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September 22, 2025

Co3287 – CHELSEA ER P23-1(440)

ADDENDUM #2

Bidders:

Changes have been made to the documents located on the Bid Opportunity website as noted below:

REVISED: Plan sheets 6, 8, 9, and 37 have been removed and replaced. The Schedule of Items in the Invitation for Bids has been revised to reflect pay item changes.

ADDED: None

DELETED: None.

VTrans Mission and Vision

Through excellent customer service, provide for the safe and efficient movement of people and goods.
A safe, reliable, and multimodal transportation system that grows the economy, is affordable to use and operate, and serves vulnerable populations.



GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2024; AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 10TH EDITION, DATED 2024; AND THEIR LATEST REVISIONS.

2. FULL ACCESS TO ALL DRIVES INCLUDING FIELD DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. THIS MAY INCLUDE TEMPORARY RELOCATION OF DRIVES AS NEEDED. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.11000 “TRAFFIC CONTROL, ALL-INCLUSIVE”.

3. NO THICKNESS ADJUSTMENTS TO THE BITUMINOUS WEARING SURFACE ON ALONG THE LENGTH OF THE BRIDGE WILL BE MADE TO ACCOUNT FOR THE DIFFERENCE BETWEEN BEAM CAMBER AND THE THEORETICAL ROADWAY PROFILE. UNEVENNESS IN THE BRIDGE DECK SURFACE SHALL BE ACCOMODATED BY VARYING THE THICKNESS OF THE INTERMEDIATE COURSE ON THE BRIDGE DECK TO MAINTAIN A MINIMUM THICKNESS OF 1.5”, WHICH MAY REQUIRE SHIMMING.

4. THE CONTRACTOR IS ADVISED THAT THE COFFERDAM INSTALLATION TIMEFRAME MAY BE AFFECTED BY IN-STREAM WORK WINDOWS. SEE PROJECT PERMITS FOR ADDITIONAL DETAILS. ADDITIONAL WORK TO MONITOR TURBIDITY IN ACCORDANCE WITH THE EPSC NARRATIVE, SECTION 8 AS A RESULT OF THESE REQUIREMENTS WILL BE INCIDENTAL TO ITEMS 208.4000 “COFFERDAM (ABUTMENT 1)” & “COFFERDAM (ABUTMENT 2)”, AND ITEM 529.1500 “REMOVAL OF STRUCTURE” PAID FOR UNDER ITEM 653.0200 “MONITORING EPSC PLAN”.

EARTHWORK

5. THE CONTRACTOR SHALL CONTACT THE RIVER MANAGEMENT ENGINEER, JARON BORG - (802) 371-8342 - A MINIMUM OF TWO WEEKS PRIOR TO CONSTRUCTION FOR APPROVAL OF STREAM BED MATERIAL AND FOR CONSULTATION REGARDING FINAL GRADING OF THE CHANNEL.

6. THE REMOVAL OF THE EXISTING STRUCTURE WILL BE PAID UNDER ITEM 529.1500 “REMOVAL OF STRUCTURE”. THIS WORK SHALL INCLUDE REMOVAL OF THE ENTIRE SUPERSTRUCTURE AND SUBSTRUCTURE INCLUDING ANY PORTION OF THE EXISTING ABUTMENTS AND WINGWALLS THAT FALL WITHIN THE LIMITS OF COFFERDAM EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION. EXCAVATION FOR REMOVAL OF STRUCTURE THAT FALLS OUTSIDE THE LIMITS OF UNCLASSIFIED CHANNEL EXCAVATION AND COFFERDAM EXCAVATION SHALL BE INCIDENTAL TO ITEM 529.1500 “REMOVAL OF STRUCTURE”.

7. DETAILED SUMMARY OF QUANTITIES PROVIDED ON THE QUANTITIES SHEET IS ESTIMATED AS TOTAL EXCAVATION AND TOTAL FILL FOR EACH REPRESENTATIVE ITEM AND DOES NOT ACCOUNT FOR PHASING/SEQUENCING.

8. ANY TEMPORARY MEANS OF SUPPORTING EXCAVATION NECESSARY WILL BE INCLUDED IN THE PAYMENT OF ITEM 208.4000, “COFFERDAM (ABUTMENT 1)” AND “COFFERDAM (ABUTMENT 2)”. CONSTRUCTION DRAWINGS SHALL BE PROVIDED FOR THIS WORK IN ACCORDANCE WITH SUBSECTION 105.06.

TRAFFIC CONTROL

9. ALL TEMPORARY TRAFFIC CONTROL DEVICES AND MEASURES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. FOR ADDITIONAL SIGNING INSTRUCTIONS, SEE THE T-SERIES STANDARD DRAWINGS LISTED IN THE STANDARDS LIST. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A SITE-SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION. THE PLAN SHALL CLEARLY DETAIL HOW TRAFFIC WILL BE MAINTAINED. THE PLAN SHALL SPECIFY ALL CONSTRUCTION ACTIVITIES REQUIRING ALTERNATING ONE-WAY TRAFFIC, RELATE THOSE ACTIVITIES TO THE CONSTRUCTION SCHEDULE, AND SHOW APPROPRIATE TEMPORARY TRAFFIC CONTROL. THE CONTRACTOR SHALL SUBMIT THE PLAN TO THE ENGINEER FOR APPROVAL AS CONSTRUCTION DRAWINGS IN ACCORDANCE WITH SUBSECTION 105.06. ALL COSTS WILL BE INCLUDED IN THE PAYMENT OF ITEM 641.1100 “TRAFFIC CONTROL, ALL-INCLUSIVE”.

11. THE PHASING PLAN SHOWN IN THESE PLANS IS CONCEPTUAL IN NATURE. THE CONTRACTOR SHALL SUBMIT A COMPLETE TRAFFIC CONTROL PLAN FOR ALL PHASES OF CONSTRUCTION IN ACCORDANCE WITH ITEM 641.1100 “TRAFFIC CONTROL, ALL-INCLUSIVE”.

12. TEMPORARY TRAFFIC BARRIER SHALL MEET THE REQUIREMENTS OF SUBSECTION 621.07 AND SHALL BE PAID FOR UNDER ITEM 621.2400 “TEMPORARY TRAFFIC BARRIER”.

13. ANY REMOVAL, COVERING, AND/OR RESETTING OF EXISTING TRAFFIC SIGNS, AS DEEMED NECESSARY BY THE ENGINEER, WILL BE CONSIDERED INCIDENTAL TO THE PAYMENT OF ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE. SIGN COVERINGS SHALL NOT DAMAGE THE RETRO REFLECTIVITY OF THE COVERED SIGN. SIGN COVERINGS SHALL NOT DETERIORATE FOR THE DURATION THE SIGNS ARE COVERED.

14. TRAFFIC CONTROL SUBMITTAL SHALL BE COORDINATED WITH ANY TEMPORARY SUPPORT OF EXCAVATION. PAYMENT FOR COORDINATION IS INCIDENTAL TO ITEM 641.1100 “TRAFFIC CONTROL, ALL-INCLUSIVE”.

PRESTRESSED SOLID SLAB BEAMS

15. JACKING FORCE PER PRESTRESSING STAND = 44 KIPS

16. THE CONTRACTOR SHALL CONFIRM AT THE TIME OF FABRICATION DRAWING REVIEW THAT THE CALCULATED CAMBER ESTIMATE IS COMPATIBLE WITH THE GRADES AND ELEVATIONS OF THE REST OF THE STRUCTURE.

17. NO HOLES SHALL BE DRILLED IN ANY PRECAST ELEMENTS.

18. ALL LIFTING POINTS IN THE SUPERSTRUCTURE SHALL BE REMOVABLE TO THE MINIMUM CLEAR COVER FOR REINFORCING STEEL SPECIFIED IN THE PLANS. PAYMENT FOR THIS WORK WILL BE INCLUDED IN THE PAYMENT OF ITEM 510.2500 “PRESTRESSED CONCRETE SOLID SLABS (21 IN X43.5 IN)”.

19. ALL RECESSED LIFTING POINTS, ANCHOR BOLTS, AND BLOCK OUTS SHALL BE FILLED WITH A TYPE IV MORTAR PER SUBSECTION 707.01. PAYMENT WILL BE INCLUDED IN THE PAYMENT OF ITEM 510.2500 “PRESTRESSED CONCRETE SOLID SLABS (21 IN X43.5 IN)”.

20. THE METHOD OF FORMING FOR SUBSEQUENT POURS AFTER PLACING THE SUPERSTRUCTURE SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR IS ENCOURAGED TO WORK WITH THE FABRICATOR IF ADDITIONAL SUPPORTS ARE REQUIRED. IN NO CASE SHALL THE CONTRACTOR ATTACH ADDITIONAL FORM OR SCREED SUPPORTS BY DRILLING OR SIMILAR MEANS INTO ANY PRECAST SUPERSTRUCTURE UNIT.

21. THE CONCRETE EDGES ALONG THE LONGITUDINAL CLOSURE POURS SHALL BE TREATED TO PROVIDE A ROUGHENED/ EXPOSED AGGREGATE SURFACE. THE AMPLITUDE OF THE EXPOSED AGGREGATE SHALL BE A MINIMUM OF 1/8” AND BE COMPLETE PRIOR TO ERECTION OF THE BEAMS. THE FABRICATOR SHALL INDICATE THE METHOD USED TO ACHIEVE THIS PROFILE ON FABRICATION DRAWINGS AND METHOD USED TO PROTECT THE REINFORCING STEEL.

22. ALL EMBEDDED HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH SUBSECTION 726.06.

CONCRETE

23. ALL CONCRETE USED FOR THE BRIDGE CURB SHALL MEET THE REQUIREMENTS FOR AND BE PAID FOR UNDER 501.3700 “PERFORMANCE-BASED CONCRETE, CLASS PCD”.

24. ALL CONCRETE USED FOR THE CLOSURE POURS SHALL MEET THE REQUIREMENTS FOR AND BE PAID FOR UNDER 542.1000 “HIGH PERFORMANCE CONCRETE, RAPID SET”.

25. ALL CONCRETE USED FOR THE ABUTMENTS, WING WALLS AND APPROACH SLABS SHALL MEET THE REQUIREMENTS FOR AND BE PAID FOR UNDER 501.3800 “PERFORMANCE-BASED CONCRETE, CLASS PCS”.

26. ALL CONCRETE USED FOR THE CULVERT HEADWALL AND CAST IN PLACE CURB TYPE B SHALL MEET THE REQUIREMENTS FOR AND BE PAID FOR UNDER 541.2200 “CONCRETE, CLASS B”.

27. WATER REPELLENT, SILANE, SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP NOTCHES.

28. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

29. A BRIDGE PLAQUE, FURNISHED BY THE AGENCY, SHALL BE CAST INTO WINGWALL NO. 2, SEE S-501 FOR DETAILS.

30. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1” X 1”.

REINFORCING STEEL

31. ALL REINFORCING STEEL IN THE SOLID SLABS, CLOSURE POURS, CURBS, WINGWALLS ABOVE THE BRIDGE SEAT, AND STEEL IN THE BRIDGE SEAT SHALL MEET THE REQUIREMENTS FOR LEVEL II CORROSION RESISTANCE IN ACCORDANCE WITH SECTION 507 AND ARE MARKED WITH A “.2” IN THEIR SUFFIX.

32. ALL BARS CONFORMING TO LEVEL II CORROSION RESISTANCE PER THE REQUIREMENTS OF SUBSECTION 507.01 SHALL BE STAINLESS-CLAD, CONTINUOUSLY-GALVANIZED, OR HOT-DIPPED GALVANIZED. DUAL-COATED BARS SHALL NOT BE PERMITTED.

33. ALL REINFORCING STEEL IN THE APPROACH SLABS SHALL MEET THE REQUIREMENTS FOR LEVEL I (EPOXY COATED) CORROSION RESISTANCE AND ARE MARKED WITH “E” IN THEIR PREFIX.

34. ALL REINFORCING STEEL IN THE WINGWALLS AND ABUTMENT STEM BELOW THE BRIDGE SEAT, PILE CAPS, AND CULVERT HEADWALL SHALL MEET THE REQUIREMENTS FOR LEVEL I (BLACK) CORROSION RESISTANCE.

35. MECHANICAL BAR CONNECTORS SHALL BE AN EQUIVALENT LEVEL OF CORROSION RESISTANCE AS THE BARS THEY ARE CONNECTING.

36. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:

i. ALONG BACK FACES OF WALLS AGAINST EARTH:

2 INCHES

ii. ALONG TOP SURFACE OF DECK SLAB:

2.5 INCHES

iii. ALONG BOTTOM SURFACE OF DECK SLAB:

1.5 INCHES

iv. DIRECT EXPOSURE TO DEICING SALTS (FASCIA AND CURB)

3 INCHES

v. ELSEWHERE UNLESS OTHERWISE INDICATED:

3 INCHES

37. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:
- A. SPACING

+/- 1”

B. CLEARANCE

+/- ¼”
- H-PILES
38. FOR ESTIMATING PURPOSES, THE PILE TIP ELEVATIONS ARE ASSUMED TO BE AS SHOWN ON THE BORING LOGS. THE ACTUAL IN-PLACE LENGTH MAY VARY.

39. A MINIMUM OF ONE DYNAMIC PILE TEST PER ABUTMENT IS REQUIRED DURING PILE INSTALLATION. PAYMENT WILL BE MADE UNDER ITEM 505.4500 “DYNAMIC PILE LOADING TEST”.

40. REINFORCED DRIVING TIPS SHALL BE REQUIRED AND SHALL CONFORM TO SUBSECTION 505.04(f) OF THE STANDARD SPECIFICATIONS.

41. ABUTMENT 1 PILES SHALL BE DRIVEN TO A NOMINAL AXIAL RESISTANCE OF 354 KIPS AND SEATED IN BEDROCK. ABUTMENT 2 PILES SHALL BE DRIVEN TO A NOMINAL AXIAL RESISTANCE OF 399 KIPS AND SEATED IN BEDROCK. ANY WORK REQUIRED FOR DRIVING SHALL BE PAID FOR UNDER ITEM 505.200 “STEEL PILING, HP 14x117”.
- TEMPORARY TRAFFIC SIGNALS
42. TEMPORARY TRAFFIC SIGNAL SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ITEM 641.2200 "TEMPORARY TRAFFIC CONTROL SYSTEM, PORTABLE" AND IN COMPLIANCE WITH THE LATEST EDITION OF THE MUTCD.

43. SIGNAL FACES SHALL BE LED AND CONSIST OF 12 INCH LENSES (RED, YELLOW AND GREEN).

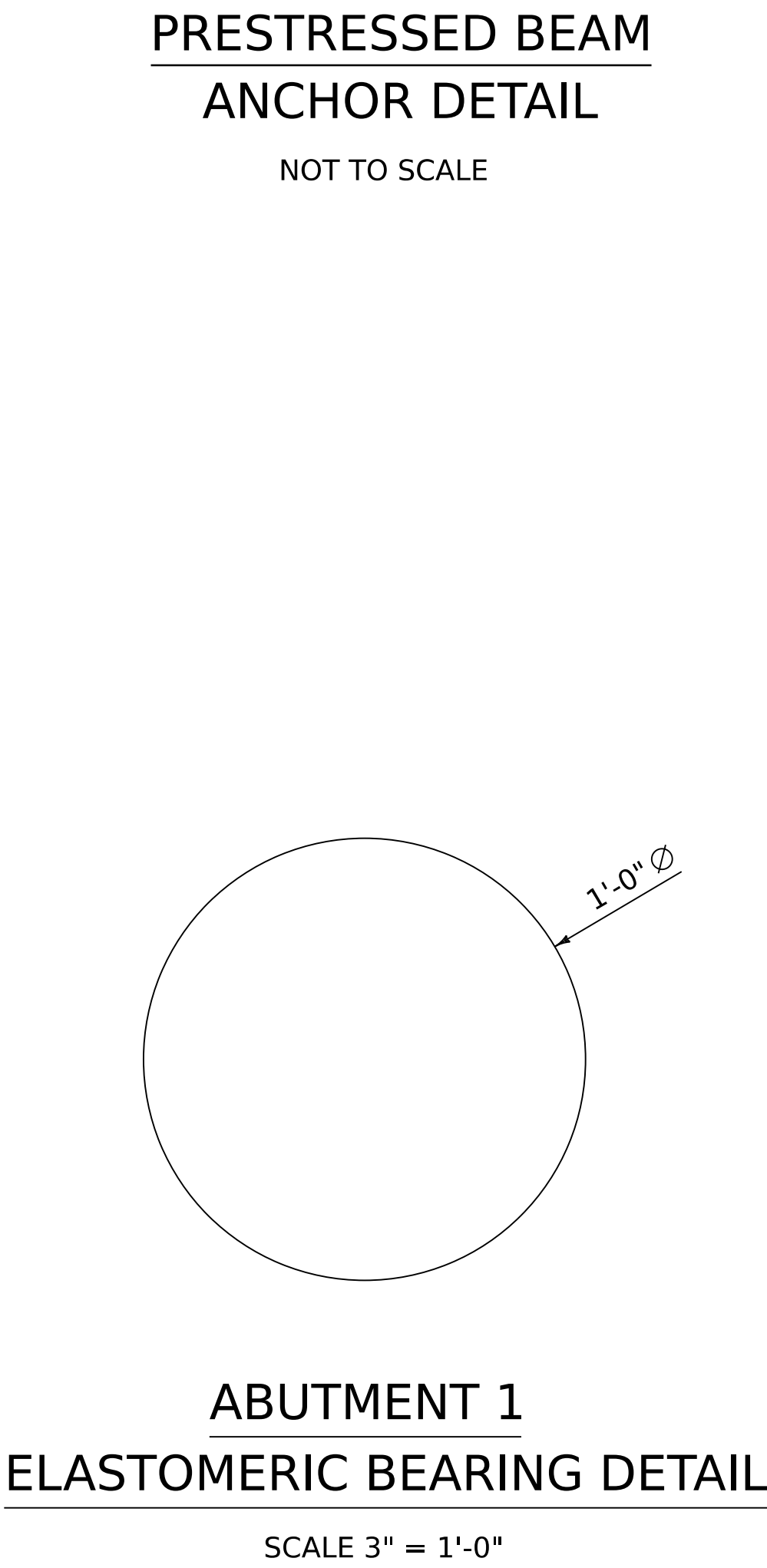
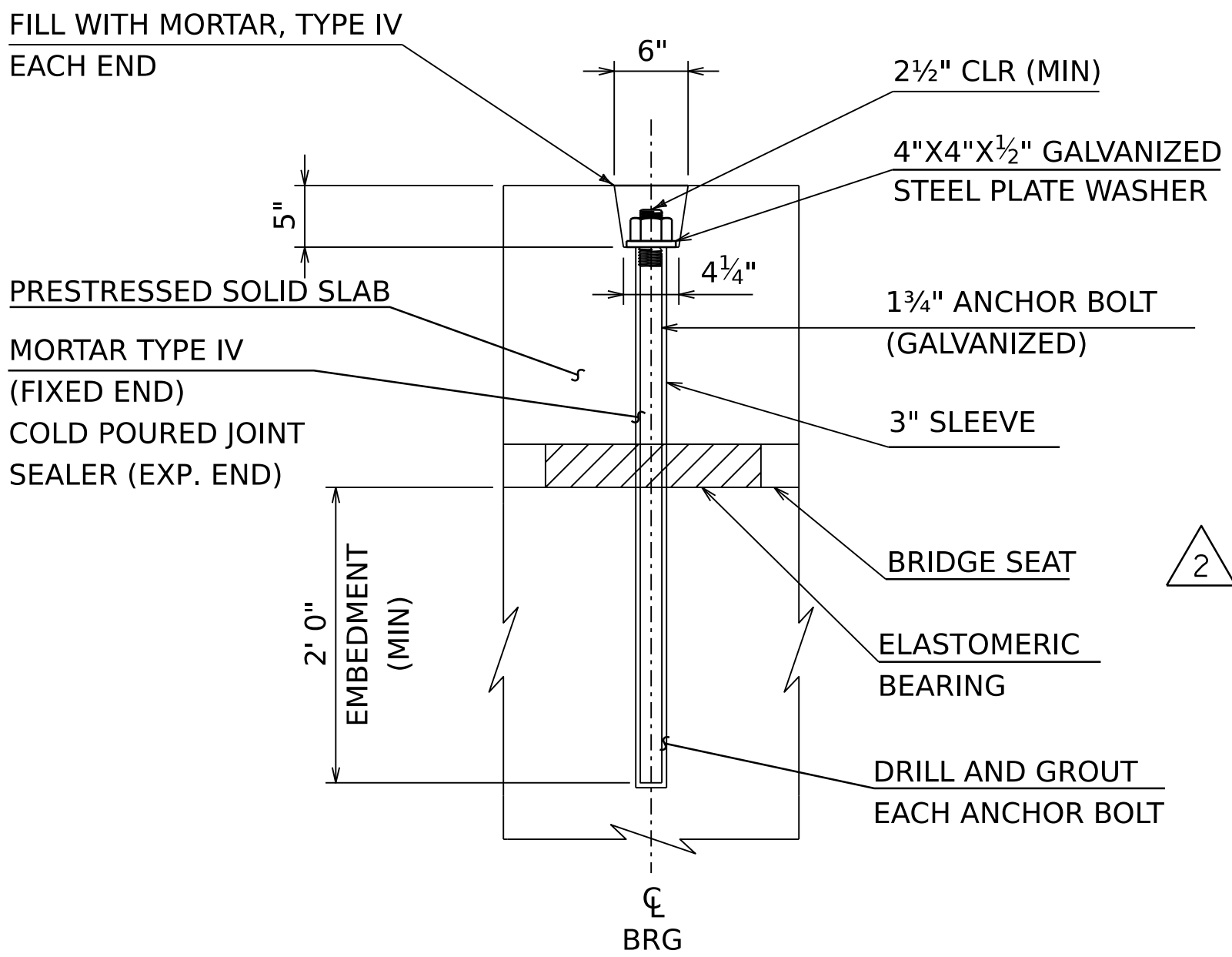
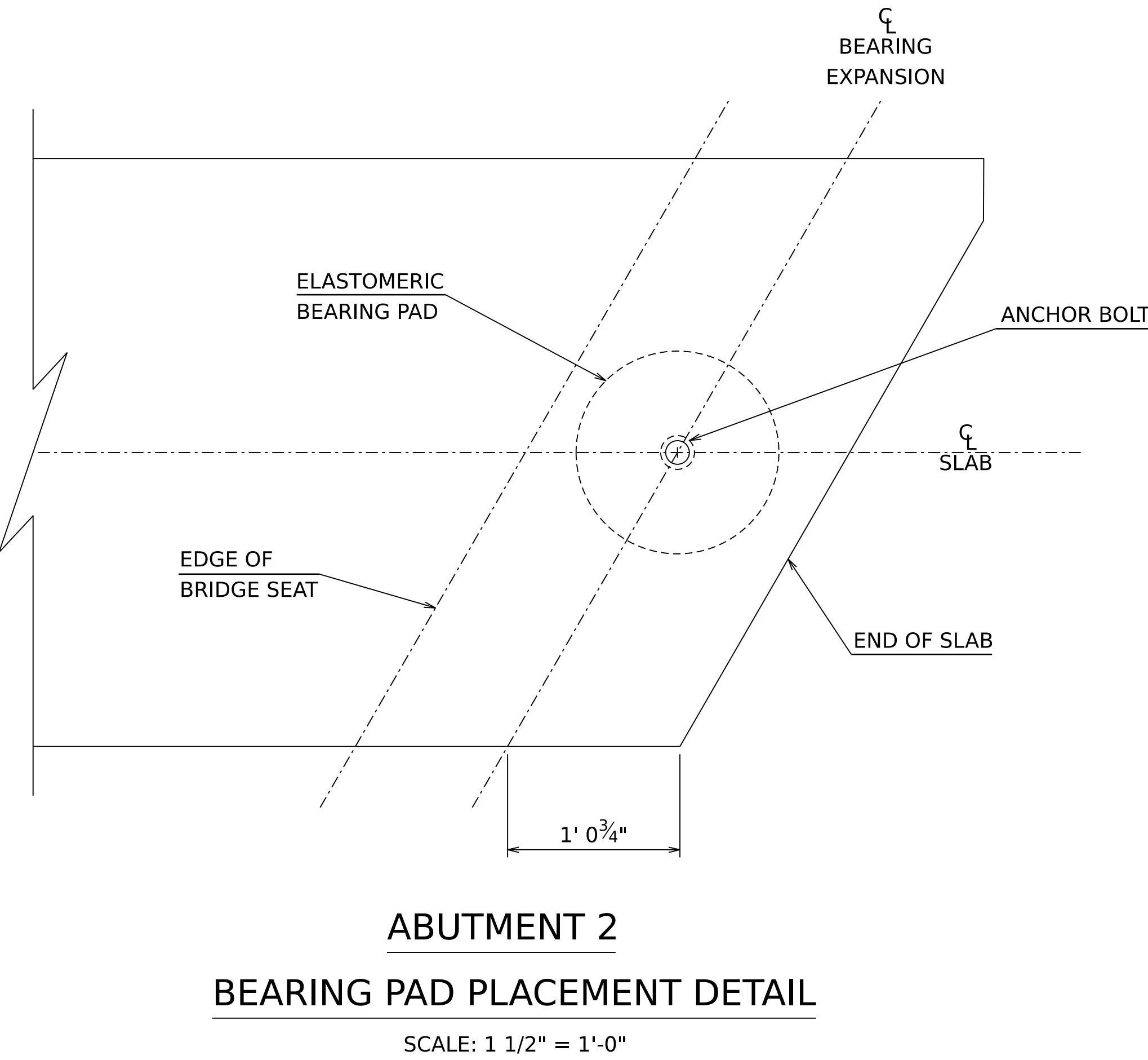
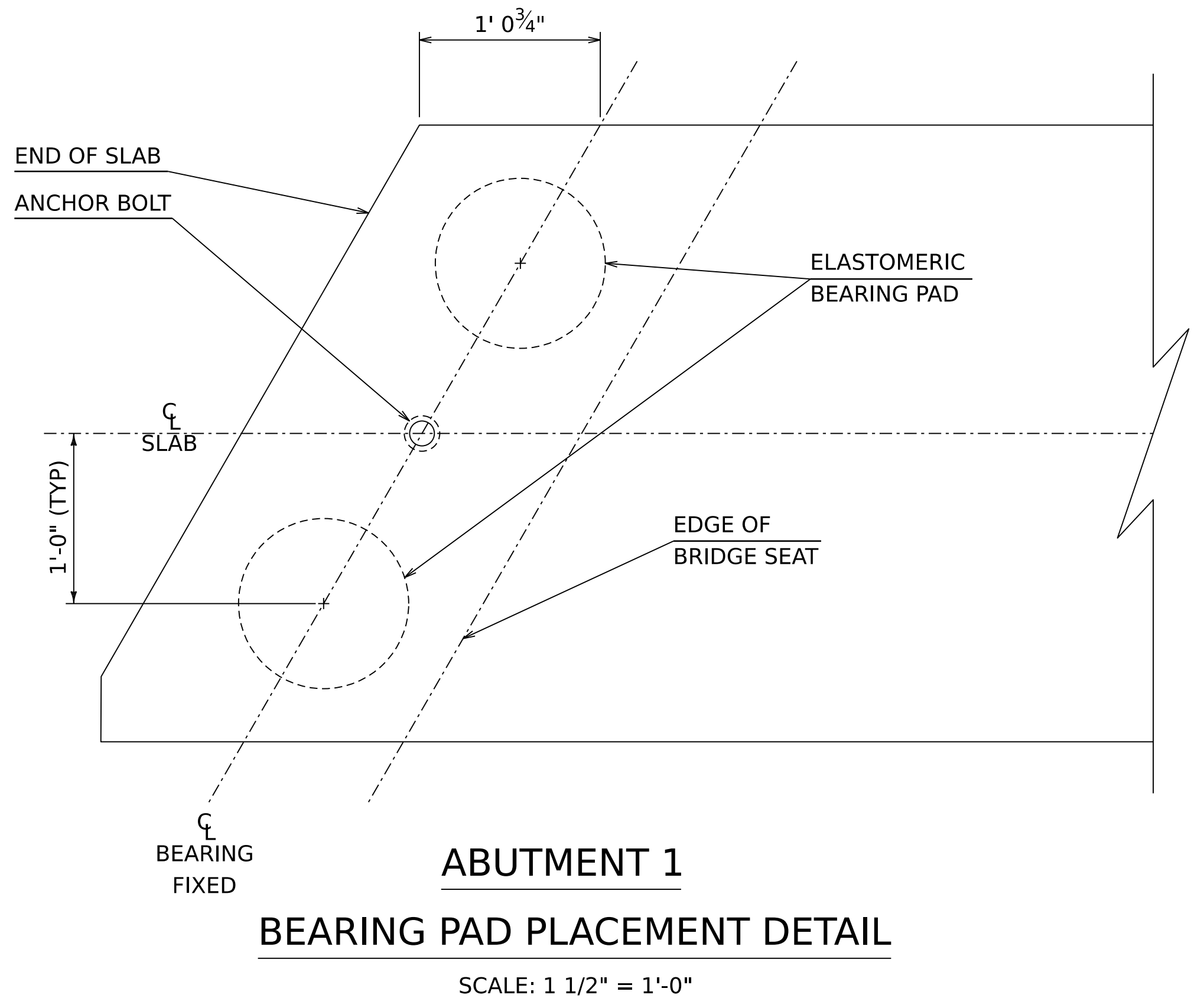
44. LUMINAIRES SHALL BE INSTALLED AT EACH OF THE APPROACHES TO ADEQUATELY LIGHT THE STOP BAR AREAS. PAYMENT WILL BE CONSIDERED INCIDENTAL TO ITEM 641.2200 "TEMPORARY TRAFFIC CONTROL SYSTEM, PORTABLE".

45. ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC. SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR REMOVAL INCLUDING UTILITY POLES, WIRES, ETC. PAYMENT WILL BE CONSIDERED INCIDENTAL TO ITEM 641.2200 "TEMPORARY TRAFFIC CONTROL SYSTEM, PORTABLE".

46. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING SIGNAL PHASING AND TIMING. THE CONTRACTOR SHALL SUBMIT A PHASING DIAGRAM AND TIMING SCHEDULE TO THE ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL MAKE THE SIGNALS OPERATIONAL ONLY AFTER RECEIVING APPROVAL OF BOTH THE PHASING DIAGRAM AND TIMING SCHEDULE BY THE ENGINEER. DEVELOPMENT OF THE PHASING DIAGRAM AND TIMING SCHEDULE WILL BE CONSIDERED INCIDENTAL TO ITEM 641.2200 "TEMPORARY TRAFFIC CONTROL SYSTEM, PORTABLE". ADDITIONAL ADJUSTMENTS TO SIGNAL TIMING OR PHASING REQUESTED BY THE ENGINEER SHALL BE COMPLETED WITHIN 48 HOURS OF THE REQUEST. PAYMENT FOR ADDITIONAL ADJUSTMENTS TO SIGNAL TIMING OR PHASING WILL BE CONSIDERED INCIDENTAL TO ITEM 641.2200 "TEMPORARY TRAFFIC CONTROL SYSTEM, PORTABLE".

47. THE SUBMITTAL FOR ITEM 641.2200 "TEMPORARY TRAFFIC CONTROL SYSTEM, PORTABLE" SHALL BE IN CONJUNCTION WITH THE SUBMITTAL FOR ITEM 641.1100 "TRAFFIC CONTROL, ALL-INCLUSIVE" AND SHALL INCLUDE AS A MINIMUM, THE SIGNAL LOCATION, TIMING AND PHASING PLAN, VEHICLE DETECTION SYSTEM, AND EMERGENCY VEHICLE PREEMPTION SYSTEM.
- | ADDENDUM | REVISION | DATE | DESCRIPTION | BY |
|----------|----------|------------|-----------------------|-----|
| 2 | I | 09-22-2026 | REVISED NOTES 3 AND 4 | REP |
- | | | | |
|-----------------|------------------|-------------|-------------|
| PROJECT NAME: | CHelsea | | |
| PROJECT NUMBER: | ER P23-1(440) | | |
| FILE NAME: | s23b796notes.dgn | PLOT DATE: | 22-SEP-2026 |
| PROJECT LEADER: | J. GRIFFIN | DRAWN BY: | R. PELLETT |
| DESIGNED BY: | K. LIHC | CHECKED BY: | A. MANN |
| PROJECT NOTES | | SHEET | 6 OF 68 |

STATE OF VERMONT AGENCY OF TRANSPORTATION													QUANTITY SHEET 2									
SUMMARY OF ESTIMATED QUANTITIES													TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
								1011 - ROADWAY	1041 - LANDSCAPING	1051 - EROSION CONTROL	1999 - FULL C.E. ITEMS	2211-BRIDGE NO. 1	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS	
												24	24		CY	HIGH PERFORMANCE CONCRETE, RAPID SET	542.1000					
								75					75		LF	24 INCH CPEP(SL)	601.2620					
								1					1		EACH	24 INCH CPEPES	601.7020					
								40					40		HR	ALL-PURPOSE EXCAVATOR RENTAL, TYPE I	608.2501					
								10					10		MGAL	DUST CONTROL WITH WATER	609.1000					
												280	280		CY	E-STONE FILL, TYPE III	613.0603					
								10					10		CY	STONE FILL, TYPE II	613.1002					
												85	85		CY	STONE FILL, TYPE III	613.1003					
										1			1		LS	IN-WATER SEDIMENT ISOLATION MEASURES	614.2000					
								130					130		LF	CAST-IN-PLACE CONCRETE CURB, TYPE B	616.2702					
								343					343		LF	REMOVAL OF GUARDRAIL	621.0100					
								250					250		LF	STEEL BEAM GUARDRAIL	621.1060					
								580					580		LF	TEMPORARY TRAFFIC BARRIER	621.2400					
								4					4		EACH	MTS, MGS, FLARED, TL-3	621.3130					
								4					4		EACH	ENERGY ABSORPTION ATTENUATOR, TEMPORARY, TL-2	621.7020					
								4					4		EACH	GUARDRAIL APPROACH SECTION, 3 RAIL BOX BEAM	621.8130					
								40					40		HR	UNIFORMED TRAFFIC OFFICERS	630.1000					
								1600					1600		HR	FLAGGERS	630.1500					
											1		1		LS	FIELD OFFICE, ENGINEER'S	631.1000					
											1		1		LS	TESTING EQUIPMENT, CONCRETE	631.1600					
											1		1		LS	TESTING EQUIPMENT, BITUMINOUS	631.1700					
											1		1		LS	TESTING EQUIPMENT, GROUT	631.1900					
											3000		3000		DL	FIELD OFFICE COMMUNICATIONS (N.A.B.I.)	631.2600					
								8					8		EACH	CPM SCHEDULE	633.1000					
								1					1		LS	MOBILIZATION/DEMOBILIZATION	635.1100					
								1					1		LS	TRAFFIC CONTROL, ALL-INCLUSIVE	641.1100					
								2					2		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.1500					
								1					1		EACH	TEMPORARY TRAFFIC CONTROL SIGNAL SYSTEM, PORTABLE	641.2200					
								1800					1800		LF	4 INCH WHITE LINE, WATERBORNE PAINT	646.2010					
								1800					1800		LF	4 INCH YELLOW LINE, WATERBORNE PAINT	646.2111					
								3350					3350		LF	TEMPORARY 4 INCH WHITE LINE	646.6000					
								3910					3910		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.1100					
												100	100		SY	GEOTEXTILE UNDER STONE FILL	649.3100					
									4469				4469		SY	TURF ESTABLISHMENT, GENERAL SEED	651.1500					
										230			230		CY	TOPSOIL	651.3500					
												140	140		SY	GRUBBING MATERIAL, 12 INCH	651.4012					
										1			1		LS	EPSC PLAN	653.0100					
										150			150		HR	MONITORING EPSC PLAN	653.0200					
										20000			20000		DL	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	653.0300					
										1			1		TON	HAY MULCH	653.1000					



2 - 1/4" EXTERIOR LAYERS OF ELASTOMER
4 - 1/2" INTERIOR LAYERS OF ELASTOMER
5 - 12 GAUGE STEEL
TOTAL THICKNESS = 3"

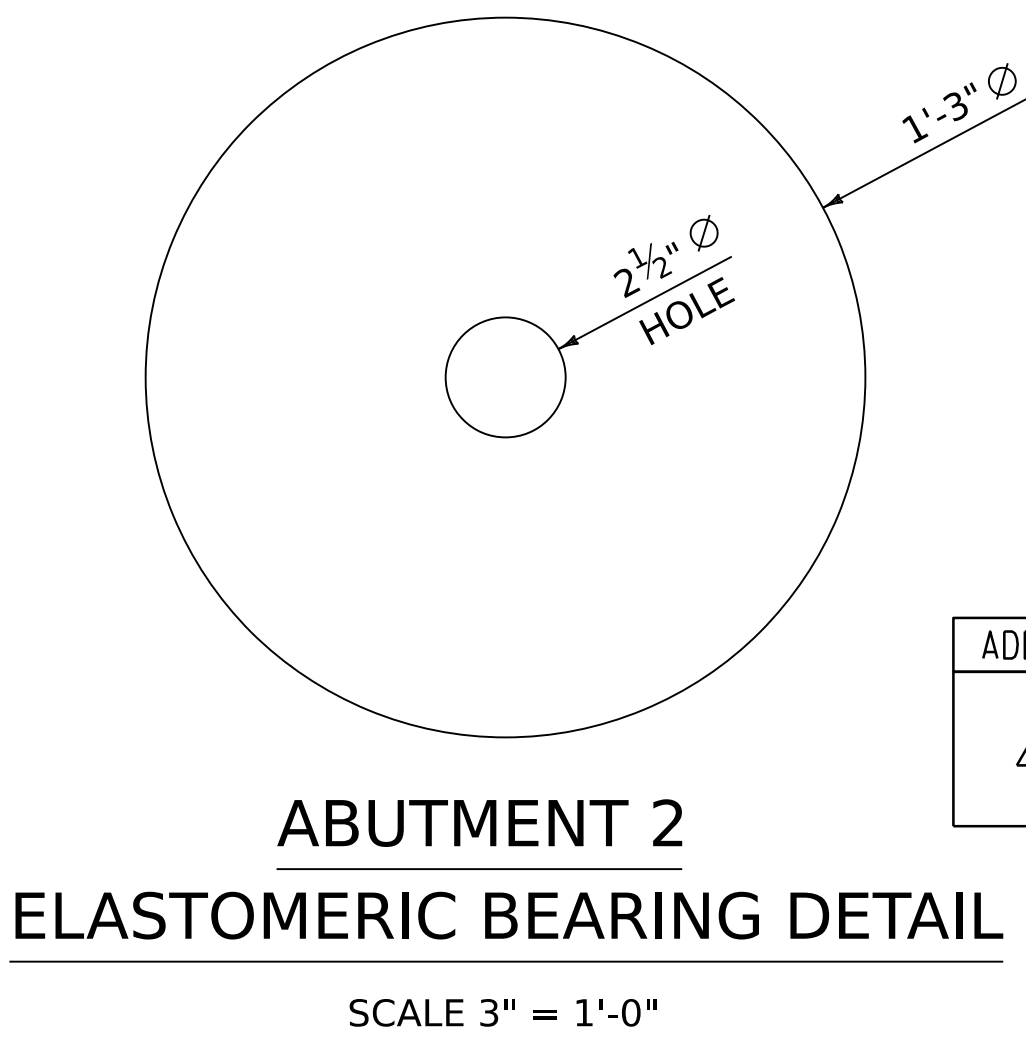
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BEARING NOTES:

- ANCHOR BOLTS TO BE ASTM F1554 GR. 105. THE CONTRACTOR SHALL TEMPLATE ANCHOR BOLT LOCATIONS PRIOR TO CASTING ABUTMENTS AND ENSURE THAT DRILLING FOR ANCHOR BOLTS WILL NOT CONFLICT WITH ABUTMENT REBAR.
- GROUT ANCHOR BOLTS INTO THE SLEEVES ON THE FIXED END. BEFORE THE GROUT CURES, PLACE THE WASHER PLATE AND INSTALL THE NUT ON TOP AND HAND TIGHTEN.
- PAYMENT FOR BEAM ANCHORAGE, INCLUDING TEMPLATING, DRILLING, GROUTING, ALL MATERIALS, LABOR, AND INCIDENTALS WILL BE INCLUDED IN THE UNIT PRICE BID FOR "PRESTRESSED CONCRETE SOLID SLABS".
- STEEL REINFORCEMENT IN ELASTOMERIC BEARING SHALL HAVE EDGE COVER OF 1/4".
- THE ELASTOMER SHALL HAVE A SHEAR MODULUS OF 150 PSI +/- 15% AND IS NOT REQUIRED TO BE THE DUROMETER HARDNESS REQUIREMENT OF SUBSECTION 731.02.
- SHIMS ARE ANTICIPATED TO BE REQUIRED TO ADJUST FOR FINAL GRADE AND CAMBER TOLERANCES. THE SHIMS SHALL BE 1/2" LARGER DIAMETER THAN THE ELASTOMERIC BEARING AND SHALL NOT BE STACKED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SHIMS PROVIDE 14 SHIMS OF EACH THICKNESS FOR THE 1'-0" DIAMETER BEARING. REQUIRED THICKNESSES ARE 1/8", 1/4", 3/8", 1/2", AND 5/8".
- SHIMS SHALL MEET THE FOLLOWING REQUIREMENTS. MANUFACTURER DATA SHEETS, NUMBER, AND SIZE OF SHIMS TO BE PROVIDED SHALL BE INCLUDED IN THE FABRICATION DRAWINGS FOR THE BEARINGS. THE COST OF THE SHIMS WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 531.1700 "BEARING DEVICE ASSEMBLY, STEEL REINFORCED ELASTOMERIC PAD".
 - HAVE A DUROMETER HARDNESS OF 90 +/-5.
 - MEET THE TEST REQUIREMENTS OF MILITARY SPECIFICATION MIL-C-882, WITH LOAD DEFLECTION PROPERTIES OF 10% OF PAD THICKNESS AT 1,000 PSI; 15% AT 2,000 PSI; AND WHEN LOADED TO 1,500 PSI, PERMANENT SET WITH LOAD REMOVED OF 2.5% OF ORIGINAL "ZERO POINT" THICKNESS.
 - ABLE TO WITHSTAND COMPRESSIVE LOADS PERPENDICULAR TO PLANE OF LAMINATIONS OF 10,000 PSI BEFORE BREAKDOWN.
 - RATIO OF LATERAL EXPANSION TO VERTICAL DEFLECTION NOT EXCEED 0.25 WHEN LOADED TO 1,500 PSI.
 - IS COMPOSED OF MULTIPLE LAYERS OF PRESTRESSED DUCK WITH 8.1 OZ NET PER SQUARE YARD; DUCK WARP COUNT OF 50 +/- 2 THREADS PER INCH; FILLING COUNT OF 40 +/- 2 THREADS PER INCH; AND 64 PLIES PER INCH OF FINISHED PAD THICKNESS.
 - COTTON DUCK SHALL BE IMPREGNATED AND BOUND WITH A HIGH-QUALITY RUBBER COMPOUND, CONTAINING ROT AND MILDEW INHIBITORS AND ANTI-OXIDANTS.
 - NO VISUAL EVIDENCE OF DAMAGE OR DETERIORATION BY ENVIRONMENTAL EFFECTS OF SUNSHINE, HUMIDITY, SALT SPRAY, FUNGUS, AND DUST IN ACCORDANCE WITH MIL-E-5272.

DESIGN SERVICE LOADS PER BEARING:
ABUTMENT 1:
MAX DEAD LOAD: 18.5 KIP
MAX LIVE LOAD: 47.4 KIP

(DESIGN METHOD B)
ABUTMENT 2:
MAX DEAD LOAD: 36.9 KIP
MAX LIVE LOAD: 94.8 KIP



2 - 1/4" EXTERIOR LAYERS OF ELASTOMER
4 - 1/2" INTERIOR LAYERS OF ELASTOMER
5 - 12 GAUGE STEEL
TOTAL THICKNESS = 4 1/4"

ADDENDUM	REVISION	DATE	DESCRIPTION	BY
2	I	09-22-2026	REQUIRED NUMBER AND THICKNESS OF SHIMS	REP

PROJECT NAME: CHelsea
PROJECT NUMBER: ER P23-1(440)

FILE NAME: s23b796brg	PLOT DATE: 22-SEP-2026
PROJECT LEADER: J. GRIFFIN	DRAWN BY: R. PETZOLDT
DESIGNED BY: A. LEMEIX	CHECKED BY: A. LEMEIX
BEARING DETAILS	SHEET 37 OF 68