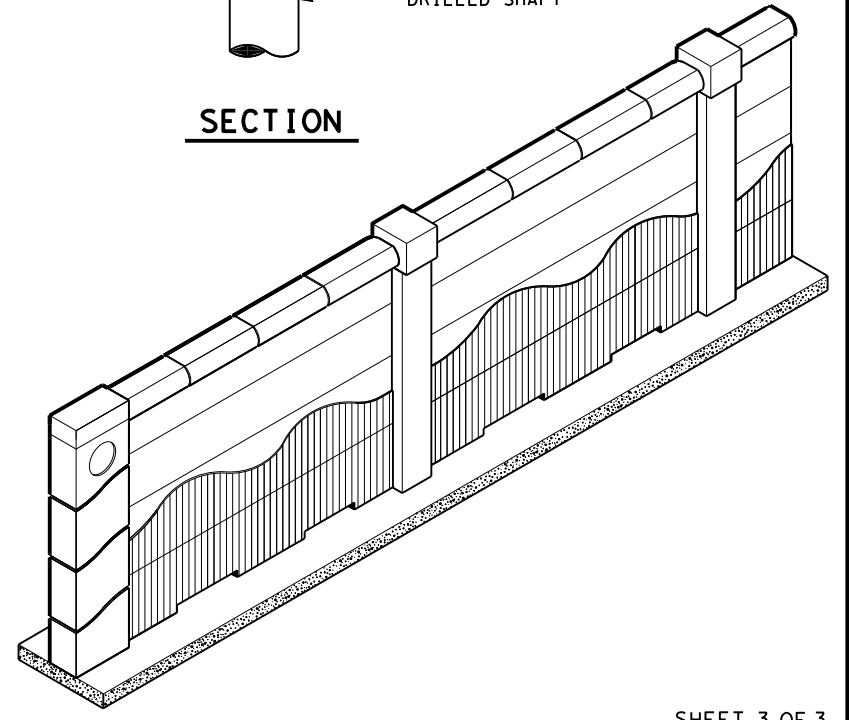
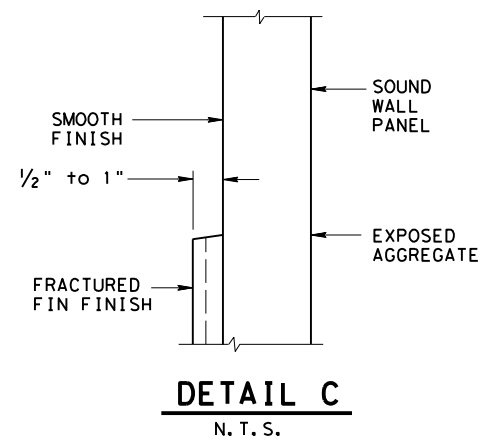
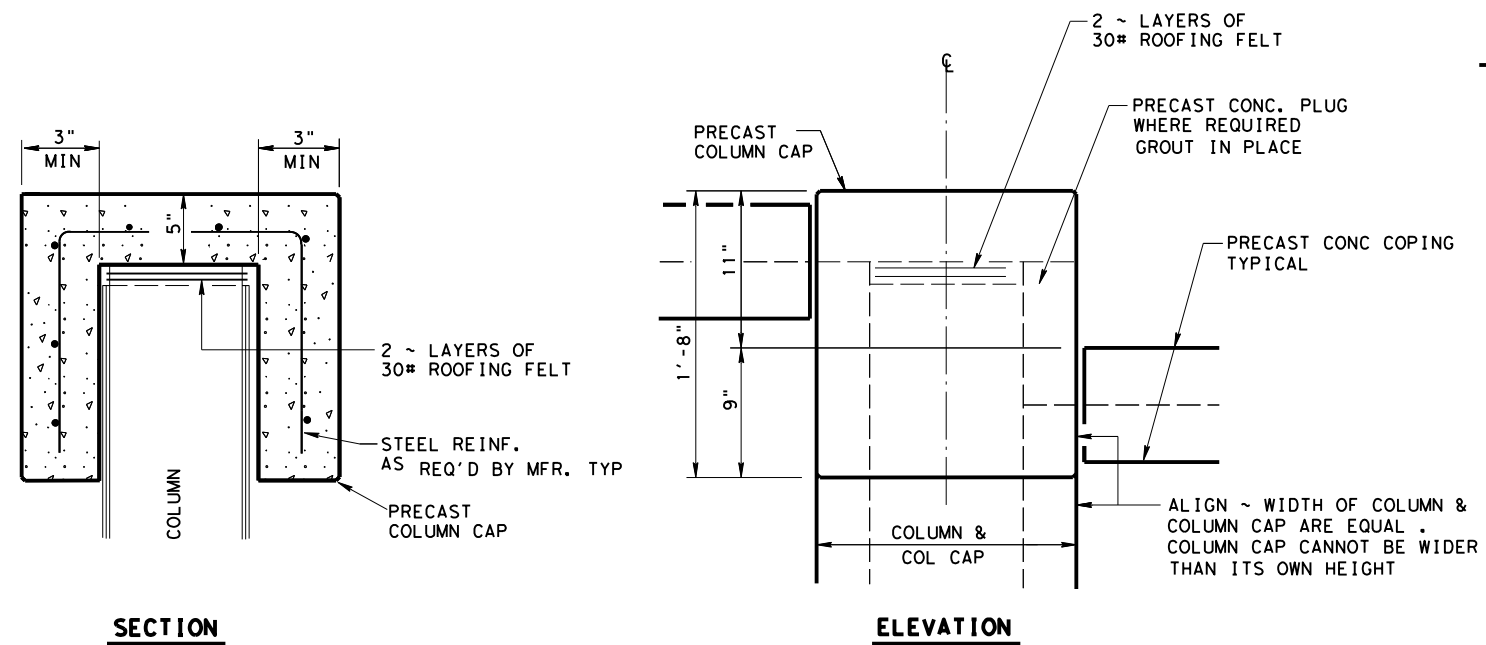
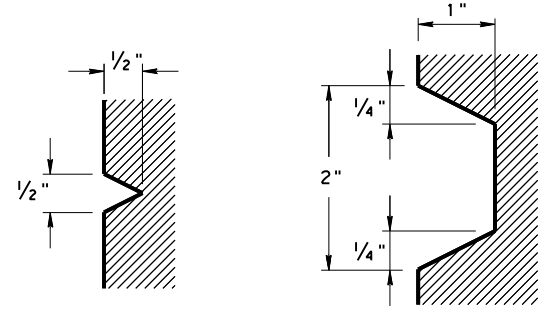
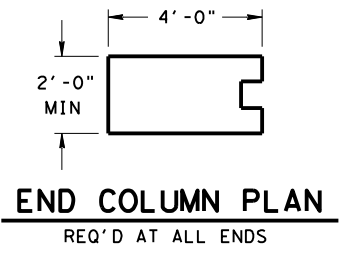
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ELEVATION

SECTION



SHEET 3 OF 3



**SOUND WALL DETAILS
WAVE SCHEME**

SWD-WS-25 (HOU)

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