#### BEAVER EXCAVATING COMPANY

2000 BEAVER PLACE AVE. S. W. CANTON, OH 44706-1935

Ph: (330)478-2151

## Letter of Transmittal

To: Subj	CHRIS A. HUGHES, FOHIO DEPT. OF TRA 1885 NORTH MCCUL LIMA, OHIO 45801 Ph: (419) 549-6019 Fect: Noise Wall Shop	NSPORTA LOUGH S ax: (419) 9	TREET 99-7067		mittal #: 0050  Date: 6/7/2017  Job: 162230 ODOT 0001(17) I75 HANCOCK CO		
WE A	ARE SENDING YOU	✓ Attac	ched	☐ Under se	separate cover via None the following items:		
V	Shop drawings	☐ Print	s	☐ Plans	☐ Samples		
	Copy of letter	☐ Char	nge order	☐ Specifica	cations		
Doc	ument Type	Copies	Date	No.	Description		
THES	SE ARE TRANSMITTE	D as chec	ked below	:			
V	For approval		Approve	ed as submitted	☐ Resubmit copies for approval		
	For your use		Approve	ed as noted	☐ Submit copies for distribution		
☐ As requested ☐			Returne	d for corrections	Return corrected prints		
	For review and comme	ent 🗆	Other				
	FOR BIDS DUE		PRINTS	RETURNED AFTE	ER LOAN TO US		
FOR BIDS DUE PRINTS RETURNED AFTER LOAN TO US  Remarks: Attached to this submittal are the shop drawings and calculations for the proposed noise walls for the ODOT(17)0001-IR 75 Hancock Major Reconstruction Project.  Copy To: SHELLY & SANDS							
From	ı:			Sign	nature:		



### MACK INDUSTRIES, INC.

201 COLUMBIA ROAD VALLEY CITY, OHIO 44280 (330)483-3111 FAX: (330)483-3507

#### SUBMITTAL DATA

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
HANCOCK COUNTY
HAN-75-14.39
PROJECT: 170001

#### PRECAST NOISE BARRIER

CONTRACTOR:

SHELLY & SANDS 1515 HARMON AVE.

COLUMBUS, OHIO 43223 PHONE: (614) 444-5100 FAX: (614) 444-5481

MANUFACTURER:

MACK INDUSTRIES, INC.

PHONE: (330) 483-3111

NOISE BARRIER WALLS

SHEET TITLE

TABLE 1

JOB NO 17081	SHEET 57
DATE 3/13/17	OF 62

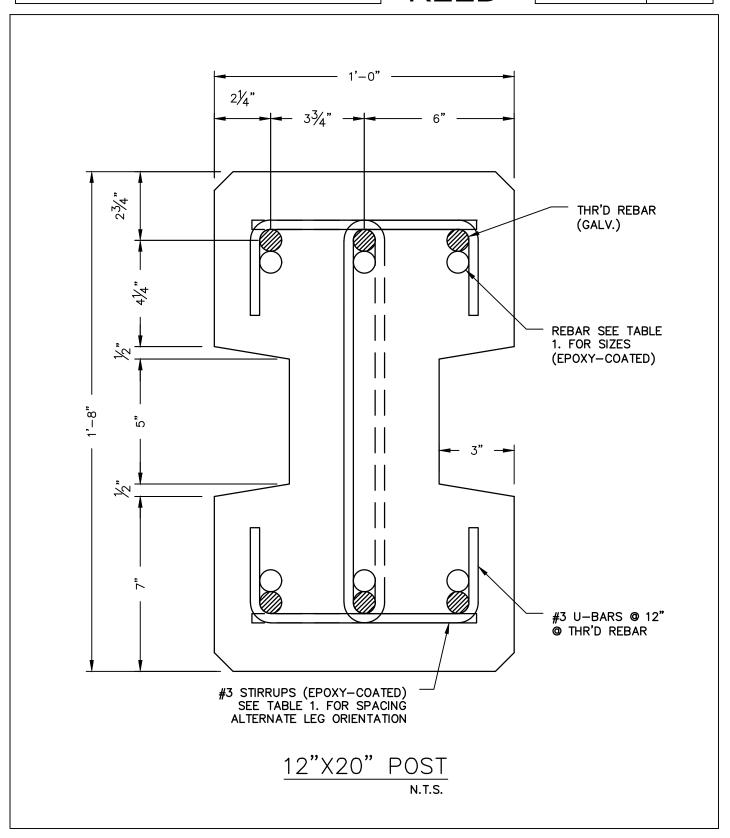
	Min. Anchor Bolts	1"Ø		11/4" Ø	E = 34"	1 1/8" 0			E = 48"		47	E = 48"	11/20			ý			
	Min. Base Plate	1"x20"x1'-10"		1 1/4"x20"x1'-10"		11//1/2001/11/11	01-17 V2V +/1 1	1 1/2"x20"x1'-10"			1 1/2"x20"x1'-10"		1 1/2"x20"x1'-10"			sign. See calculation			
	Min. Reinforcing	3 - #7 E.F., Lap 46"	#3 St. @ 11"	3 - #8 E.F., Lap 54"	#3 St. @ 12"	#3 U-Bars @ 6" @ Inr'd Rebar 3 - #8 F F Tan 72"	#3 St. @ 11"	3 - #9 E.F., Lap 72"	#3 St. @ 12"	#3 U-Bars @ 6" @ Thr'd Rebar	3 - #10 E.F., Lap 79"	#3 St. @ 12" #3 U-Bars @ 6" @ Thr'd Rebar	3 - #10 E.F., Lap 96"	#3 St. @ 12"	#3 U-Bars @ 6" @ Thr'd Rebar	* Note: 4'-0" step in wall accounted for in design. See calculations.			
	Max. Spacing	16'-0"		16'-0"		24'-0"	0	24'-0"			16'-0"		24'-0"			* Note: 4'-			
	Post	12"x16"x16'-6"		12"x20"x22'-6"		12"x16"x16'-6"		12"x20"x21'-0"			12"x20"x26'-6"		12"x20"x27'-6"			Each Face *		Embedment	
1	Style	P1		P2		p3	2	P4			P5		*9d			E.F. =	St. =	E =	

ODOT NOISE BARRIER WALLS

SHEET TITLE

12"X20" POST

JOB NO.	SHEET <b>58</b>
15323	56
DATE	OF
3/13/17	62

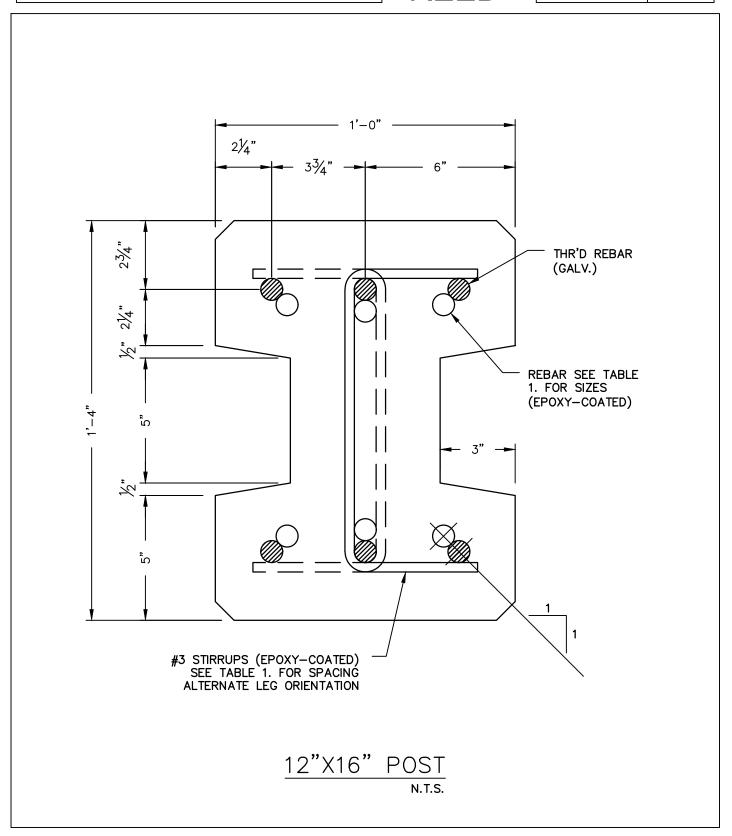


ODOT NOISE BARRIER WALLS

SHEET TITLE

12"X16" POST

ов NO. 15323	59
3/13/17	of <b>62</b>

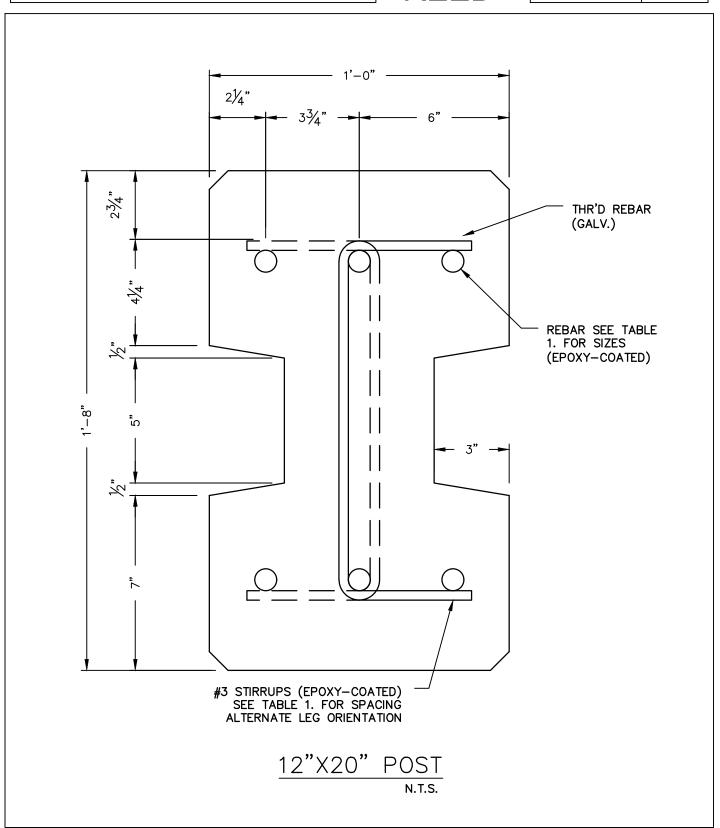


ODOT NOISE BARRIER WALLS

SHEET TITLE

12"X20" POST

JOB NO.	SHEET
15323	60
DATE	OF
3/13/17	62



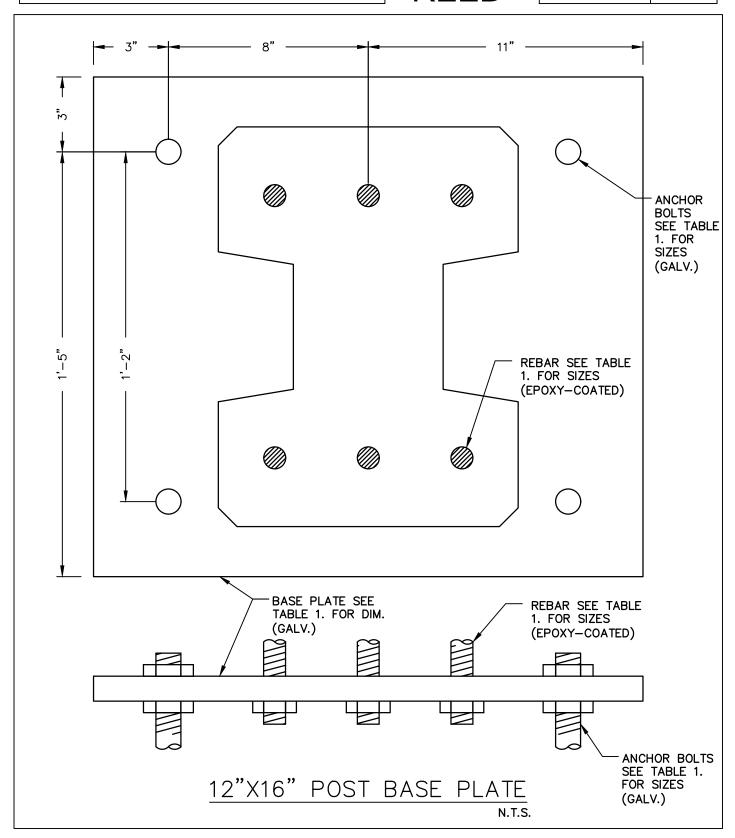
PROJECT

ODOT NOISE BARRIER WALLS

SHEET TITLE

12"X16" POST BASE PLATE

JOB NO.	SHEET
15323	61
DATE	OF
3/13/17	62



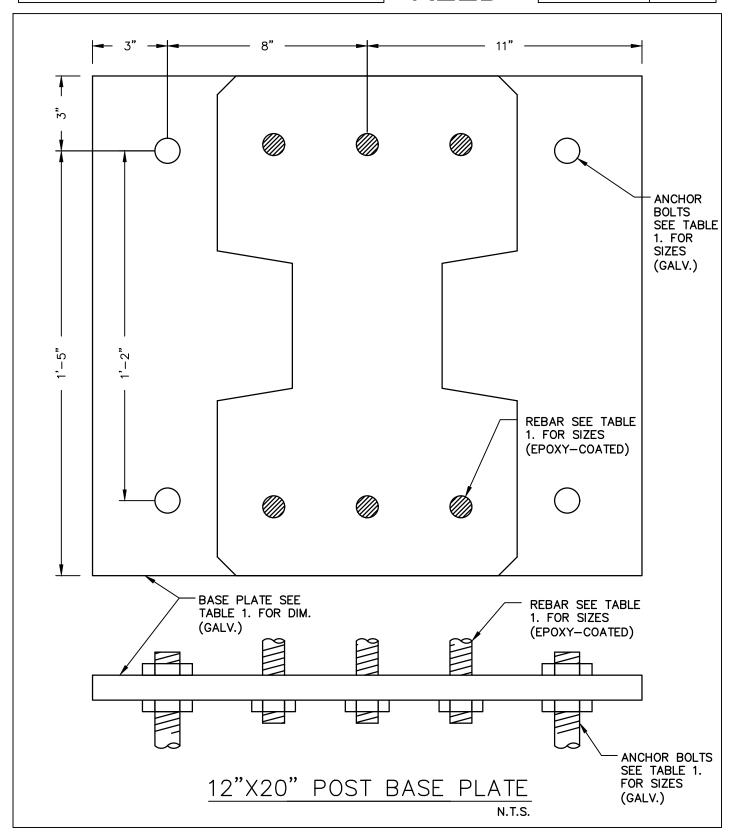
PROJECT

ODOT NOISE BARRIER WALLS

SHEET TITLE

12"X20" POST BASE PLATE

JOB NO.	SHEET
15323	62
DATE	OF
3/13/17	62



STATE OF OHIO DEPARTMENT OF TRANSPORTATION HANCOCK COUNTY HAN-75-14.39 PROJECT: 170001

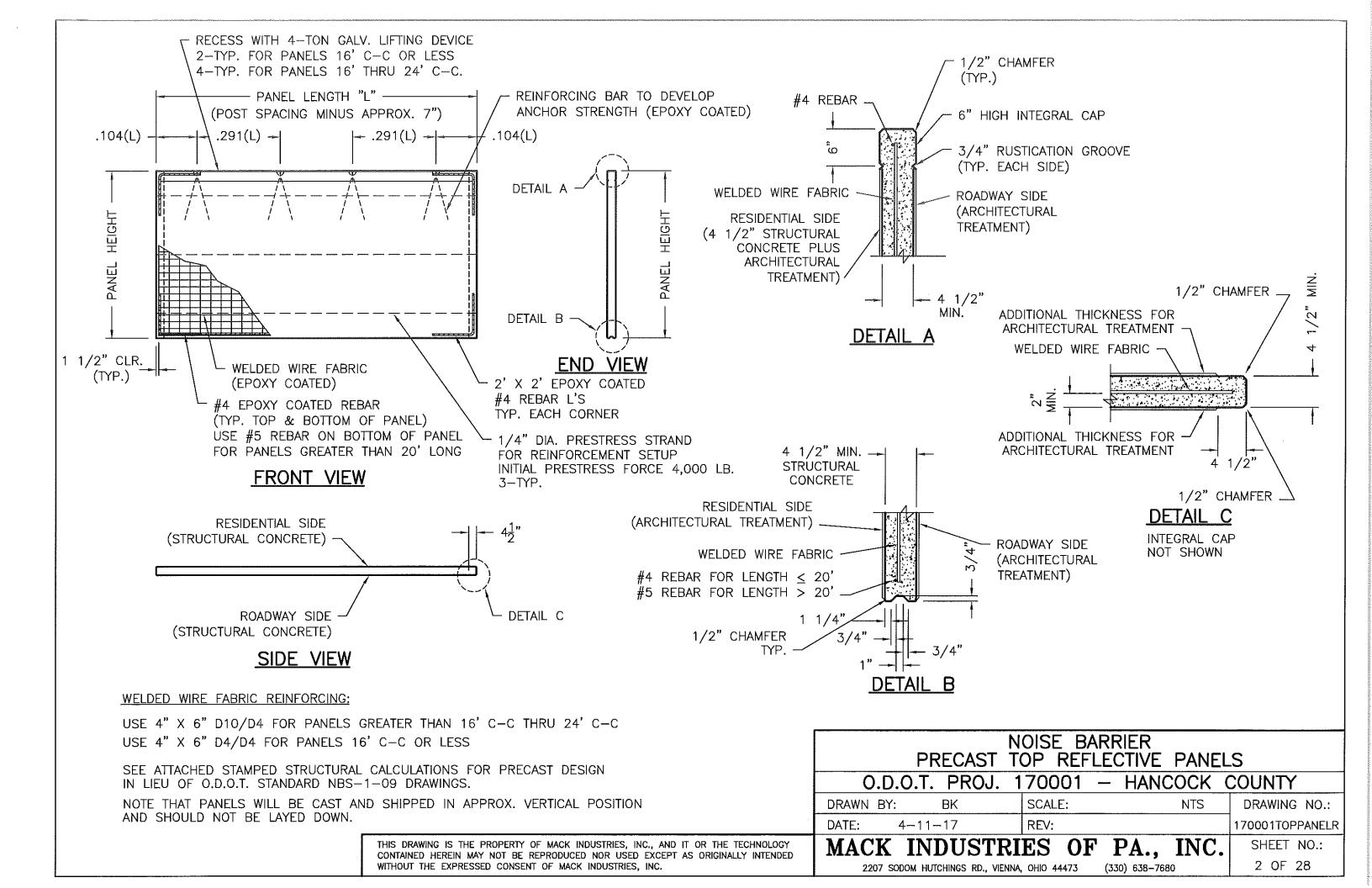
NOISE BARRIER WALL
GENERAL NOTES AND INFORMATION

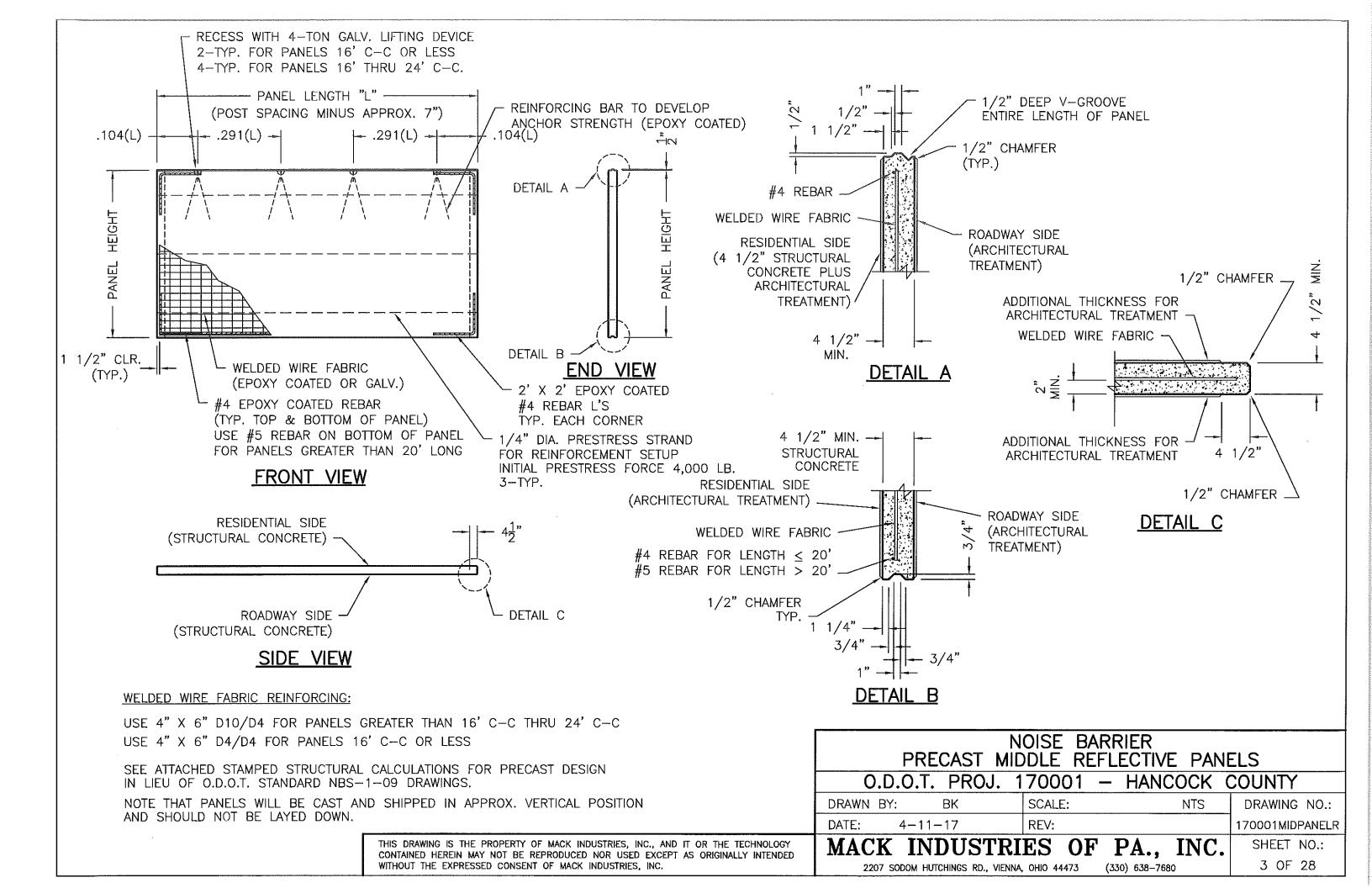
- 1. MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH STANDARDS SPECIFIED ON O.D.O.T. APPROVED DRAWINGS AND CONTRACT SPECIAL PROVISIONS.
- 2. THE DESIGN OF ALL ELEMENTS AND COMPONENTS IS IN ACCORDANCE WITH ACL AND AASHTO SPECIFICATIONS.
- 2A. SEE ATTACHED STAMPED STRUCTURAL CALCULATIONS FOR PRECAST DESIGN IN LIEU OF O.D.O.T. STANDARD NBS-1-09 DRAWINGS.
- 3. ALL STRUCTURAL PRECAST CONCRETE PER CMS 499, CLASS C, SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI.
- 4. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064 AND BE FABRICATED FROM WIRE MEETING ASTM A82, AND BE EPOXY COATED PER CMS 709.14, OR GALVANIZED AFTER FABRICATION PER ASTM A1060.
- 5. ALL REBAR TO CONFORM TO ASTM A615, GRADE 60. REINFORCING STEEL SHALL BE DETAILED TO CRSI STANDARDS AND BE EPOXY COATED PER CMS 709.00.
- 6. STRUCTURAL STEEL TO BE GALVANIZED IN ACCORDANCE WITH CMS 711.02.
- 7. NEOPRENE BEARING PADS TO BE 1/4" THICK MIN. AND CONFORM TO CMS 711.21.
- 8. THE ROADWAY SIDE OF THE NOISE BARRIER SHALL BE A REFLECTIVE FORMLINED ROUGH CUT STONE PATTERN USING ARCHITECTURAL POLYMERS #892 12" QUARRY STONE LINER, TYP. ALL WALLS.
- 9. THE RESIDENTIAL SIDE OF THE NOISE BARRIER SHALL BE A REFLECTIVE FORMLINED ASHLAR PATTERN USING ARCHITECTURAL POLYMERS #905 SMALL AGED ASHLAR LINER, TYP. ALL WALLS.
- 10. THE ROADWAY SIDE OF THE NOISE WALL PANELS SHALL BE SEALED/COATED TO A COLOR OF GRAY MEETING FEDERAL COLOR #595B-36373, TYP. ALL WALLS
- 11. THE RESIDENTIAL SIDE OF THE NOISE WALL PANELS SHALL BE SEALED/COATED TO A COLOR OF LIGHT GRAY MEETING FEDERAL COLOR #595B-16515, WALLS 002A, 002B, 002C, 003A, & 003B.

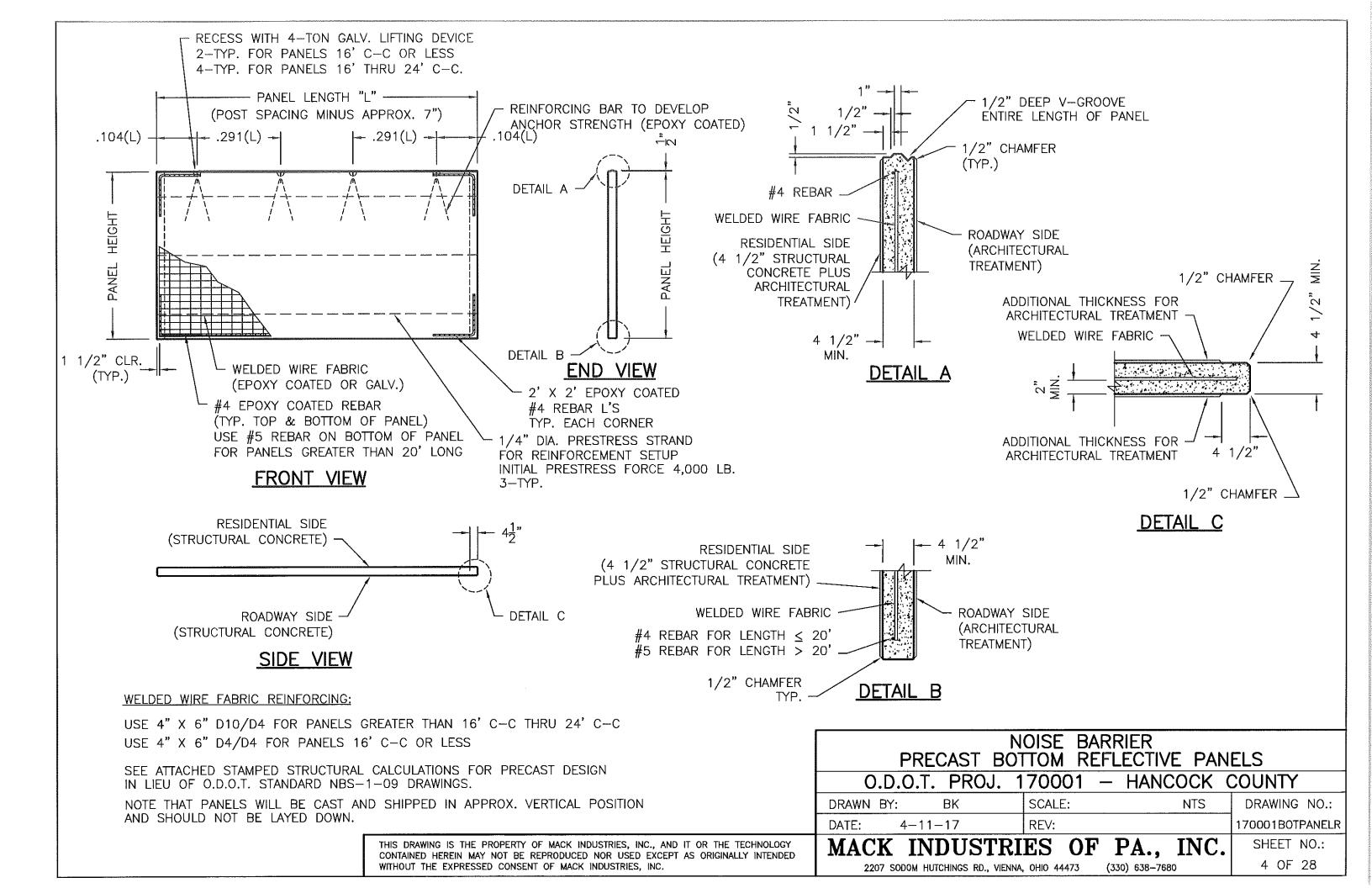
  11A. THE RESIDENTIAL SIDE OF THE NOISE WALL PANELS SHALL BE SEALED/COATED TO A COLOR OF
- TAN MEETING FEDERAL COLOR #595B-10324, WALLS 004 & 005.
- 12. THE PRECAST POSTS SHALL HAVE NO SURFACE APPLIED COLOR COATING, BUT SHALL INCLUDE A WATERPROOFING ADMIX. SEALER.

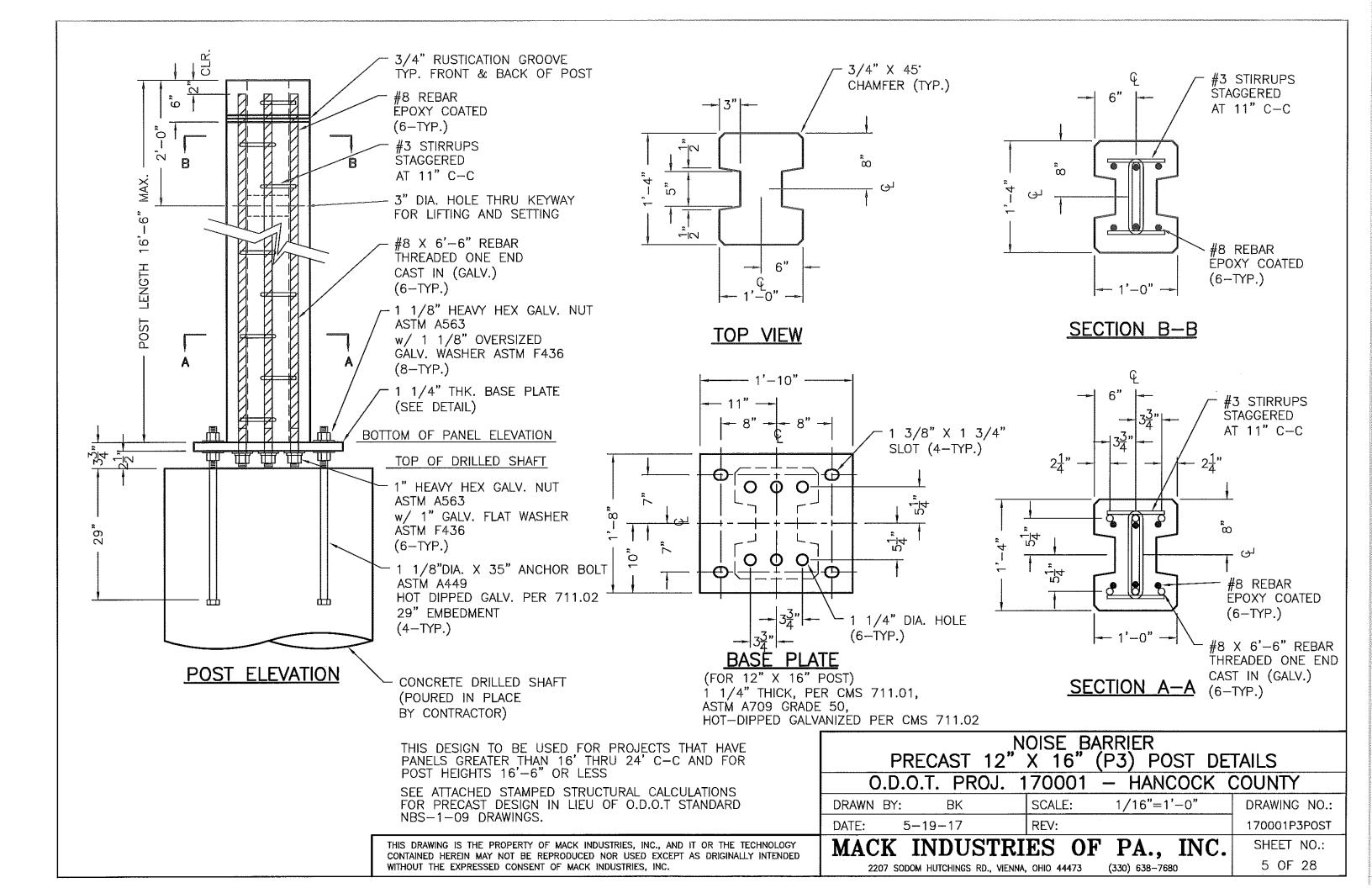
INDEX OF DRAWINGS	DRAWING NO.: SH	HEET NO.:
GENERAL NOTES	170001NOTES	1
PRECAST TOP PANELS	170001TOPPANELR	2
PRECAST MIDDLE PANELS	170001MIDPANELR	3
PRECAST BOTTOM PANELS	170001BOTPANELR	4
PRECAST 12X16 P3 POST	170001P3P0ST	5
PRECAST 12X16 P3E POST	170001P3EP0ST	6
PRECAST 12X20 P4 POST	170001P4P0ST	7
PRECAST 12X20 P4E POST	170001P4EP0ST	8
PRECAST 12X20 P4C POST	170001P4CP0ST	9
PRECAST 12X20 P4D POST	170001P4DPOST	9A
MISC. DETAILS	170001MISC	10
WALL 4 CORNER DETAIL	170001CORNERDETAIL	10A
POST CAP DETAILS	170001CAP	11
WALL 002A PROFILE	170001PR02A	12-13
WALL 002B PROFILE	170001PR02B	14-158
WALL 002C PROFILE	170001PR02C	16
WALL 003A PROFILE	170001PR03A	17-18
WALL 003B PROFILE	170001PR03B	19-20
WALL 004 PROFILE	170001PR04	21-25
WALL 005 PROFILE	170001PR05	26-28

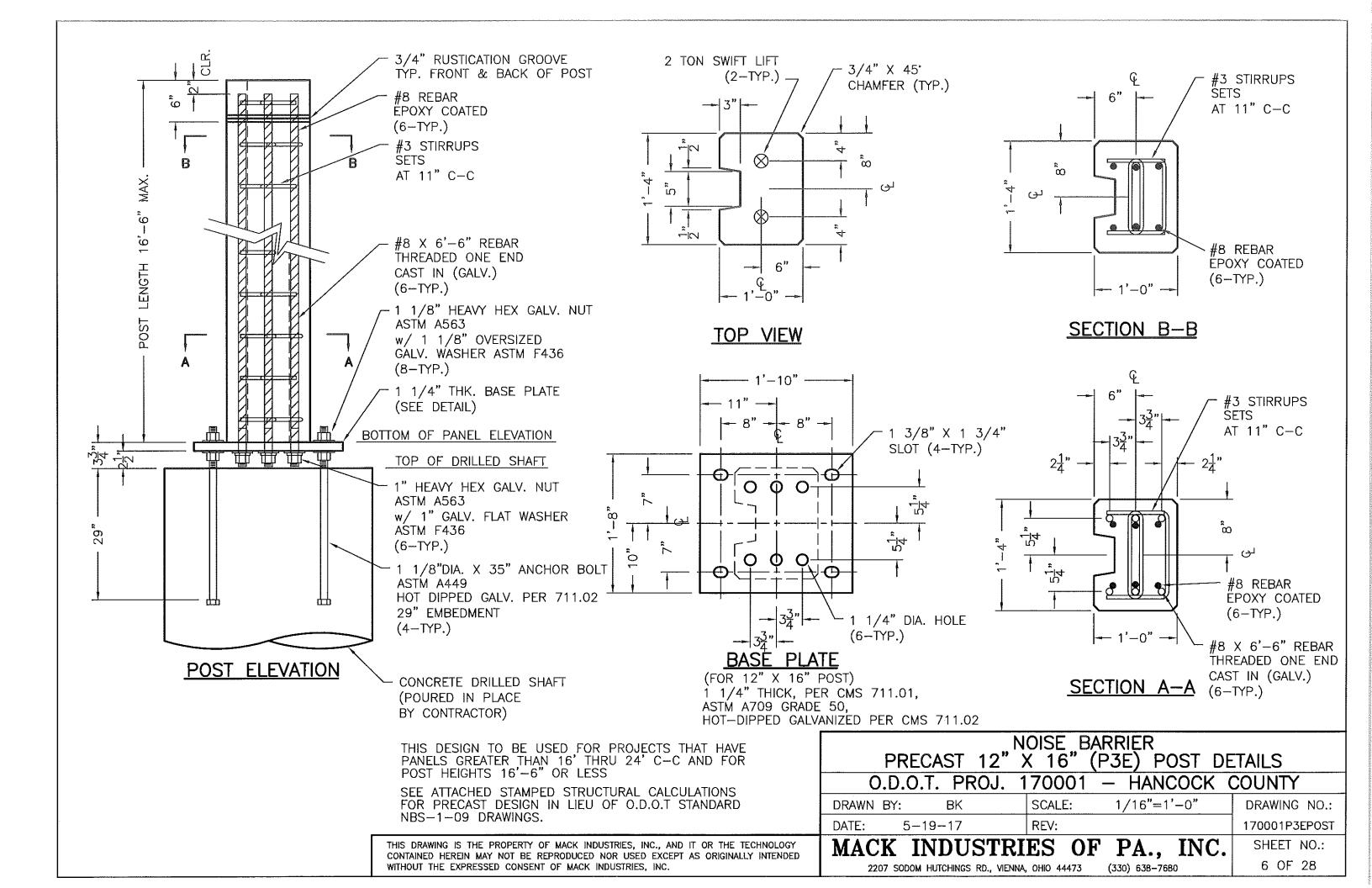
NOISE BARRIER GENERAL NOTES								
O.D.O.T. PROJ.	170001 – HANCOCK (	COUNTY						
DRAWN BY: BK	SCALE:	DRAWING NO.:						
DATE: 5-19-17	REV:	170001NOTES						
MACK INDUSTRI	ES OF PA., INC.	SHEET NO.:						
2207 SODOM HUTCHINGS RD., VIENNA		1 OF 28						

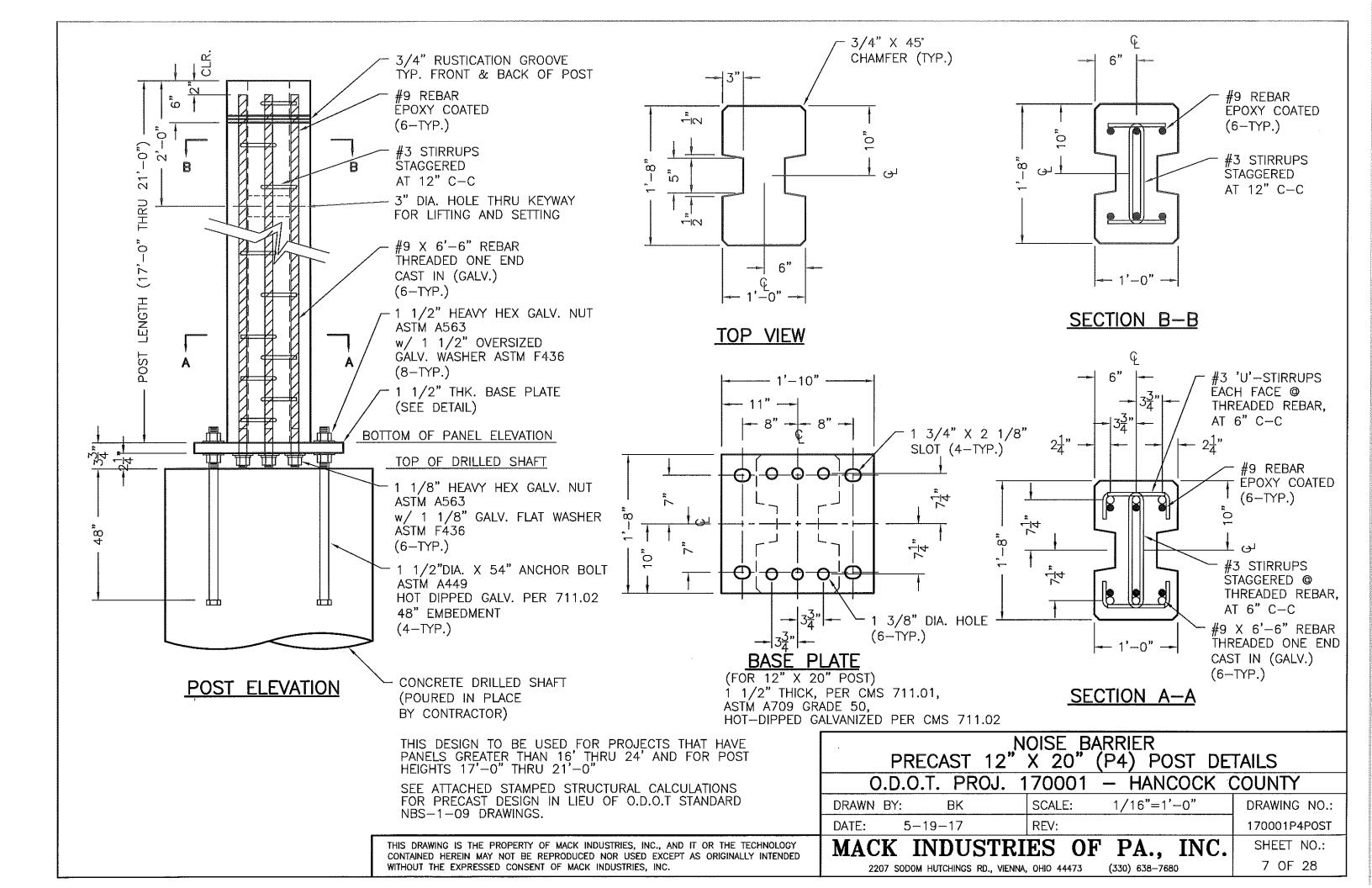


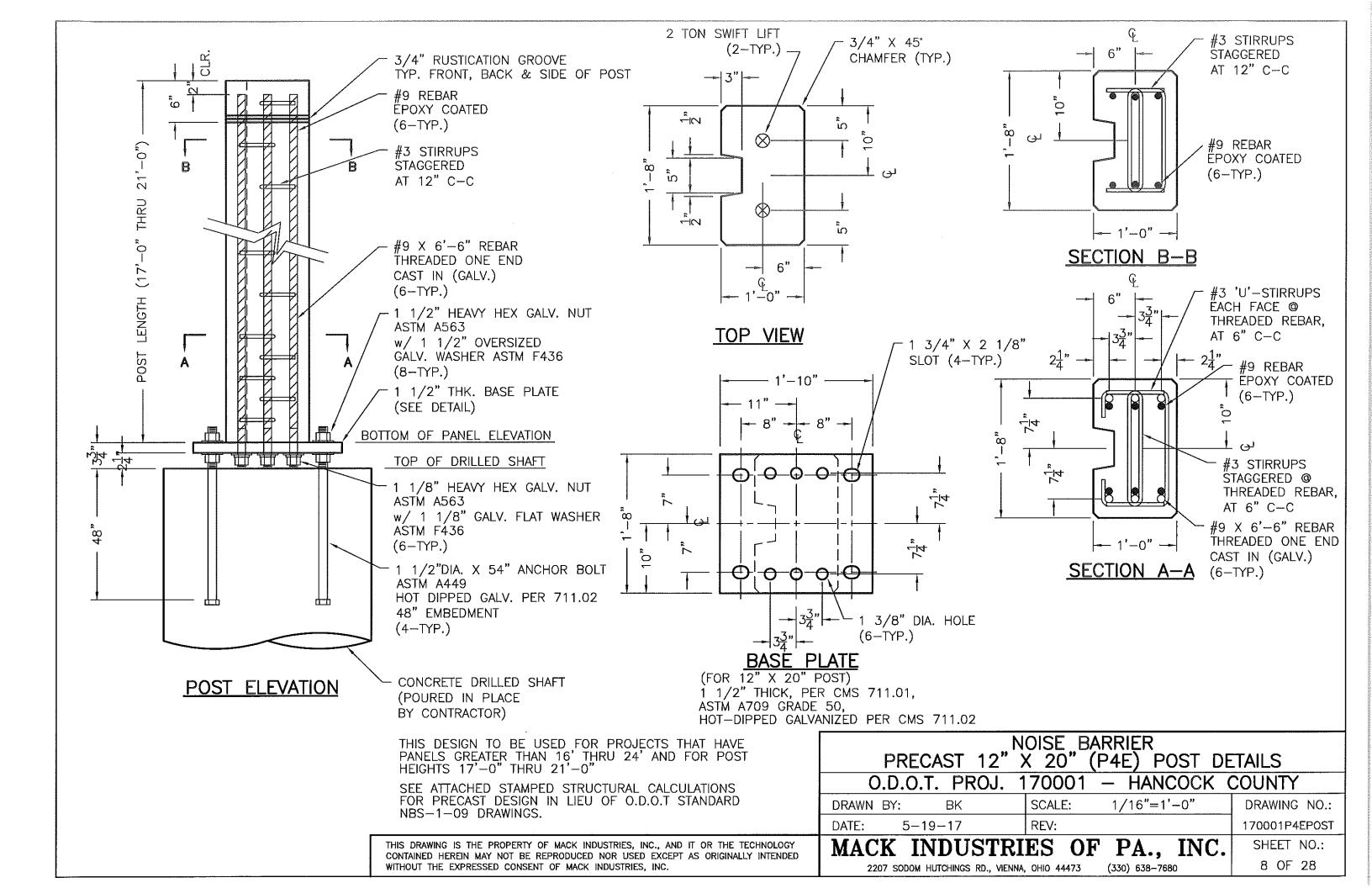


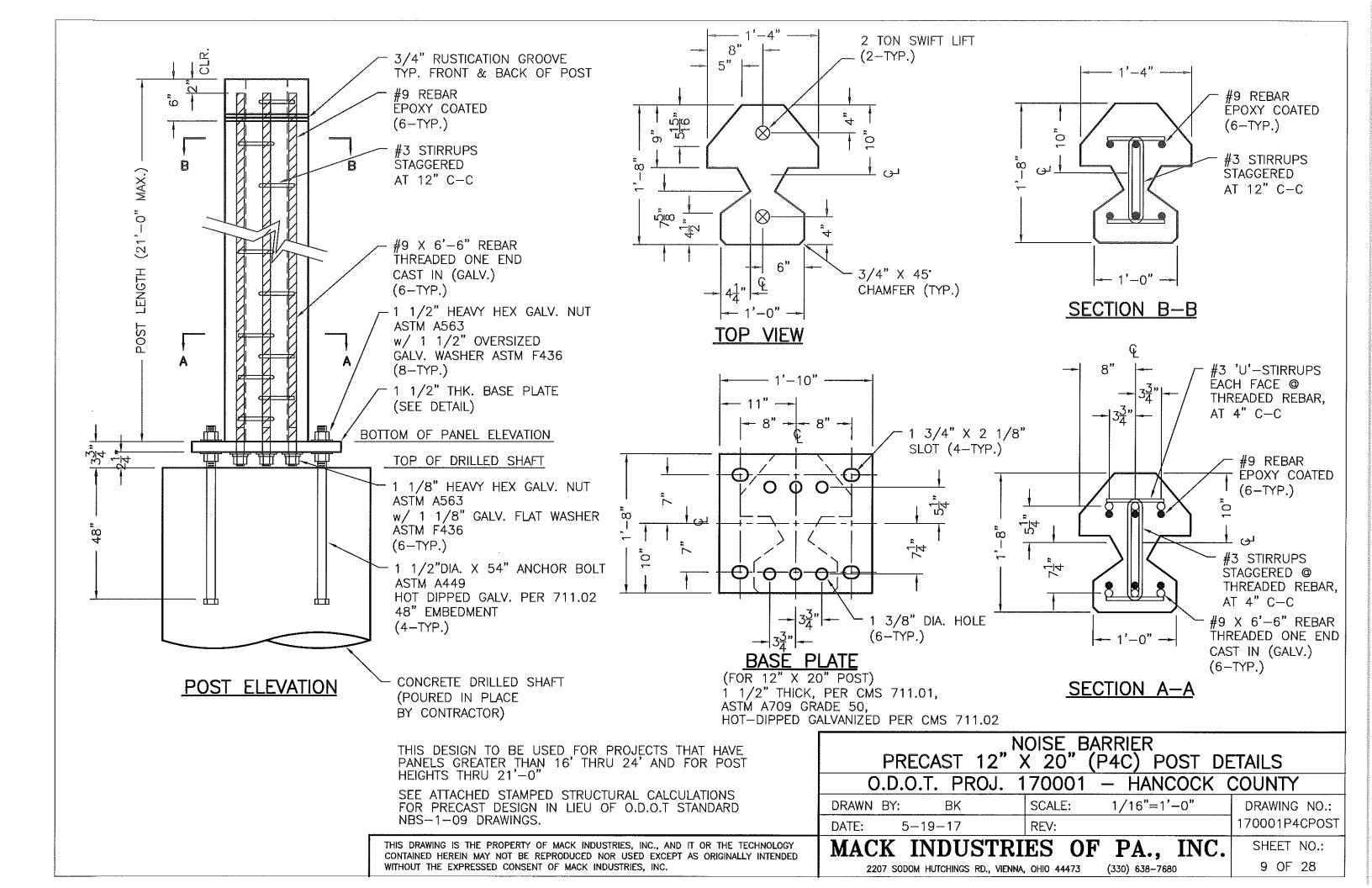


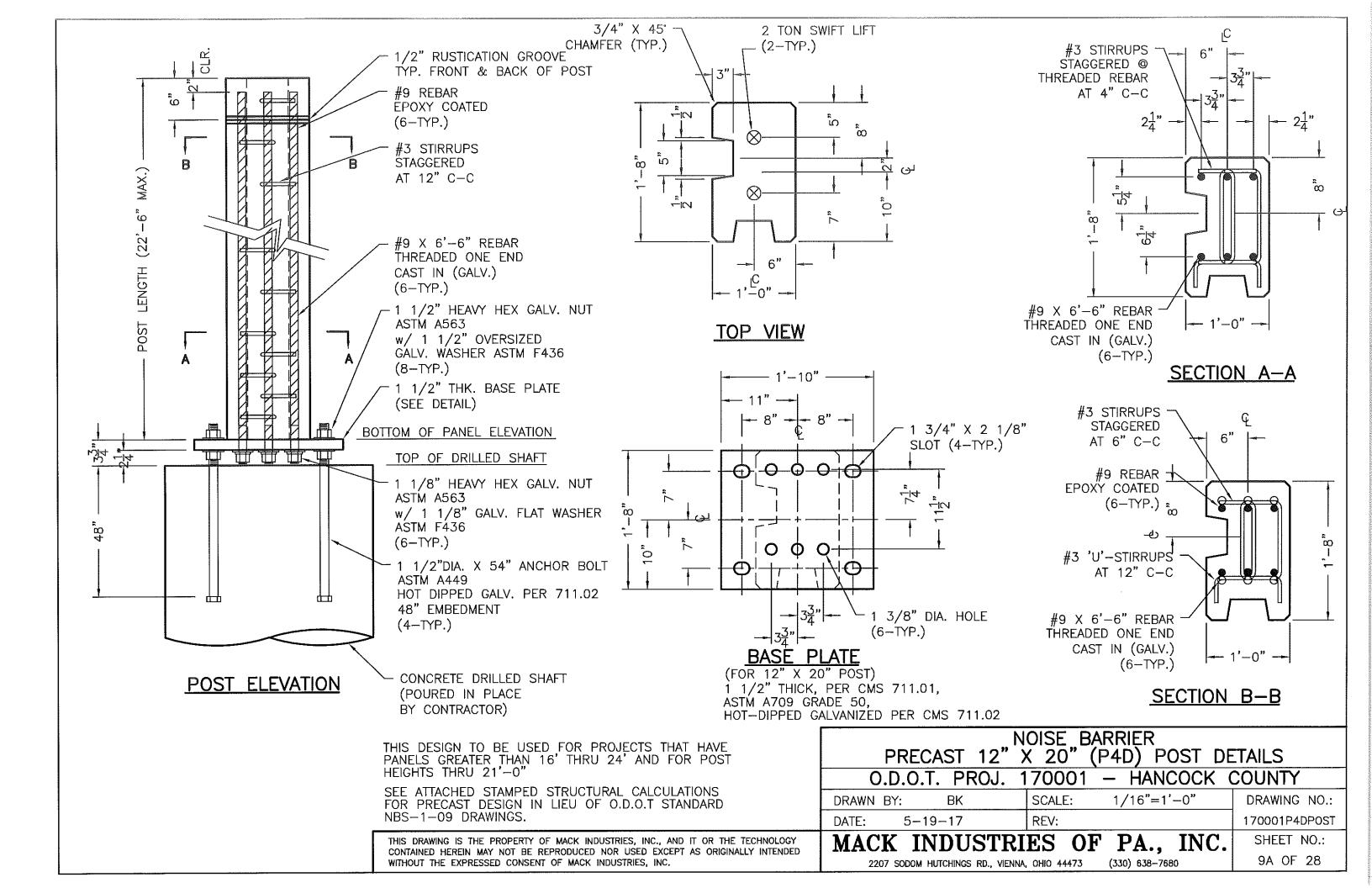


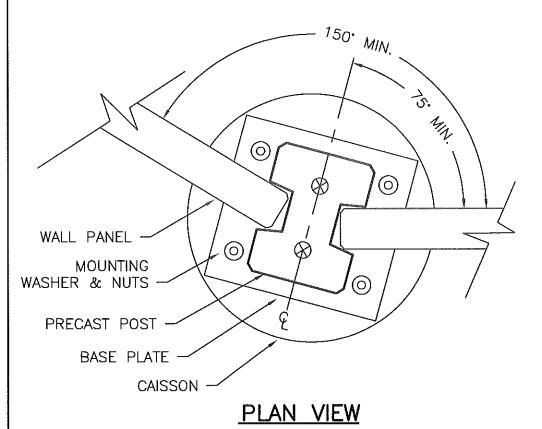




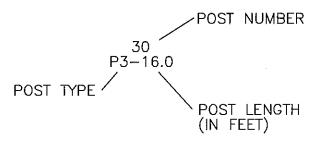








POST DESIGNATION KEY



BEARING PAD PER CMS 711.21 5" X 5" X 1/4" -BEARING PAD PER CMS 711.21

**PRECAST** 

BOTTOM PANEL

7/4

DATE:

5" X 6" PRECAST BLOCK FOR PANEL STEP HEIGHT AS REQ'D.

PRECAST BOTTOM PANEL

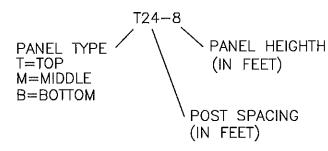
5" X 5" X 1/4"

TOP OF DRILLED SHAFT

- BASE PLATE

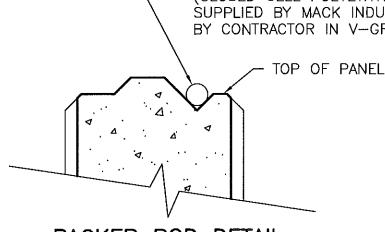
CONCRETE DRILLED SHAFT (POURED IN PLACE BY CONTRACTOR)

## PANEL DESIGNATION KEY



NOTE: CENTERLINE OF POST TO BE ORIENTATED ON CAISSON TO SYMMETRICALLY DIVIDE ANGLE OF ADJACENT WALL PANELS.

> 3/4" DIA. FOAM BACKER ROD (CLOSED CELL POLYETHYLENE FOAM) SUPPLIED BY MACK INDUSTRIES, INSTALLED BY CONTRACTOR IN V-GROOVE BETWEEN PANELS



BACKER ROD DETAIL

N.T.S.

NOISE BARRIER MISC. DETAILS PROJ. O.D.O.T.

2207 SODOM HUTCHINGS RO., VIENNA, OHIO 44473

170001 - HANCOCK COUNTY 1/16"=1'-0" DRAWN BY: SCALE: DRAWING NO.: BK 5-19-17

MACK INDUSTRIES PA., INC.

REV:

PANEL SEAT DETAIL

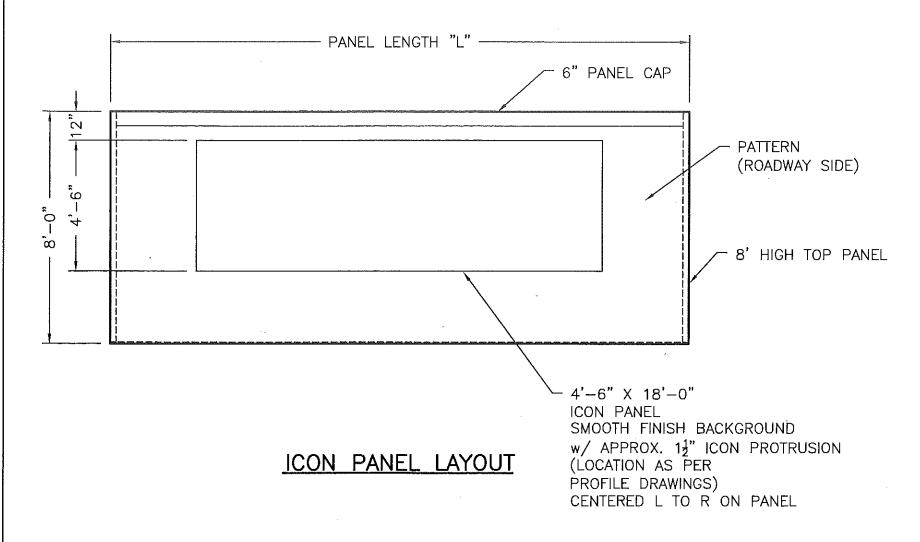
NOTE: SEE POST DRAWINGS

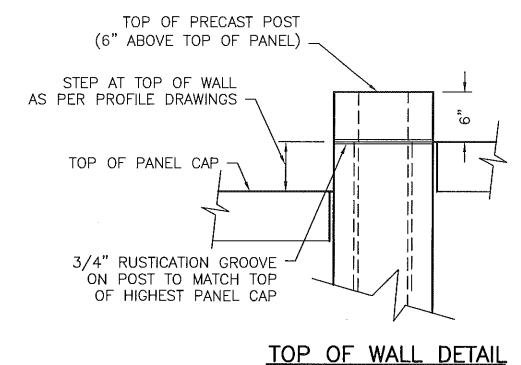
FOR ANCHOR BOLT DETAILS

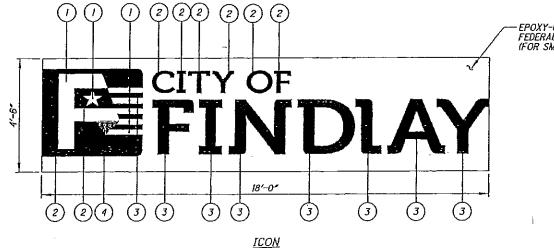
SHEET NO .: 10 OF 28 (330) 638-7680

170001MISC

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(ROADWAY SIDE)

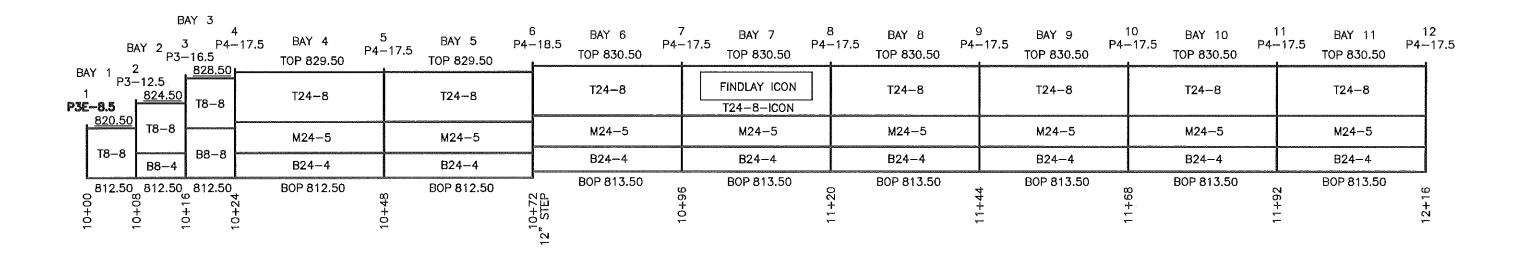
-EPOXY-URETHANE SEALER, FEDERAL COLOR NO. 37875, WHITE (FOR SMOOTH BACKGROUND SURFACES)

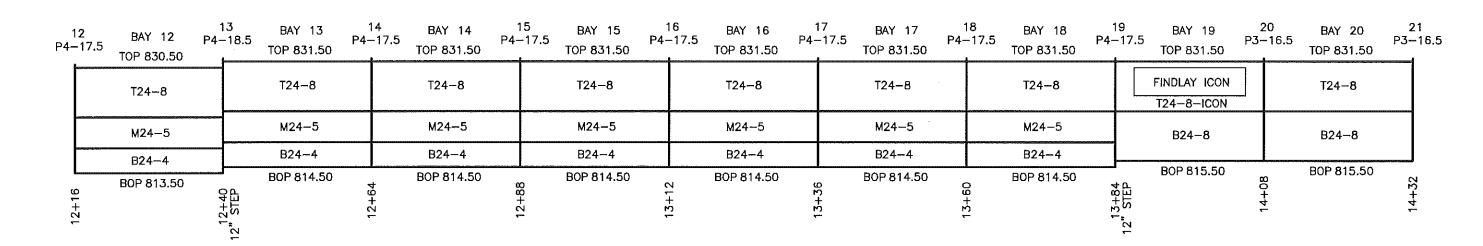
#### AESTHETIC PANEL LEGEND:

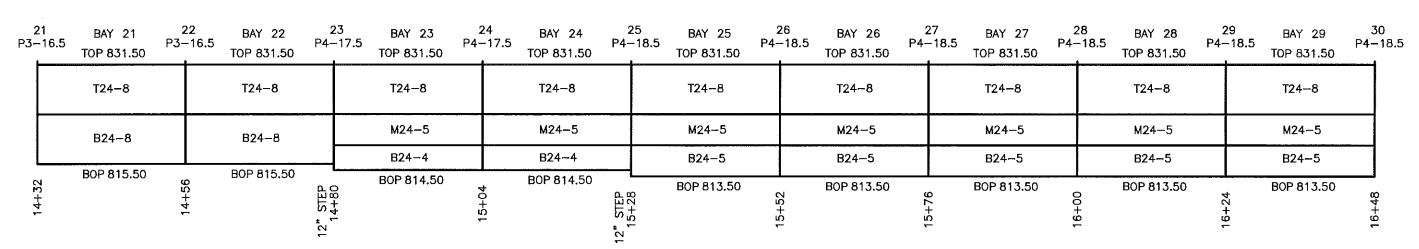
- () EPOXY-URETHANE SEALER FEDERAL COLOR NO. 37875, WHITE
- 2 EPOXY-URETHANE SEALER FEDERAL COLOR NO. 35095, BLUE
- 3 EPOXY-URETHANE SEALER FEDERAL COLOR NO. 31086, RED
- 4 EPOXY-URETHANE SEALER FEDERAL COLOR NO. 36373, GRAY

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NOISE BARRIER								
PRECAST POST CAP DETAILS								
O.D.O.T. PROJ. 1	70001 - HANCOCK (	COUNTY						
DRAWN BY: BK	SCALE: 1/16"=1'-0"	DRAWING NO.:						
DATE: 5-19-17	REV:	170001CAP						
MACK INDUSTRI	ES OF PA., INC.	SHEET NO.:						
2207 SODOM HUTCHINGS RD., VIENNA,		11 OF 28						







ROADWAY SIDE - ROUGH CUT STONE - COLOR 36373

RESIDENTIAL SIDE - ASHLAR - COLOR 16515

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# NOISE BARRIER WALL 003B PROFILE, ROADWAY SIDE STA. 10+00 TO STA. 16+48 O.D.O.T. PROJ. 170001 — HANCOCK COUNTY

(330) 638-7680

 DRAWN BY:
 BK
 SCALE:
 DRAWING NO.:

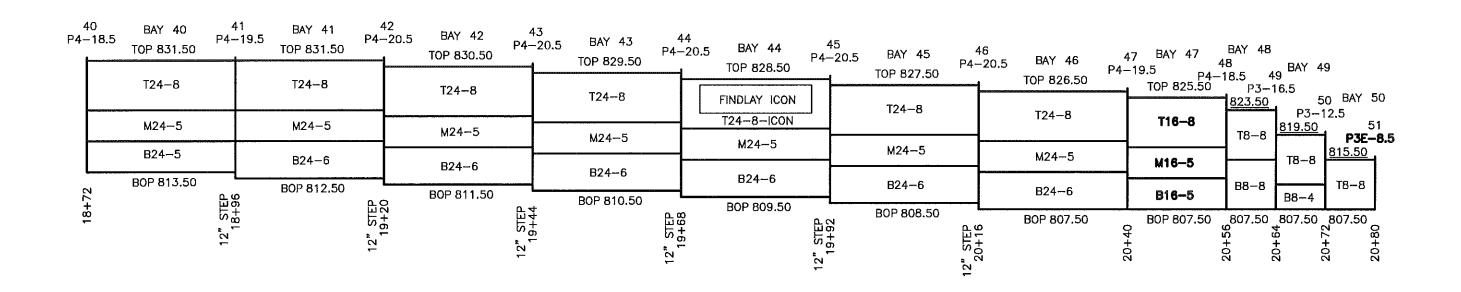
 DATE:
 5-19-17
 REV:
 170001PR03B

# MACK INDUSTRIES OF PA., INC.

2207 SODOM HUTCHINGS RD., VIENNA, OHIO 44473

SHEET NO.: 19 OF 28

30 P4−1	BAY 30 3 8.5 P4- TOP 831.50	51 BAY 31 <sup>3</sup> -18.5 P4- TOP 831.50	52 BAY 32 -18.5 P4 TOP 831.50	33 BAY 33 -18.5 P4 TOP 831.50		35 BAY 35 18.5 F TOP 831.50	36 BAY 36 4-18.5 P4 TOP 831.50	יאם שלו	38 BAY 38 -18.5 P4 - TOP 831.50	39 BAY 39 40 -18.5 P4-18.5 TOP 831.50
	T16-8	<b>716-8</b>	FINDLAY ICON T24-8-ICON	T24-8	T24-8	T24-8	T24-8	T24-8	T <b>24</b> -8	T24-8
	M16-5	M16-5	M24-5	M24-5	M24-5	M24-5	M245	M245	M24-5	M24-5
	B16-5	<b>816-5</b>	B24-5	B24-5	B24-5	B24-5	B24-5	B24-5	B24-5	B24-5
00	BOP 813.50	BOP 813.50	BOP 813.50	BOP 813.50	BOP 813.50	BOP 813.50	BOP 813.50	BOP 813.50	BOP 813.50	BOP 813.50
16+4	1		5 -	17+0	17+2	17+5	17+7	18+0	184 8 4 7	18+4



ROADWAY SIDE — ROUGH CUT STONE — COLOR 36373 RESIDENTIAL SIDE — ASHLAR — COLOR 16515

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NOISE BARRIER WALL 003B PROFILE, ROADWAY SIDE STA. 16+48 TO STA. 20+80				
O.D.O.T. PROJ. 170001 - HANCOCK COUNTY				
DRAWN BY:	BK	SCALE:		DRAWING NO.:
DATE:	5-19-17	REV:		170001PR03B
MACK INDUSTRIES OF PA., INC. 2207 SODOM HUTCHINGS RD., VIENNA, OHIO 44473 (330) 638-7680  SHEET NO.: 20 OF 28				