COSMEC INC. / DYNAMIC RUBBER

P.O. Box 2159
1501 Rocky Ridge Road
Athens, TX 75751
TEL: 903.677.2871 FAX: 903.675.4776

TRANSMITTAL SHEET

TO: SHELLY & SANDS
RYAN GREZLIK - r.grezlik@shellyandsands.com
ZACK MESSMER - z.messmer@shellyandsands.com
KAREN WARNER - karenwarner@roadrunner.com

DATE: 10/27/2026
JOB: FRA-33-21.71
RE: FINAL DRAWING DISTRIBUTION
DRP JOB NO: **18951** LOCATION: FRANKLIN COUNTY

WE TRANSMIT TO YOU UNDER SEPARATE COVER HERE WITH THE FOLLOWING DRAWINGS:

DWG NO	REV NO	NO EACH	DESCRIPTION	REMARKS
18951-GN1	0	1	GENERAL NOTES	
18951-E1	0	1	ERECTION TABLE	
18951-D1	0	1	SHOP DRAWING	
18951-D2	0	1	SHOP DRAWING	
18951-D3	1	1	SHOP DRAWING	

DWG NO	REV NO	NO EACH	DESCRIPTION	REMARKS

COMMENTS: **THE ATTACHED SHOP DRAWINGS ARE PROVIDED FOR FINAL DISTRIBUTION, NO ACTION REQUIRED ON YOUR PART.**

THE ABOVE PRINTS ARE SUBMITTED TO YOU FOR:

BY:

( ) Approval	( ) Final Approval	(XXX) Distribution
( ) Field Use	( ) Fabrication	(XXX) E-MAIL
( ) Next Day Air	( ) Second Day Air	( ) Messenger
( ) UPS	( ) First Class Mail	( ) Fax

Thank you

LIZ STONE

COSMEC INC. / DYNAMIC RUBBER PRODUCTS

WWW.COSMECINC.COM

GENERAL NOTES

GENERAL NOTES:

1. ALL BEARINGS IN ACCORDANCE WITH THE 2023 OHIO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIAL SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS 869.

2. THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG–TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.

3. SHOP TO MARK BEARING MARK ON ASSEMBLIES. MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER BEARING IS INSTALLED.

4. SHOP TO MARK HIGH SIDE ⊗ AND AHEAD STATIONS ARROW ON BEARINGS ASSEMBLIES AS SHOWN ON THESE SHOP DRAWINGS.

5. ALL DIMENSIONS ARE IN INCHES.

6. ALL PLATES SHALL BE SMOOTH AND STRAIGHT.

7. SHIP THE SAMPLE BEARINGS TO AN INDEPENDENT TESTING LABORATORY FOR TESTING PER OH DOT STANDARD SPECIFICATION.

8. DYNAMIC RUBBER REPRESENTATIVE:
   KAREN WARNER
   karenwarner@roadrunner.com
   903–677–2871
   1501 ROCKY RIDGE RD.
   ATHENS, TX 75751

MATERIAL NOTES:

1. STEEL PLATES:
   ASTM A709 GRADE 50 (PRIME PAINTED)

2. HP10x42 PEDESTALS:
   ASTM A709 GRADE 50 (PRIME PAINTED)

3. ELASTOMER:
   50 DUROMETER GRADE 3 NATURAL RUBBER

4. STEEL LAMINATES:
   ASTM A709 GRADE 36, A1011 GRADE 36 or 40 OR EQUIVALENT.

5, STEEL BACKING PLATES:
   ASTM A709 GRADE 50 (METALIZED)

6. STAINLESS STEEL:
   ASTM A240 W/#8 MIRROR FINISH

7. PTFE
   VIRGIN UNFILLED CONFORMING TO ASTM D4894

8. SHEAR STUDS:
   ASTM A108 GRADE 1018 (METALIZED)

FINISH NOTES:

1. BLAST EXPOSED STEEL SURFACES OF THE LOAD PLATES AND HP10x42 PEDESTALS TO SSPC–SP10 (NEAR–WHITE BLAST CLEANING) WITH AN ANCHOR PATTERN DEPTH OF 2–4 MILS.

2. ALL EXPOSED STEEL SURFACES OF THE PLATES AND HP10x42 PEDESTALS SHALL BE SHOP PRIME PAINTED WITH:

   SHERWIN–WILLIAMS ZINC CLAD III PRIMER (2–5 MILS DFT).

3. BLAST EXPOSED STEEL SURFACES OF THE BACKING PLATES AND SHEAR STUDS TO SSPC–SP10 (NEAR–WHITE BLAST CLEANING) PRIOR TO METALIZING. ANGULAR BLAST PROFILE SHALL BE 3 MILS MIN..

4. ALL EXPOSED SURFACES OF THE STEEL BACKING PLATES AND SHEAR STUDS SHALL BE METALIZED WITH 99.99 PERCENT ZINC WIRE UNS (Z130005)(12 MILS MIN. DFT.) IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 800 SECTION 516.03.C AND SUPPLEMENTAL SPECIFICATION 845.

5. ALL EXPOSED SURFACES OF THE BACKING PLATES AND SHEAR STUDS SHALL BE SEALED USING CARBOLINE 134 CLEAR. THE MINIMUM SEAL THICKNESS SHALL BE 2 MILS DFT.

CONTRACTOR NOTES:

1. WHEN WELDING TOP PLATE TO BEAM FLANGE USE TEMPERATURE INDICATING WAX PEN, OR OTHER SUITABLE MEANS, TO ENSURE THE TEMPERATURE OF THE ELASTOMER DOES NOT EXCEED 250°F. TEMPERATURES ABOVE THIS MAY DAMAGE THE ELASTOMER.

2. **THIS IS A REHABILITATION PROJECT. THE CONTRACTOR MUST VERIFY ALL SIZES AND DIMENSIONS ON THESE SHOP DRAWINGS PRIOR TO ANY FABRICATION BY COSMEC INC.. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE CORRECT SIZES AND CORRECT FIT IN THE FIELD OF ALL COMPONENTS.**

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

WINCHESTER PIKE
OVER US RTE. 33
BRIDGE NO. FRA–33–2276L

STATE	COUNTY	FED. PROJ. NO.
OH	FRANKLIN	E201 (228)

STATE PROJ. NO.: FRA–33–21.71

DYNAMIC RUBBER.:
LAMINATED BEARING ASSEMBLIES

Cosmec
1501 ROCKY RIDGE ROAD
P.O. BOX 2159
ATHENS, TEXAS 75751

SCALE: NONE	DRAWN BY: JR	CHECKED BY: ELS
	DATE: 6/26/26	DATE: 7/16/26

SHEET GN1 OF 1 | JOB NO.: 18951

REV.	DESCRIPTION	BY	DATE	CK'D	DATE
0	.	.	.	.	.

CUSTOMER: SHELLY & SANDS INC.
DRAWING NUMBER: 18951–GN1
REV.: 0

Bridge #FRA-33-2267L - Erection Table

Abut. or Pier	Girders	Bearing Ass'y Mark	Bearing Ass'y Qty.	Rub PL Ass'y Marks	Rub PL Qty.
Rear Abut.	ALL	EBA1	4	RP1 & RP2	1 ea.
Pier 1	ALL	EBA3	4	N/A	N/A
Pier 2	ALL	EBA4	4	N/A	N/A
Forward Abut.	ALL	EBA2	4	RP1 & RP2	1 ea.

SEE SHEET GN1 FOR NOTES & MATERIALS

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

WINCHESTER PIKE
OVER US RTE. 33
BRIDGE NO. FRA–33–2276L

STATE	COUNTY	FED. PROJ. NO.
OH	FRANKLIN	E201 (228)

STATE PROJ. NO.: FRA–33–21.71

DYNAMIC RUBBER.: LAMINATED BEARING ASSEMBLIES

Cosmec
1501 ROCKY RIDGE ROAD
P.O. BOX 2159
ATHENS, TEXAS 75751

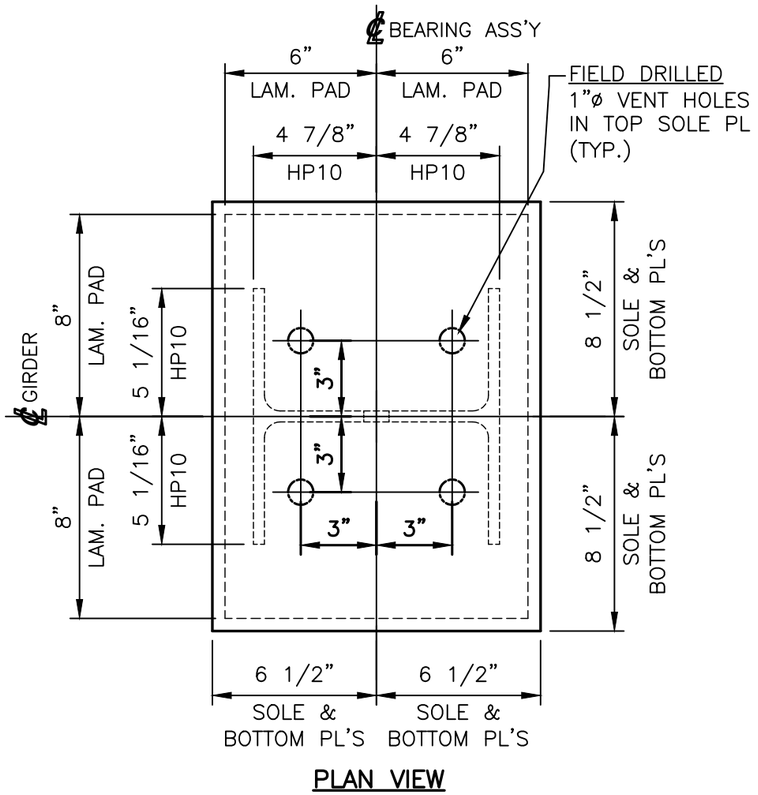
SCALE: NONE	DRAWN BY: JR	CHECKED BY: ELS
	DATE: 6/26/26	DATE: 7/16/26
SHEET E1 OF 1	JOB NO.: 18951	

REV.	DESCRIPTION	BY	DATE	CK'D	DATE
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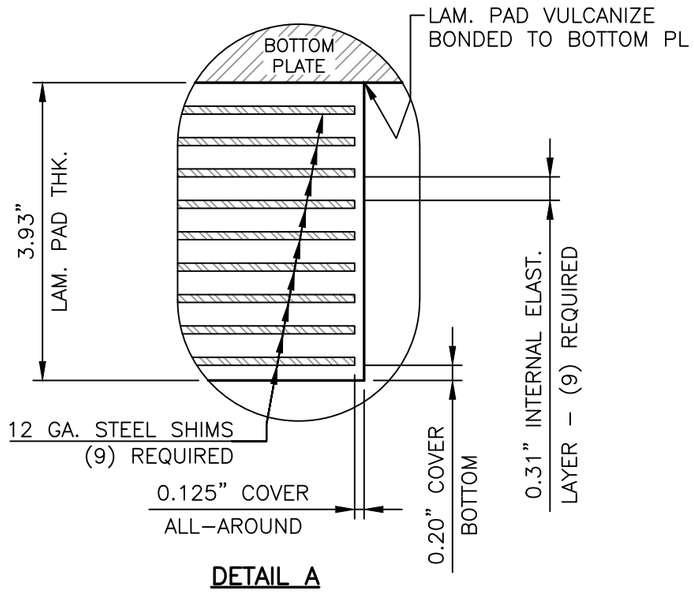
CUSTOMER: SHELLY & SANDS INC.
DRAWING NUMBER: 18951–E1
REV.: 0

Rear Abutment		
Location	TL	TH
Girder 1	8.45	8.72
Girder 2	8.83	9.10
Girder 3	7.91	8.18
Girder 4	8.28	8.55
Unit is in Inches		

Forward Abutment		
Location	TL	TH
Girder 1	8.35	8.46
Girder 2	8.96	9.07
Girder 3	9.49	9.60
Girder 4	8.17	8.28
Unit is in Inches		

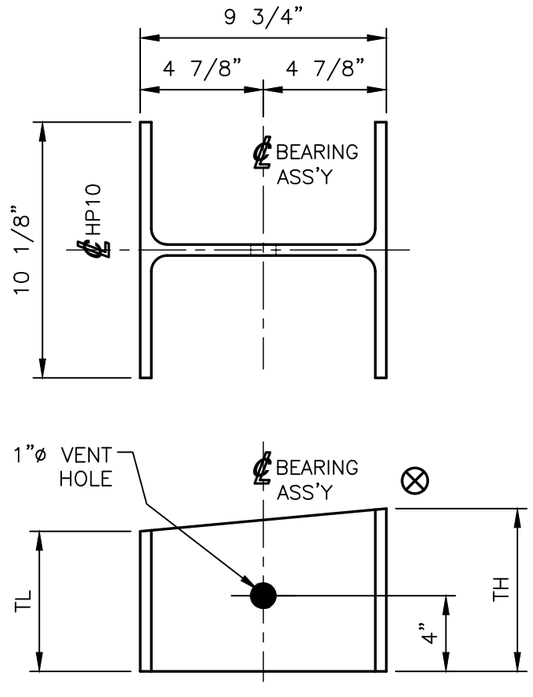


PLAN VIEW



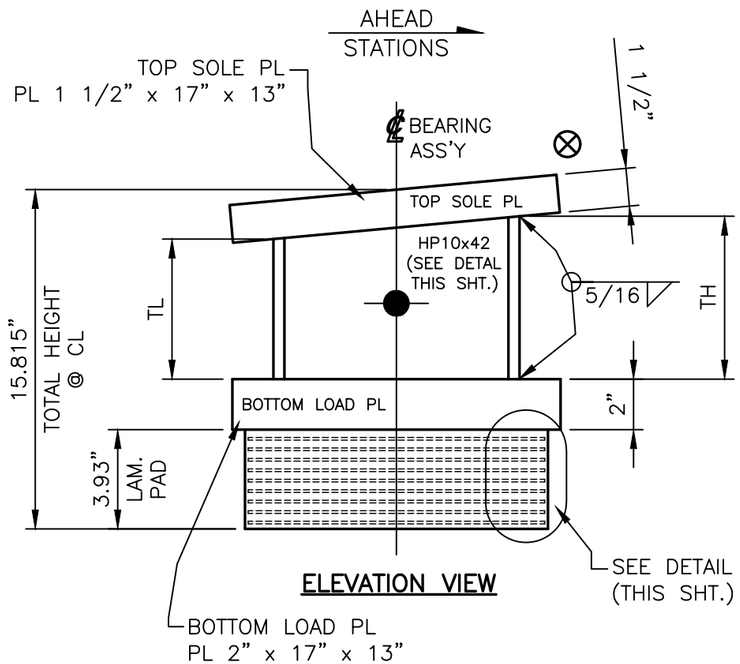
DETAIL A

LAM. PAD 3.93" x 16" x 12"
50 DURO NATURAL RUBBER GRADE 3
VULCANIZE BONDED TO BOTTOM PLATE
(8) REQUIRED



BEVELED HP10 x 42

SEE TABLE A1 FOR DIMS. "TL" & "TH"
AND ASSEMBLY MARKS
(8) TOTAL REQUIRED



ELEVATION VIEW

TOTAL DESIGN LOAD (kips)
182.90 kips

(8) EXP. BEARING ASSEMBLIES
MKS. EBA1 & EBA2

SEE TABLE A1 (ABOVE) FOR LOCATIONS, DIMENSIONS, MARKS AND QUANTITIES

REF. #352, ITEM #516E44101

⊗ – SHOP TO MARK HIGH SIDE AND AHEAD STATIONS ARROW AS SHOWN.

SEE SHEET GN1 FOR NOTES & MATERIALS

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

WINCHESTER PIKE
OVER US RTE. 33
BRIDGE NO. FRA-33-2276L

STATE	COUNTY	FED. PROJ. NO.
OH	FRANKLIN	E201 (228)

STATE PROJ. NO.: FRA-33-21.71

DYNAMIC RUBBER.:
LAMINATED BEARING ASSEMBLIES

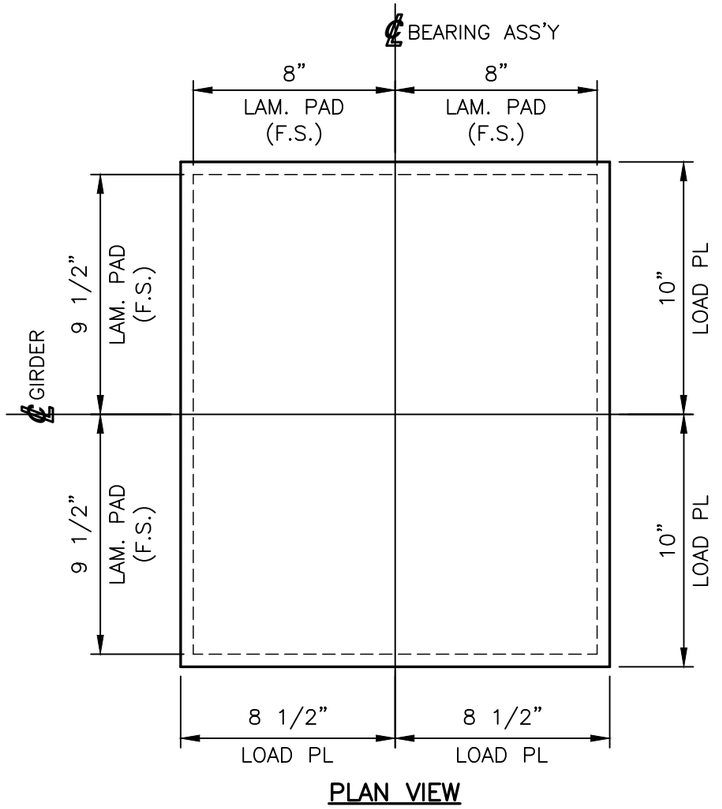
Cosmec
1501 ROCKY RIDGE ROAD
P.O. BOX 2159
ATHENS, TEXAS 75751

SCALE: NONE | DRAWN BY: JR DATE: 6/25/26 | CHECKED BY: ELS DATE: 7/16/26

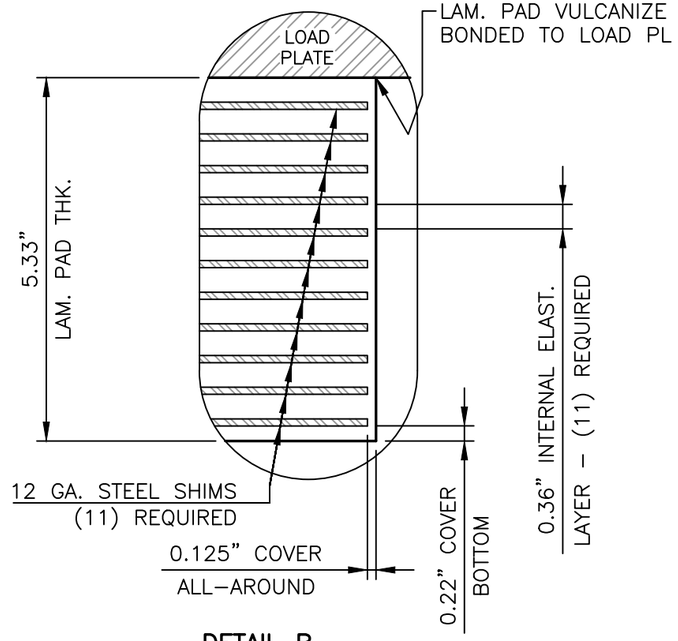
SHEET 1 OF 3 | JOB NO.: 18951

REV.	DESCRIPTION	BY	DATE	CK'D	DATE
0	.	.	.	.	.

CUSTOMER: SHELLY & SANDS INC.
DRAWING NUMBER: 18951-D1
REV. 0



PLAN VIEW

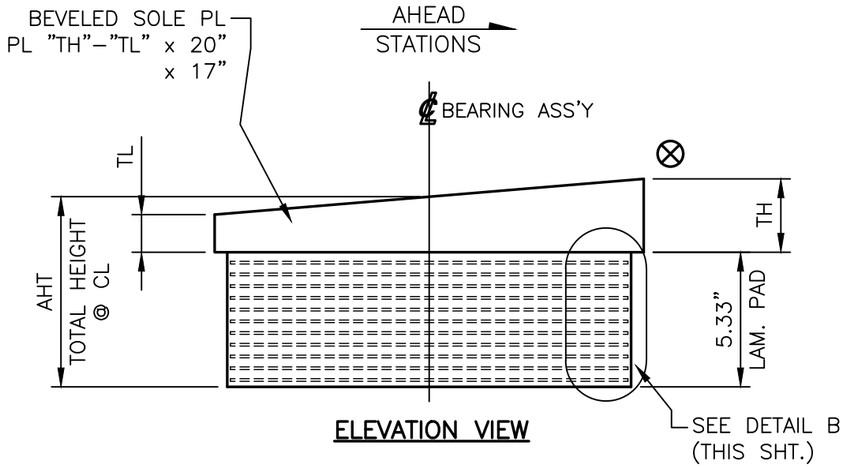


DETAIL B

LAM. PAD 5.33" x 19" x 16"
50 DURO NATURAL RUBBER GRADE 3
VULCANIZE BONDED TO LOAD PLATE
(8) REQUIRED

TEST #1

LAM. PAD 5.33" x 19" x 16"
50 DURO NATURAL RUBBER GRADE 3
NO PLATE
(1) REQUIRED



ELEVATION VIEW

⊗ – SHOP TO MARK HIGH SIDE AND AHEAD STATIONS ARROW AS SHOWN.

Table A2 - Expansion Bearing Assemblies

Assembly Mark	Qty.	Location	Girders	Dim. "TL" (in.)	Dim. "TH" (in.)	Dim. "AHT" (in.)
EBA3	4	Pier 1	ALL	2.00	2.43	7.545
EBA4	4	Pier 2	ALL	2.00	2.32	7.490

TOTAL DESIGN LOAD (kips)
376.3 kips

(8) EXP. BEARING ASSEMBLIES
MKS. EBA3 & EBA4

SEE TABLE A2 (ABOVE) FOR LOCATIONS, DIMENSIONS, MARKS AND QUANTITIES

REF. #353, ITEM #516E44201

SEE SHEET GN1 FOR NOTES & MATERIALS

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
WINCHESTER PIKE
OVER US RTE. 33
BRIDGE NO. FRA-33-2276L

STATE	COUNTY	FED. PROJ. NO.
OH	FRANKLIN	E201 (228)

STATE PROJ. NO.: FRA-33-21.71

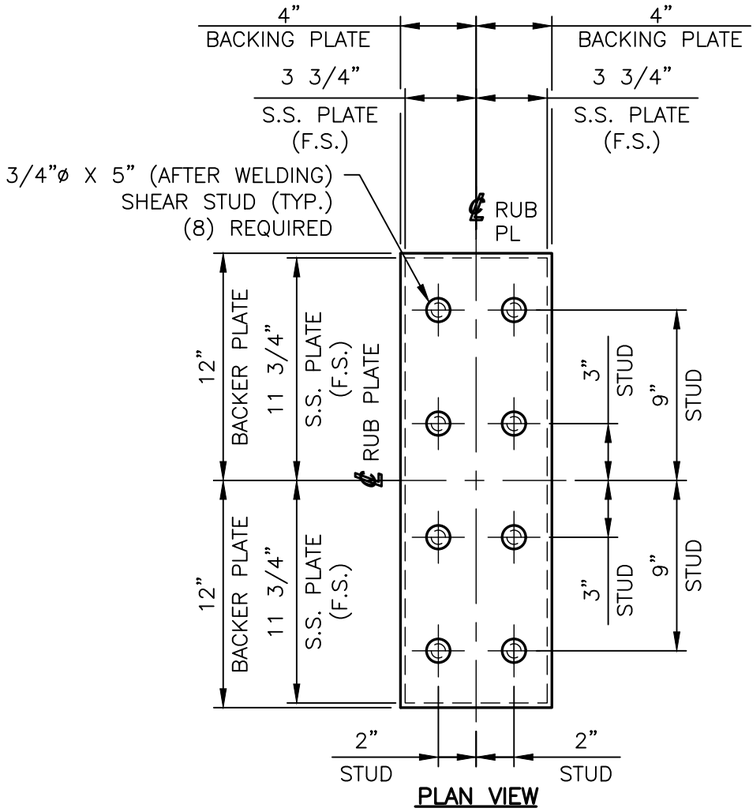
DYNAMIC RUBBER.:
LAMINATED BEARING ASSEMBLIES

Cosmec
1501 ROCKY RIDGE ROAD
P.O. BOX 2159
ATHENS, TEXAS 75751

SCALE: NONE | DRAWN BY: JR | DATE: 6/25/26 | CHECKED BY: ELS | DATE: 7/16/26

REV.	DESCRIPTION	BY	DATE	CK'D	DATE
0	.	.	.	.	.

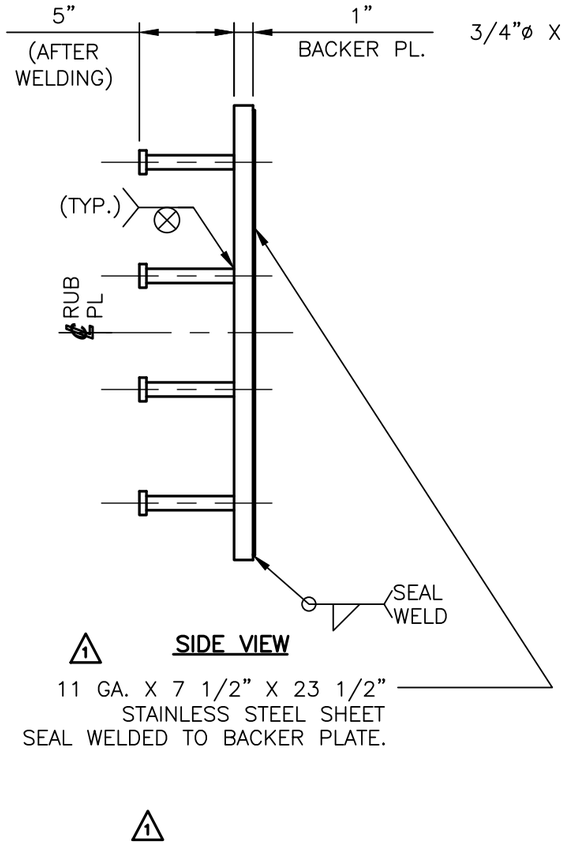
SHEET 2 OF 3 | JOB NO.: 18951
CUSTOMER: SHELLY & SANDS INC.
DRAWING NUMBER: 18951-D2 | REV. 0



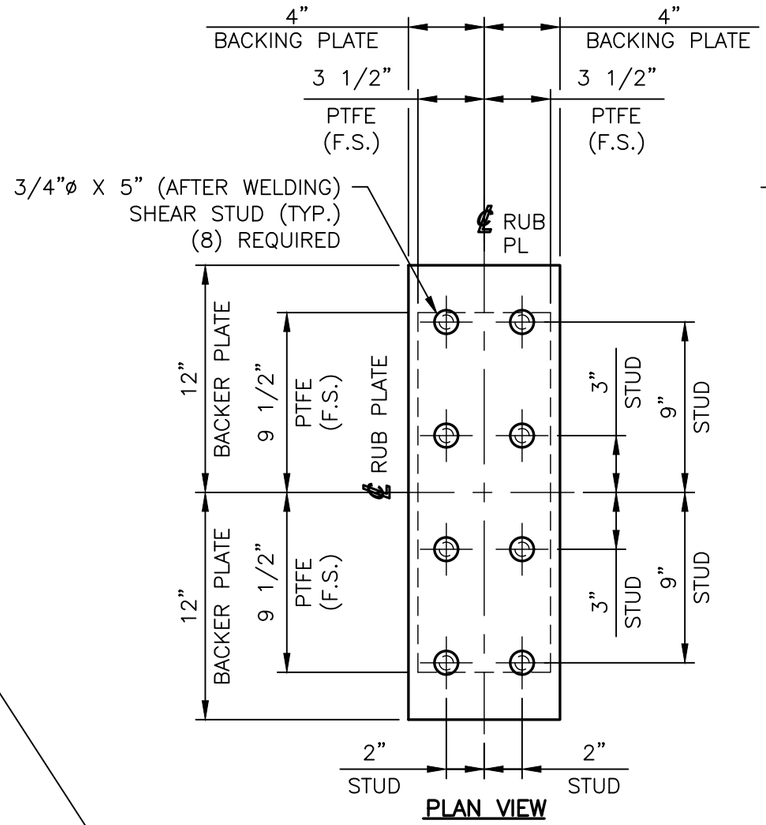
PLAN VIEW

RUB PLATE ASSEMBLY REF. #336
ITEM #511E33500
MARK: RP1

(2) LOCATED AT ABUTMENTS
(2) TOTAL REQUIRED



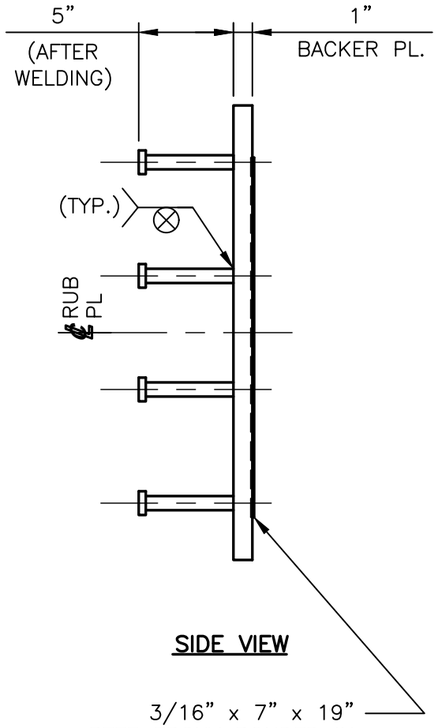
SIDE VIEW



PLAN VIEW

RUB PLATE ASSEMBLY REF. #336
ITEM #511E33500
MARK: RP2

(2) LOCATED AT ABUTMENTS
(2) TOTAL REQUIRED



SIDE VIEW

SEE SHEET GN1 FOR NOTES & MATERIALS

STATE OF OHIO
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WINCHESTER PIKE
OVER US RTE. 33

BRIDGE NO. FRA-33-2276L

STATE	COUNTY	FED. PROJ. NO.
OH	FRANKLIN	E201 (228)

STATE PROJ. NO.: FRA-33-21.71

DYNAMIC RUBBER.:
LAMINATED BEARING ASSEMBLIES

Cosmec
1501 ROCKY RIDGE ROAD
P.O. BOX 2159
ATHENS, TEXAS 75751

REV.	DESCRIPTION	BY	DATE	CK'D	DATE
1	REMOVED APPROVER NOTATION AND CLOUD	DRP	10/27/26	ELS	10/27/26

SCALE: NONE
DRAWN BY: JR
DATE: 6/25/26
CHECKED BY: ELS
DATE: 7/16/26
SHEET 3 OF 3
JOB NO.: 18951
CUSTOMER: SHELLY & SANDS INC.
DRAWING NUMBER 18951-D3
REV. 1