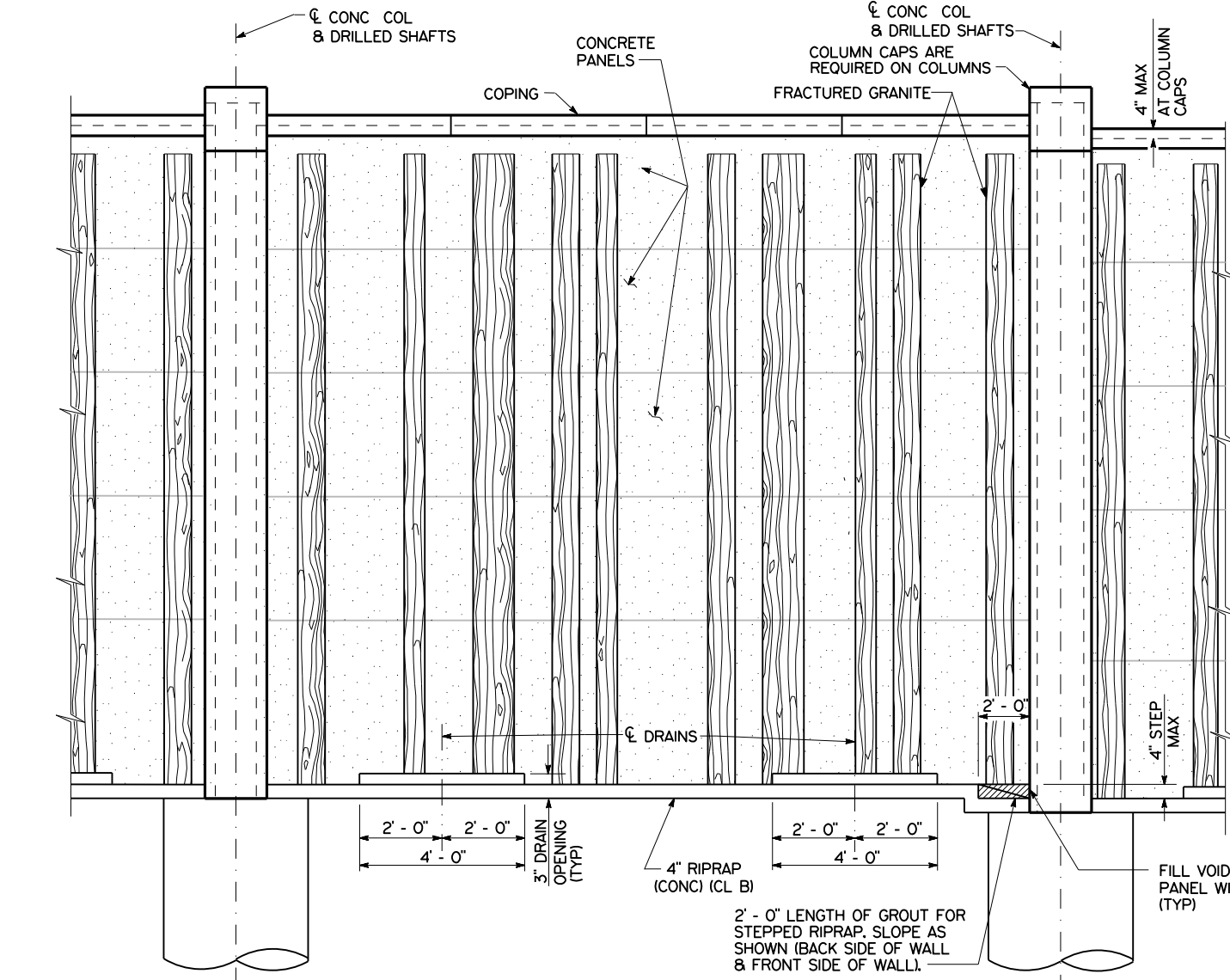


PLAN

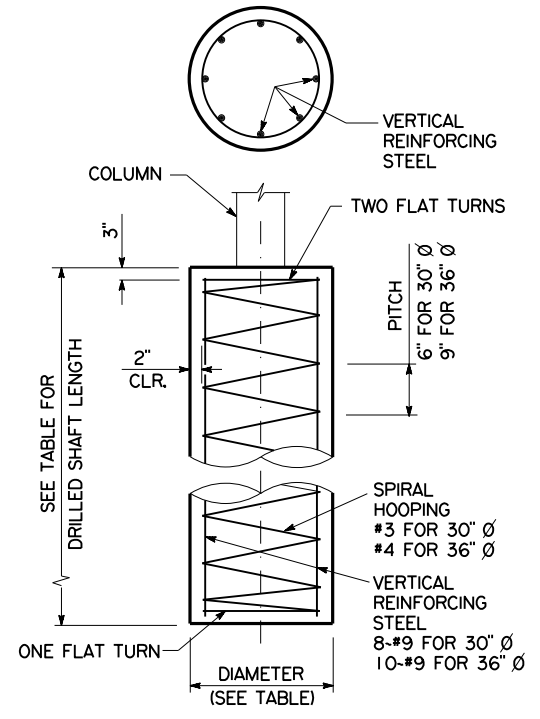
(PRECAST CONCRETE CAP AND COPING NOT SHOWN)



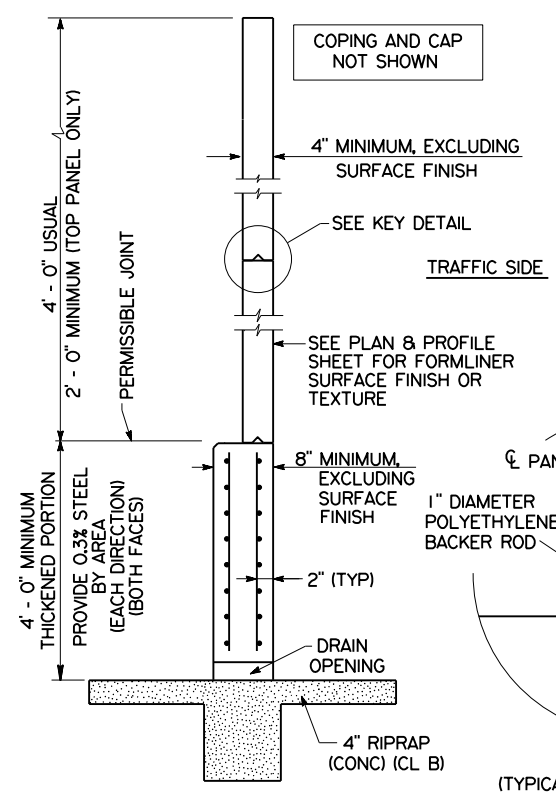
ELEVATION

(SHOWN FOR SLOPING OR UNEVEN TERRAIN)

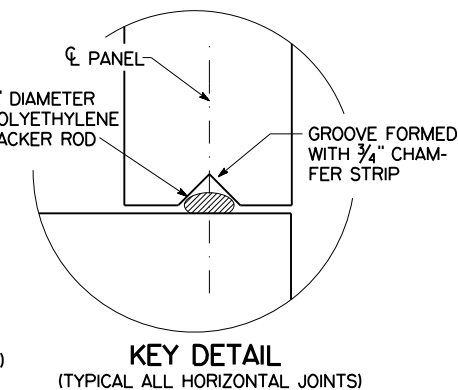
DRILLED SHAFT DESIGN		
WALL HEIGHT	DRILLED SHAFT	
	DIAMETER	LENGTH



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 USING A "FRACTURED GRANITE" FORMLINER MANUFACTURED BY SCOTT SYSTEMS, INC. DENVER, COLORADO OR EQUAL. 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 "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.

NOTE TO DESIGNER:

- DELETE BEFORE SUBMITTAL
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.

Texas Department of Transportation
Houston District Bridge
Green Ribbon Project

SOUND WALL DETAILS
VERTICAL SCHEME

SWD-VS

FILE: STDJ5.DGN	DW: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT DEC. 2010	DISTRICT HOUSTON	FED REG 6	PROJECT NO.	SHEET
REVISIONS				
12/2010 Update bottom panel steel requirements.				
8/2014 (usual) added to ROW.				
6/2017 Removed Minn'l Hand Blends.				
COUNTY	CONTROL	SECT	JOB	HIGHWAY