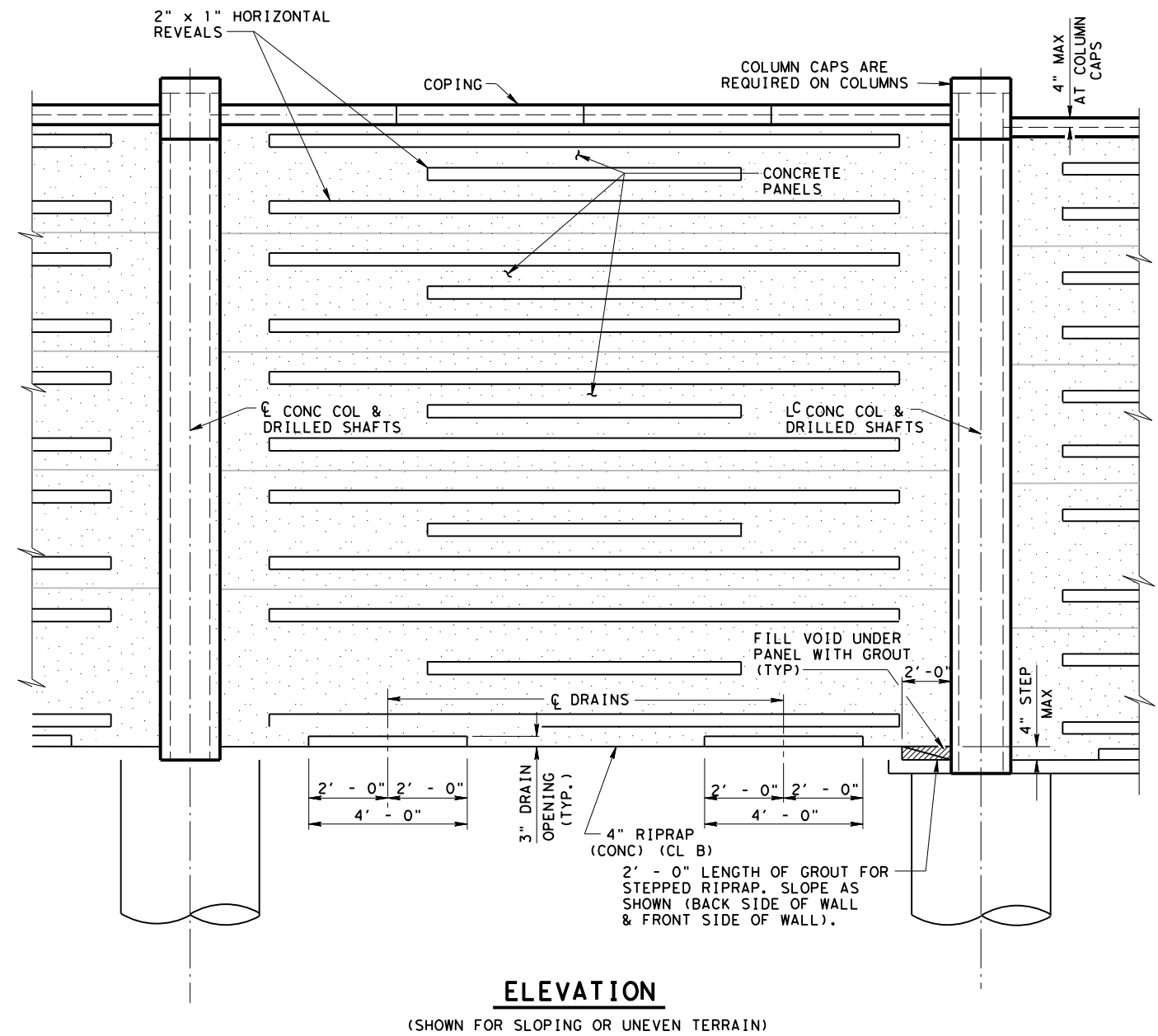
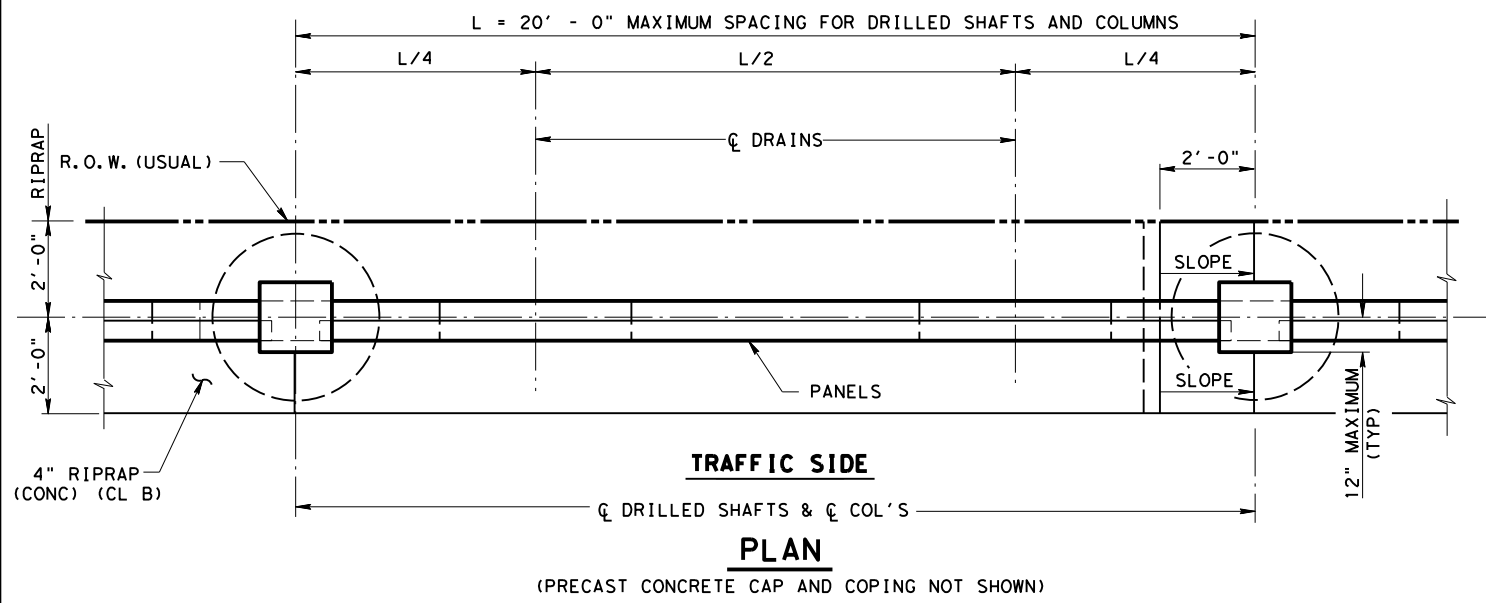


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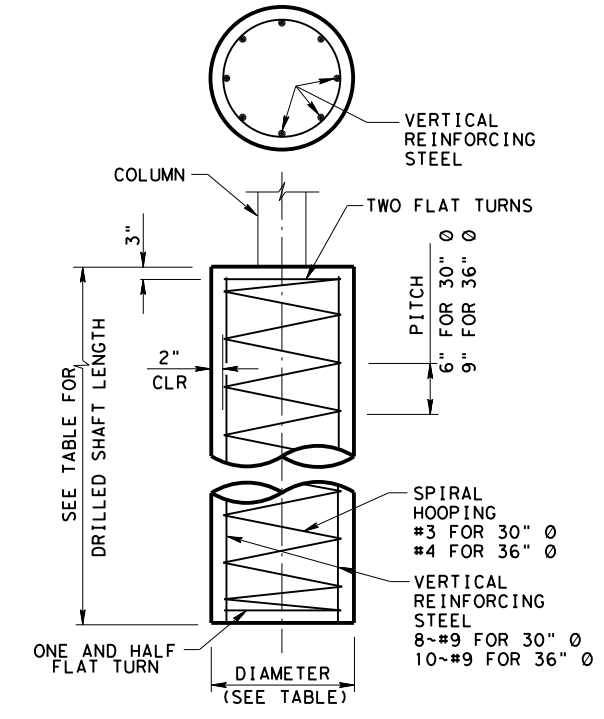
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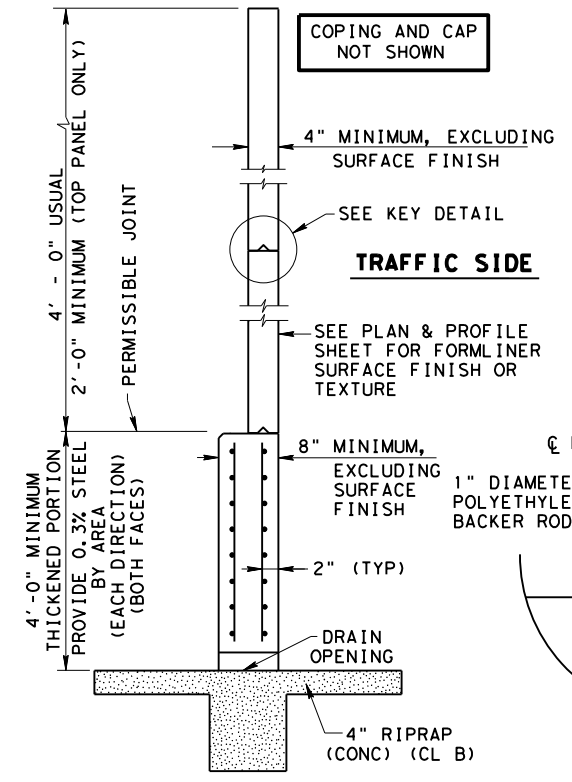
**ELEVATION**  
(SHOWN FOR SLOPING OR UNEVEN TERRAIN)

**DRILLED SHAFT DESIGN**

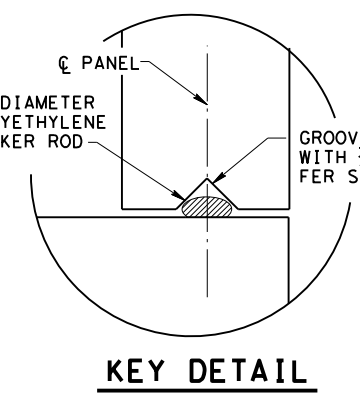
WALL HEIGHT	DRILLED SHAFT	
	DIAMETER	LENGTH



**DRILLED SHAFT DETAIL**



**TYPICAL SECTION**



**KEY DETAIL**  
(TYPICAL ALL HORIZONTAL JOINTS)

**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 AS SHOWN WITH SMOOTH CONCRETE FINISH. PROVIDE FORMLINERS USED FOR PATTERN MADE OF ONE PIECE CONSTRUCTION. JOINTS ARE NOT BE 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"

**DELETE BEFORE SUBMITTAL**

**NOTE TO DESIGNER:**

1. 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.
2. 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.
3. PROVIDE RIPRAP BETWEEN THE ROW AND BACK OF SOUND BARRIER WALL WHEN PRACTICAL TO REDUCE FUTURE MAINTENANCE. RIPRAP IS PAID FOR UNDER ITEM 432.
4. THE DRILLED SHAFT DESIGN TABLE NEEDS TO BE FILLED IN BY THE DESIGNER. DRILLED SHAFTS ARE PAID FOR UNDER ITEM 416 "DRILLED SHAFTS".
5. THIS SHEET MUST BE SIGNED AND SEALED BY THE DESIGN ENGINEER.
6. PLACE SOUND WALLS SO AS NOT TO ALTER THE FLOW OF STORM WATER RUNOFF.

SHEET 1 OF 3

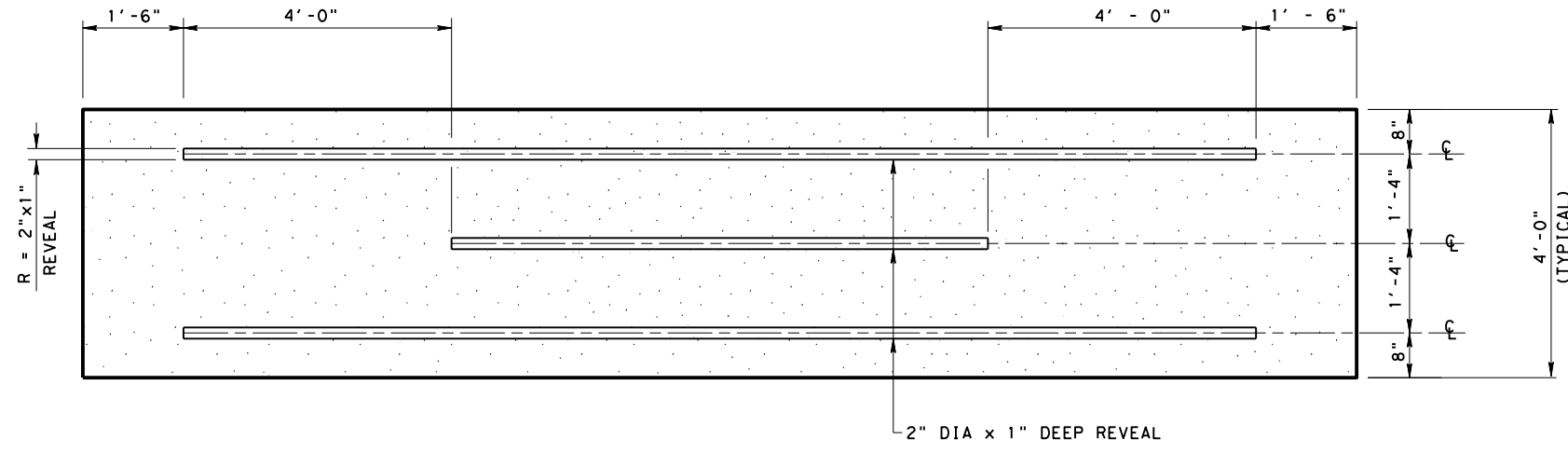


**SOUND WALL DETAILS  
HORIZONTAL SCHEME**

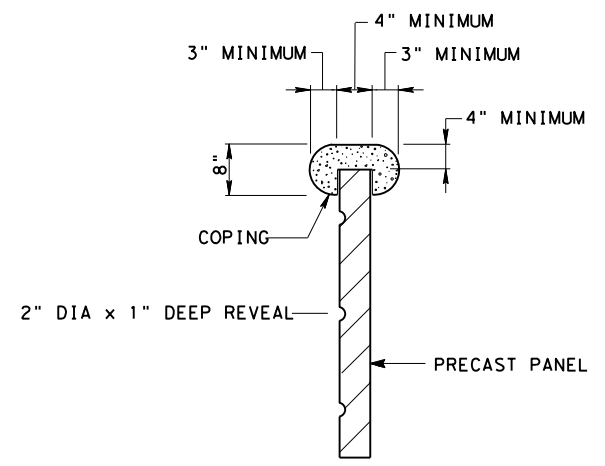
**SWD-HS-25 (HOU)**

FILE: SWD-HS-25 (HOU).DGN	DN: TxDOT	CK: TxDOT	DW: TxDOT	CR: TxDOT
© TxDOT April 2025	CONT	SECT	JOB	HIGHWAY
<b>REVISIONS</b>				
12/2010: Update bottom panel steel requirements.				
09/2014: Usual added to ROW.				
06/2017: Removed Wind Ratio Blend.				
04/2025: 2024 Spec Updates				
DIST	COUNTY			SHEET NO.

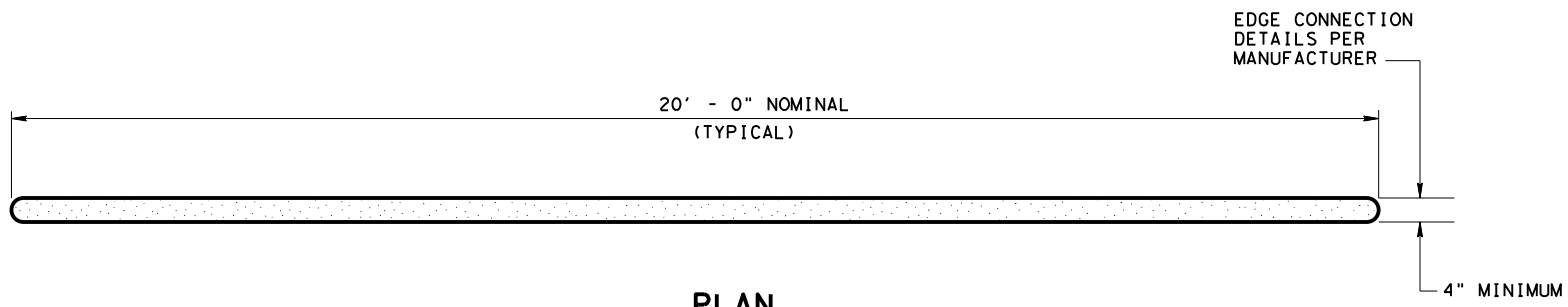
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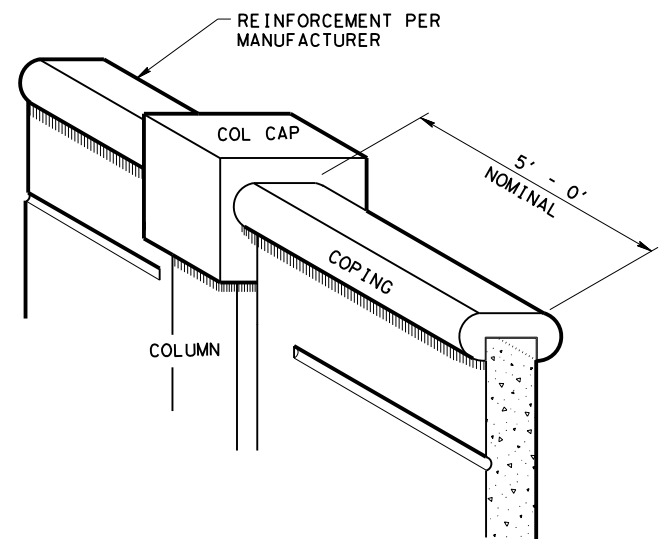
**ELEVATION**



**SECTION**

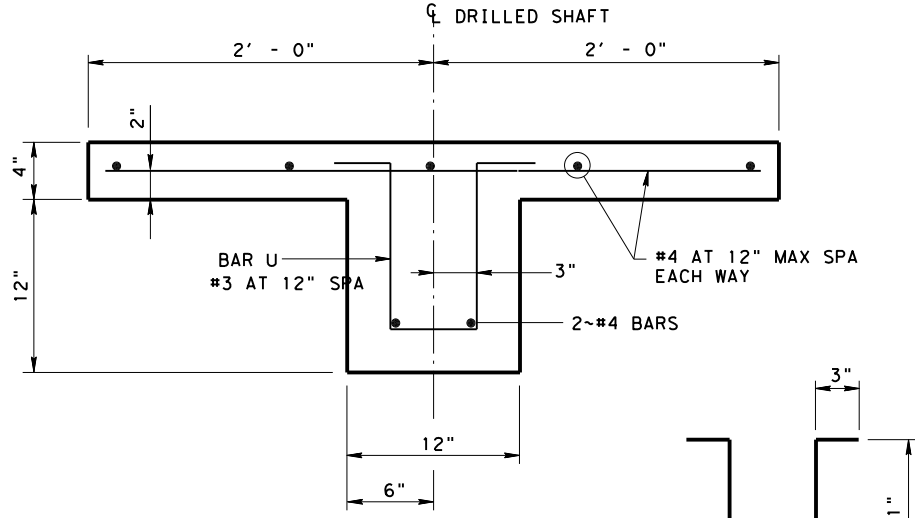
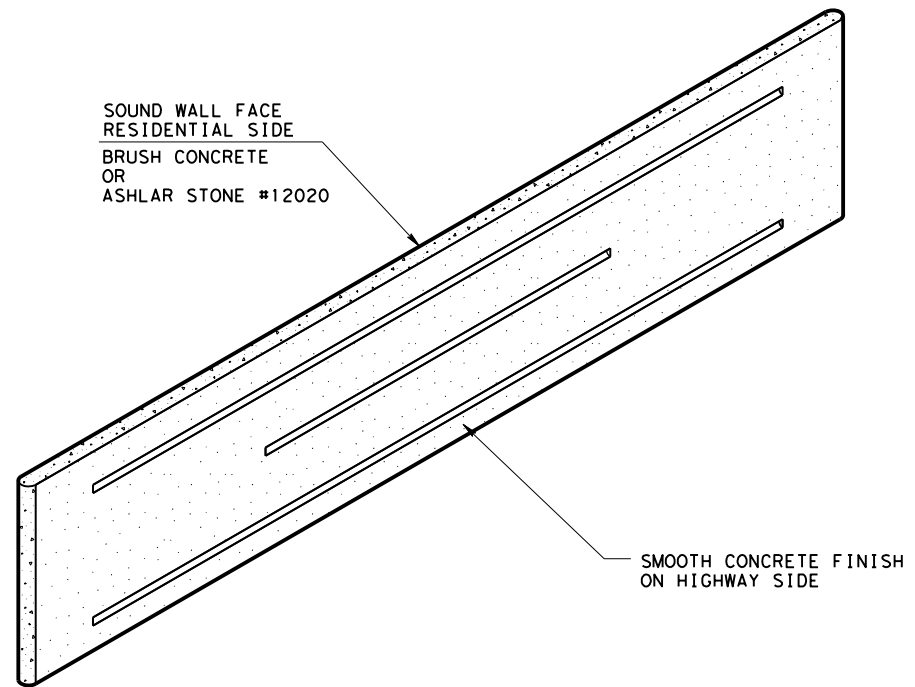


**PLAN**

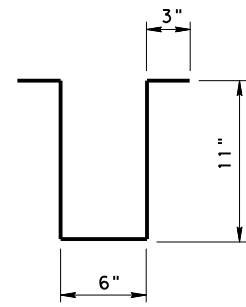


**PRECAST CONCRETE COPING**

N. T. S.



**RIPRAP DETAIL**



**BAR U**

SHEET 2 OF 3



**SOUND WALL DETAILS HORIZONTAL SCHEME**

**SWD-HS-25 (HOU)**

FILE: SWD-HS-25 (HOU).DGN	DN: TXDOT	CK: TXDOT	DW: TXDOT	CR: TXDOT
©TxDOT April 2025	CONT	SECT	JOB	HIGHWAY
<b>REVISIONS</b>				
12/2010: Update bottom panel steel requirements.				
09/2014: Usual added to ROW.				
06/2017: Removed Mini-Waho Blend.				
04/2025: 2024 Spec Updates				
DIST	COUNTY			SHEET NO.

DATE:  
FILE:

