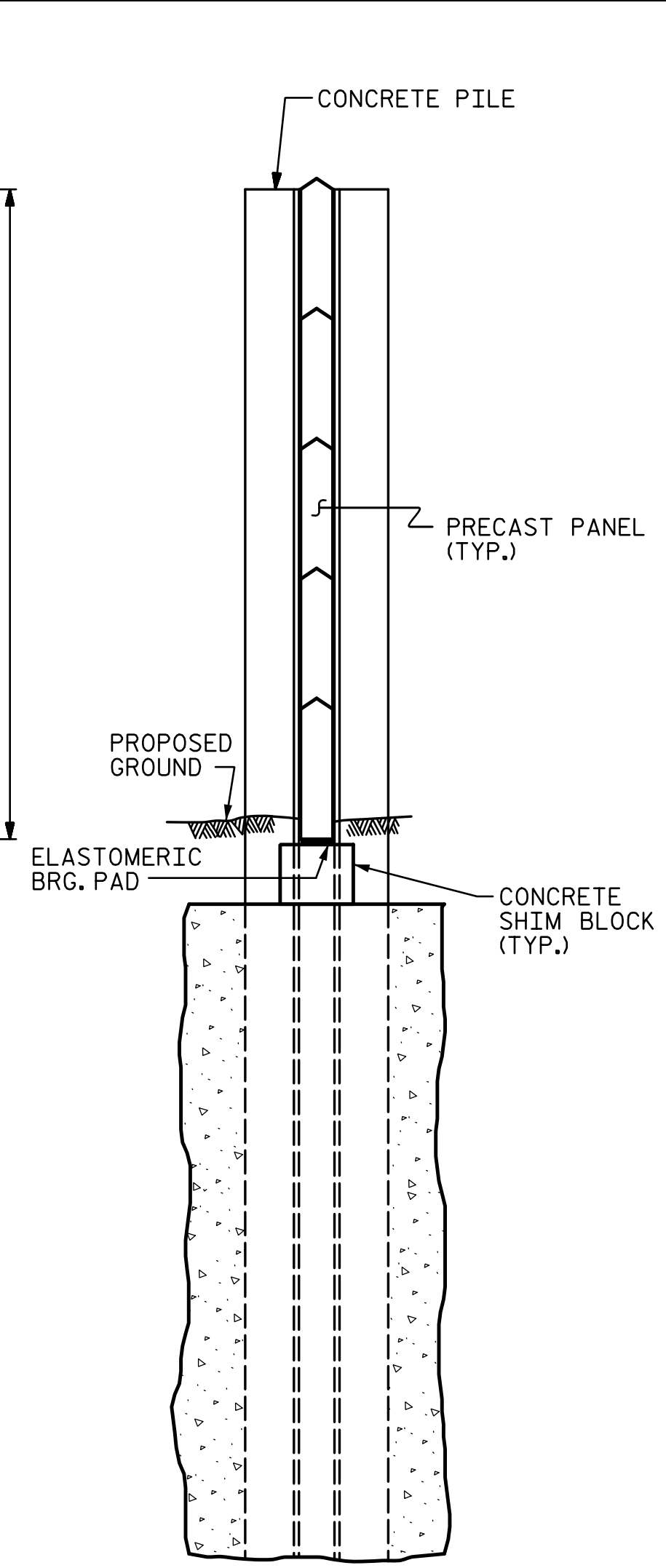


**ELEVATION**

(DETAIL APPLIES TO 15' PILE SPACING ONLY.  
FOR 25' PILE SPACING, SEE SHEET 2 OF 2.)  
(CONCRETE BARRIER IN FRONT OF SOUND BARRIER WALL  
NOT SHOWN FOR CLARITY, SEE ROADWAY PLANS)



**SECTION A-A**

(DETAIL APPLIES TO 15' PILE SPACING ONLY.  
FOR 25' PILE SPACING, SEE SHEET 2 OF 2.)  
(CONCRETE BARRIER IN FRONT OF SOUND BARRIER WALL  
NOT SHOWN FOR CLARITY, SEE ROADWAY PLANS)

PILE EXCAVATION DEPTHS "D"			
3'-0" Ø HOLE			
WALL -NW14- (STA. 10+00 TO 21+65 -NW14-)			
STATION	MAX WALL HEIGHT	PILE SPACING	SHAFT DEPTH
STA. 129+24.09 -L- TO STA. 132+51.84 -L-	17'-0"	15'-0"	16'-0"
STA. 132+66.47 -L- TO STA. 138+08.08 -L-	14'-0"	15'-0"	14'-6"
Δ STA. 138+22.72 -L- TO STA. 138+47.12 -L-	13'-0"	25'-0"	17'-0"
STA. 138+61.76 -L- TO STA. 140+66.69 -L-	13'-0"	15'-0"	14'-6"

Δ FOR ELEVATION VIEW AND DETAILS FOR 25' PILE SPACING, SEE SHEET 2 OF 2.  
Δ FOR STEEL PILE, SUPPORT BEAM, ANGLES, AND LAGGING STOP NOTES, SEE "SOUND BARRIER WALL DETAILS" SHEET 3 OF 3.

**NOTES:**

- FOR SOUND BARRIER WALL, SEE SPECIAL PROVISIONS.
- CONSTRUCT SOUND BARRIER WALL TO LINES AND GRADES SHOWN ON THE ROADWAY PLANS.
- PROVIDE PANELS WITH A FLAT BOTTOM.
- VERIFY THE LOCATION OF UNDERGROUND UTILITIES BEFORE DRILLING HOLES TO ENSURE SUFFICIENT CLEARANCE IS AVAILABLE.
- ADJUST PILE EXCAVATION ELEVATIONS TO MAINTAIN 6" MINIMUM EMBEDMENT OF THE BOTTOM PANEL.
- USE CLASS AA FOR PANELS AND CLASS A CONCRETE PILE EXCAVATION BACKFILL, IN ACCORDANCE WITH ARTICLE 1000-4 OF THE STANDARD SPECIFICATIONS.
- FOR SOUND BARRIER WALL STATIONS, OFFSETS, AND WALL ENVELOPE, SEE ROADWAY PLANS.
- PLACE 1" Ø BACKER RODS FULL HEIGHT ON EACH SIDE OF THE PRECAST PANELS. SET AND SEAL THE BACKER ROD IN PLACE WITH SEALANT THAT CONFORMS WITH ARTICLE 1028-3 OF THE STANDARD SPECIFICATIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC BEARING DETAILS, SEE "SOUND BARRIER WALL DETAILS" SHEET 1 OF 3.
- FOR CONCRETE SHIM BLOCK DETAILS, SEE "SOUND BARRIER WALL DETAILS" SHEET 1 OF 3.
- FOR PRECAST PANEL DETAILS, SEE "SOUND BARRIER WALL DETAILS" SHEET 1 & 3 OF 3.
- FOR CONCRETE PILE DETAILS, SEE "SOUND BARRIER WALL DETAILS" SHEETS 1 & 2 OF 3.
- AT THE CONTRACTOR'S OPTION, USE CONTINUOUS FLIGHT AUGER PILES IN LIEU OF PILE EXCAVATION FOR SOUND BARRIER WALL FOUNDATION. SEE "CONTINUOUS FLIGHT AUGER PILES FOR SOUND BARRIER WALLS" SPECIAL PROVISION.
- THE ARCHITECTURAL CONCRETE SURFACE TREATMENT SHALL MATCH THE APPEARANCE (STONE SIZE AND SHAPE, STONE TEXTURE, PATTERN AND RELIEF) OF NATURAL STONE TO RESEMBLE A DRY STACKED STONE PATTERN WITH FEDERAL STANDARD 595 COLOR # F30450 STAIN.

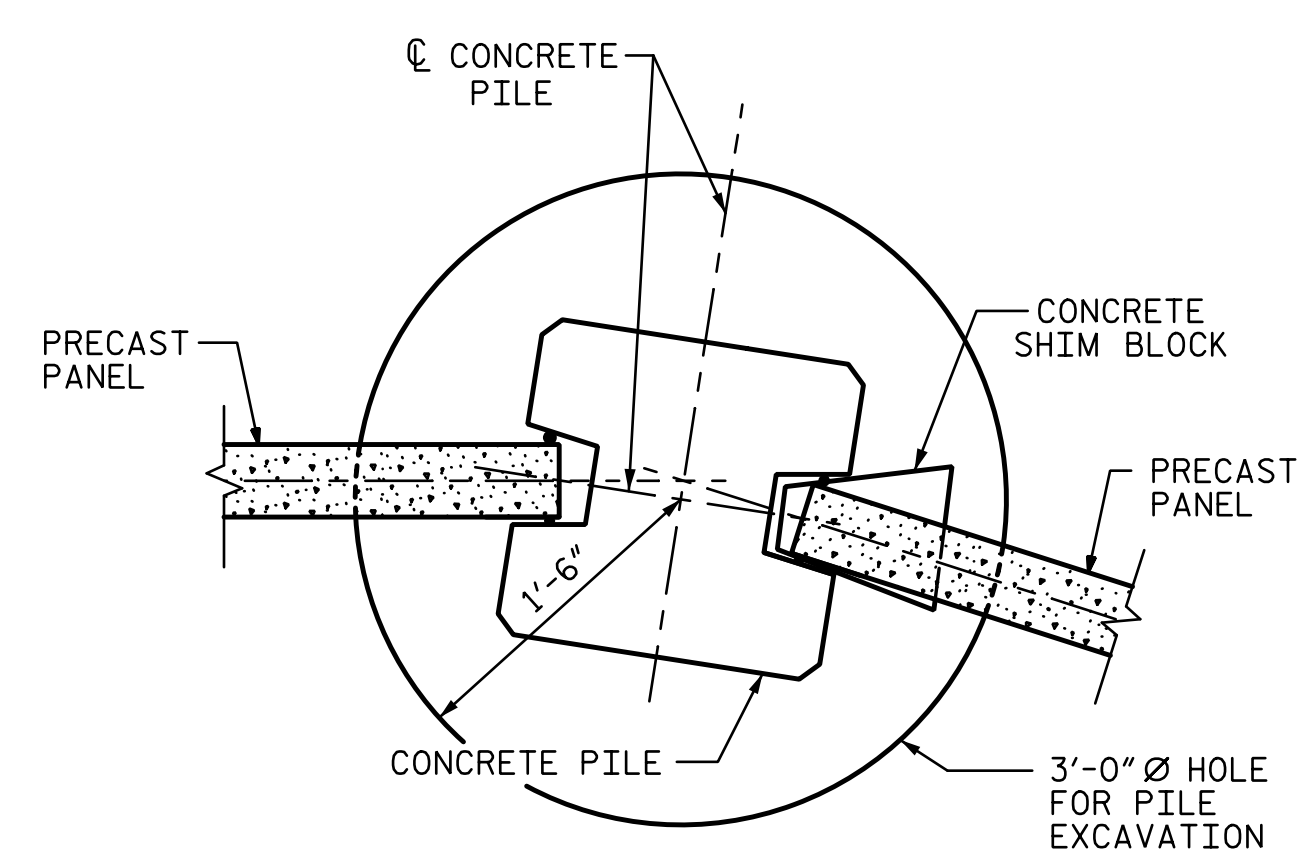
**EXPOSURE CATEGORY D - PILE REINFORCING STEEL**

DESIGN WIND PRESSURE = 62 PSF (0' < H ≤ 14'); 71 PSF (14' < H < 25')			
PILE TYPE I			
PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES
15'-0"	H ≤ 15'	4 - #8 EA. FACE	#3 @ 11" CTS.
15'-0"	15' < H ≤ 20'	4 - #10 EA. FACE	#3 @ 10" CTS.
PILE TYPE II			
PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES
15'-0"	H ≤ 15'	4 - #6 EA. FACE	#3 @ 11" CTS.
15'-0"	15' < H ≤ 20'	4 - #8 EA. FACE	#3 @ 10" CTS.

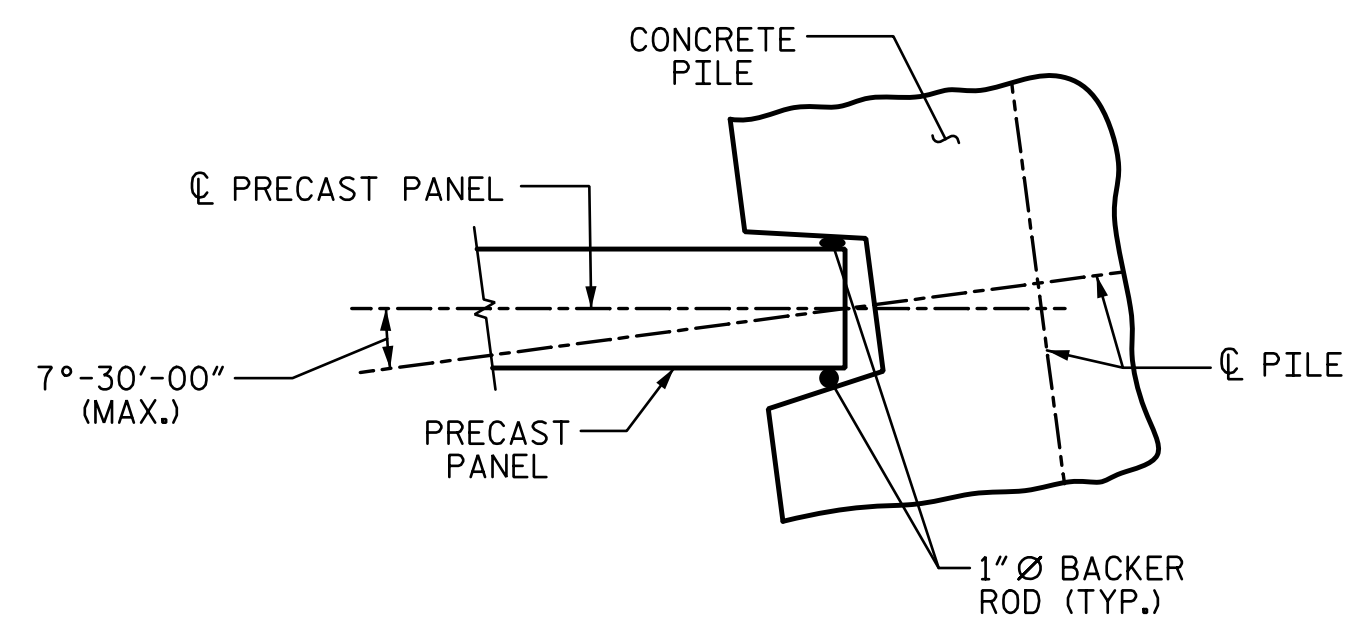
BILL OF MATERIAL -NW14-	
SOUND BARRIER WALL	S.F. 16,142
ARCHITECTURAL SURFACE TREATMENT	S.F. 26,964
QUANTITIES PROVIDED ARE APPROXIMATE AND ARE FOR BID PURPOSES ONLY.	

Δ REVISED ARCHITECTURAL SURFACE TREATMENT QUANTITY

PROJECT NO. U-4751  
NEW HANOVER COUNTY  
STATION: 129+24.09 -L- = 10+00.00 -NW14-  
SHEET 1 OF 2



**TYPICAL WALL TURN DETAILS**  
0° TO 15° TURNS (PILE TYPE I)



**PILE ROTATION LIMIT FOR WALL TURN**

(ROTATE THE CONCRETE PILE ±7°-30'-00" MAX. TO ACCOMMODATE WALL TURN.)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STV ENGINEERS, INC.  
900 West Trade St., Suite 715  
Charlotte, NC 28202  
NC License Number F-5991

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

**SOUND BARRIER WALL NO. -NW14-**

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1	STV	10-17	3		
2			4		

TOTAL SHEETS: 17

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