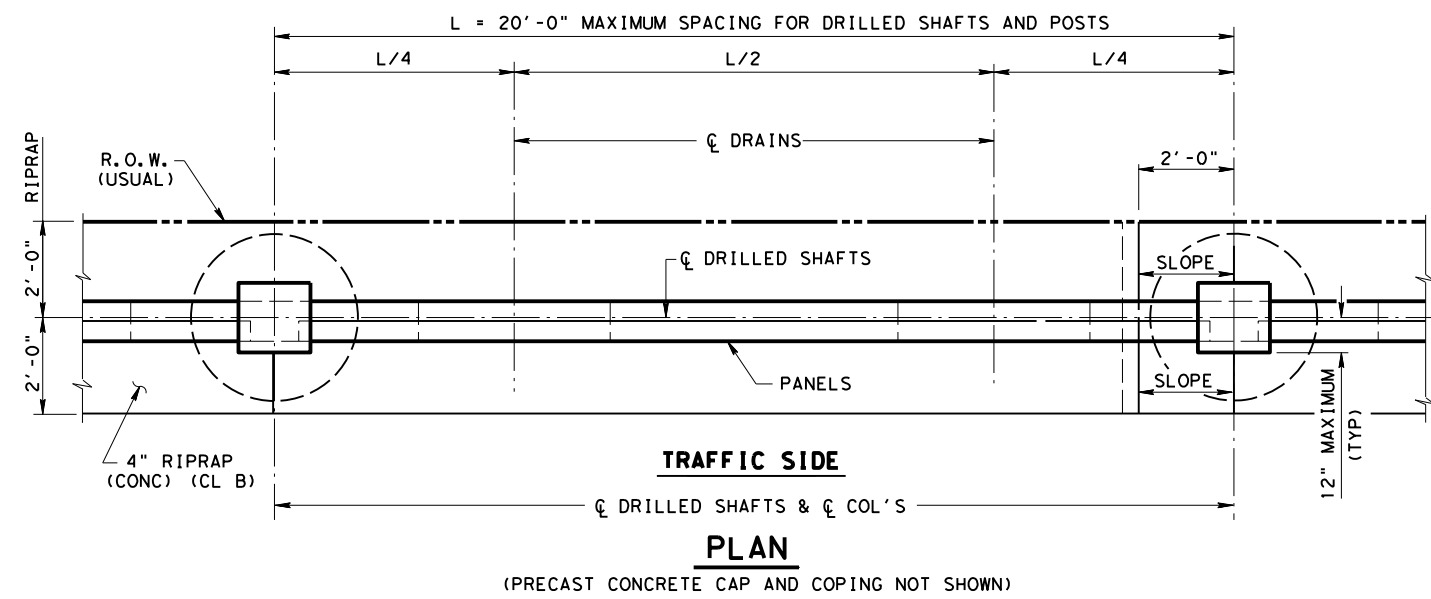
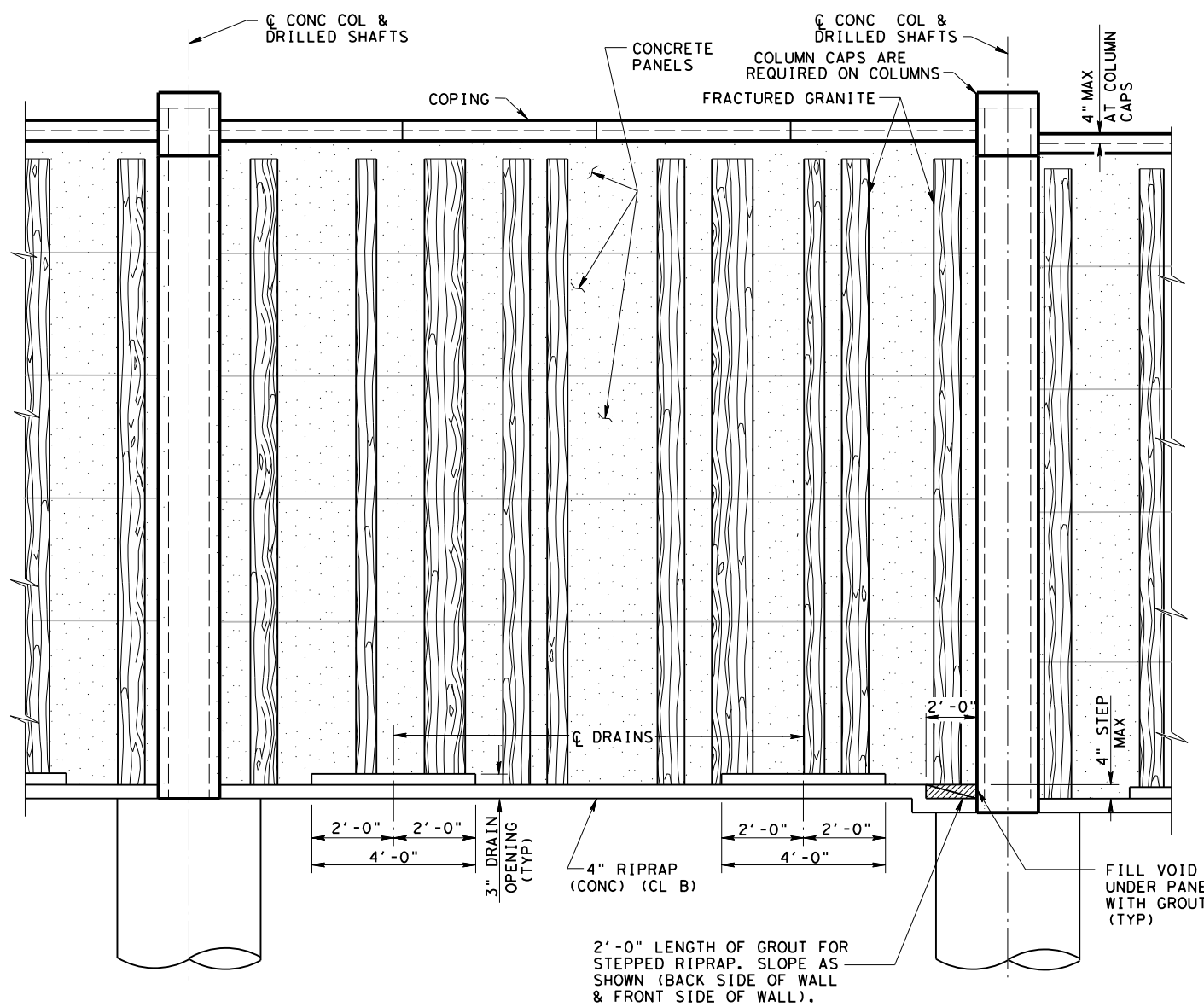


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DATE: FILE:

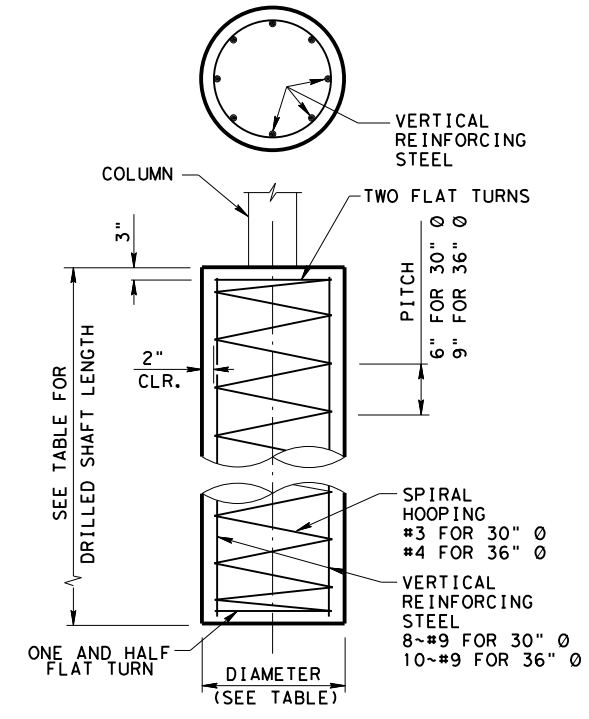


PLAN
(PRECAST CONCRETE CAP AND COPING NOT SHOWN)

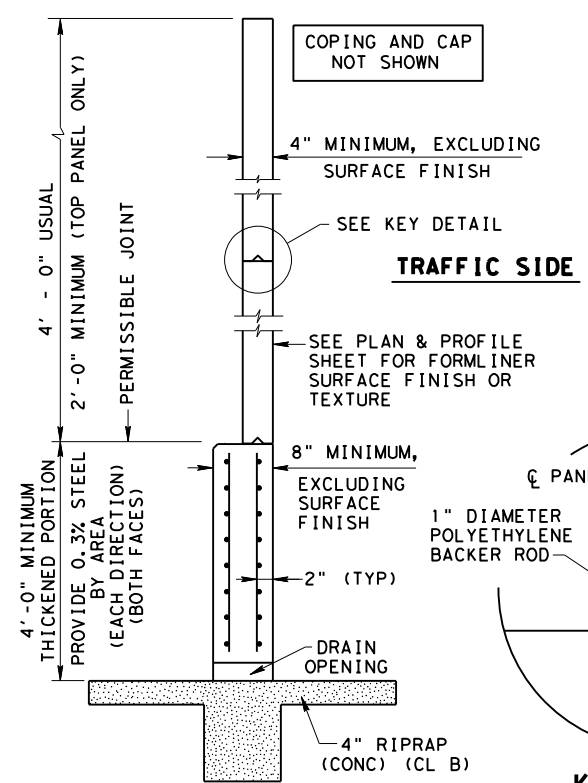


ELEVATION
(SHOWN FOR SLOPING OR UNEVEN TERRAIN)

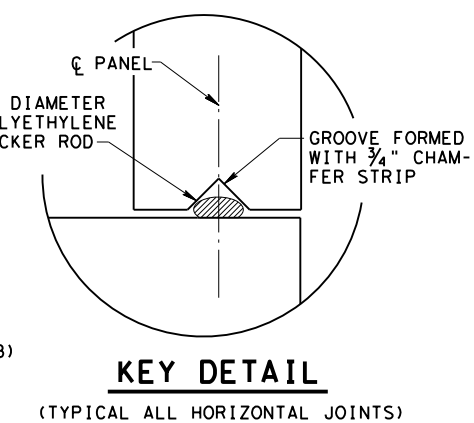
| WALL HEIGHT | DRILLED SHAFT | |
|-------------|---------------|--------|
| | DIAMETER | LENGTH |
| | | |
| | | |



DRILLED SHAFT DETAIL



PLAN OF PANELS



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. GREENWICH, NEW YORK 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 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:

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.

DELETE BEFORE SUBMITTAL

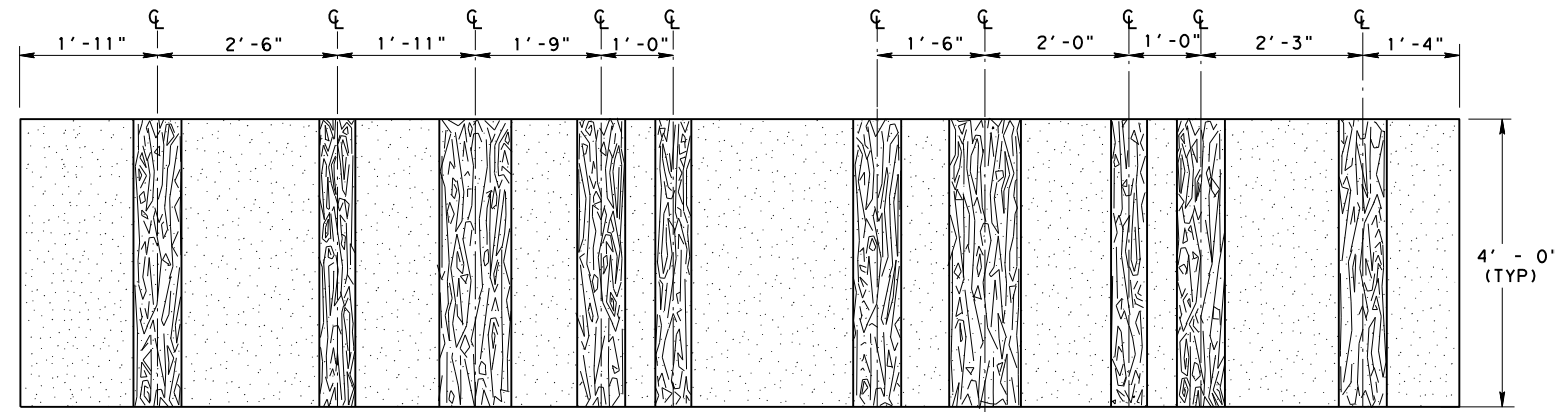


SOUND WALL DETAILS VERTICAL SCHEME

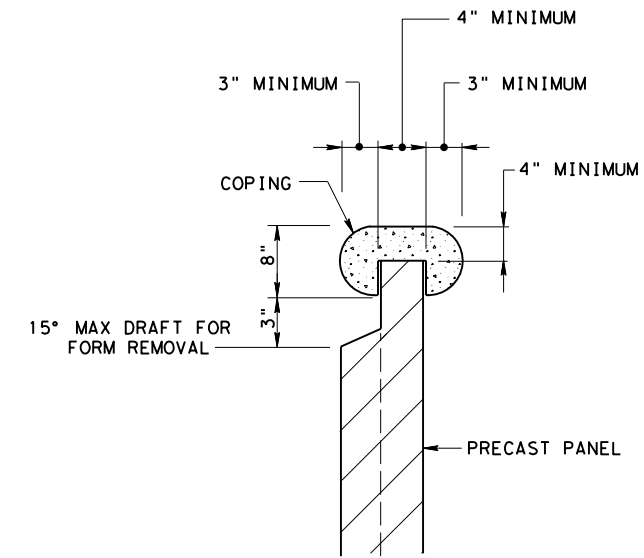
SWD-VS-25 (HOU)

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| © 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) Ratio Blend. | | | | |
| 04/2025: 2024 Spec Updates | | | | |
| DIST | COUNTY | | | SHEET NO. |

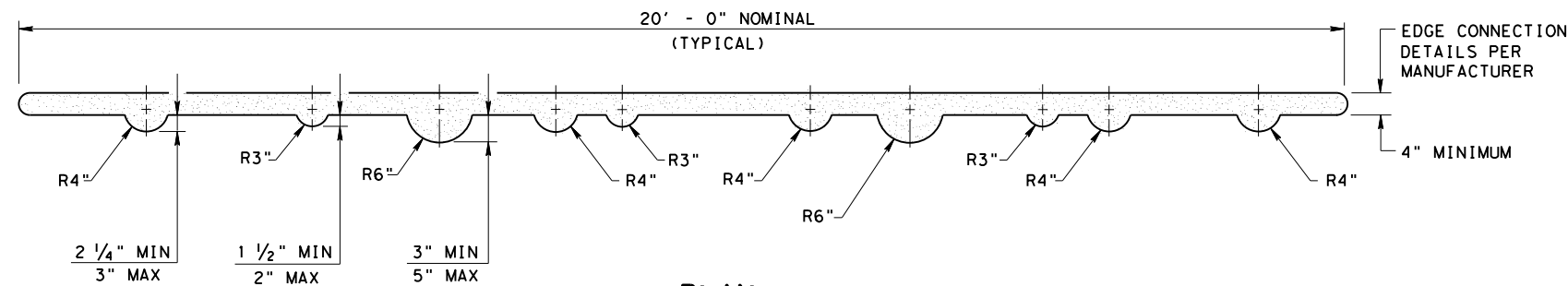
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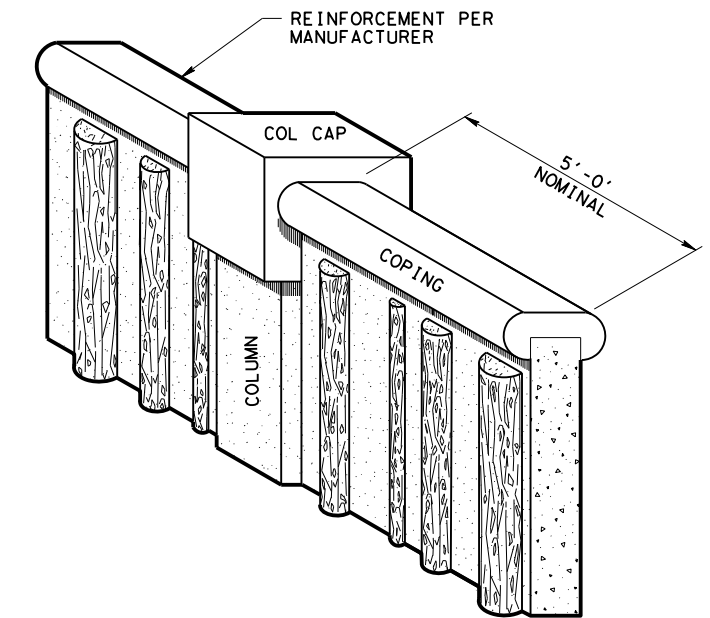
ELEVATION



SECTION

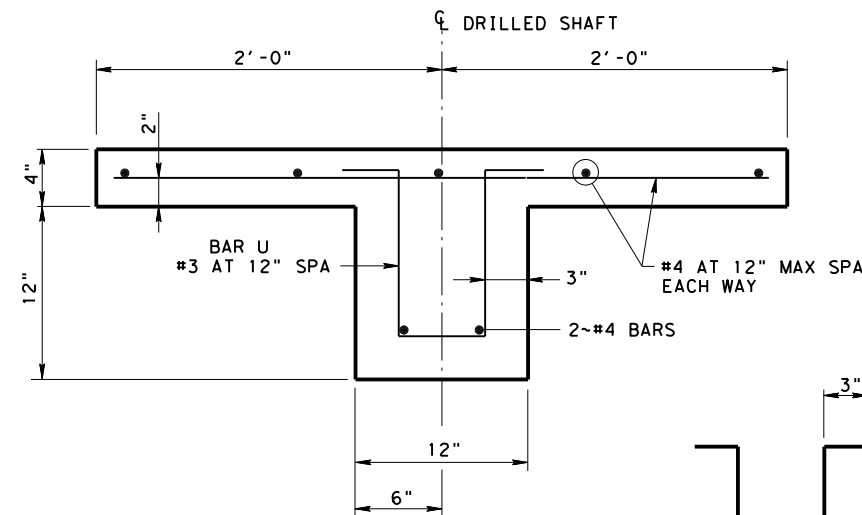
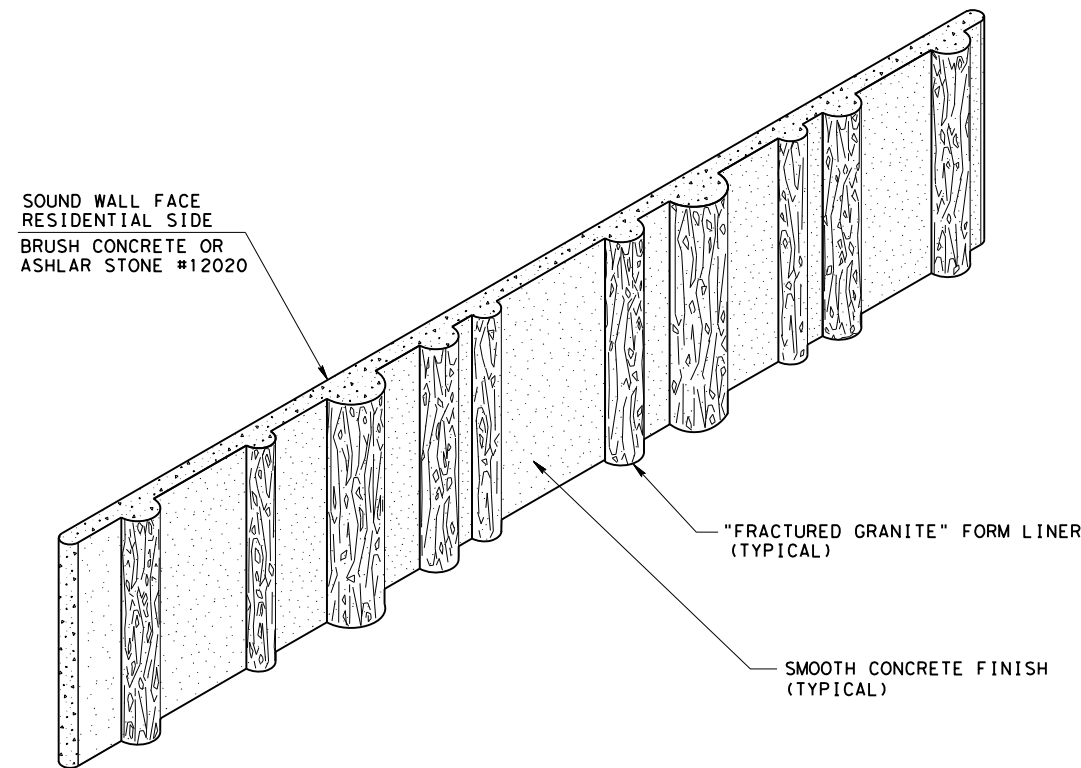


PLAN

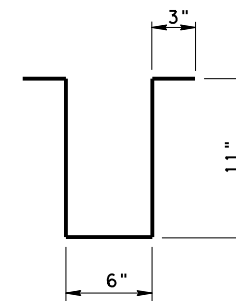


PRECAST CONCRETE COPING

N. T. S.



RIPRAP DETAIL



BAR U

SHEET 2 OF 3



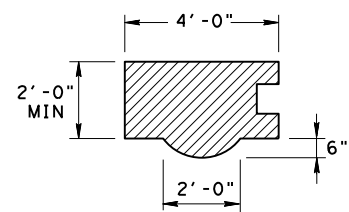
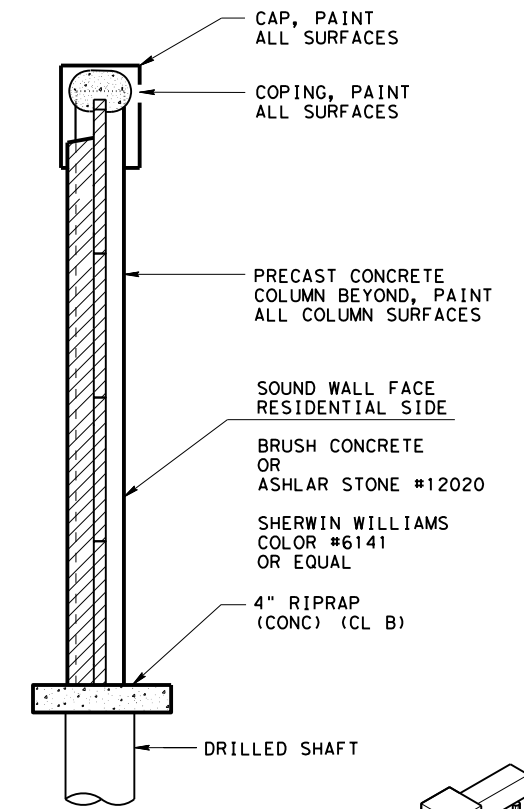
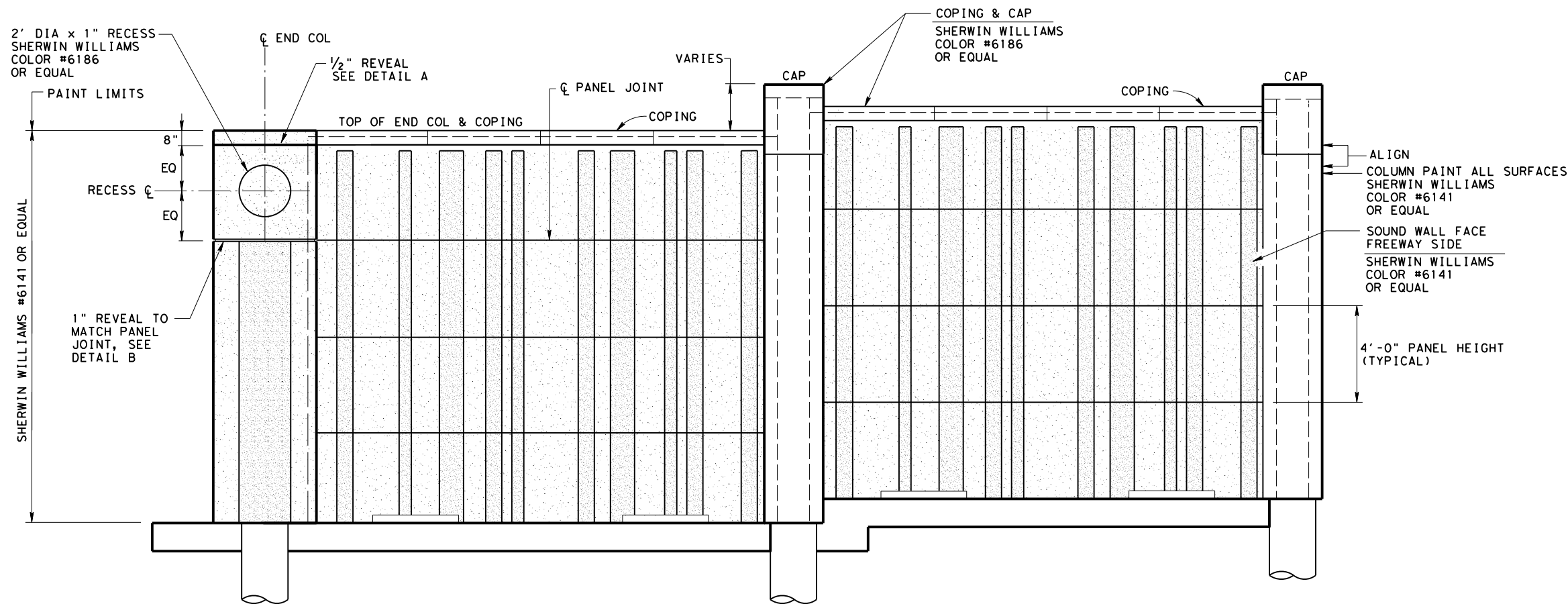
SOUND WALL DETAILS VERTICAL SCHEME

SWD-VS-25 (HOU)

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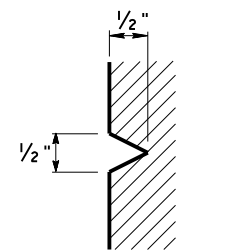
DATE:
FILE:

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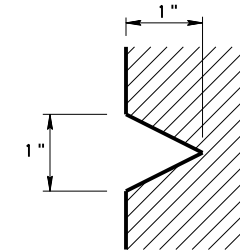


END COLUMN PLAN
REQ'D AT ALL ENDS

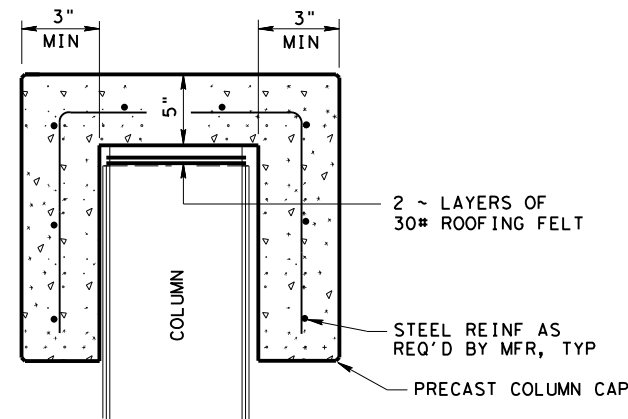
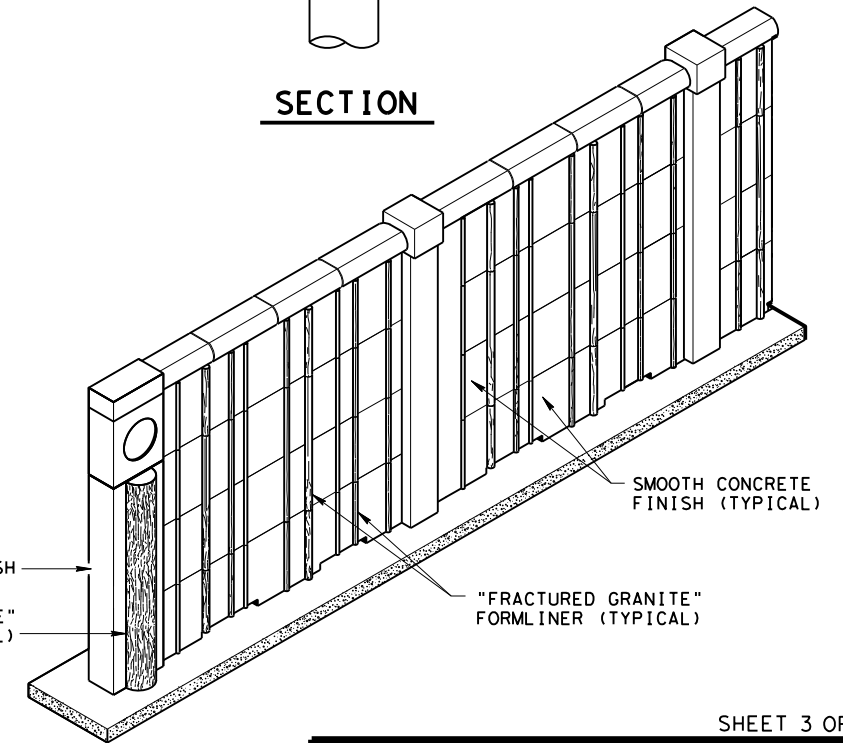
ELEVATION



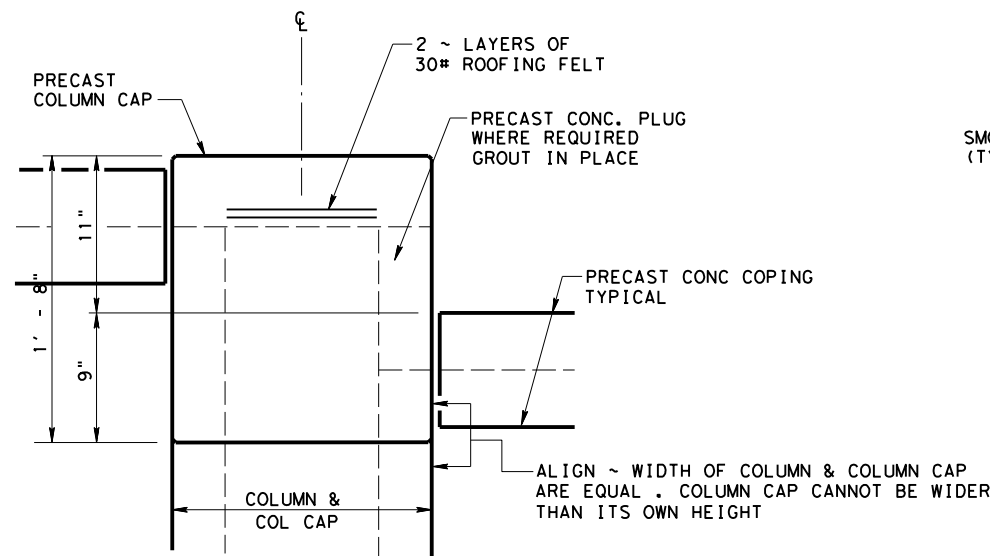
DETAIL A
N. T. S.



DETAIL B
N. T. S.



SECTION



ELEVATION

PRECAST CONCRETE COLUMN CAP

SHEET 3 OF 3



**SOUND WALL DETAILS
VERTICAL SCHEME**

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| | | | | |
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