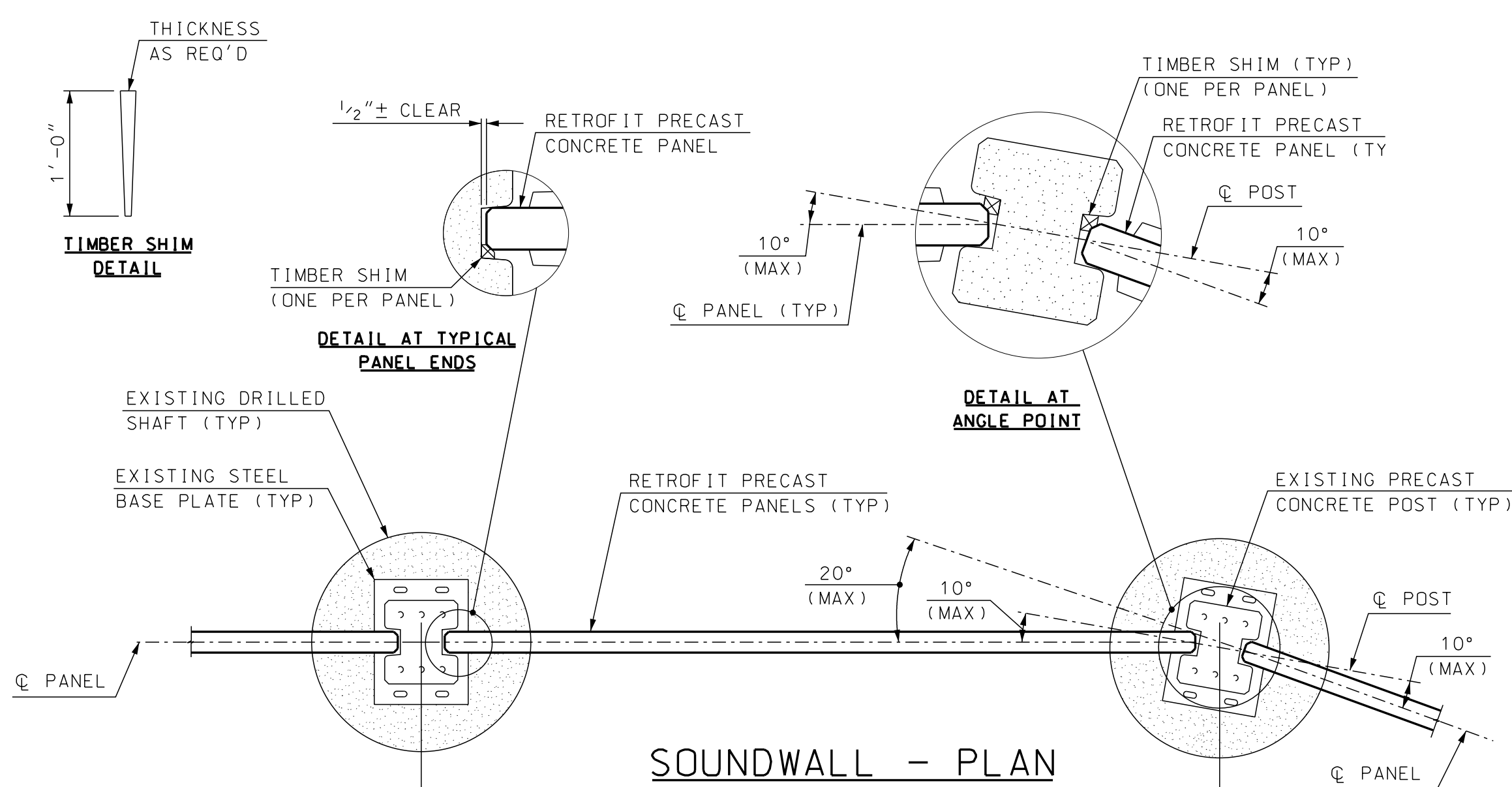
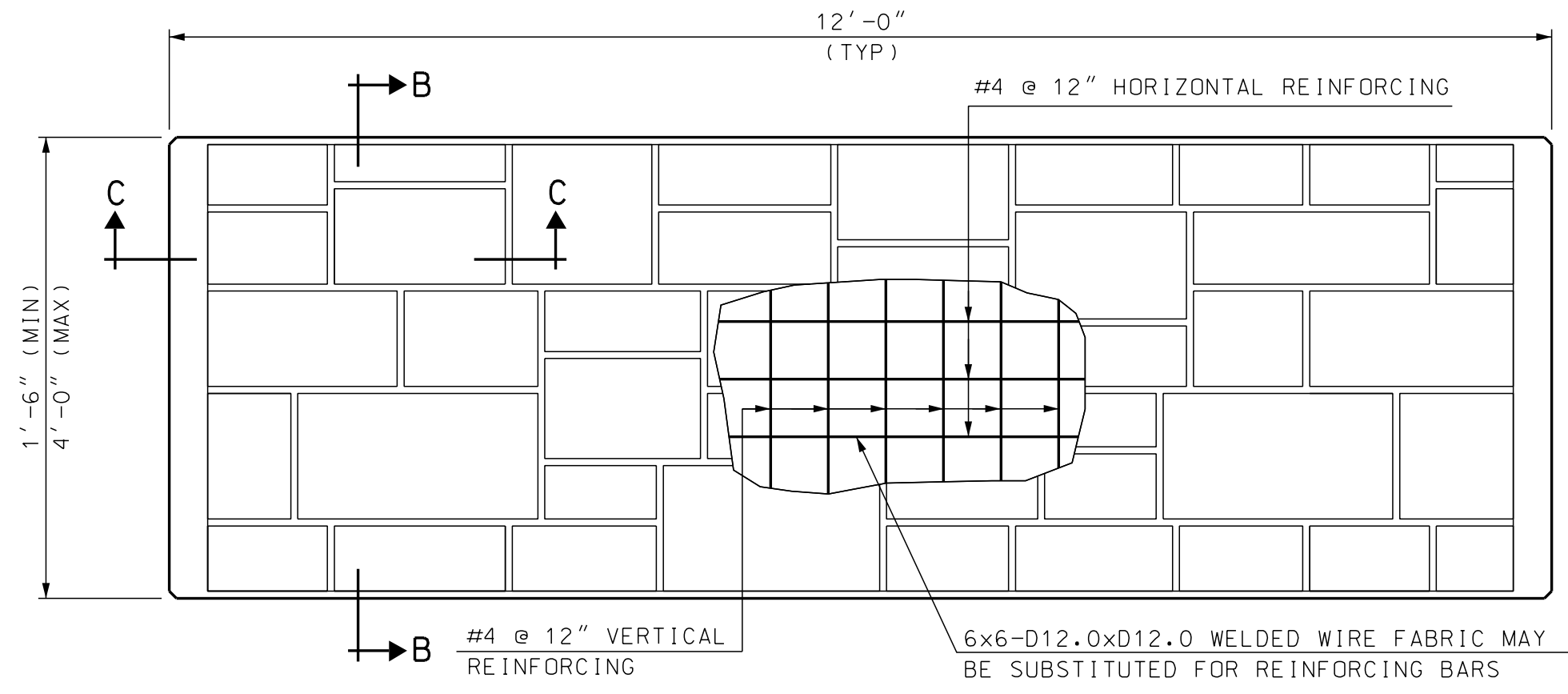


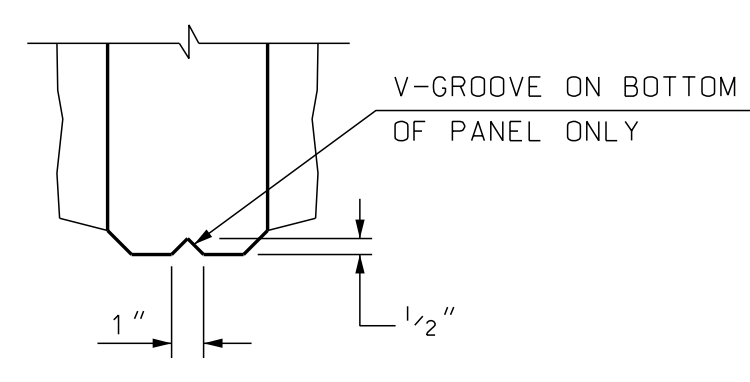
NO MODIFICATIONS SHALL BE MADE TO THIS SHEET, EXCEPT AS NOTED. IF ANY MODIFICATIONS ARE MADE TO THIS SHEET, THAT PERSON SHALL BECOME THE DESIGNER AND ENGINEER OF RECORD.



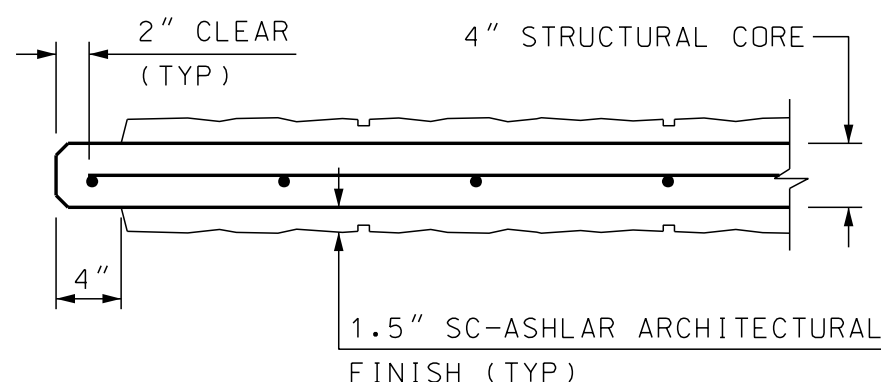
SOUNDWALL - PLAN
(SC - ASHLAR FINISH NOT SHOWN)
SCALE: 1/2" = 1'-0"



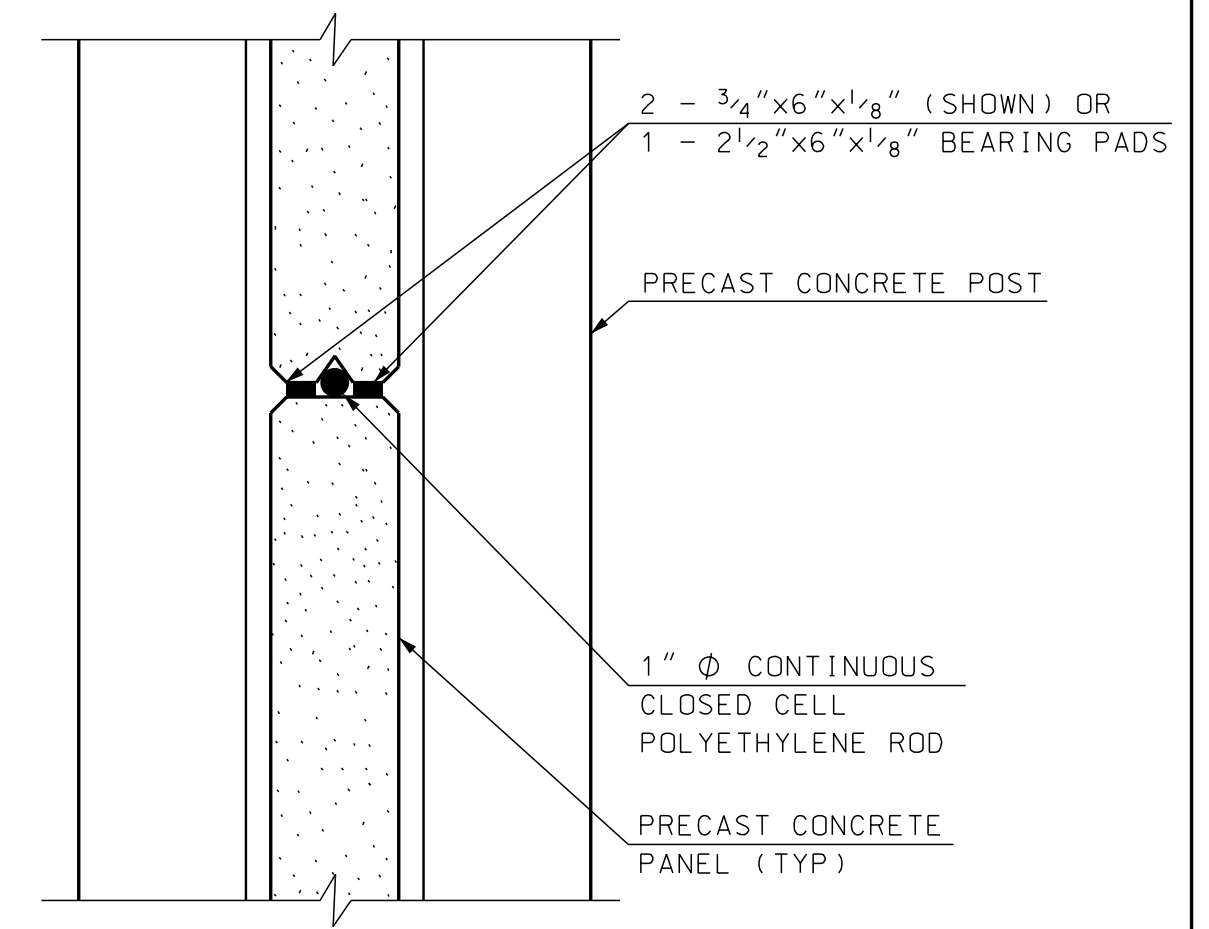
RETOFIT PRECAST CONCRETE SOUNDWALL PANEL DETAIL
SCALE: 3/4" = 1'-0"



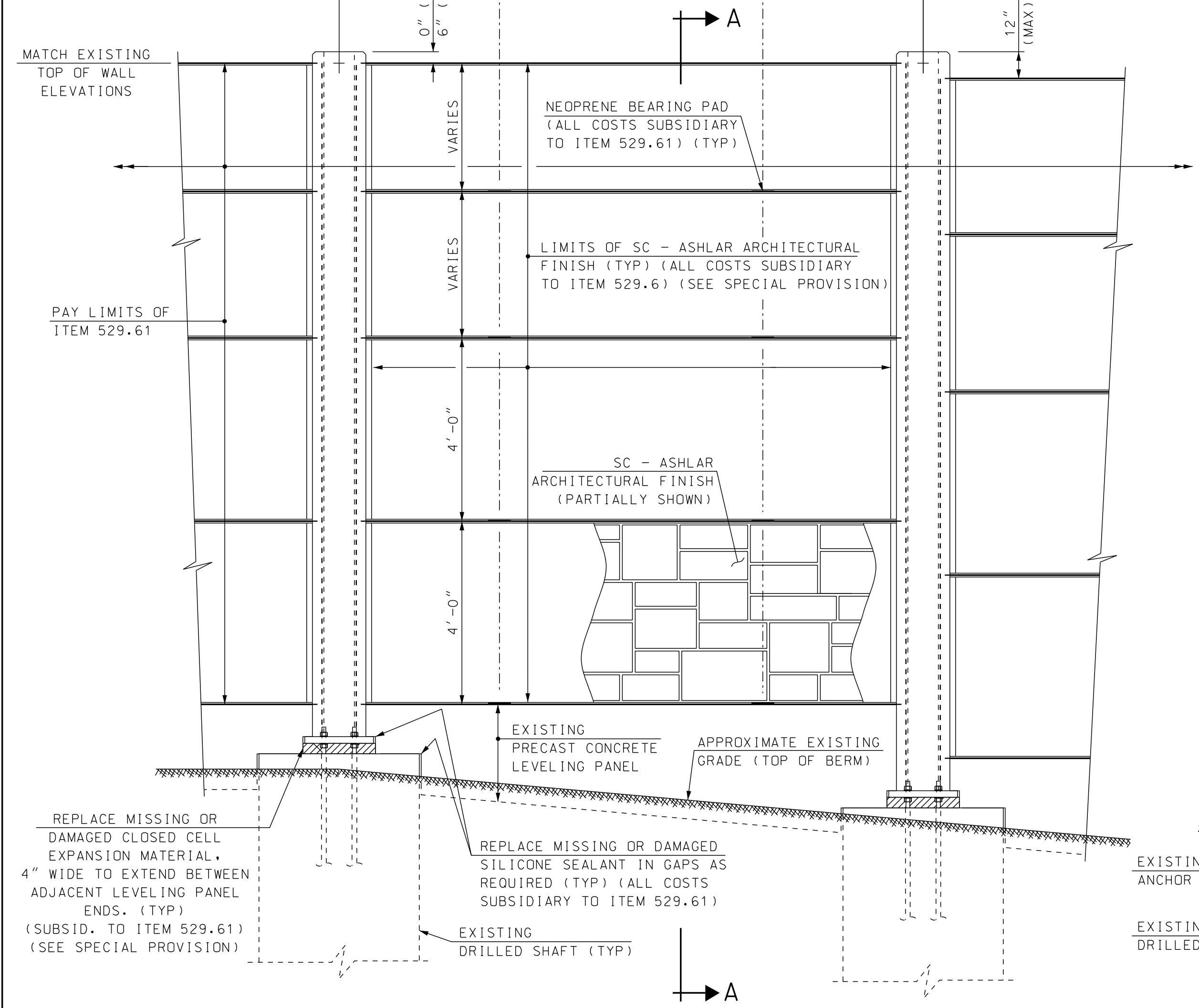
V-GROOVE DETAIL
SCALE: 2" = 1'-0"



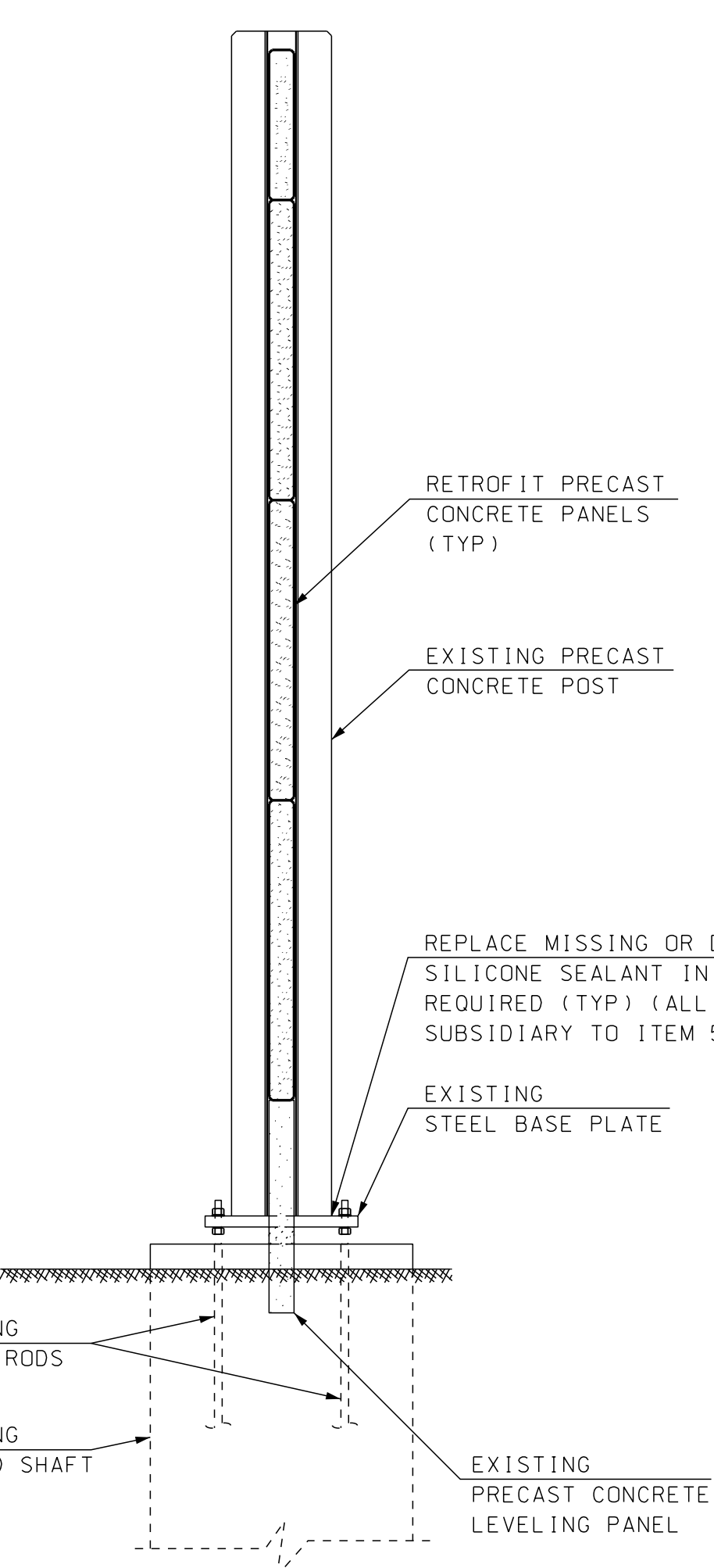
SECTION C-C
SCALE: 1" = 1'-0"



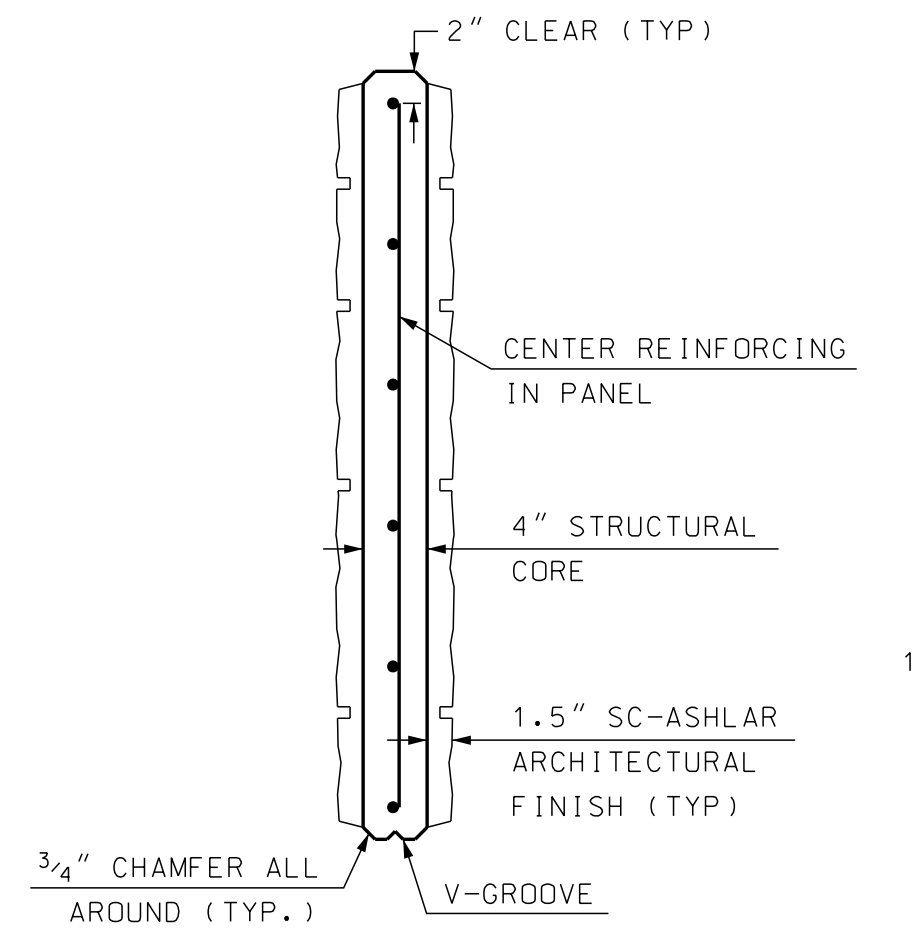
PANEL JOINT DETAIL
(SC - ASHLAR FINISH NOT SHOWN)
SCALE: 2" = 1'-0"



SOUNDWALL - ELEVATION
(SC - ASHLAR FINISH PARTIALLY SHOWN)
SCALE: 1/2" = 1'-0"



SECTION A-A
(SC - ASHLAR FINISH NOT SHOWN)
SCALE: 1/2" = 1'-0"



SECTION B-B
SCALE: 1" = 1'-0"

GENERAL NOTES

1. RETROFIT PRECAST CONCRETE SOUNDWALL PANEL SHOWN ON THIS SHEET SHALL ONLY BE USED TO REPLACE EXISTING WOOD PANELS ON EXISTING SOUNDWALLS.
2. ITEM 529.61, PRECAST CONCRETE SOUND ABATEMENT WALL RETROFIT PANEL (F) SHALL INCLUDE, ALL PRECAST CONCRETE PANELS, INCIDENTAL MATERIAL, AND REMOVAL OF EXISTING WOOD PANELS NECESSARY FOR CONSTRUCTION OF THE SOUNDWALL AS DETAILED ON THE PLANS.
3. SEE SECTION 529 SPECIAL PROVISION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
4. THE ANGLE BETWEEN THE PRECAST CONCRETE POST AND WALL PANEL SHALL NOT EXCEED 10 DEGREES. POSTS SHALL BE HORIZONTALLY ALIGNED TO ACHIEVE THE PROPOSED WALL ALIGNMENT WITH ANGLE POINTS NOT TO EXCEED 20 DEGREES.
5. COAT ALL NEW AND EXISTING PRECAST SURFACES (SOUNDWALL PANELS, POSTS, AND LEVELING PANELS) WITH WATER REPELLENT (SILANE-SILOXANE) IN ACCORDANCE WITH SECTION 534. ALL COSTS SUBSIDIARY TO ITEM 529.61.
6. REINFORCING SPACING SHOWN IS MAXIMUM. REINFORCING SHALL BE EQUALLY SPACED TO MAINTAIN 2 INCHES BETWEEN EDGE OF PANEL AND FIRST REINFORCING BAR. CLEAR COVER FOR REINFORCEMENT SHALL BE AS SHOWN.
7. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
8. ALL PANELS SHALL BE 4'-0" TALL, EXCEPT FOR THE UPPER TWO PANELS BETWEEN EACH POST, WHICH SHALL VARY IN HEIGHT TO ACHIEVE THE DESIRED TOP OF WALL ELEVATION.
9. PRECAST CONCRETE SOUNDWALL PANELS SHALL HAVE A SC - ASHLAR ARCHITECTURAL FINISH ON BOTH FACES, CAST USING PATTERN NO. 1515 FORM LINERS BY SPEC FORMLINERS, INC. SEE SECTION 529 SPECIAL PROVISION FOR MORE INFORMATION.
10. LIFTING POINTS AND DEVICES SHALL BE DESIGNED BY THE CONTRACTOR AND SUBMITTED FOR APPROVAL. ALL UPWARD FACING RECESSES FOR LIFTING DEVICES SHALL BE FILLED WITH A NON-SHRINK GROUT AFTER OR DURING ERECTION.

DESIGN CRITERIA

- (1) SPECIFICATION: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH ED., 2020, SECTION 15
NHDDOT 2016 STANDARD SPECIFICATIONS AS AMENDED.
SPECIAL PROVISION SECTION 529 - PRECAST CONCRETE SOUND ABATEMENT WALL
- (2) DESIGN LOADING: WIND PRESSURE = 46 PSF (STRENGTH III)
WHERE:
V = 123 MPH (AASHTO FIG. 3.8.1.1.2-1)
Kz(c) = 1.14 GROUND SURFACE ROUGHNESS CATEGORY C, OPEN TERRAIN (TOP OF WALL MEASURED 60 FT ABOVE LOW GROUND SURFACE, TO REPRESENT A 25 FT SOUNDWALL ON A 35 FT HIGH MSE WALL)
G = 0.85
Cd = 1.2
- (3) MATERIALS:
A. CONCRETE FOR THE SOUNDWALL PANELS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND SHALL CONFORM TO SECTION 520 FOR CLASS AA CONCRETE UNLESS NOTED OTHERWISE. ALL PRECAST CONCRETE SHALL HAVE CORROSION INHIBITOR (CALCIUM NITRATE) ADMIXTURE ADDED AT A RATE OF 3 GALLONS PER CUBIC YARD.
B. ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M 31 (ASTM A615), GRADE 60. ALL WELDED WIRE FABRIC SHALL CONFORM TO AASHTO M55. ALL REINFORCING IN PANELS SHALL BE BLACK (UNCOATED) STEEL.
- (4) PRECAST TOLERANCES: IN ACCORDANCE WITH SECTION 529 SPECIAL PROVISION.

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN		BRIDGE NO.			STATE PROJECT				
LOCATION									
RETOFIT PRECAST CONCRETE PANEL, SOUNDWALL (1 OF 1)									
REVISIONS AFTER PROPOSAL		BY		DATE		BY		DATE	
		DESIGNED		04/2022		CHECKED		04/2022	
		DRAWN		04/2022		CHECKED		04/2022	
		QUANTITIES				CHECKED			
		ISSUE DATE		12/21/2022		FEDERAL PROJECT NO.		SHEET NO.	
		REV. DATE						TOTAL SHEETS	

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
English/SNDWALL	RET SOUNDWALL	AS NOTED