

SPECIFICATIONS

ALL REFERENCES TO THE STANDARD SPECIFICATIONS ARE TO THE 2019 EDITION OF THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH SUPPLEMENTAL SPECIFICATIONS.

ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO THE LRFD BRIDGE DESIGN SPECIFICATIONS, 9th EDITION.

DESIGN LOAD

THE COLUMNS AND CRASH WALL ARE DESIGNED FOR 124 KIP COLLISION FORCE.

DESIGN METHOD

ALL REINFORCED CONCRETE MEMBERS ARE DESIGNED BY THE LOAD AND RESISTANCE FACTOR METHOD AS SPECIFIED IN THE CURRENT AASHTO SPECIFICATIONS.

MATERIALS DESIGN SPECIFICATIONS

FOR CLASS "A" REINFORCED CONCRETE F'C = 3,500 psi
FOR STEEL REINFORCEMENT FY = 60,000 psi

REINFORCEMENT

DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE TO CENTER OF BAR UNLESS OTHERWISE SHOWN. CLEAR DISTANCE TO THE FACE OF CONCRETE IS 2" UNLESS NOTED OTHERWISE. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS.

DRILLING AND ANCHORING INTO EXISTING CONCRETE

FOR ANCHORING NEW REINFORCING STEEL INTO EXISTING CONCRETE, SEE SECTIONS 511 AND 602.03.04 OF THE STANDARD SPECIFICATIONS. AVOID DRILLING THROUGH COLUMN OR WALL REINFORCEMENT (LONGITUDINAL AND HOOP). IF REINFORCEMENT CANNOT BE LOCATED PRIOR TO DRILLING AND IS HIT, STOP DRILLING IMMEDIATELY, SHIFT DRILL TEMPLATE LOCATION AND RE-DRILL. THE COST OF THIS WORK, INCLUDING LABOR, TOOLS, AND MATERIALS IS TO BE INCIDENTAL TO THE UNIT BID PRICE FOR STEEL REINFORCEMENT.

BONDING NEW CONCRETE TO EXISTING CONCRETE

IMMEDIATELY PRIOR TO PLACING NEW CLASS "A" CONCRETE, THE SURFACE AREAS OF EXISTING CONCRETE ARE TO BE COATED WITH A TWO-COMPONENT EPOXY RESIN SYSTEM IN ACCORDANCE WITH SECTIONS 511 AND 826 OF THE STANDARD SPECIFICATIONS. THE COST OF THIS WORK, INCLUDING LABOR, TOOLS, AND MATERIALS IS TO BE INCIDENTAL TO THE UNIT BID PRICE FOR CLASS "A" CONCRETE.

CONCRETE SEALING

CONTRARY TO THE SPECIFICATIONS, DO NOT APPLY MASONRY COATING. INSTEAD APPLY CONCRETE SEALER IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE SEALING. ALL EXPOSED SURFACES OF NEW CONCRETE ARE TO BE SEALED.

BEVELED EDGES

ALL EXPOSED EDGES SHALL BE BEVELED 3/4" UNLESS OTHERWISE SHOWN.

TRAFFIC CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING PROPER BARRICADES AND ADVANCE WARNING SIGNALS FOR ROAD CONSTRUCTION AND ROAD CLOSURE.

UTILITIES

BEFORE BEGINNING WORK, LOCATE ALL EXISTING UTILITIES. CONSIDER LOCATION OF ANY UTILITIES SHOWN ON THE EXISTING OR CONTRACT DRAWINGS TO BE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. THE DEPARTMENT DOES NOT WARRANT THE LOCATIONS AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS. THE CONTRACTOR MUST MAKE HIS OWN DETERMINATION. EXCEPT AS SHOWN ON THE PLANS, WORK AROUND AND DO NOT DISTURB EXISTING UTILITIES.

REMOVE EXISTING STRUCTURE

EXISTING CONCRETE BARRIERS AND CRASH WALLS ARE TO BE REMOVED AS SHOWN IN THE PLANS. THE COSTS FOR EXISTING CRASH WALL REMOVAL AND REMOVAL OF THE SPLIT MEDIAN BARRIER WALL ALONG A PIER SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE CONCRETE MASONRY." THE COSTS FOR REMOVING THE EXISTING CONCRETE MEDIAN BARRIER SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE CONCRETE MEDIAN BARRIER."

SAWCUTTING

SAWCUTTING OF THE EXISTING CONCRETE MEDIAN BARRIER, INCLUDING ITS FOOTER, IS INCIDENTAL TO THE UNIT BID PRICE FOR CONCRETE CLASS "A".

STRUCTURE EXCAVATION

THE COST FOR ANY EXCAVATION REQUIRED TO REMOVE AND CONSTRUCT CRASH WALL IS INCIDENTAL TO THE UNIT BID PRICE FOR CONCRETE CLASS "A".

PLANS OF EXISTING STRUCTURE

AS AN AID TO THE CONTRACTOR, PLANS OF THE EXISTING BRIDGE ARE AVAILABLE (SEE DRAWING NUMBER 23716). THE COMPLETENESS AND ACCURACY OF THE DRAWINGS ARE NOT GUARANTEED.

VERIFYING FIELD CONDITIONS

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL. NEW MATERIAL THAT IS UNSUITABLE BECAUSE OF VARIATIONS IN THE EXISTING STRUCTURE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

DAMAGE TO THE STRUCTURE

THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE EXISTING STRUCTURE, SHOULD IT BE ALLOWED TO FALL DUE TO THE CONTRACTOR'S ACTIONS. THE CONTRACTOR IS RESPONSIBLE FOR BOTH THE REMOVAL AND REPLACEMENT OF THE FALLEN PORTION AT THE CONTRACTOR'S EXPENSE.

PAVEMENT REPAIRS

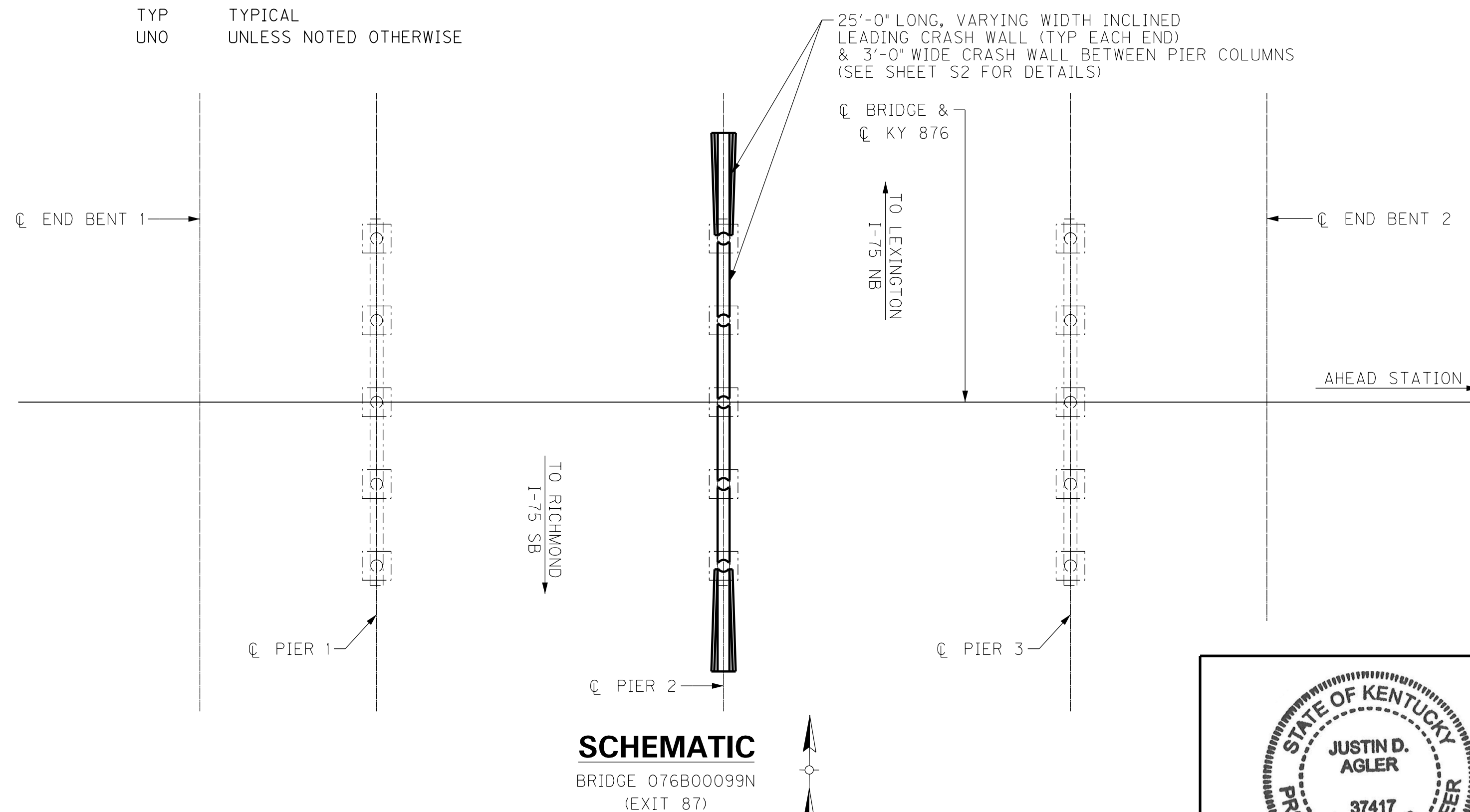
ALL VOIDS IN THE PAVEMENT LEFT BY REMOVAL OF THE EXISTING MEDIAN BARRIER AND PIER CRASH WALL AND CONSTRUCTION OF THE NEW INCLINED TRANSITION CRASH WALL AND PIER CRASH WALL ARE TO BE FILLED WITH ASPHALT PAVEMENT AS SHOWN IN THE PAVEMENT REPAIR DETAILS ON SHEET S3. THE ASPHALT QUANTITIES REQUIRED TO FILL THE VOIDS WILL BE SHOWN ON THE ROADWAY PLANS PAVING SUMMARY.

ABBREVIATIONS

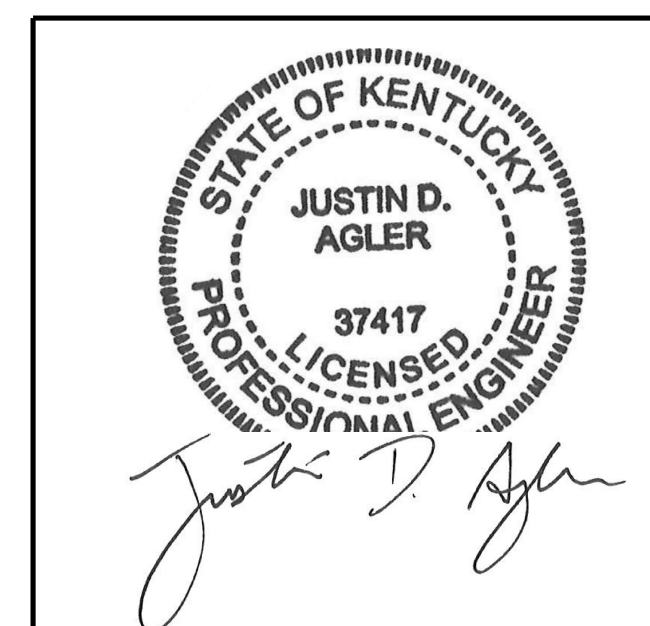
☉	CENTERLINE
CLR	CLEAR
EF	EACH FACE
EMBED	EMBEDMENT
EO	EQUAL
MIN	MINIMUM
MAX	MAXIMUM
NB	NORTHBOUND
SB	SOUTHBOUND
SPA	SPACE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

ESTIMATE OF QUANTITIES

BID CODE	ITEM	QUANTITY	UNIT
02403	REMOVE CONCRETE MASONRY	84.0	CY
08100	CONCRETE-CLASS A	140.0	CY
08150	STEEL REINFORCEMENT	9,424	LB
21935EN	REMOVE CONC MEDIAN BARRIER	50	LF
23378EC	CONCRETE SEALING	2,560	SF



SCHEMATIC
BRIDGE 076B00099N
(EXIT 87)



JUSTIN D. AGLER DATE: 12-20-2024
KY PE NO. 37417

ITEM NUMBER
7-22115.00

INDEX OF SHEETS

Sheet No.	Description
S1	GENERAL NOTES & ESTIMATE OF QUANTITIES
S2	PIER 2 CRASH WALL ADDITION
S3	PIER 2 CRASH WALL ADDITION BILL OF REINFORCEMENT

SPECIAL NOTES

CONCRETE SEALING

SPECIAL PROVISIONS

NA

STANDARD DRAWINGS

SPECIFICATIONS

2019 Standard Specifications for Road and Bridge Construction.
2020 (9th Edition) AASHTO LRFD Bridge Design Specifications

REVISION	DATE
DATE: DECEMBER 2024	CHECKED BY: A. ADKINS
DESIGNED BY: J. AGLER	A. ADKINS
DETAILED BY: J. AGLER	A. ADKINS

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY
MADISON

ROUTE KY 876	CROSSING I-75
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GENERAL NOTES & EST. QUANTITIES

PREPARED BY SHEET NO. **S1**
DRAWING NO.

LETTING DATE

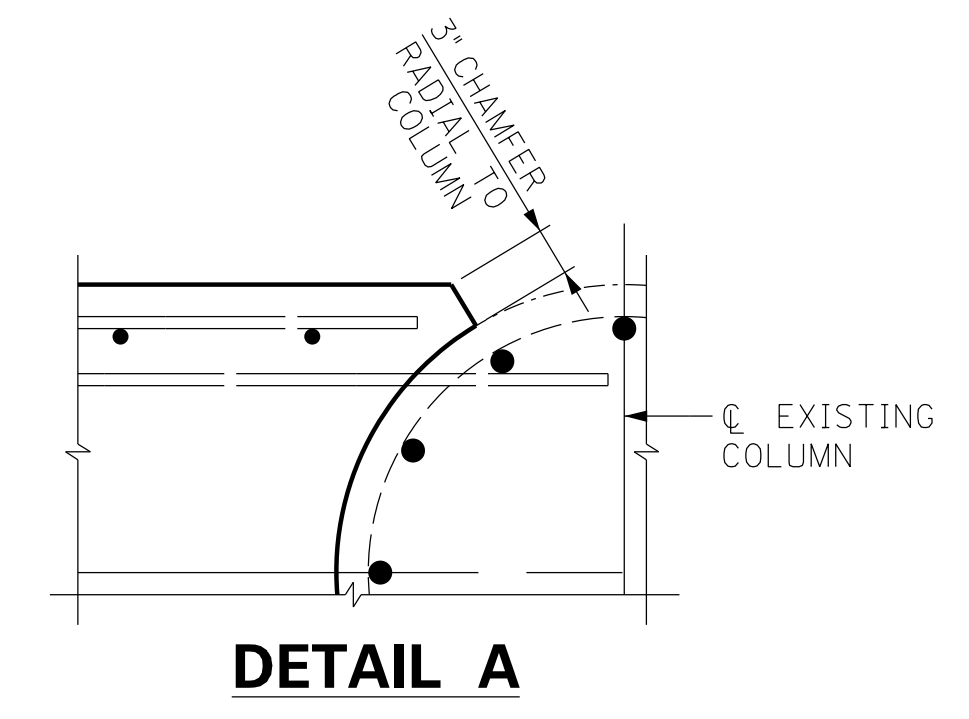
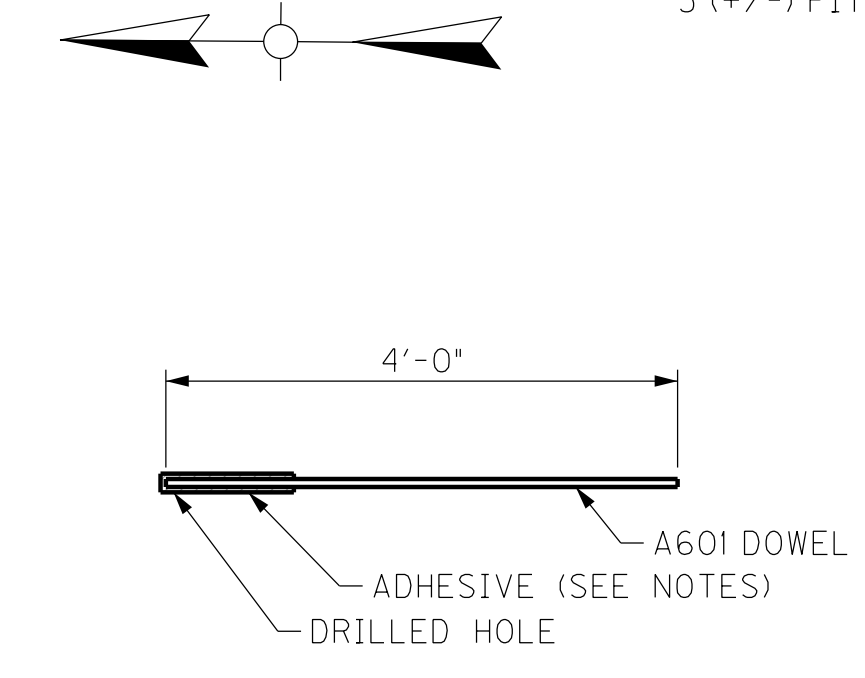
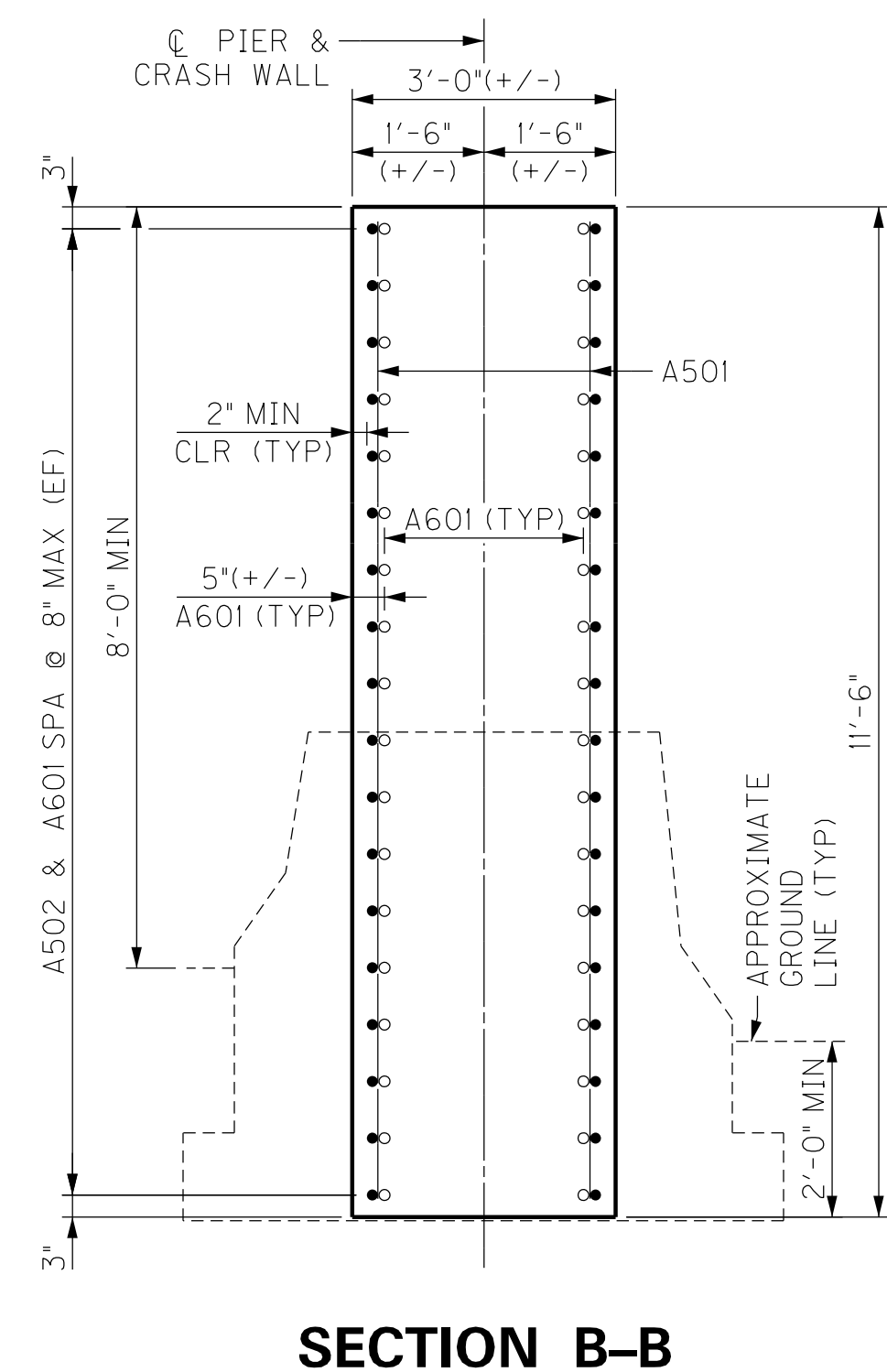
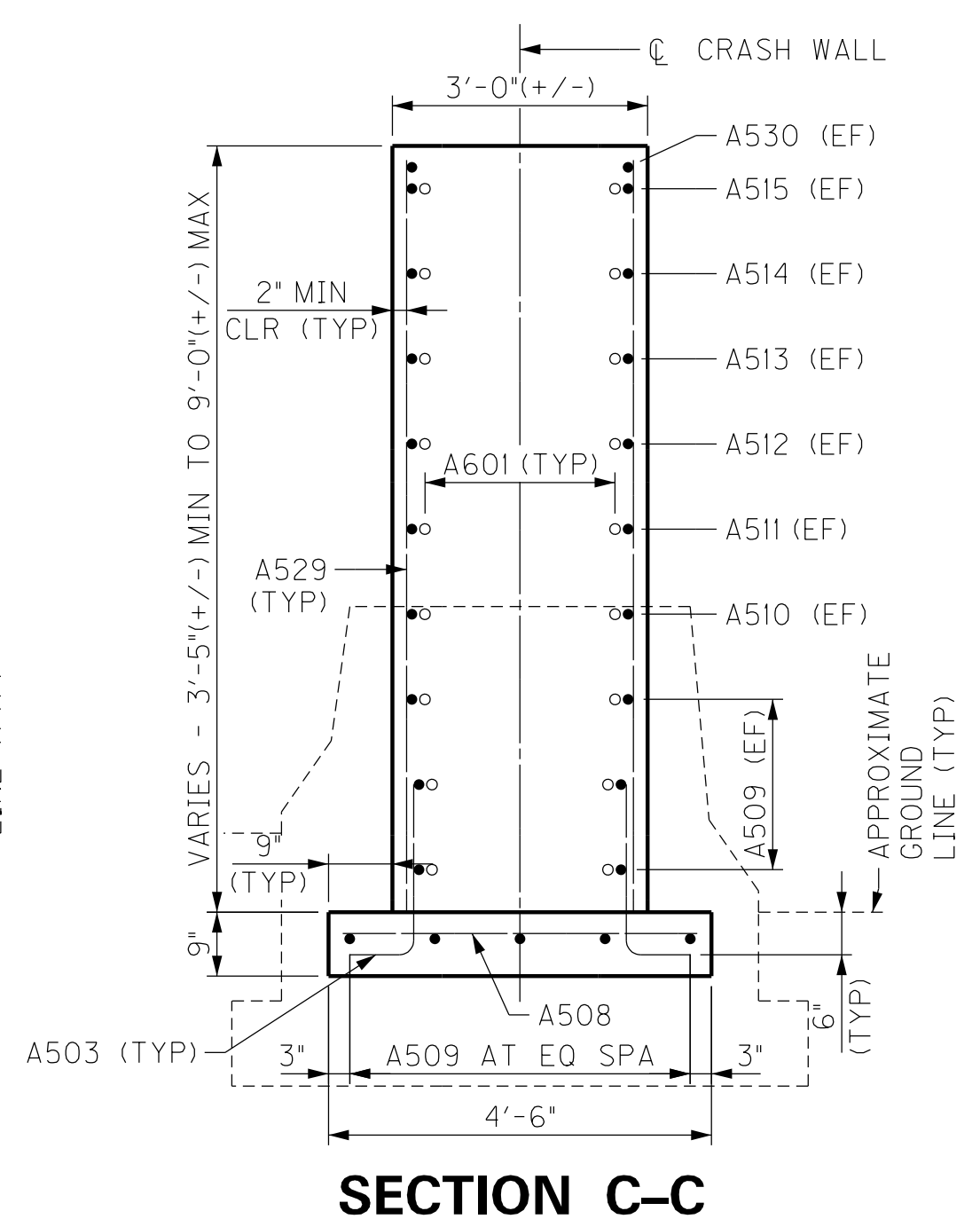
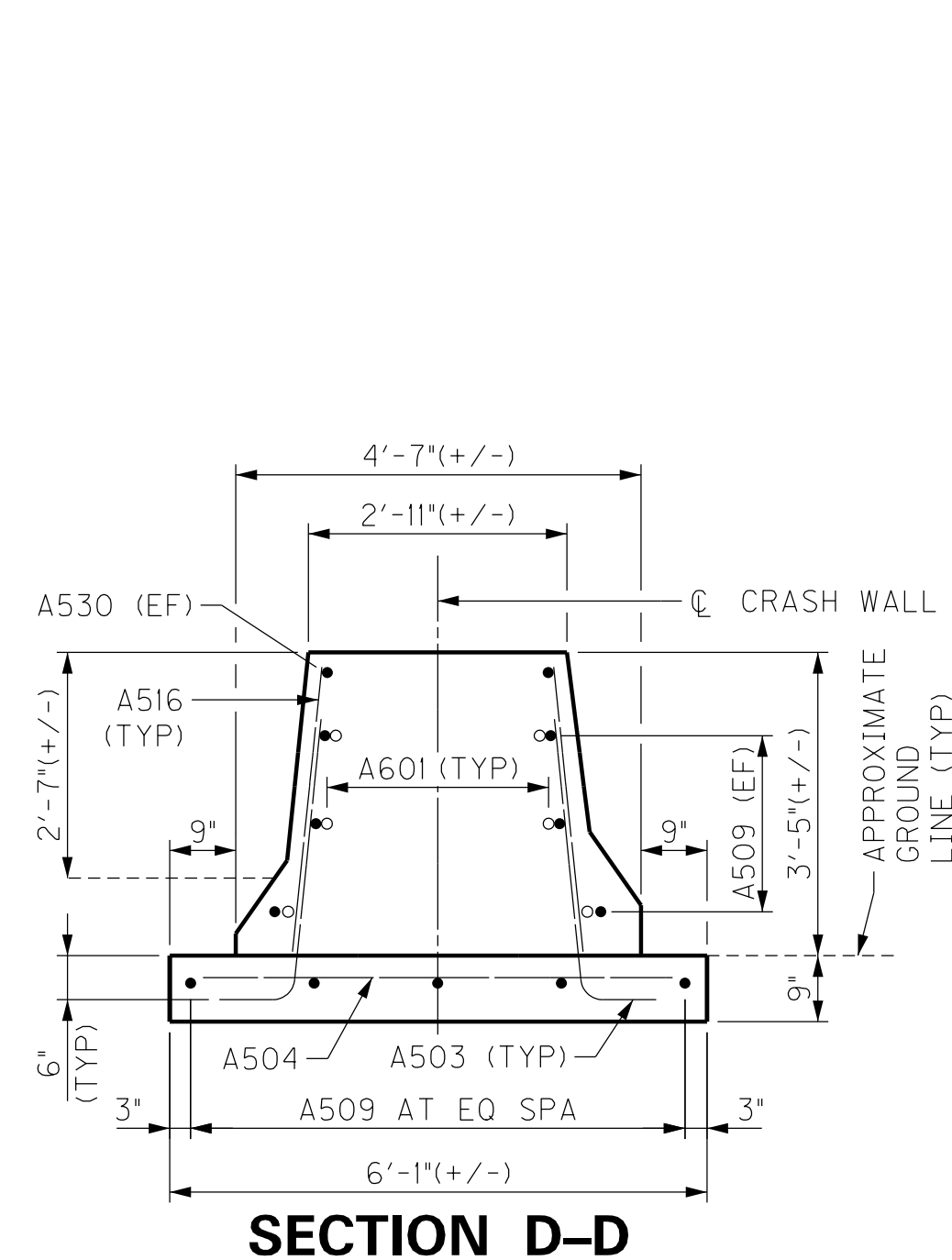
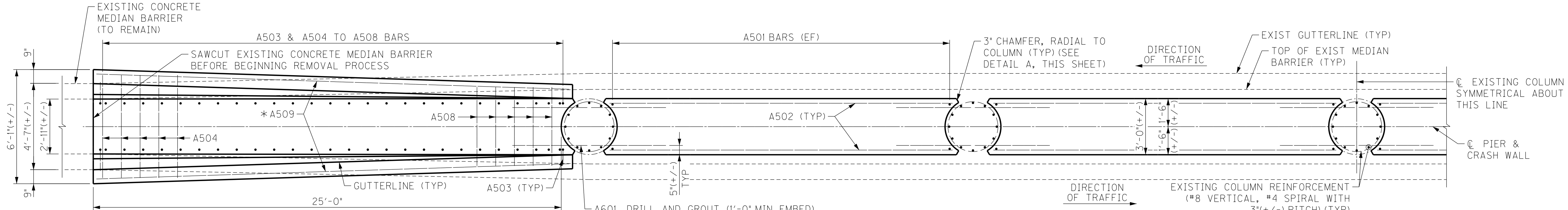
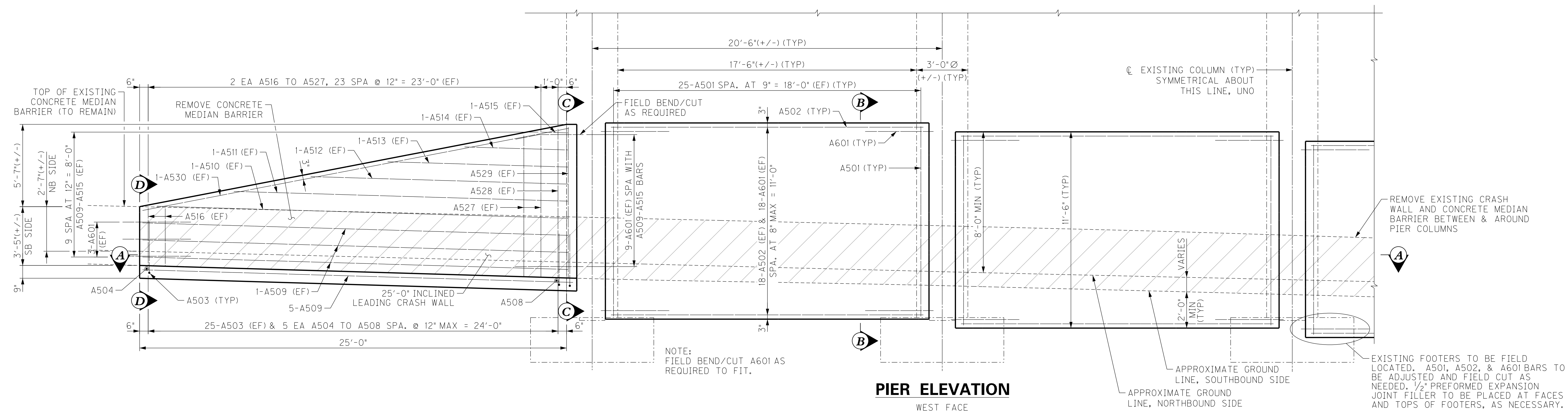
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USER: jagler
DATE PLOTTED: December 19, 2024

E-SHEET NAME:

MicroStation v8.11.9.919



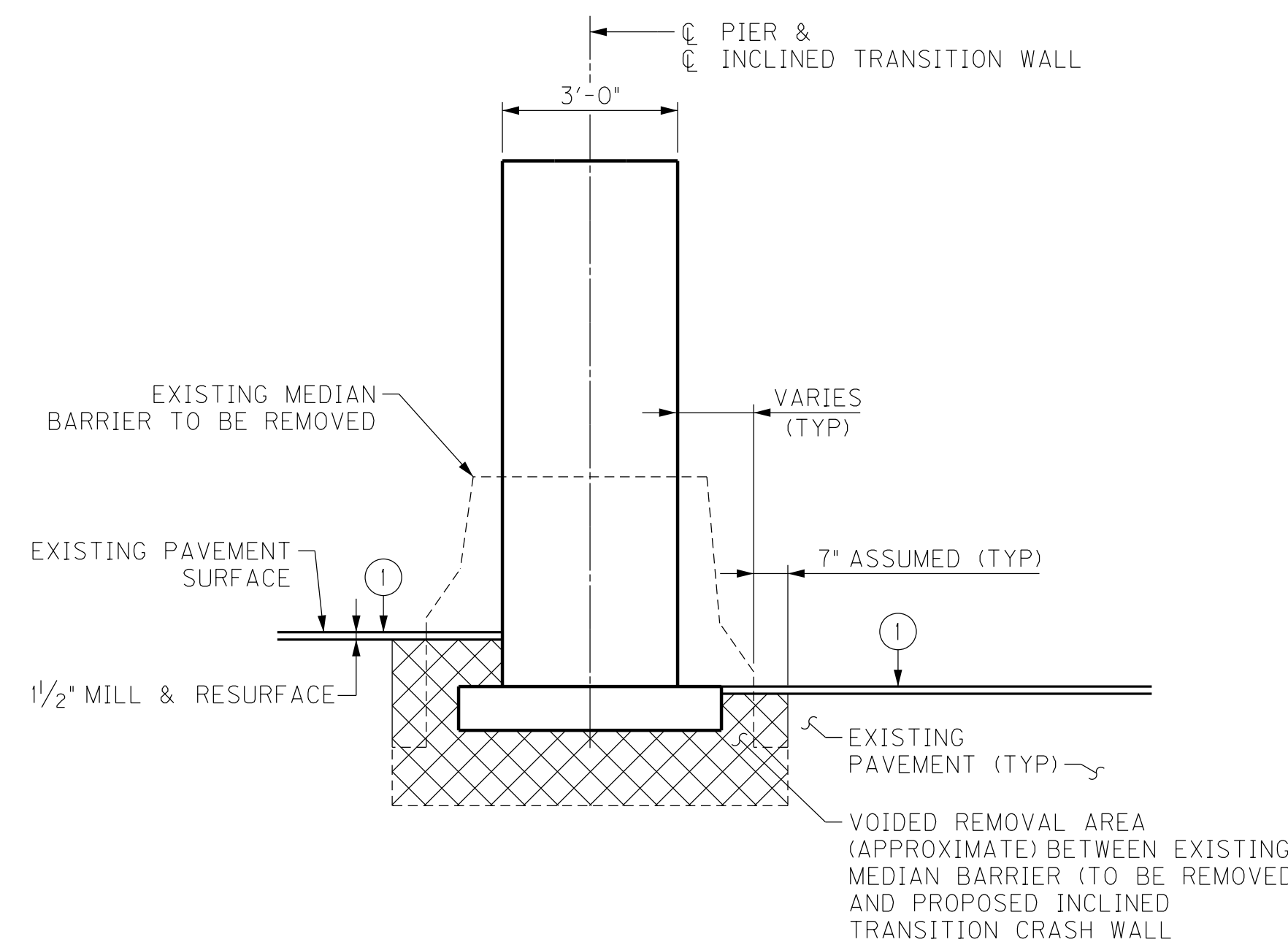
REVISION		DATE
DATE: DECEMBER 2024	CHECKED BY: A. ADKINS	
DESIGNED BY: J. AGLER	DETAILED BY: J. AGLER	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY MADISON		
ROUTE KY 876	CROSSING I-75	
PIER 2 CRASH WALL ADDITION		
ITEM NUMBER 7-22115.00		PREPARED BY DLZ
		SHEET NO. S2 DRAWING NO.

FILE NAME: X:\PROJECTS\2022\2312\10490 KYC P\WINT REHAB 2022-2024\0401 MADISON I-75\BRIDGES\ SHEETS\076B00099N S3.DGN

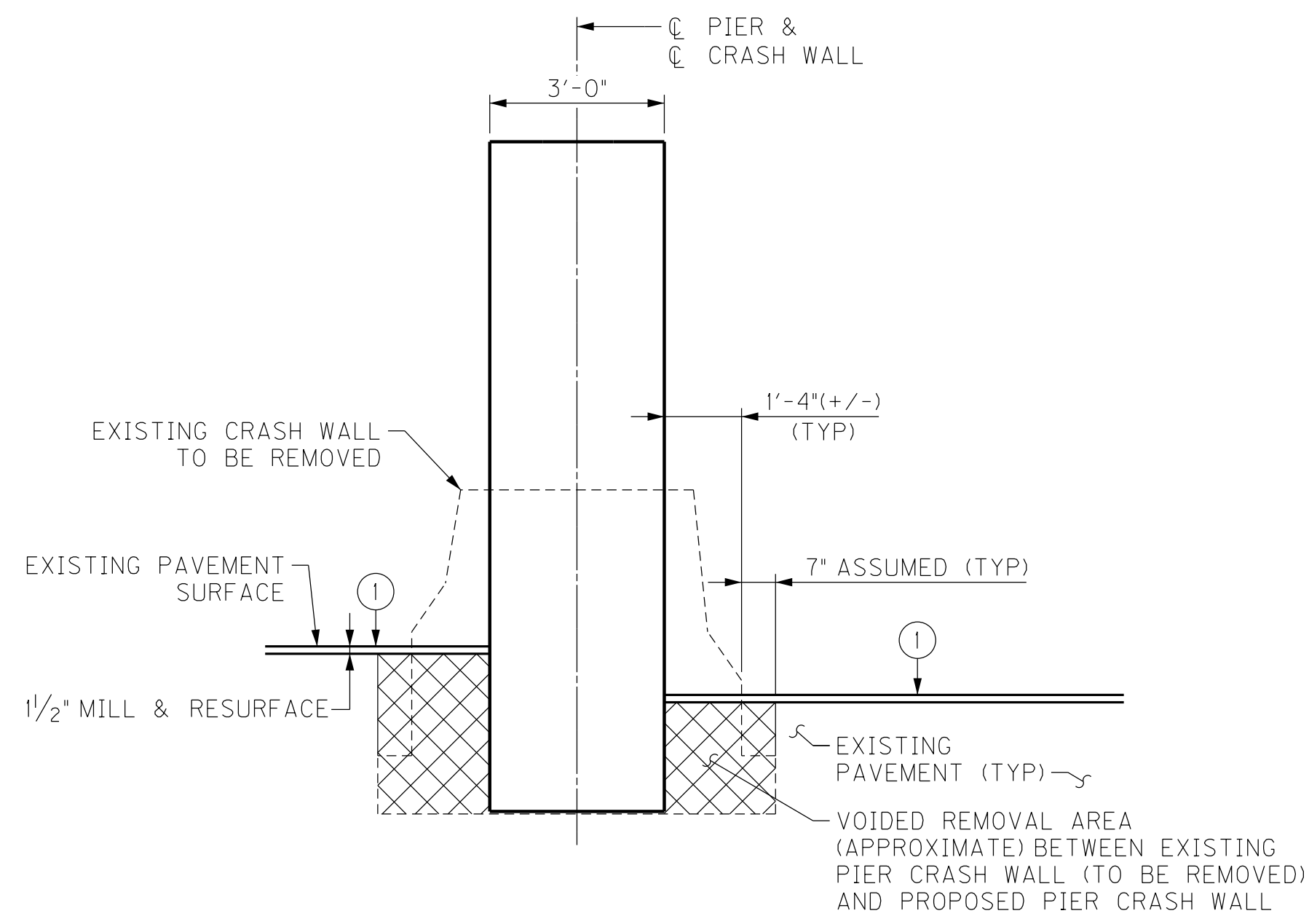
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DATE PLOTTED: December 19, 2024

E-SHEET NAME:

MicroStation v8.11.9.919

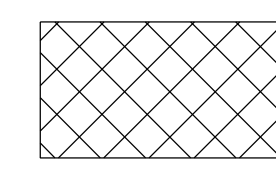


INCLINED TRANSITION CRASH WALL PAVEMENT REPAIR DETAIL



PIER CRASH WALL PAVEMENT REPAIR DETAIL

LEGEND



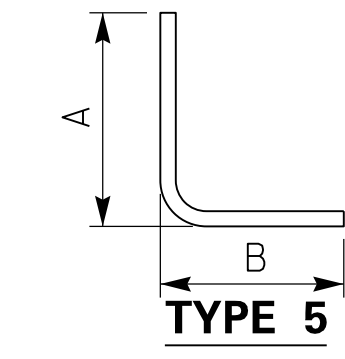
ALL VOID AREAS BETWEEN NEW CONCRETE INCLINED TRANSITION WALLS AND PIER CRASH WALLS AND THE EXISTING PAVEMENT ARE TO BE FILLED WITH THE FOLLOWING:
CL4 ASPHALT BASE 1.00D PG76-22 IN COMPACTED LIFTS BETWEEN 3" AND 4 1/2" THICK
1/2" CL4 ASPHALT SURFACE 0.38A PG76-22
THE ASPHALT QUANTITIES WILL BE SHOWN ON THE ROADWAY PAVING SUMMARY.



THE SHOULDER IS TO BE MILLED AND RESURFACED TO A DEPTH OF 1/2" ACROSS THE ENTIRE SHOULDER WIDTH THROUGH THE CRASHWALL MODIFICATION AREAS.

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH		LOCATION	LOCATION						
				FT.	IN.		A	B	C	D			
							FT.	IN.	FT.	IN.	FT.	IN.	IN.
A501	STR.	200	5	11	2	CRASH WALLS							
A502	STR.	144	5	18	3	CRASH WALLS							
A503	⑤	104	5	3	11	INCLINED CRASH WALLS	0	9	3	2			
A504	STR.	10	5	5	6	INCLINED CRASH WALLS							
A505	STR.	10	5	5	2	INCLINED CRASH WALLS							
A506	STR.	10	5	4	10	INCLINED CRASH WALLS							
A507	STR.	10	5	4	6	INCLINED CRASH WALLS							
A508	STR.	10	5	4	2	INCLINED CRASH WALLS							
A509	STR.	22	5	25	2	INCLINED CRASH WALLS							
A510	STR.	4	5	24	1	INCLINED CRASH WALLS							
A511	STR.	4	5	19	7	INCLINED CRASH WALLS							
A512	STR.	4	5	15	0	INCLINED CRASH WALLS							
A513	STR.	4	5	10	6	INCLINED CRASH WALLS							
A514	STR.	4	5	6	0	INCLINED CRASH WALLS							
A515	STR.	4	5	1	6	INCLINED CRASH WALLS							
A516	STR.	8	5	3	4	INCLINED CRASH WALLS							
A517	STR.	8	5	3	10	INCLINED CRASH WALLS							
A518	STR.	8	5	4	3	INCLINED CRASH WALLS							
A519	STR.	8	5	4	8	INCLINED CRASH WALLS							
A520	STR.	8	5	5	2	INCLINED CRASH WALLS							
A521	STR.	8	5	5	7	INCLINED CRASH WALLS							
A522	STR.	8	5	6	0	INCLINED CRASH WALLS							
A523	STR.	8	5	6	6	INCLINED CRASH WALLS							
A524	STR.	8	5	6	11	INCLINED CRASH WALLS							
A525	STR.	8	5	7	4	INCLINED CRASH WALLS							
A526	STR.	8	5	7	10	INCLINED CRASH WALLS							
A527	STR.	8	5	8	3	INCLINED CRASH WALLS							
A528	STR.	4	5	8	8	INCLINED CRASH WALLS							
A529	STR.	4	5	8	10	INCLINED CRASH WALLS							
A530	STR.	4	5	25	5	INCLINED CRASH WALLS							
A601	STR.	336	6	4	0	CRASH WALL DOWELS							



REVISION		DATE
DATE: DECEMBER 2024	CHECKED BY	
DESIGNED BY: J. AGLER	A. ADKINS	
DETAILED BY: J. AGLER	A. ADKINS	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY MADISON		
ROUTE KY 876	CROSSING I-75	
PIER 2 CRASH WALL ADDITION B.O.R.		

ITEM NUMBER
7-22115.00

PREPARED BY

SHEET NO.
S3
DRAWING NO.

LETTING DATE

FILE NAME: X:\PROJECTS\2022\23\12\10490 KYTC PAVINT REHAB 2022-2024\0401 MADISON I-75\BRIDGE\SHEETS\076B00093N S1.DGN

CONSTRUCTION PROJECT NO.

USER: jagler
DATE PLOTTED: December 19, 2024

E-SHEET NAME:

MicroStation v8.11.9.919

SPECIFICATIONS

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DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE TO CENTER OF BAR UNLESS OTHERWISE SHOWN. CLEAR DISTANCE TO THE FACE OF CONCRETE IS 2" UNLESS NOTED OTHERWISE. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS.

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CONCRETE SEALING

CONTRARY TO THE SPECIFICATIONS, DO NOT APPLY MASONRY COATING. INSTEAD APPLY CONCRETE SEALER IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE SEALING. ALL EXPOSED SURFACES OF NEW CONCRETE ARE TO BE SEALED.

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REMOVE EXISTING STRUCTURE

EXISTING CONCRETE BARRIERS AND CRASH WALLS ARE TO BE REMOVED AS SHOWN IN THE PLANS. THE COSTS FOR EXISTING CRASH WALL REMOVAL AND REMOVAL OF THE SPLIT MEDIUM BARRIER WALL ALONG A PIER SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE CONCRETE MASONRY." THE COSTS FOR REMOVING THE EXISTING CONCRETE MEDIUM BARRIER SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE CONCRETE MEDIUM BARRIER."

SAWCUTTING

SAWCUTTING OF THE EXISTING CONCRETE MEDIUM BARRIER, INCLUDING ITS FOOTER, IS INCIDENTAL TO THE UNIT BID PRICE FOR CONCRETE CLASS "A".

STRUCTURE EXCAVATION

THE COST FOR ANY EXCAVATION REQUIRED TO REMOVE AND CONSTRUCT CRASH WALL IS INCIDENTAL TO THE UNIT BID PRICE FOR CONCRETE CLASS "A".

PLANS OF EXISTING STRUCTURE

AS AN AID TO THE CONTRACTOR, PLANS OF THE EXISTING BRIDGE ARE AVAILABLE (SEE DRAWING NUMBER 23103). THE COMPLETENESS AND ACCURACY OF THE DRAWINGS ARE NOT GUARANTEED.

VERIFYING FIELD CONDITIONS

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL. NEW MATERIAL THAT IS UNSUITABLE BECAUSE OF VARIATIONS IN THE EXISTING STRUCTURE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

DAMAGE TO THE STRUCTURE

THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE EXISTING STRUCTURE, SHOULD IT BE ALLOWED TO FALL DUE TO THE CONTRACTOR'S ACTIONS. THE CONTRACTOR IS RESPONSIBLE FOR BOTH THE REMOVAL AND REPLACEMENT OF THE FALLEN PORTION AT THE CONTRACTOR'S EXPENSE.

PAVEMENT REPAIRS

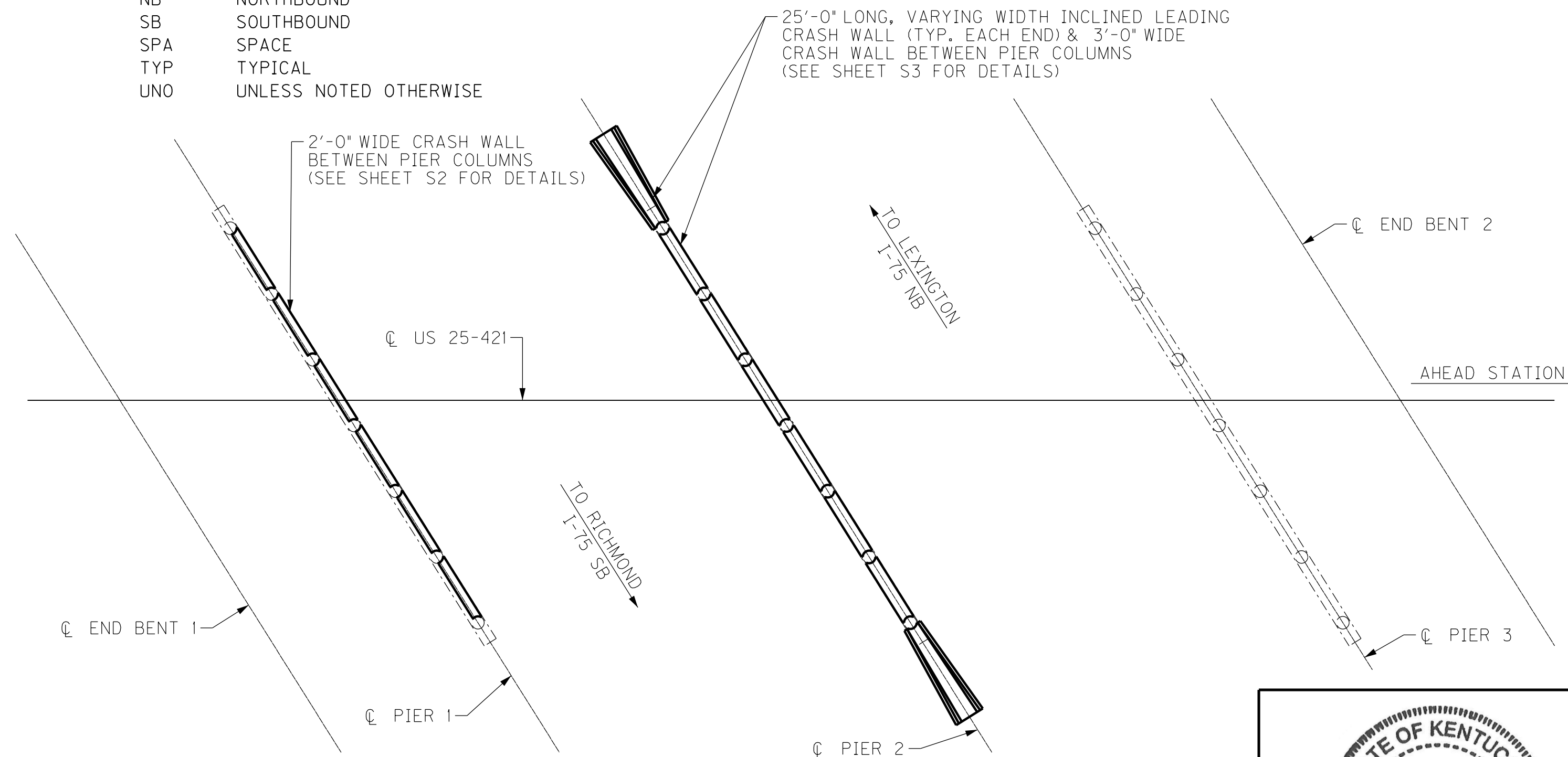
ALL VOIDS IN THE PAVEMENT LEFT BY REMOVAL OF THE EXISTING MEDIUM BARRIER AND PIER CRASH WALL AND CONSTRUCTION OF THE NEW INCLINED TRANSITION CRASH WALL AND PIER CRASH WALL ARE TO BE FILLED WITH ASPHALT PAVEMENT AS SHOWN IN THE PAVEMENT REPAIR DETAILS ON SHEET S4. THE ASPHALT QUANTITIES REQUIRED TO FILL THE VOIDS WILL BE SHOWN ON THE ROADWAY PLANS PAVING SUMMARY.

ABBREVIATIONS

- BF BACK FACE
- CL CENTERLINE
- CLR CLEAR
- EF EACH FACE
- EMBED EMBEDMENT
- EQ EQUAL
- FF FRONT FACE
- MIN MINIMUM
- MAX MAXIMUM
- NB NORTHBOUND
- SB SOUTHBOUND
- SPA SPACE
- TYP TYPICAL
- UNO UNLESS NOTED OTHERWISE

ESTIMATE OF QUANTITIES

BID CODE	ITEM	QUANTITY	UNIT
02403	REMOVE CONCRETE MASONRY	73.0	CY
08100	CONCRETE-CLASS A	260.0	CY
08150	STEEL REINFORCEMENT	20,239	LB
21935EN	REMOVE CONC MEDIUM BARRIER	50	LF
23378EC	CONCRETE SEALING	4,980	SF



JUSTIN D. AGLER
37417
LICENSED PROFESSIONAL ENGINEER

DATE: 12-20-2024

JUSTIN D. AGLER KY PE NO. 37417

DATE: 12-20-2024

ITEM NUMBER: 7-22115.00

INDEX OF SHEETS

Sheet No.	Description
S1	GENERAL NOTES & ESTIMATE OF QUANTITIES
S2	PIER 1 CRASH WALL ADDITION
S3	PIER 2 CRASH WALL ADDITION
S4	PIER CRASH WALL ADDITION BILL OF REINFORCEMENT

SPECIAL NOTES

NO.	DESCRIPTION
1	CONCRETE SEALING

SPECIAL PROVISIONS

NO.	PROVISION
1	NA

STANDARD DRAWINGS

NO.	DESCRIPTION
1	
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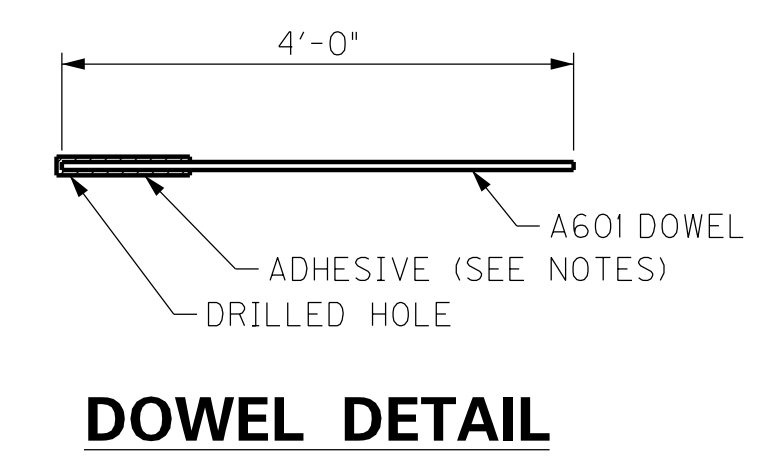
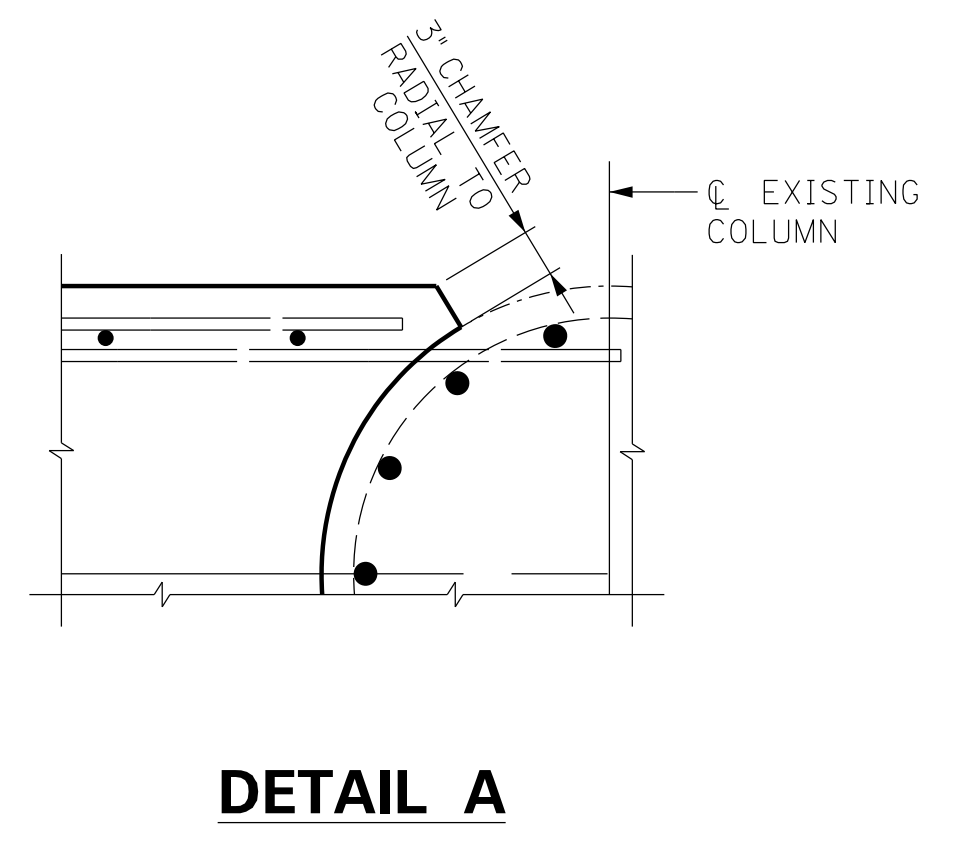
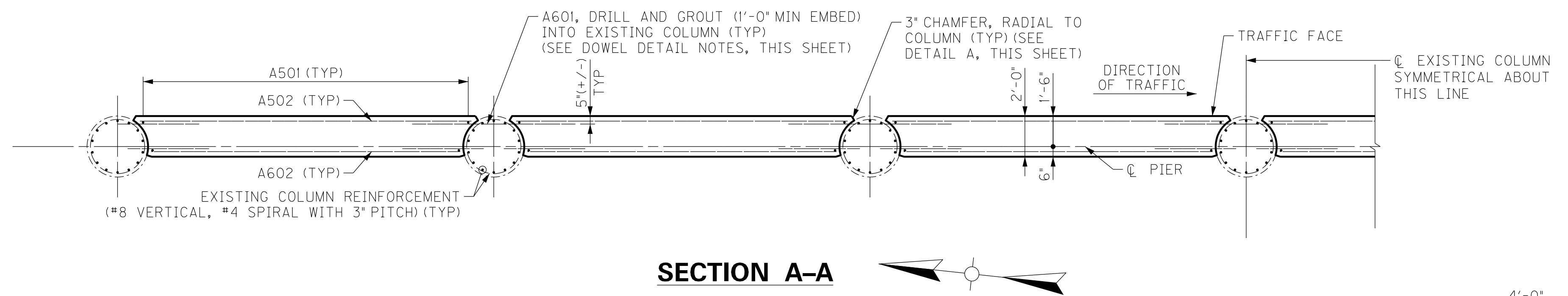
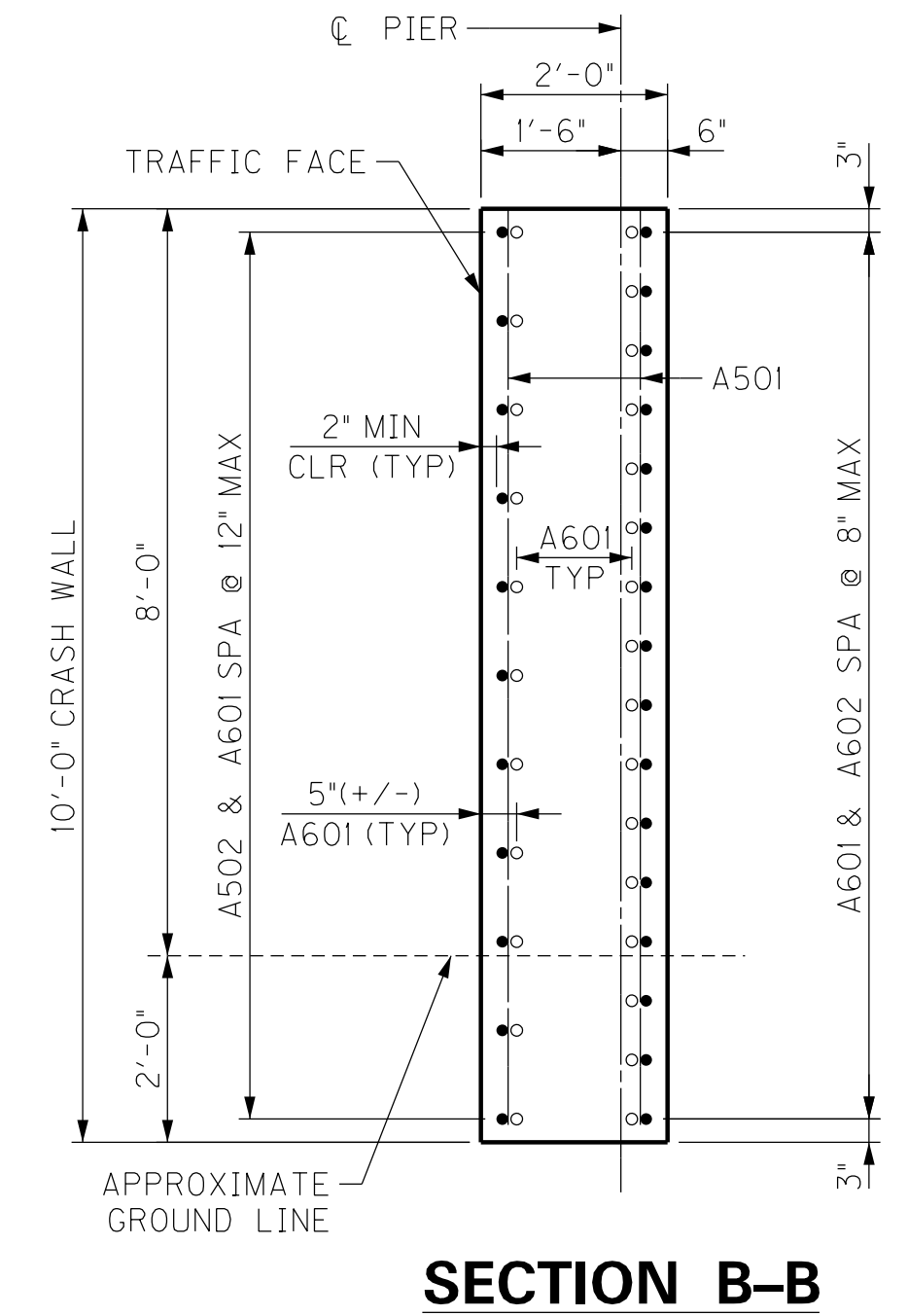
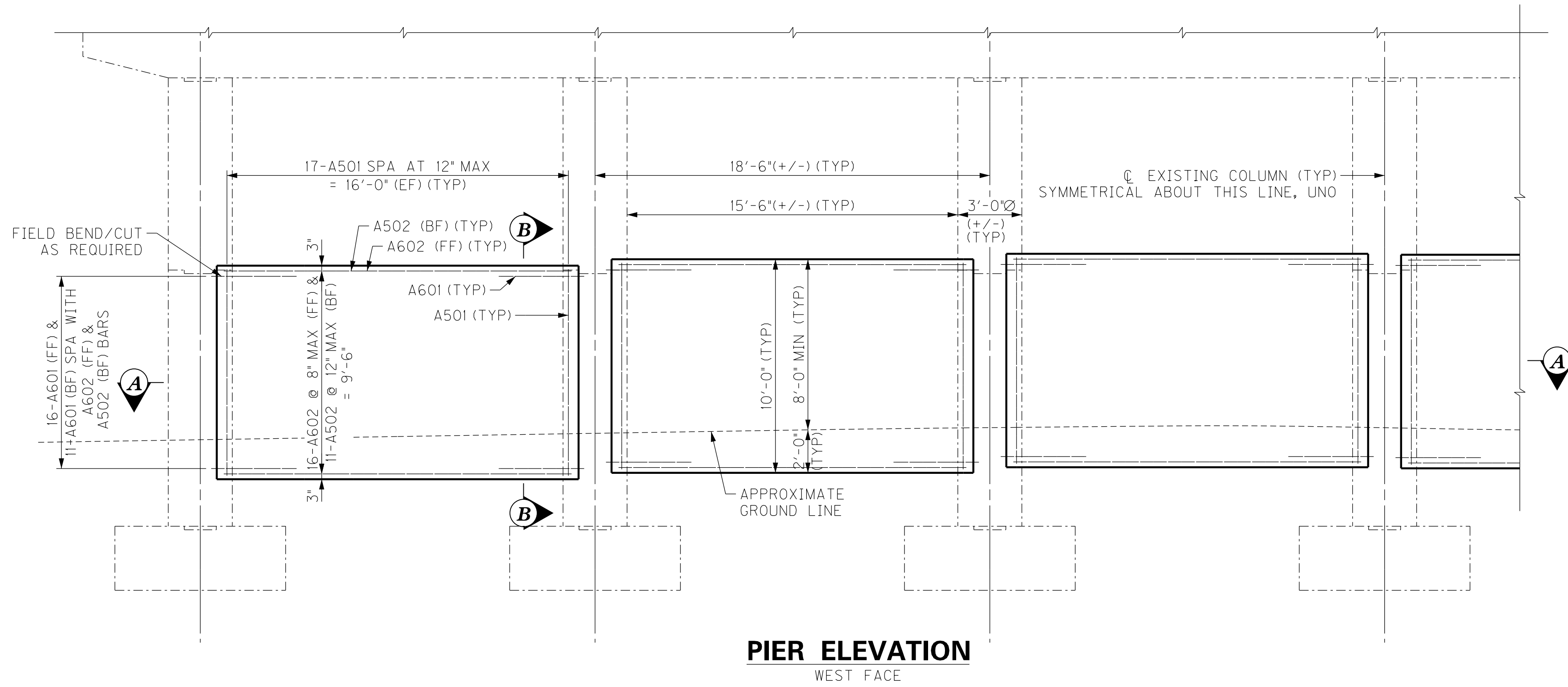
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DETAILED BY: J. AGLER	A. ADKINS

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY
MADISON

ROUTE	CROSSING
US 25-421	I-75
GENERAL NOTES & EST. QUANTITIES	
PREPARED BY	SHEET NO. S1
DLZ	DRAWING NO.



NOTE:
ANCHOR DOWELS SHALL BE ADHESIVELY BONDED TO EXISTING CONCRETE IN DRILLED HOLES. THE ANCHOR DOWEL ADHESIVE SHALL BE ONE OF THE FOLLOWING:
A. HILTI HIT-HY-200
B. AN APPROVED EQUAL MEETING ACI 355.4 AND THE MINIMUM BOND STRESS OF THE HIT-HY-200.
INSTALL ANCHOR DOWELS WITH A MINIMUM EMBEDMENT INTO EXISTING CONCRETE AS SHOWN. INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS.

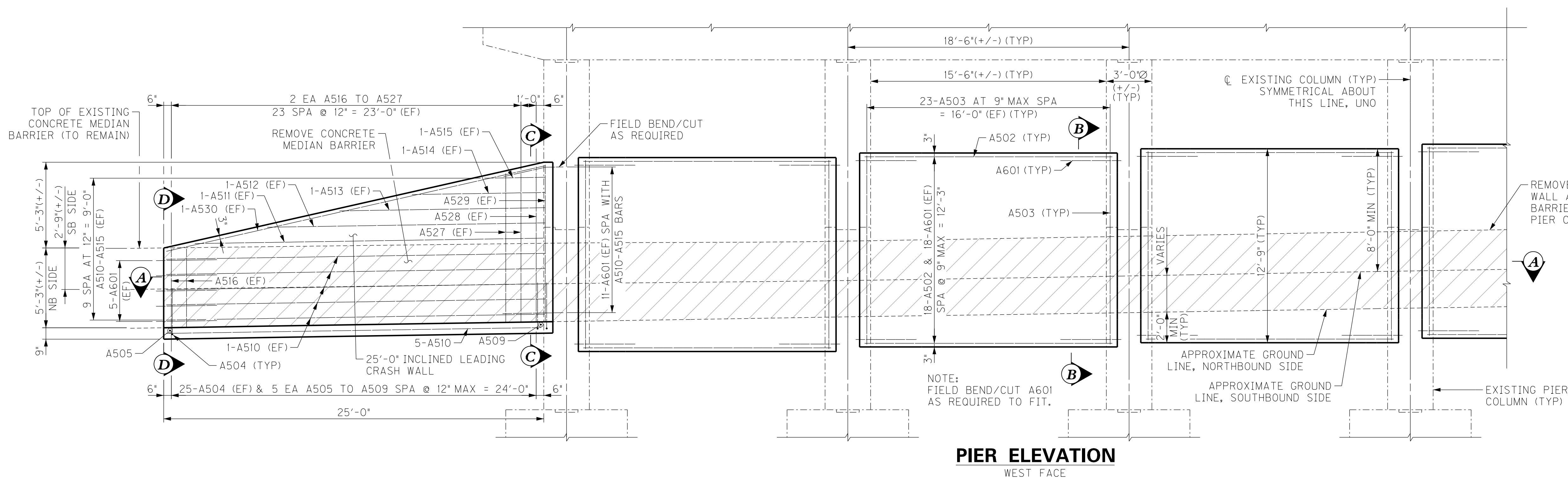
REVISION		DATE
DATE: DECEMBER 2024	CHECKED BY: A. ADKINS	
DESIGNED BY: J. AGLER	A. ADKINS	
DETAILED BY: J. AGLER	A. ADKINS	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY MADISON		
ROUTE US 25-421	CROSSING I-75	
PIER 1 CRASH WALL ADDITION		
ITEM NUMBER 7-22115.00	PREPARED BY EDLZ	SHEET NO. S2 DRAWING NO.

FILE NAME: X:\PROJECTS\2022\22312\0490 KYC P\WINT REHAB 2022-2024\0401 MADISON I-75\BRIDGES\SHETS\07600093N S3.DGN

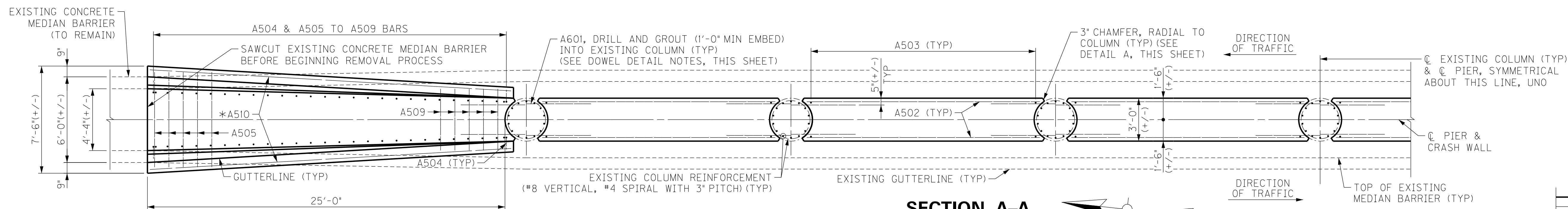
USER: jgblg
DATE PLOTTED: December 19, 2024

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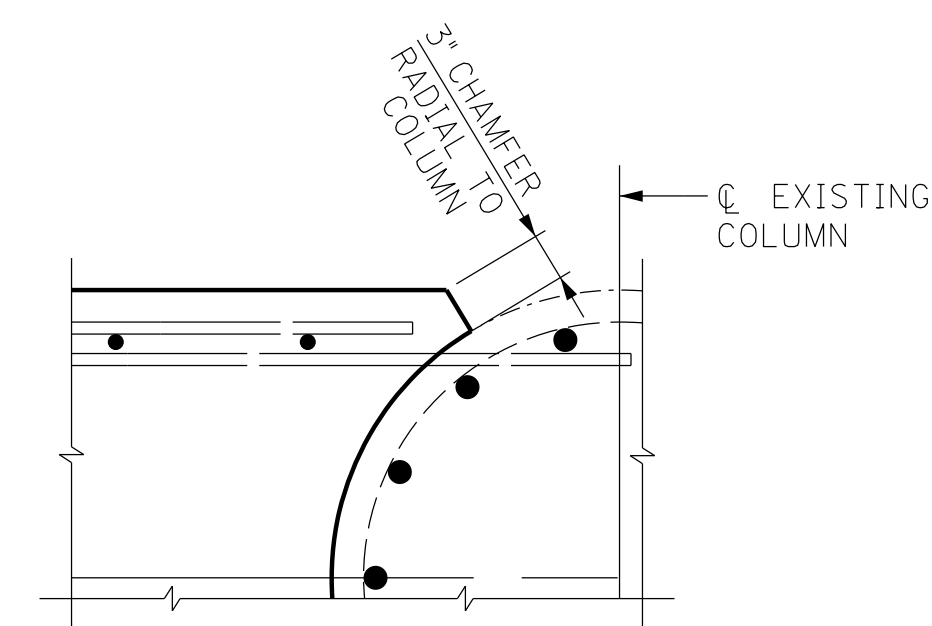
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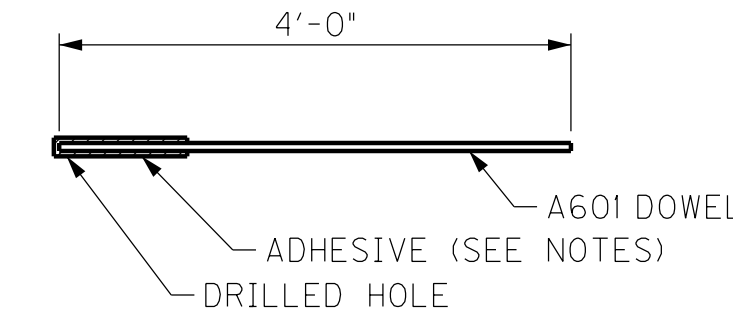
PIER ELEVATION
WEST FACE



SECTION A-A

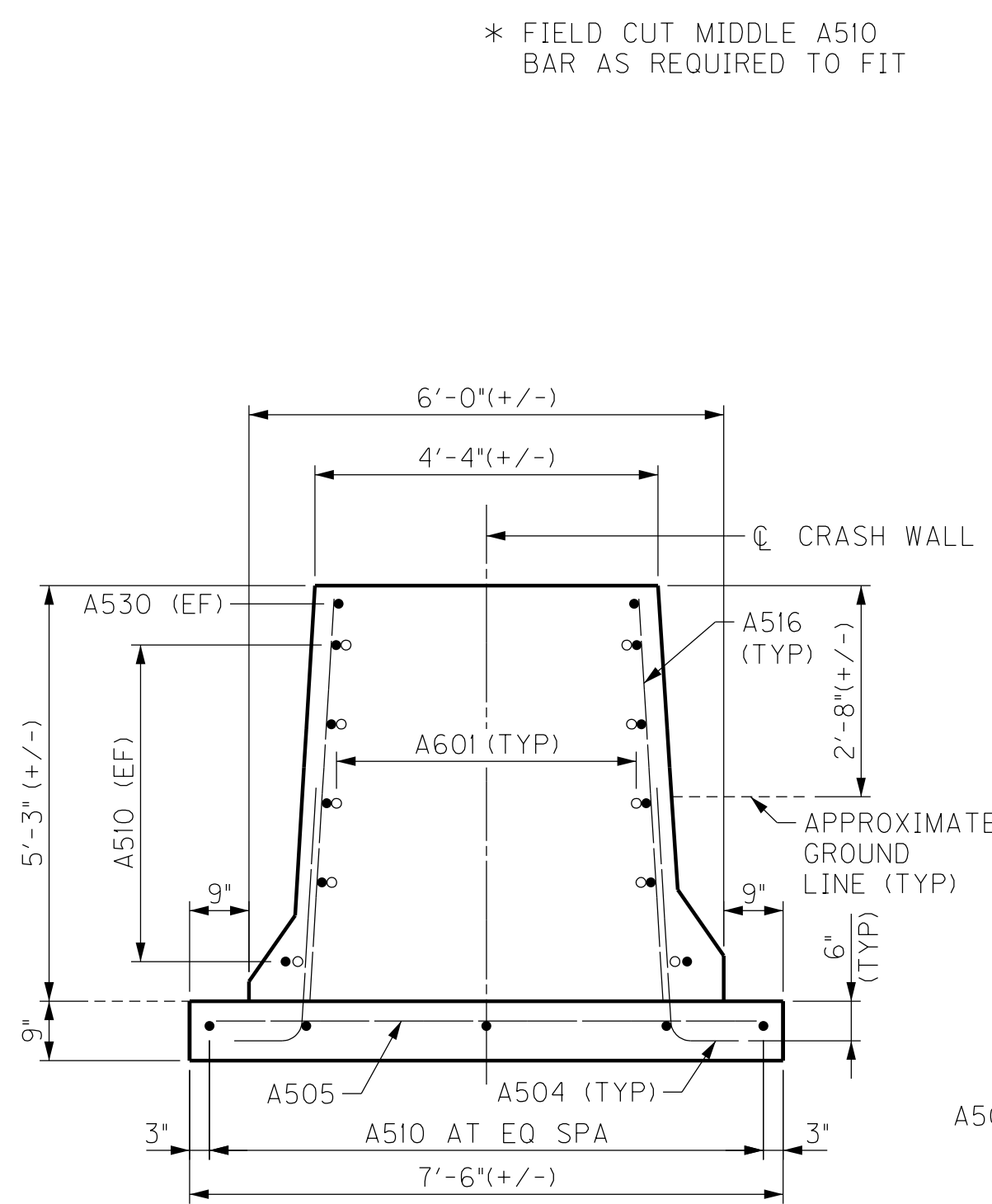


DETAIL A

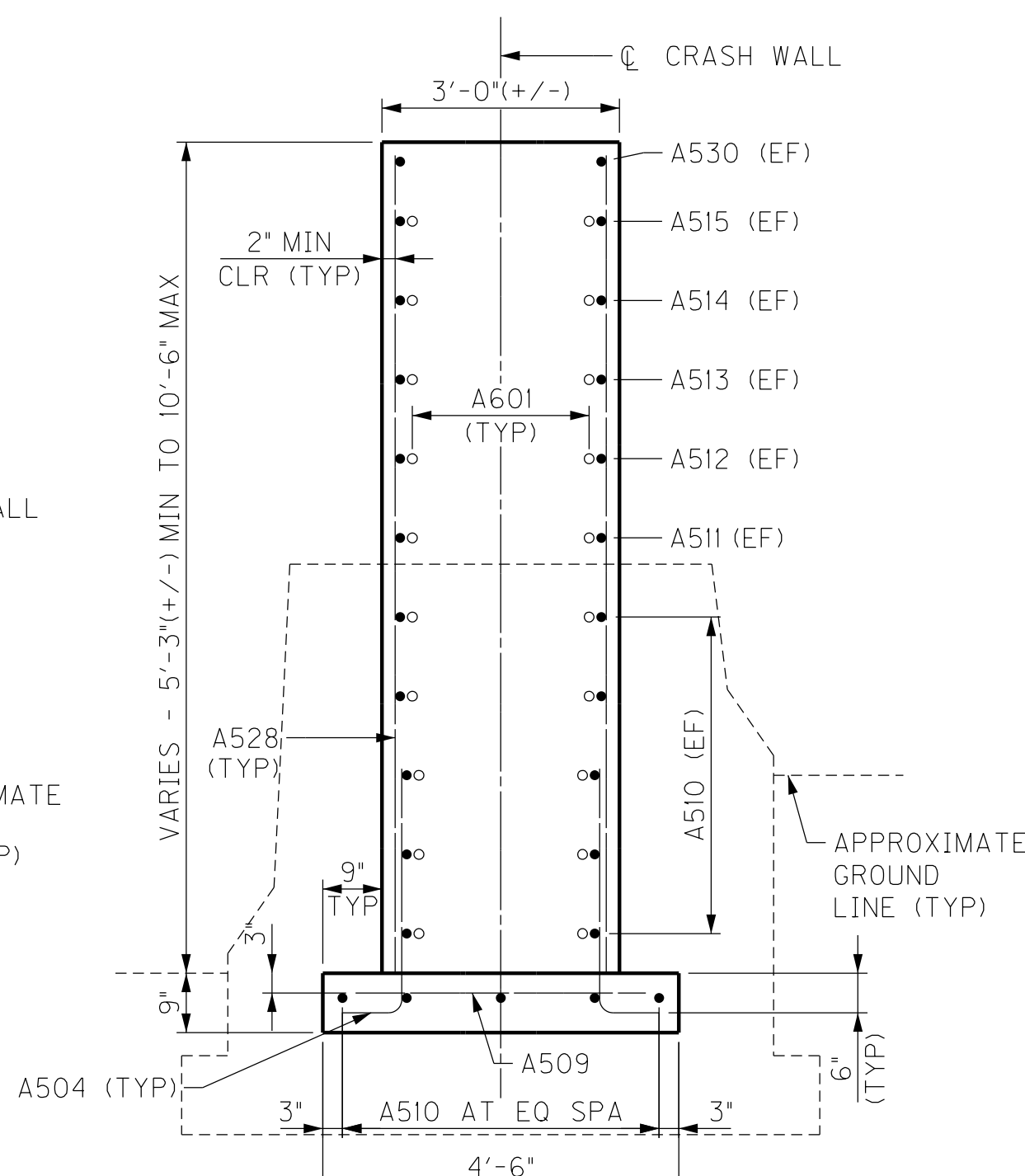


DOWEL DETAIL

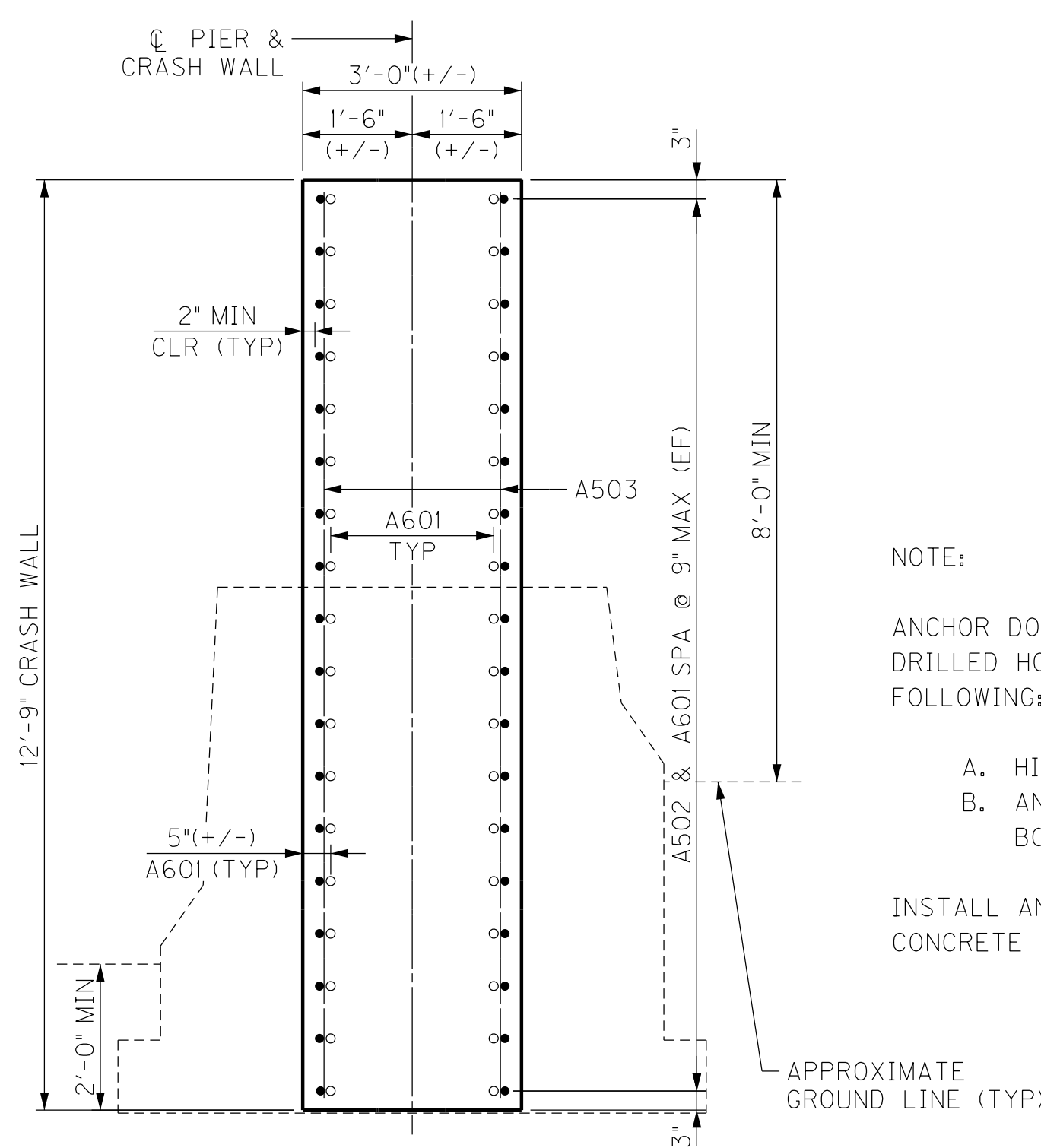
NOTE:
ANCHOR DOWELS SHALL BE ADHESIVELY BONDED TO EXISTING CONCRETE IN DRILLED HOLES. THE ANCHOR DOWEL ADHESIVE SHALL BE ONE OF THE FOLLOWING:
A. HILTI HIT-HY-200
B. AN APPROVED EQUAL MEETING ACI 355.4 AND THE MINIMUM BOND STRESS OF THE HIT-HY-200.
INSTALL ANCHOR DOWELS WITH A MINIMUM EMBEDMENT INTO EXISTING CONCRETE AS SHOWN. INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS.



SECTION D-D



SECTION C-C



SECTION B-B

ITEM NUMBER	7-22115.00
--------------------	-------------------

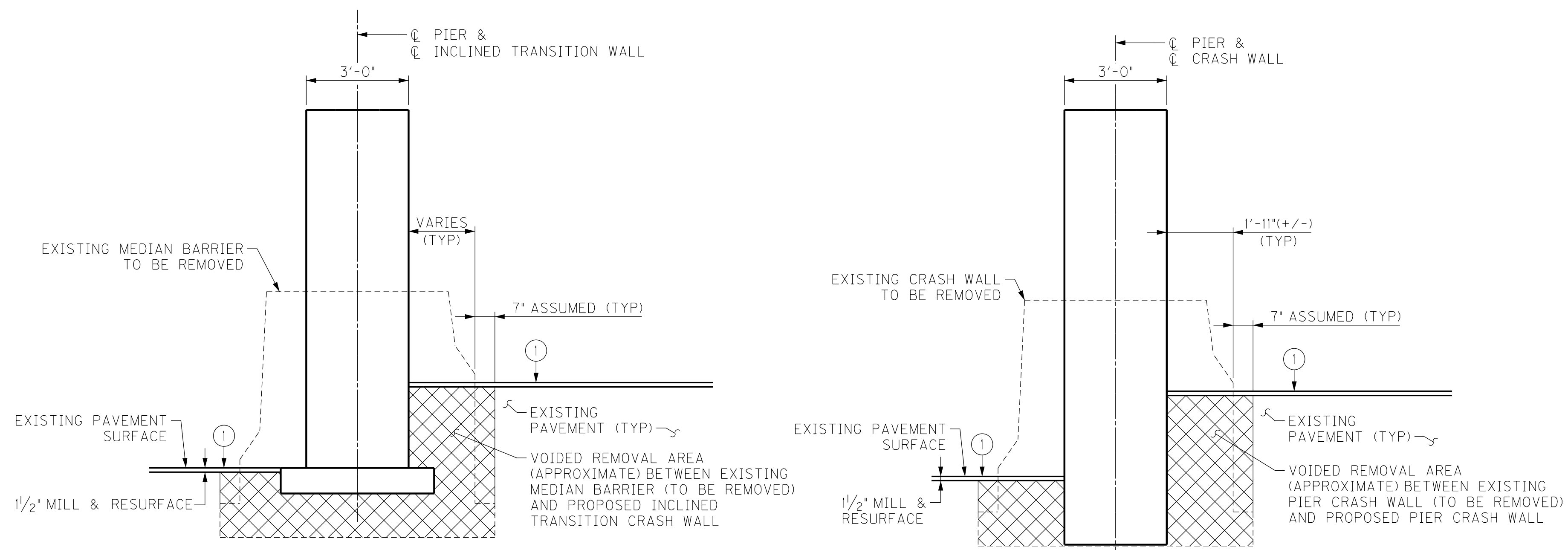
REVISION		DATE
DATE: DECEMBER 2024	CHECKED BY: A. ADKINS	
DESIGNED BY: J. AGLER	A. ADKINS	
DETAILED BY: J. AGLER	A. ADKINS	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY MADISON		
ROUTE US 25-421	CROSSING I-75	
PIER 2 CRASH WALL ADDITION		
PREPARED BY		SHEET NO. S3
		DRAWING NO.

FILE NAME: X:\PROJECTS\2022\2312\10490 KYTC PAVINT REHAB 2022-2024\0401 MADISON I-75\BRIDGES\SHETS\076B0003N S4.DGN

USER: jagler
DATE PLOTTED: December 19, 2024

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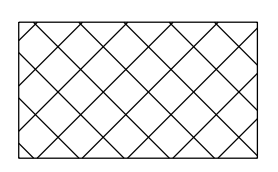
MicroStation v8.11.9.919



**INCLINED TRANSITION CRASH WALL
PAVEMENT REPAIR DETAIL**

**PIER CRASH WALL PAVEMENT
REPAIR DETAIL**

LEGEND

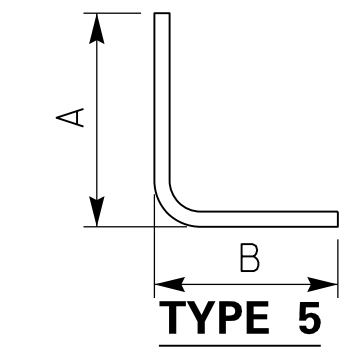


ALL VOID AREAS BETWEEN NEW CONCRETE INCLINED TRANSITION WALLS AND PIER CRASH WALLS AND THE EXISTING PAVEMENT ARE TO BE FILLED WITH THE FOLLOWING:
CL4 ASPHALT BASE 1.00D PG76-22 IN COMPACTED LIFTS BETWEEN 3" AND 4 1/2" THICK
1/2" CL4 ASPHALT SURFACE 0.38A PG76-22
THE ASPHALT QUANTITIES WILL BE SHOWN ON THE ROADWAY PAVING SUMMARY.

① THE SHOULDER IS TO BE MILLED AND RESURFACED TO A DEPTH OF 1/2" ACROSS THE ENTIRE SHOULDER WIDTH THROUGH THE CRASHWALL MODIFICATION AREAS.

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH		LOCATION	LOCATION						
				FT.	IN.		A	B	C	D			
							FT.	IN.	FT.	IN.	FT.	IN.	IN.
A501	STR.	204	5	9	8	P1 CRASH WALL							
A502	STR.	282	5	16	3	CRASH WALLS							
A503	STR.	276	5	12	5	P2 CRASH WALL							
A504	⑤	104	5	3	11	P2 INCLINED CRASH WALLS	0	9	3	2			
A505	STR.	10	5	6	7	P2 INCLINED CRASH WALLS							
A506	STR.	10	5	6	0	P2 INCLINED CRASH WALLS							
A507	STR.	10	5	5	5	P2 INCLINED CRASH WALLS							
A508	STR.	10	5	4	10	P2 INCLINED CRASH WALLS							
A509	STR.	10	5	4	3	P2 INCLINED CRASH WALLS							
A510	STR.	30	5	25	2	P2 INCLINED CRASH WALLS							
A511	STR.	4	5	23	0	P2 INCLINED CRASH WALLS							
A512	STR.	4	5	18	3	P2 INCLINED CRASH WALLS							
A513	STR.	4	5	13	6	P2 INCLINED CRASH WALLS							
A514	STR.	4	5	8	9	P2 INCLINED CRASH WALLS							
A515	STR.	4	5	4	0	P2 INCLINED CRASH WALLS							
A516	STR.	8	5	5	2	P2 INCLINED CRASH WALLS							
A517	STR.	8	5	5	7	P2 INCLINED CRASH WALLS							
A518	STR.	8	5	6	0	P2 INCLINED CRASH WALLS							
A519	STR.	8	5	6	5	P2 INCLINED CRASH WALLS							
A520	STR.	8	5	6	10	P2 INCLINED CRASH WALLS							
A521	STR.	8	5	7	3	P2 INCLINED CRASH WALLS							
A522	STR.	8	5	7	8	P2 INCLINED CRASH WALLS							
A523	STR.	8	5	8	1	P2 INCLINED CRASH WALLS							
A524	STR.	8	5	8	6	P2 INCLINED CRASH WALLS							
A525	STR.	8	5	8	11	P2 INCLINED CRASH WALLS							
A526	STR.	8	5	9	4	P2 INCLINED CRASH WALLS							
A527	STR.	8	5	9	9	P2 INCLINED CRASH WALLS							
A528	STR.	4	5	10	2	P2 INCLINED CRASH WALLS							
A529	STR.	4	5	10	4	P2 INCLINED CRASH WALLS							
A530	STR.	4	5	25	6	P2 INCLINED CRASH WALLS							
A601	STR.	820	6	4	0	CRASH WALL DOWELS							
A602	STR.	96	6	15	2	P1 CRASH WALL							



REVISION		DATE
DATE: DECEMBER 2024	CHECKED BY	
DESIGNED BY: J. AGLER	A. ADKINS	
DETAILED BY: J. AGLER	A. ADKINS	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY MADISON		
ROUTE US 25-421	CROSSING I-75	
PIER CRASH WALL ADDITION B.O.R.		
ITEM NUMBER	PREPARED BY	SHEET NO.
7-22115.00		S4
		DRAWING NO.

SPECIFICATIONS

ALL REFERENCES TO THE STANDARD SPECIFICATIONS ARE TO THE 2019 EDITION OF THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH SUPPLEMENTAL SPECIFICATIONS.

ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO THE LRFD BRIDGE DESIGN SPECIFICATIONS, 9th EDITION.

DESIGN LOAD

THE COLUMNS AND CRASH WALL ARE DESIGNED FOR 124 KIP COLLISION FORCE.

DESIGN METHOD

ALL REINFORCED CONCRETE MEMBERS ARE DESIGNED BY THE LOAD AND RESISTANCE FACTOR METHOD AS SPECIFIED IN THE CURRENT AASHTO SPECIFICATIONS.

MATERIALS DESIGN SPECIFICATIONS

FOR CLASS "A" REINFORCED CONCRETE F'C = 3,500 psi
FOR STEEL REINFORCEMENT FY = 60,000 psi

REINFORCEMENT

DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE TO CENTER OF BAR UNLESS OTHERWISE SHOWN. CLEAR DISTANCE TO THE FACE OF CONCRETE IS 2" UNLESS NOTED OTHERWISE. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS.

DRILLING AND ANCHORING INTO EXISTING CONCRETE

FOR ANCHORING NEW REINFORCING STEEL INTO EXISTING CONCRETE, SEE SECTIONS 511 AND 602.03.04 OF THE STANDARD SPECIFICATIONS. AVOID DRILLING THROUGH COLUMN OR WALL REINFORCEMENT (LONGITUDINAL AND HOOP). IF REINFORCEMENT CANNOT BE LOCATED PRIOR TO DRILLING AND IS HIT, STOP DRILLING IMMEDIATELY, SHIFT DRILL TEMPLATE LOCATION AND RE-DRILL. THE COST OF THIS WORK, INCLUDING LABOR, TOOLS, AND MATERIALS IS TO BE INCIDENTAL TO THE UNIT BID PRICE FOR STEEL REINFORCEMENT.

BONDING NEW CONCRETE TO EXISTING CONCRETE

IMMEDIATELY PRIOR TO PLACING NEW CLASS "A" CONCRETE, THE SURFACE AREAS OF EXISTING CONCRETE ARE TO BE COATED WITH A TWO-COMPONENT EPOXY RESIN SYSTEM IN ACCORDANCE WITH SECTIONS 511 AND 826 OF THE STANDARD SPECIFICATIONS. THE COST OF THIS WORK, INCLUDING LABOR, TOOLS, AND MATERIALS IS TO BE INCIDENTAL TO THE UNIT BID PRICE FOR CLASS "A" CONCRETE.

CONCRETE SEALING

CONTRARY TO THE SPECIFICATIONS, DO NOT APPLY MASONRY COATING. INSTEAD APPLY CONCRETE SEALER IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE SEALING. ALL EXPOSED SURFACES OF NEW CONCRETE ARE TO BE SEALED.

BEVELED EDGES

ALL EXPOSED EDGES SHALL BE BEVELED 3/4" UNLESS OTHERWISE SHOWN.

TRAFFIC CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING PROPER BARRICADES AND ADVANCE WARNING SIGNALS FOR ROAD CONSTRUCTION AND ROAD CLOSURE.

UTILITIES

BEFORE BEGINNING WORK, LOCATE ALL EXISTING UTILITIES. CONSIDER LOCATION OF ANY UTILITIES SHOWN ON THE EXISTING OR CONTRACT DRAWINGS TO BE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. THE DEPARTMENT DOES NOT WARRANT THE LOCATIONS AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS. THE CONTRACTOR MUST MAKE HIS OWN DETERMINATION. EXCEPT AS SHOWN ON THE PLANS, WORK AROUND AND DO NOT DISTURB EXISTING UTILITIES.

REMOVE EXISTING STRUCTURE

EXISTING CONCRETE BARRIERS AND CRASH WALLS ARE TO BE REMOVED AS SHOWN IN THE PLANS. THE COSTS FOR EXISTING CRASH WALL REMOVAL AND REMOVAL OF THE SPLIT MEDIAN BARRIER WALL ALONG A PIER SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE CONCRETE MASONRY." THE COSTS FOR REMOVING THE EXISTING CONCRETE MEDIAN BARRIER SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE CONCRETE MEDIAN BARRIER."

SAWCUTTING

SAWCUTTING OF THE EXISTING CONCRETE MEDIAN BARRIER, INCLUDING ITS FOOTER, IS INCIDENTAL TO THE UNIT BID PRICE FOR CONCRETE CLASS "A".

STRUCTURE EXCAVATION

THE COST FOR ANY EXCAVATION REQUIRED TO REMOVE AND CONSTRUCT CRASH WALL IS INCIDENTAL TO THE UNIT BID PRICE FOR CONCRETE CLASS "A".

PLANS OF EXISTING STRUCTURE

AS AN AID TO THE CONTRACTOR, PLANS OF THE EXISTING BRIDGE ARE AVAILABLE (SEE DRAWING NUMBER 26899). THE COMPLETENESS AND ACCURACY OF THE DRAWINGS ARE NOT GUARANTEED.

VERIFYING FIELD CONDITIONS

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL. NEW MATERIAL THAT IS UNSUITABLE BECAUSE OF VARIATIONS IN THE EXISTING STRUCTURE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

DAMAGE TO THE STRUCTURE

THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE EXISTING STRUCTURE, SHOULD IT BE ALLOWED TO FALL DUE TO THE CONTRACTOR'S ACTIONS. THE CONTRACTOR IS RESPONSIBLE FOR BOTH THE REMOVAL AND REPLACEMENT OF THE FALLEN PORTION AT THE CONTRACTOR'S EXPENSE.

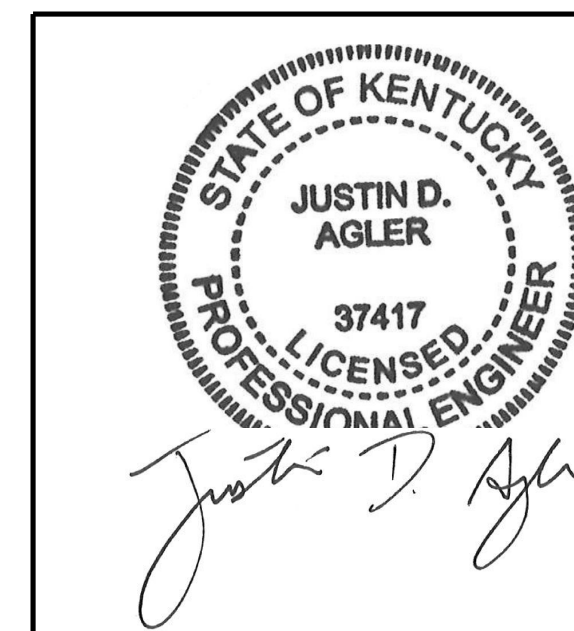
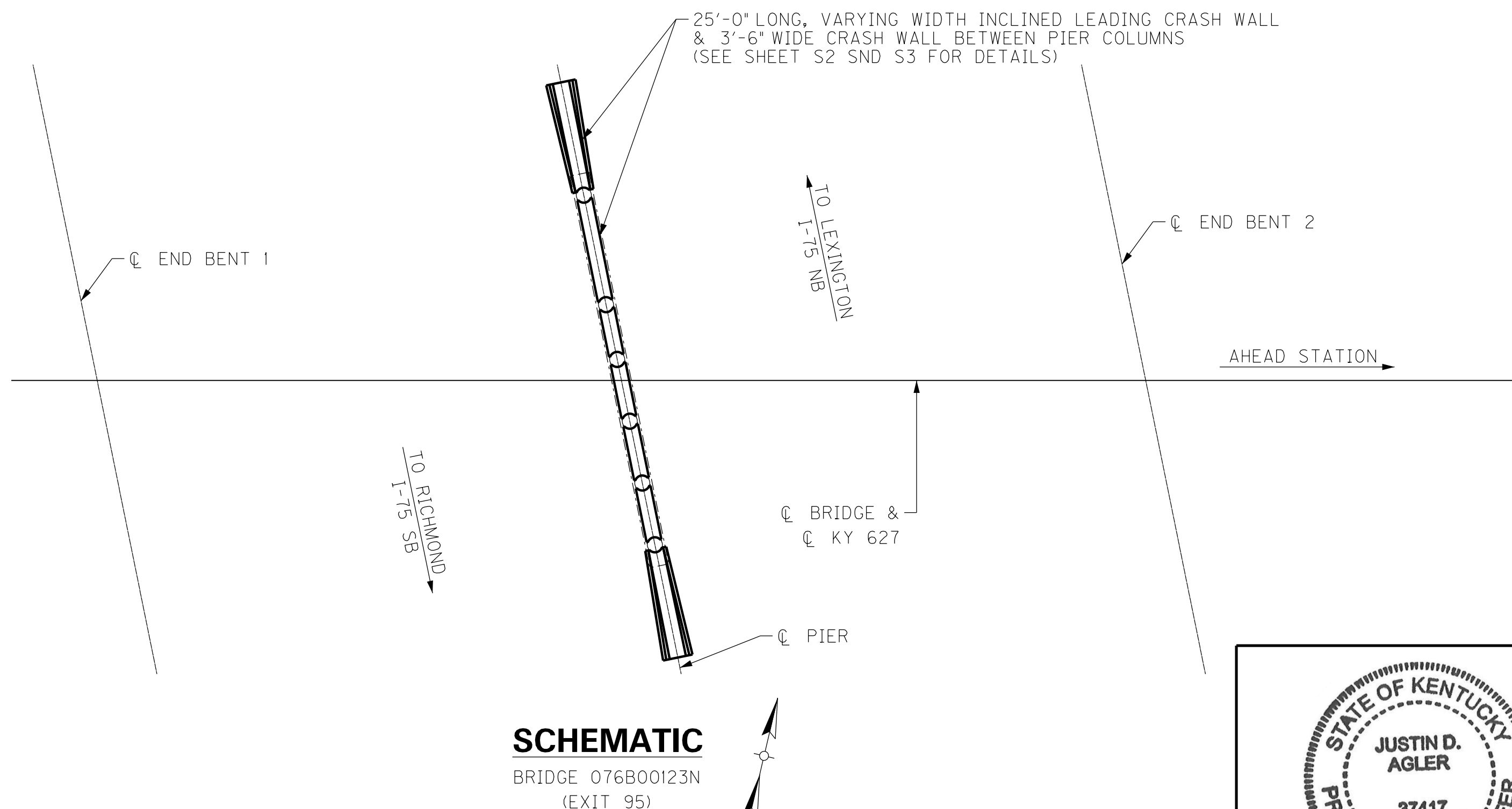
PAVEMENT REPAIRS

ALL VOIDS IN THE PAVEMENT LEFT BY REMOVAL OF THE EXISTING MEDIAN BARRIER AND PIER CRASH WALL AND CONSTRUCTION OF THE NEW INCLINED TRANSITION CRASH WALL AND PIER CRASH WALL ARE TO BE FILLED WITH ASPHALT PAVEMENT AS SHOWN IN THE PAVEMENT REPAIR DETAILS ON SHEET S3. THE ASPHALT QUANTITIES REQUIRED TO FILL THE VOIDS WILL BE SHOWN ON THE ROADWAY PLANS PAVING SUMMARY.

ABBREVIATIONS

CL	CENTERLINE
CLR	CLEAR
EF	EACH FACE
EMBED	EMBEDMENT
EQ	EQUAL
MIN	MINIMUM
MAX	MAXIMUM
NB	NORTHBOUND
SB	SOUTHBOUND
SPA	SPACE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

ESTIMATE OF QUANTITIES			
BID CODE	ITEM	QUANTITY	UNIT
02403	REMOVE CONCRETE MASONRY	69.0	CY
08100	CONCRETE-CLASS A	155.0	CY
08150	STEEL REINFORCEMENT	8,728	LB
21935EN	REMOVE CONC MEDIAN BARRIER	50	LF
23378EC	CONCRETE SEALING	2,590	SF



JUSTIN D. AGLER DATE: 12-20-2024
KY PE NO. 37417

ITEM NUMBER
7-22115.00

INDEX OF SHEETS

Sheet No.	Description
S1	GENERAL NOTES & ESTIMATE OF QUANTITIES
S2	PIER CRASH WALL ADDITION
S3	PIER CRASH WALL DETAILS & BILL OF REINFORCEMENT

SPECIAL NOTES

CONCRETE SEALING

SPECIAL PROVISIONS

NA

STANDARD DRAWINGS

SPECIFICATIONS

2019 Standard Specifications for Road and Bridge Construction.

2020 (9th Edition) AASHTO LRFD Bridge Design Specifications

	REVISION	DATE
DATE: DECEMBER 2024	CHECKED BY:	
DESIGNED BY: J. AGLER	A. ADKINS	
DETAILED BY: J. AGLER	A. ADKINS	

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY
MADISON

ROUTE: **KY 627** CROSSING: **I-75**

GENERAL NOTES & EST. QUANTITIES

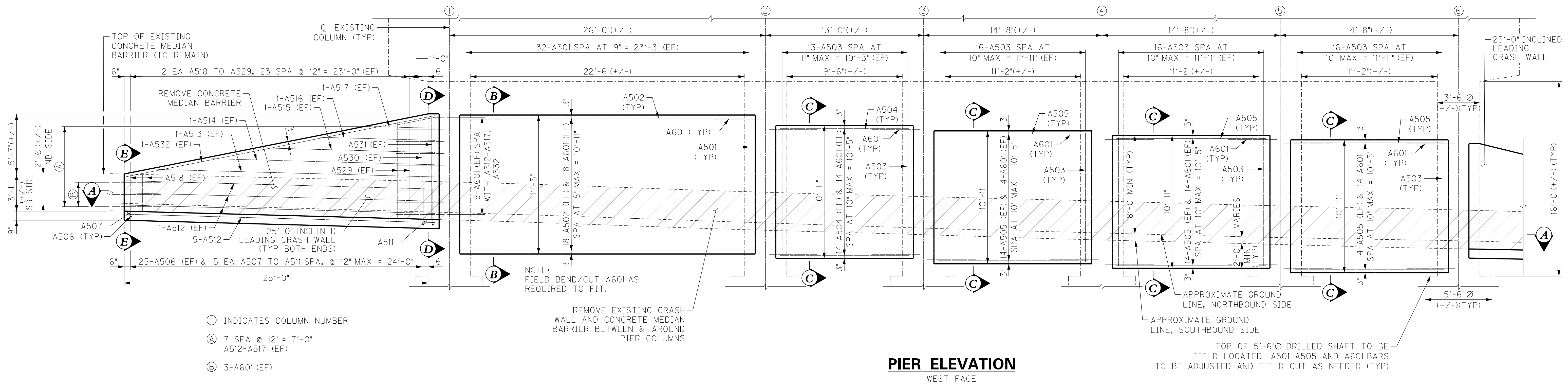
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DRAWING NO.:	

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USER: jhghr
DATE PLOTTED: December 19, 2024

E-SHEET NAME:

MicroStation v8.11.9.919



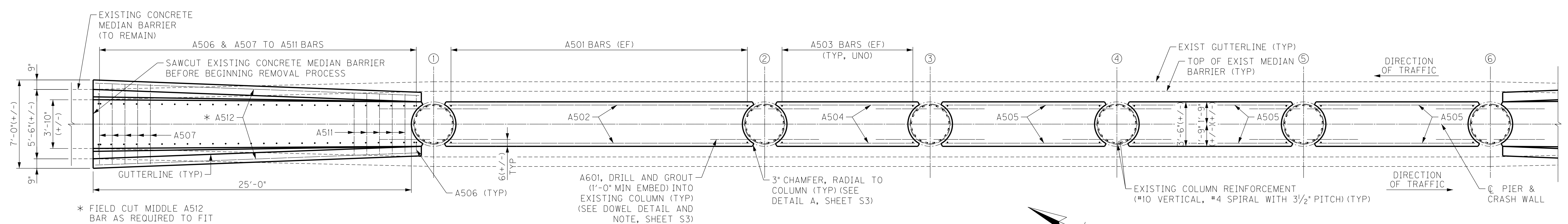
PIER ELEVATION
WEST FACE

- ① INDICATES COLUMN NUMBER
- Ⓐ 7 SPA @ 12" = 7'-0" A512-A517 (EF)
- Ⓑ 3-A601 (EF)

NOTE:
FIELD BEND/CUT A601 AS
REQUIRED TO FIT.

REMOVE EXISTING CRASH
WALL AND CONCRETE MEDIAN
BARRIER BETWEEN & AROUND
PIER COLUMNS

TOP OF 5'-6"Ø DRILLED SHAFT TO BE
FIELD LOCATED. A501-A505 AND A601 BARS
TO BE ADJUSTED AND FIELD CUT AS NEEDED (TYP)



SECTION A-A

NOTE:
FOR SECTIONS B-B, C-C, D-D, AND E-E, SEE SHEET S3.

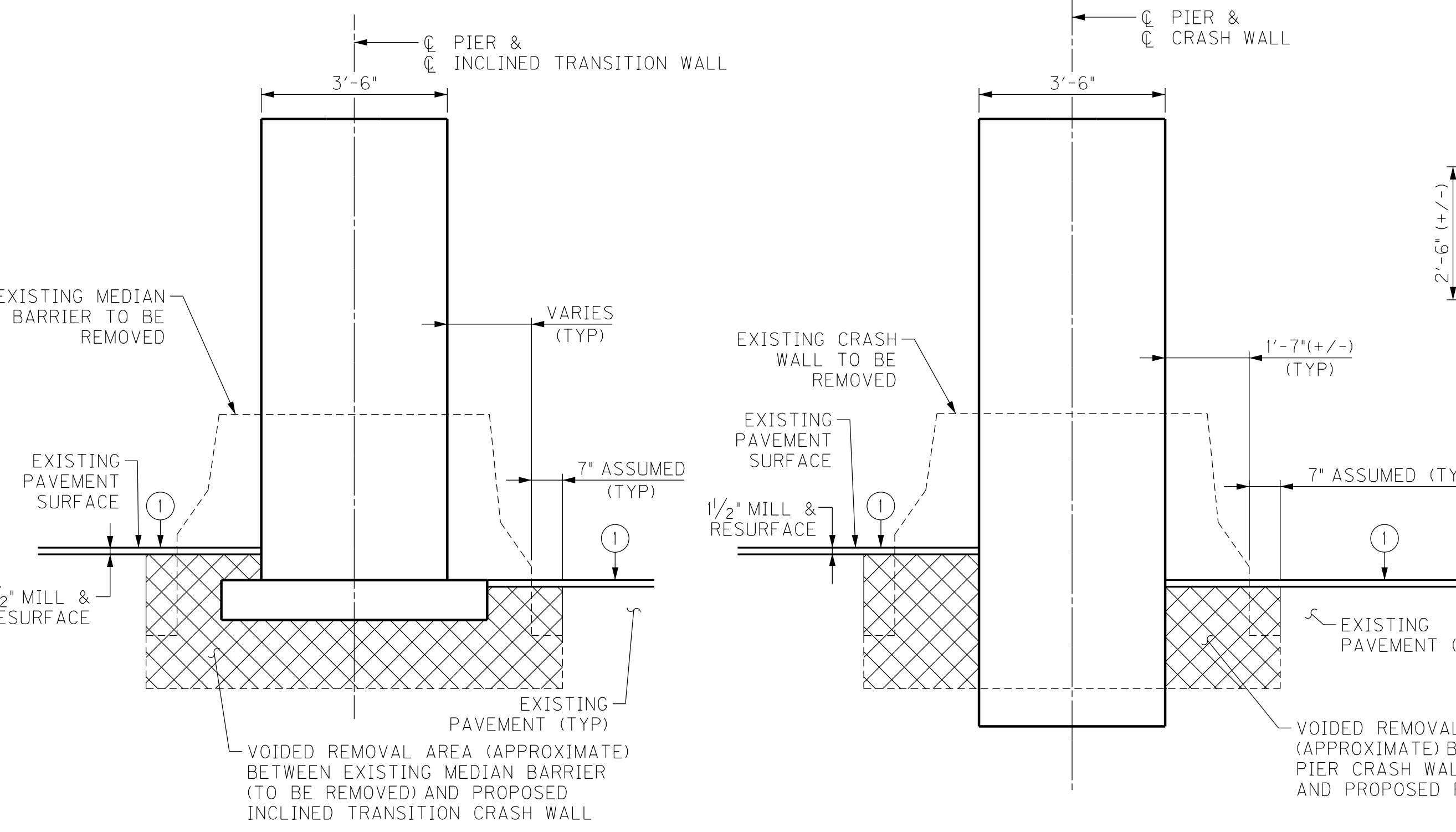
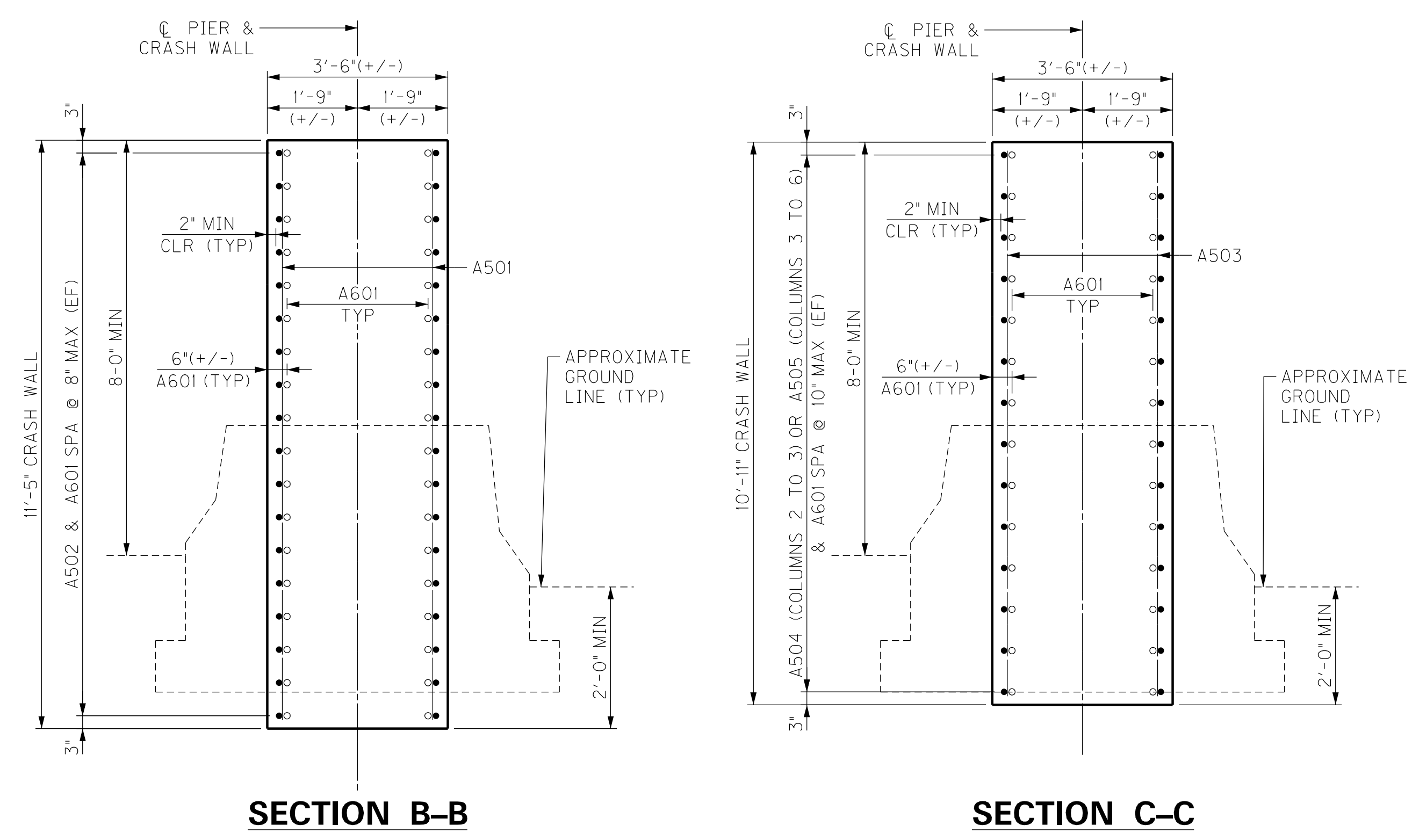
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Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY MADISON		
ROUTE KY 627	CROSSING I-75	
PIER CRASH WALL ADDITION		
ITEM NUMBER 7-22115.00	PREPARED BY DLZ	SHEET NO. S2 DRAWING NO.

FILE NAME: X:\PROJECTS\2022\22312\10490 KYTC PAVINT REHAB 2022-2024\0401 MADISON I-75\BRIDGES\SSHEETS\076B00123N SS3.DGN

USER: jhgr DATE PLOTTED: December 19, 2024

E-SHEET NAME:

MicroStation v8.11.9.919

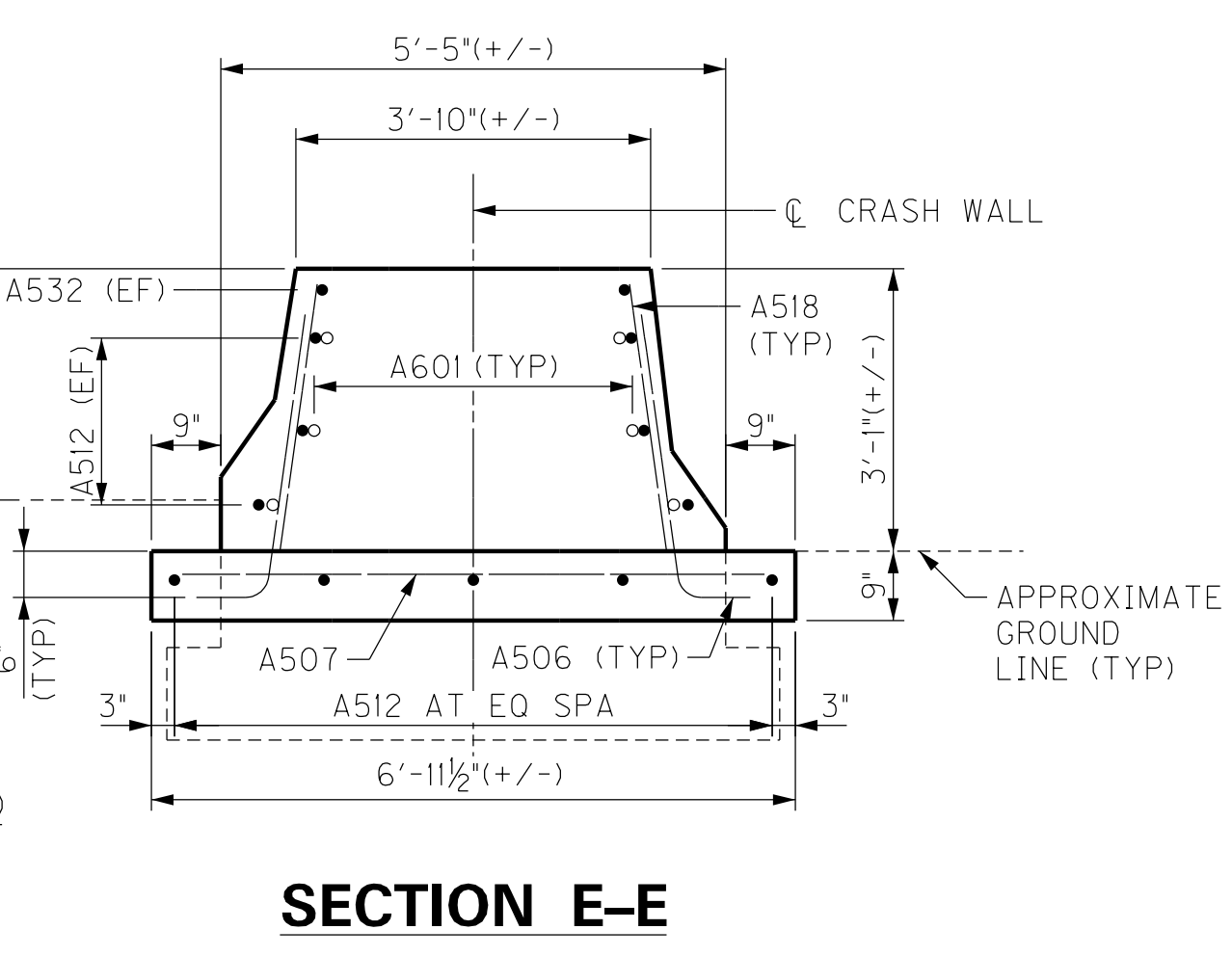


INCLINED TRANSITION CRASH WALL PAVEMENT REPAIR DETAIL

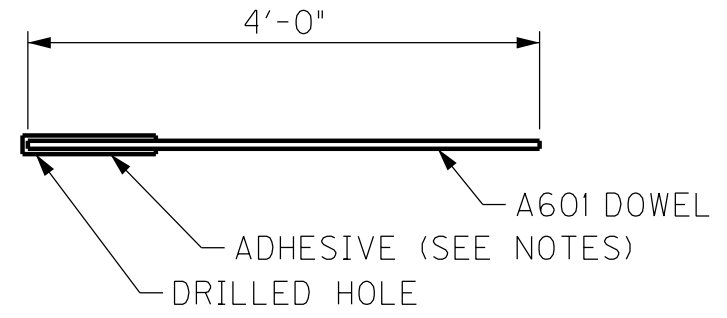
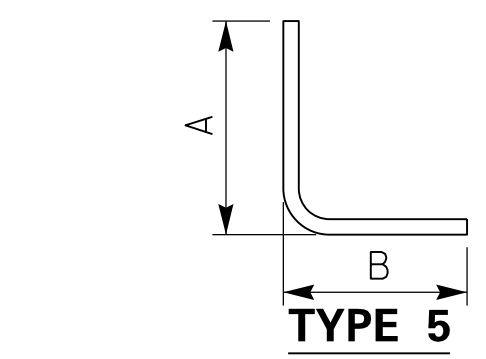
PIER CRASH WALL PAVEMENT REPAIR DETAIL

LEGEND

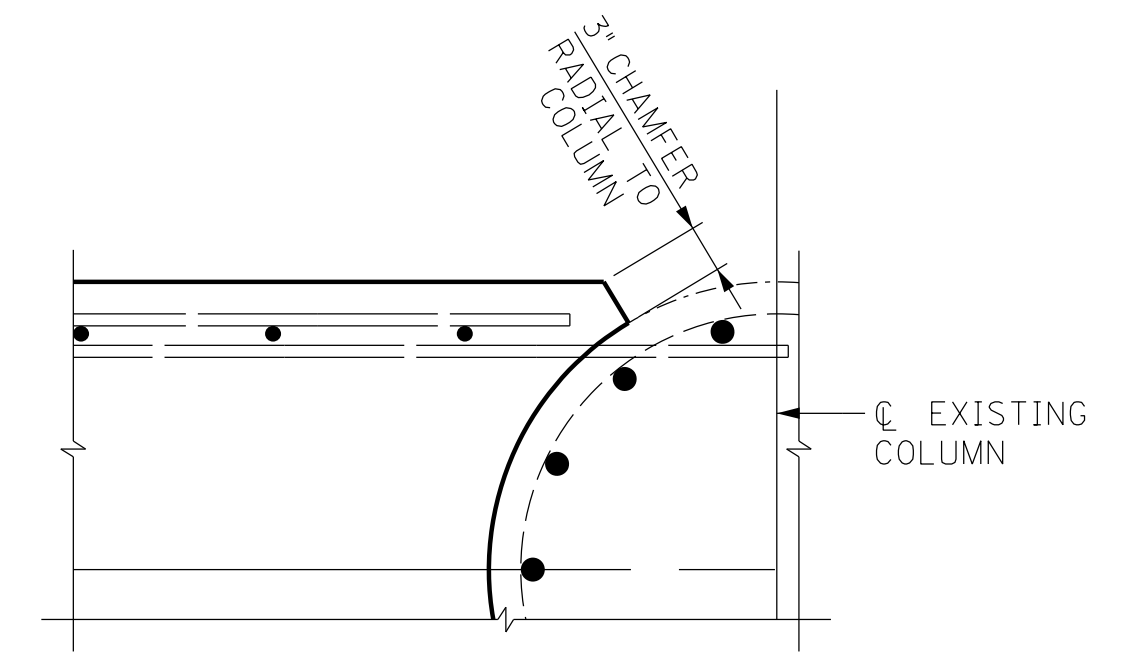
- ALL VOID AREAS BETWEEN NEW CONCRETE INCLINED TRANSITION WALLS AND PIER CRASH WALLS AND THE EXISTING PAVEMENT ARE TO BE FILLED WITH THE FOLLOWING:
CL4 ASPHALT BASE 1,00D PG76-22 IN COMPACTED LIFTS BETWEEN 3" AND 4 1/2" THICK
1 1/2" CL4 ASPHALT SURFACE 0.38A PG76-22
THE ASPHALT QUANTITIES WILL BE SHOWN ON THE ROADWAY PAVING SUMMARY.
- ① THE SHOULDER IS TO BE MILLED AND RESURFACED TO A DEPTH OF 1/2" ACROSS THE ENTIRE SHOULDER WIDTH THROUGH THE CRASHWALL MODIFICATION AREAS.



SECTION E-E



DOWEL DETAIL



DETAIL A

NOTE:
ANCHOR DOWELS SHALL BE ADHESIVELY BONDED TO EXISTING CONCRETE IN DRILLED HOLES. THE ANCHOR DOWEL ADHESIVE SHALL BE ONE OF THE FOLLOWING:
A. HILTI HIT-HY-200
B. AN APPROVED EQUAL MEETING ACI 355.4 AND THE MINIMUM BOND STRESS OF THE HIT-HY-200.

INSTALL ANCHOR DOWELS WITH A MINIMUM EMBEDMENT INTO EXISTING CONCRETE AS SHOWN. INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS.

NOTE:
FOR LOCATIONS OF SECTIONS B-B, C-C, D-D, AND E-E, SEE SHEET S2.

ITEM NUMBER
7-22115.00

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH		LOCATION	DIMENSIONS								
				FT.	IN.		A	B	C	D					
							FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	
A501	STR.	64	5	11	1	CRASH WALLS									
A502	STR.	36	5	23	7	CRASH WALLS									
A503	STR.	122	5	10	7	CRASH WALLS									
A504	STR.	28	5	10	7	CRASH WALLS									
A505	STR.	84	5	12	3	CRASH WALLS									
A506	⑤	104	5	3	11	INCLINED CRASH WALLS	0	9	3	2					
A507	STR.	10	5	6	3	INCLINED CRASH WALLS									
A508	STR.	10	5	5	11	INCLINED CRASH WALLS									
A509	STR.	10	5	5	6	INCLINED CRASH WALLS									
A510	STR.	10	5	5	1	INCLINED CRASH WALLS									
A511	STR.	10	5	4	9	INCLINED CRASH WALLS									
A512	STR.	22	5	25	5	INCLINED CRASH WALLS									
A513	STR.	4	5	22	9	INCLINED CRASH WALLS									
A514	STR.	4	5	18	4	INCLINED CRASH WALLS									
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A531	STR.	4	5	8	6	INCLINED CRASH WALLS									
A532	STR.	4	5	25	11	INCLINED CRASH WALLS									
A601	STR.	344	6	4	0	CRASH WALL DOWELS									

REVISION		DATE
DATE: DECEMBER 2024	CHECKED BY	
DESIGNED BY: J. AGLER	A. ADKINS	
DETAILED BY: J. AGLER	A. ADKINS	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
MADISON		
ROUTE	CROSSING	
KY 627	I-75	
PIER CRASH WALL DETAILS & B.O.R.		
PREPARED BY		SHEET NO.
		S3
		DRAWING NO.

SPECIFICATIONS

ALL REFERENCES TO THE STANDARD SPECIFICATIONS ARE TO THE 2019 EDITION OF THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH SUPPLEMENTAL SPECIFICATIONS.

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DESIGN LOAD

THE COLUMNS AND CRASH WALL ARE DESIGNED FOR 124 KIP COLLISION FORCE.

DESIGN METHOD

ALL REINFORCED CONCRETE MEMBERS ARE DESIGNED BY THE LOAD AND RESISTANCE FACTOR METHOD AS SPECIFIED IN THE CURRENT AASHTO SPECIFICATIONS.

MATERIALS DESIGN SPECIFICATIONS

FOR CLASS *A* REINFORCED CONCRETE F'C = 3,500 psi
FOR STEEL REINFORCEMENT FY = 60,000 psi

REINFORCEMENT

DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE TO CENTER OF BAR UNLESS OTHERWISE SHOWN. CLEAR DISTANCE TO THE FACE OF CONCRETE IS 2" UNLESS NOTED OTHERWISE. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS.

DRILLING AND ANCHORING INTO EXISTING CONCRETE

FOR ANCHORING NEW REINFORCING STEEL INTO EXISTING CONCRETE, SEE SECTIONS 511 AND 602.03.04 OF THE STANDARD SPECIFICATIONS. AVOID DRILLING THROUGH COLUMN OR WALL REINFORCEMENT (LONGITUDINAL AND HOOP). IF REINFORCEMENT CANNOT BE LOCATED PRIOR TO DRILLING AND IS HIT, STOP DRILLING IMMEDIATELY, SHIFT DRILL TEMPLATE LOCATION AND RE-DRILL. THE COST OF THIS WORK, INCLUDING LABOR, TOOLS, AND MATERIALS IS TO BE INCIDENTAL TO THE UNIT BID PRICE FOR STEEL REINFORCEMENT.

BONDING NEW CONCRETE TO EXISTING CONCRETE

IMMEDIATELY PRIOR TO PLACING NEW CLASS *A* CONCRETE, THE SURFACE AREAS OF EXISTING CONCRETE ARE TO BE COATED WITH A TWO-COMPONENT EPOXY RESIN SYSTEM IN ACCORDANCE WITH SECTIONS 511 AND 826 OF THE STANDARD SPECIFICATIONS. THE COST OF THIS WORK, INCLUDING LABOR, TOOLS, AND MATERIALS IS TO BE INCIDENTAL TO THE UNIT BID PRICE FOR CLASS *A* CONCRETE.

CONCRETE SEALING

CONTRARY TO THE SPECIFICATIONS, DO NOT APPLY MASONRY COATING. INSTEAD APPLY CONCRETE SEALER IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE SEALING. ALL EXPOSED SURFACES OF NEW CONCRETE ARE TO BE SEALED.

BEVELED EDGES

ALL EXPOSED EDGES SHALL BE BEVELED 3/4" UNLESS OTHERWISE SHOWN.

TRAFFIC CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING PROPER BARRICADES AND ADVANCE WARNING SIGNS AND SIGNALS FOR ROAD CONSTRUCTION AND ROAD CLOSURE.

UTILITIES

BEFORE BEGINNING WORK, LOCATE ALL EXISTING UTILITIES. CONSIDER LOCATION OF ANY UTILITIES SHOWN ON THE EXISTING OR CONTRACT DRAWINGS TO BE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. THE DEPARTMENT DOES NOT WARRANT THE LOCATIONS AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS. THE CONTRACTOR MUST MAKE HIS OWN DETERMINATION. EXCEPT AS SHOWN ON THE PLANS, WORK AROUND AND DO NOT DISTURB EXISTING UTILITIES.

REMOVE EXISTING STRUCTURE

EXISTING CONCRETE BARRIERS AND CRASH WALLS ARE TO BE REMOVED AS SHOWN IN THE PLANS. THE COSTS FOR EXISTING CRASH WALL REMOVAL, REMOVAL OF EXISTING CONCRETE BARRIER ENDS AND REMOVAL OF THE SPLIT MEDIAN BARRIER WALL ALONG A PIER SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE CONCRETE MASONRY." THE COSTS FOR REMOVING THE EXISTING CONCRETE MEDIAN BARRIER SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE CONCRETE MEDIAN BARRIER."

SAWCUTTING

SAWCUTTING OF THE EXISTING CONCRETE MEDIAN BARRIER, INCLUDING ITS FOOTER, IS INCIDENTAL TO THE UNIT BID PRICE FOR CONCRETE CLASS *A*.

STRUCTURE EXCAVATION

THE COST FOR ANY EXCAVATION REQUIRED TO REMOVE AND CONSTRUCT CRASH WALL IS INCIDENTAL TO THE UNIT BID PRICE FOR CONCRETE CLASS *A*.

PLANS OF EXISTING STRUCTURE

AS AN AID TO THE CONTRACTOR, PLANS OF THE EXISTING BRIDGE ARE AVAILABLE (SEE DRAWING NUMBER 13694). THE COMPLETENESS AND ACCURACY OF THE DRAWINGS ARE NOT GUARANTEED.

VERIFYING FIELD CONDITIONS

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL. NEW MATERIAL THAT IS UNSUITABLE BECAUSE OF VARIATIONS IN THE EXISTING STRUCTURE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

DAMAGE TO THE STRUCTURE

THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE EXISTING STRUCTURE, SHOULD IT BE ALLOWED TO FALL DUE TO THE CONTRACTOR'S ACTIONS. THE CONTRACTOR IS RESPONSIBLE FOR BOTH THE REMOVAL AND REPLACEMENT OF THE FALLEN PORTION AT THE CONTRACTOR'S EXPENSE.

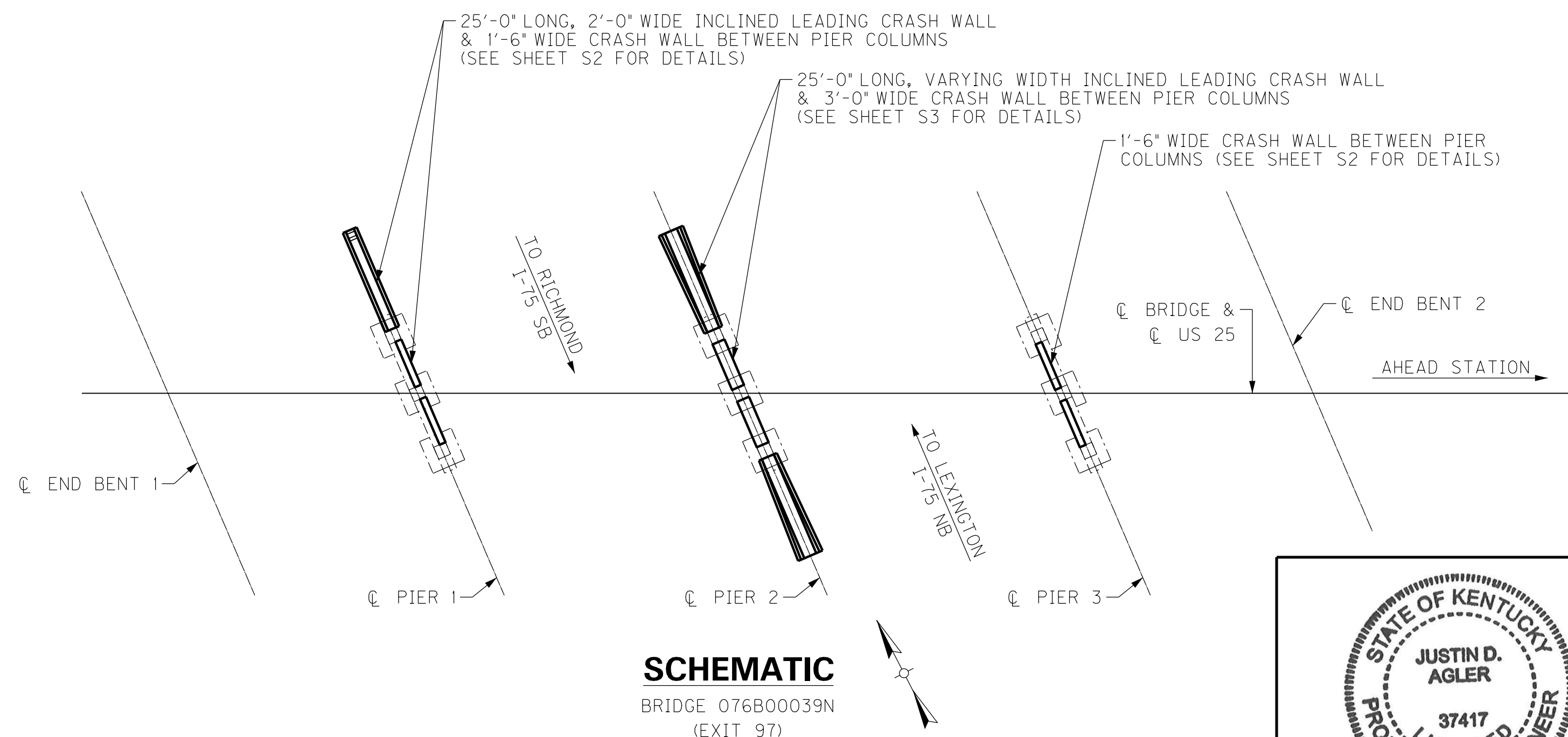
PAVEMENT REPAIRS

ALL VOIDS IN THE PAVEMENT LEFT BY REMOVAL OF THE EXISTING MEDIAN BARRIER AND PIER CRASH WALL AND CONSTRUCTION OF THE NEW INCLINED TRANSITION CRASH WALL AND PIER CRASH WALL ARE TO BE FILLED WITH ASPHALT PAVEMENT AS SHOWN IN THE PAVEMENT REPAIR DETAILS ON SHEET S4. THE ASPHALT QUANTITIES REQUIRED TO FILL THE VOIDS WILL BE SHOWN ON THE ROADWAY PLANS PAVING SUMMARY.


ABBREVIATIONS

BF	BACK FACE
CL	CENTERLINE
CLR	CLEAR
EA	EACH
EF	EACH FACE
EMBED	EMBEDMENT
EO	EQUAL
FF	FRONT FACE
MIN	MINIMUM
MAX	MAXIMUM
NB	NORTHBOUND
SB	SOUTHBOUND
SPA	SPACE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

ESTIMATE OF QUANTITIES			
BID CODE	ITEM	QUANTITY	UNIT
02403	REMOVE CONCRETE MASONRY	17.0	CY
08100	CONCRETE-CLASS A	110.0	CY
08150	STEEL REINFORCEMENT	8,658	LB
21935EN	REMOVE CONC MEDIAN BARRIER	50	LF
23378EC	CONCRETE SEALING	2,440	SF



SCHMATIC
BRIDGE 076B00039N
(EXIT 97)



JUSTIN D. AGLER
37417
LICENSED PROFESSIONAL ENGINEER

Justin D. Agler

JUSTIN D. AGLER DATE: 12-20-2024
KY PE NO. 37417

INDEX OF SHEETS

Sheet No.	Description
S1	GENERAL NOTES & ESTIMATE OF QUANTITIES
S2	PIERS 1 & 3 CRASH WALL ADDITION
S3	PIER 2 CRASH WALL ADDITION
S4	PIER CRASH WALL ADDITION BILL OF REINFORCEMENT

SPECIAL NOTES

CONCRETE SEALING

SPECIAL PROVISIONS

NA

STANDARD DRAWINGS

SPECIFICATIONS

2019 Standard Specifications for Road and Bridge Construction.
2020 (9th Edition) AASHTO LRFD Bridge Design Specifications

REVISION	DATE

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
MADISON

ROUTE **US 25** CROSSING **I-75**

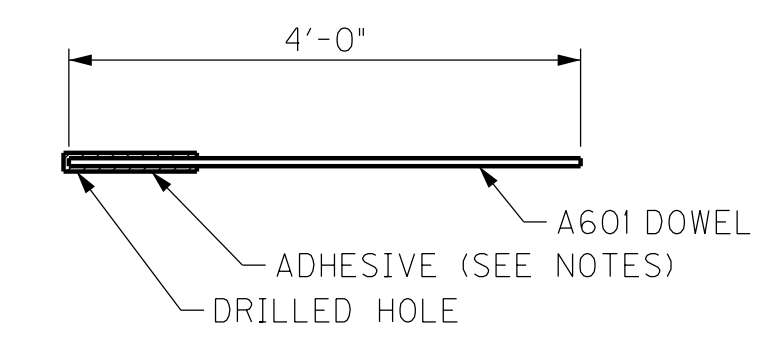
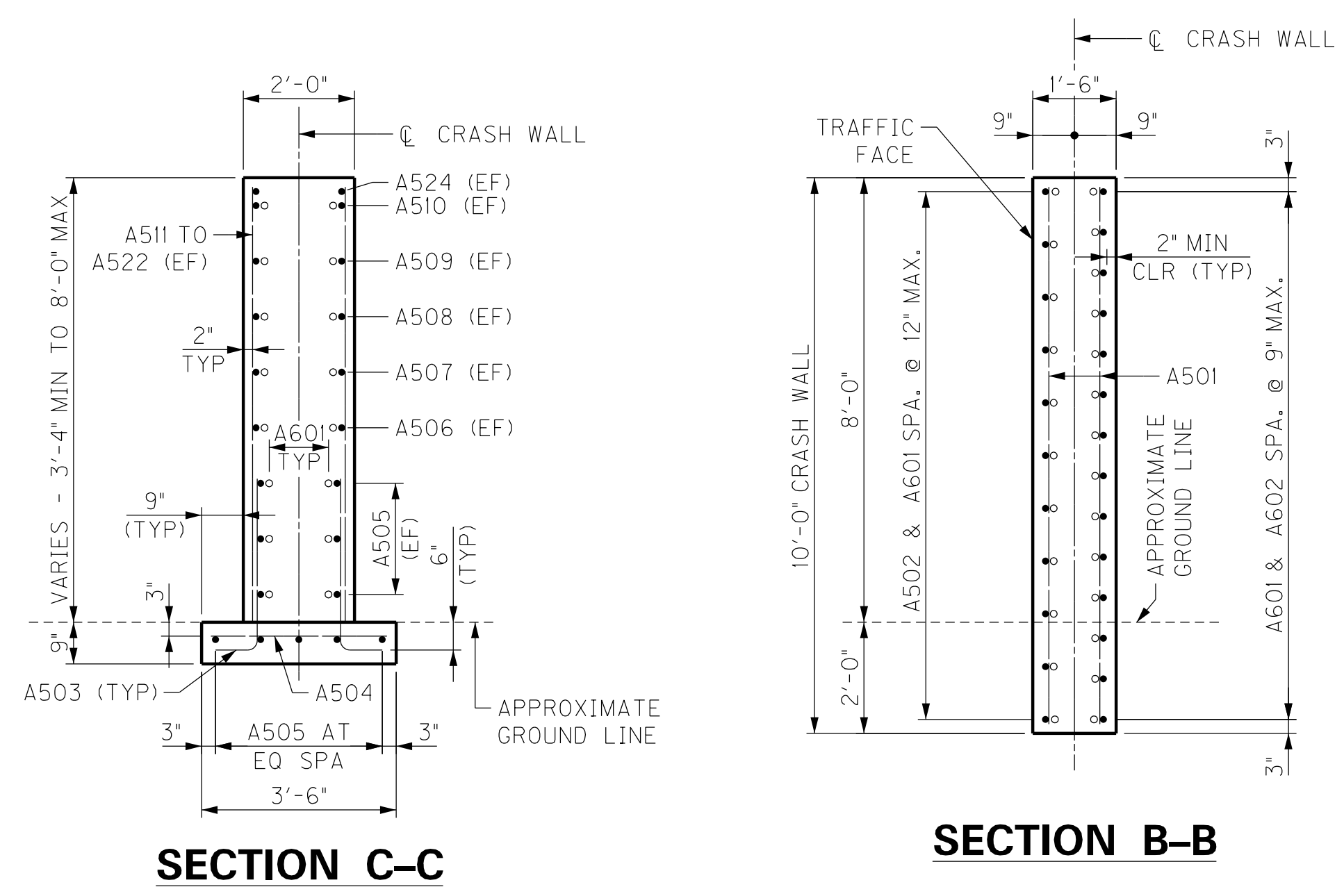
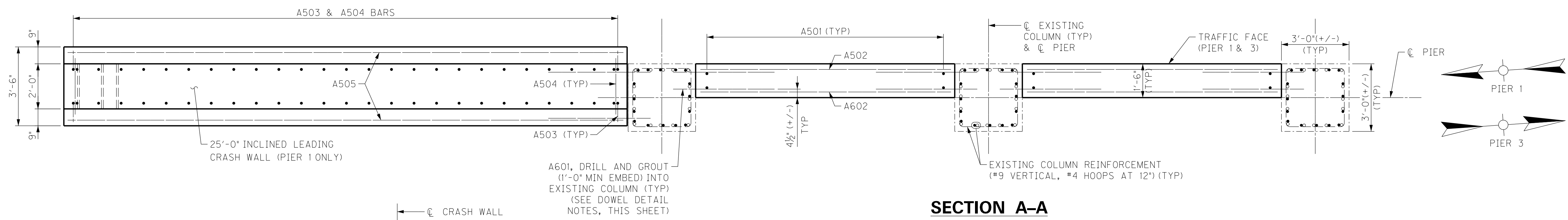
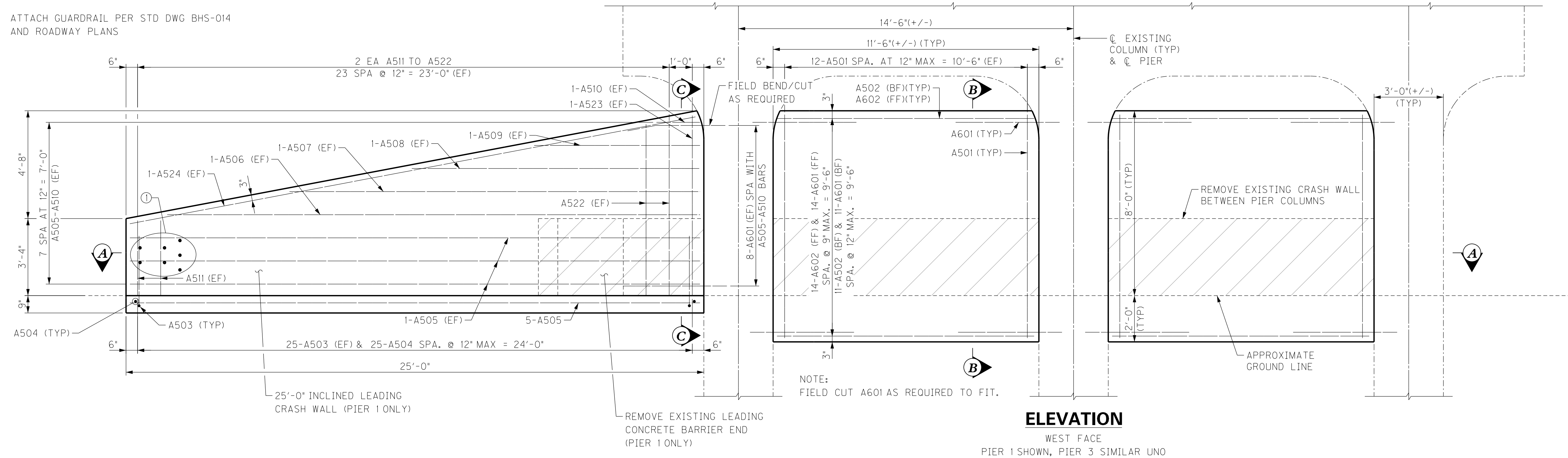
GENERAL NOTES & EST. QUANTITIES

PREPARED BY **DLZ** SHEET NO. **S1**
DRAWING NO.

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 CONSTRUCTION PROJECT NO.
 LETTING DATE
 USER: jagler DATE PLOTTED: December 19, 2024
 E-SHEET NAME:
 MicroStation v8.11.9.919

NOTATIONS:

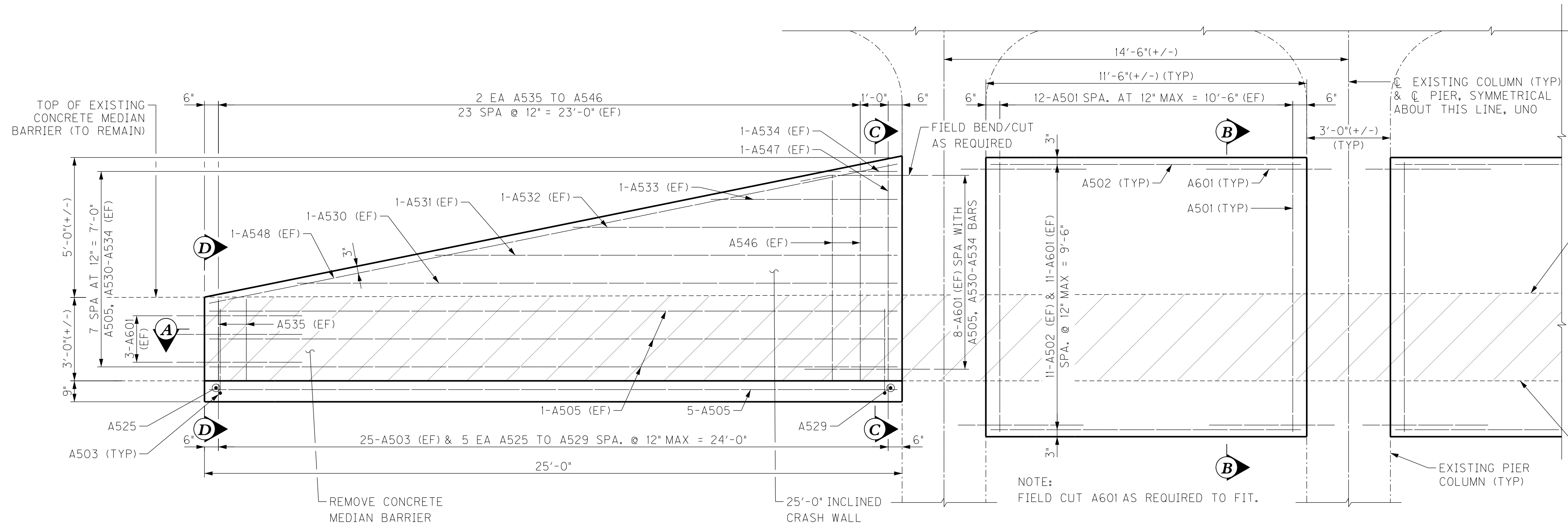
- ① ATTACH GUARDRAIL PER STD DWG BHS-014 AND ROADWAY PLANS



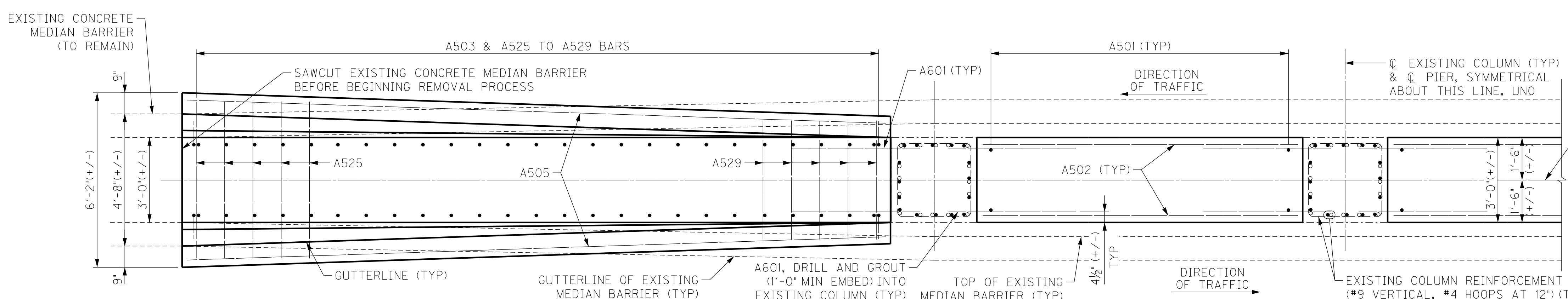
NOTE:
ANCHOR DOWELS SHALL BE ADHESIVELY BONDED TO EXISTING CONCRETE IN DRILLED HOLES. THE ANCHOR DOWEL ADHESIVE SHALL BE ONE OF THE FOLLOWING:
A. HILTI HIT-HY-200
B. AN APPROVED EQUAL MEETING ACI 355.4 AND THE MINIMUM BOND STRESS OF THE HIT-HY-200.
INSTALL ANCHOR DOWELS WITH A MINIMUM EMBEDMENT INTO EXISTING CONCRETE AS SHOWN. INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS.

FILE NAME: X:\PROJECTS\2022\2312\10490 KYTC PAVINT REHAB 2022-2024\0401 MADISON I-75\BRIDGES\SHETS\07600039N S2.DGN
 USER: jhglr
 DATE PLOTTED: December 19, 2024
 E-SHEET NAME:
 MicroStation v8.11.9.919

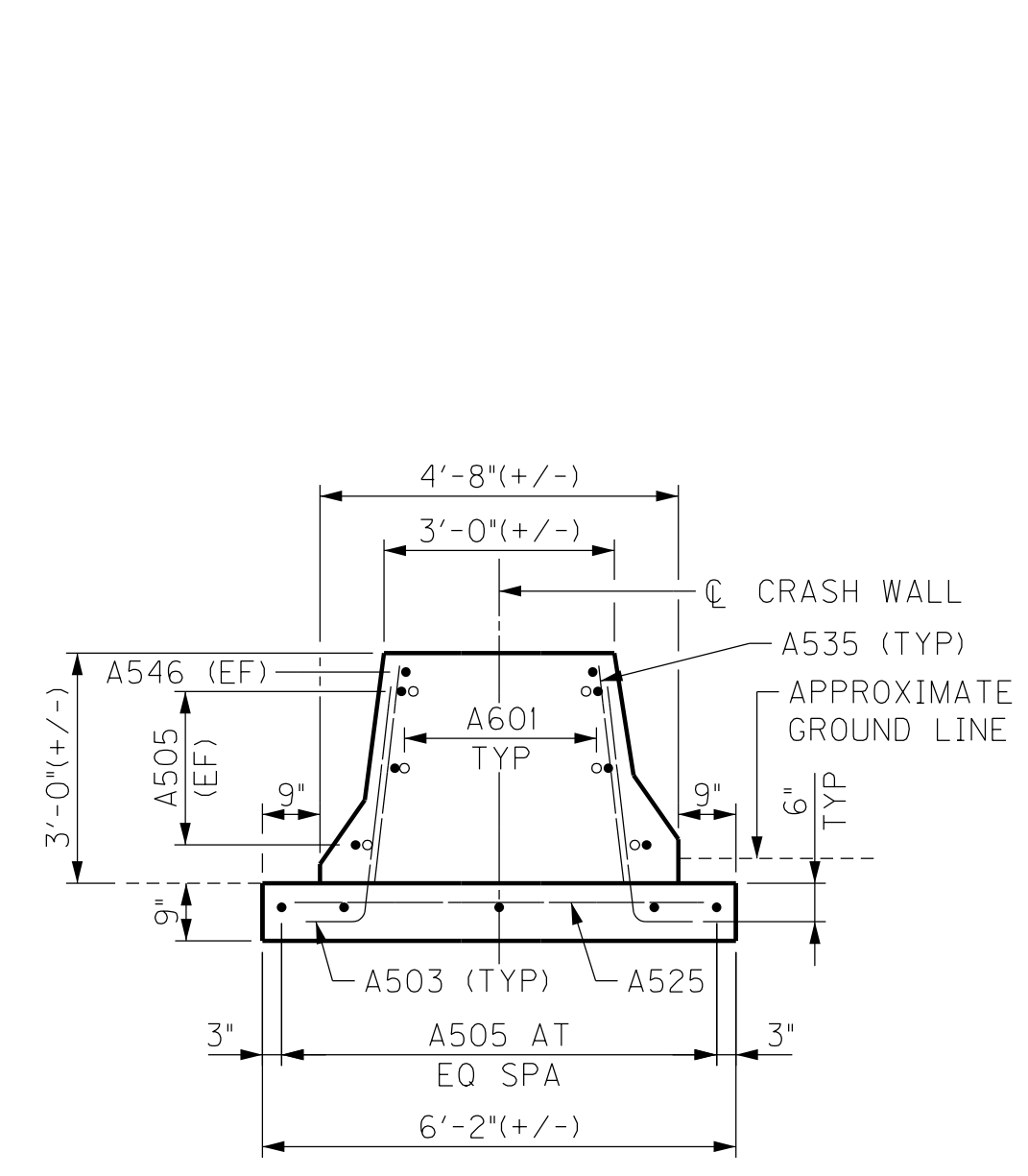
REVISION		DATE
DATE: DECEMBER 2024		CHECKED BY:
DESIGNED BY: J. AGLER		A. ADKINS
DETAILED BY: J. AGLER		A. ADKINS
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS COUNTY MADISON		
ROUTE US 25	CROSSING I-75	
PIERS 1 & 3 CRASH WALL ADDITION		
ITEM NUMBER 7-22115.00	PREPARED BY DLZ	SHEET NO. S2 DRAWING NO.



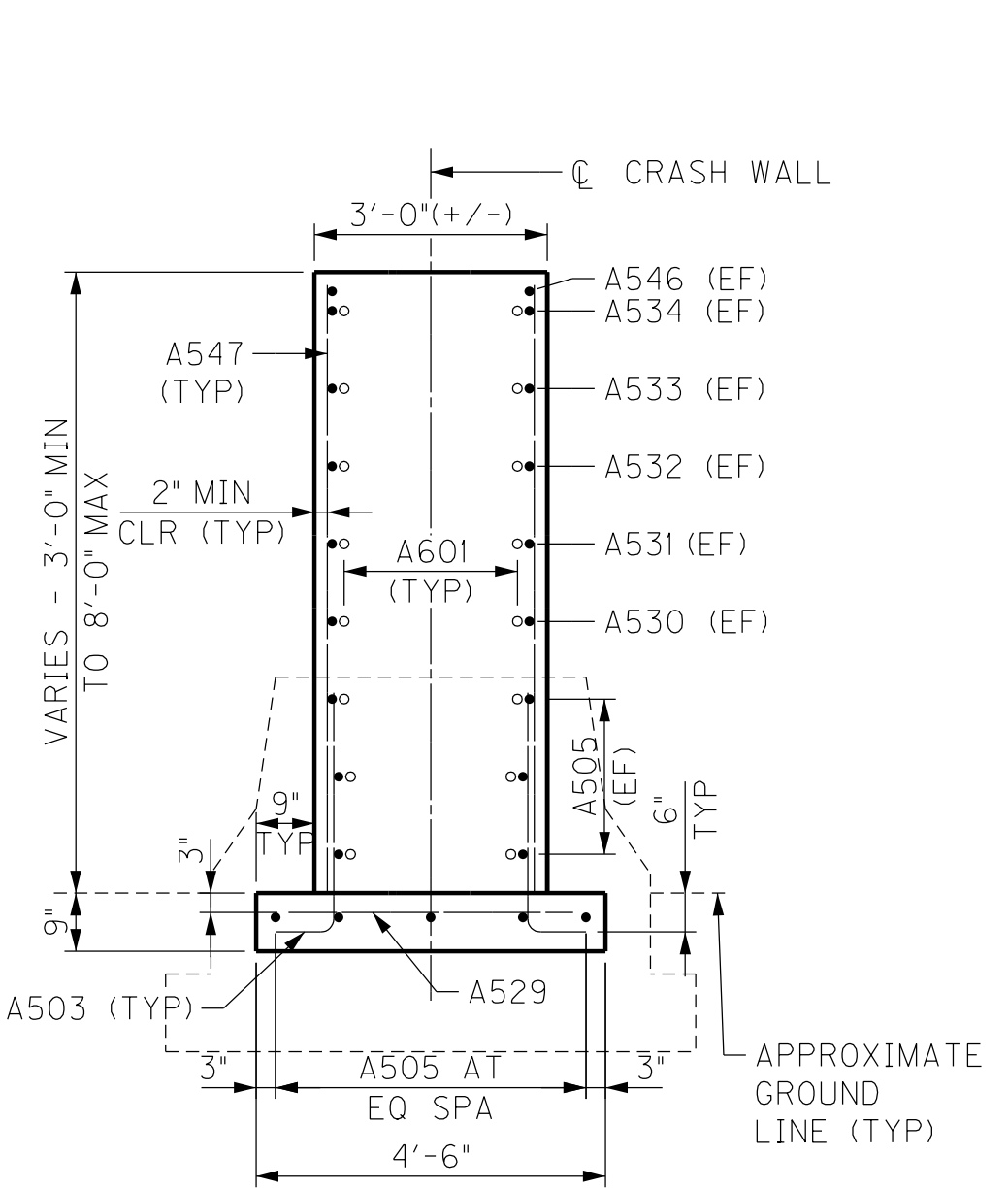
ELEVATION - PIER 2
WEST FACE



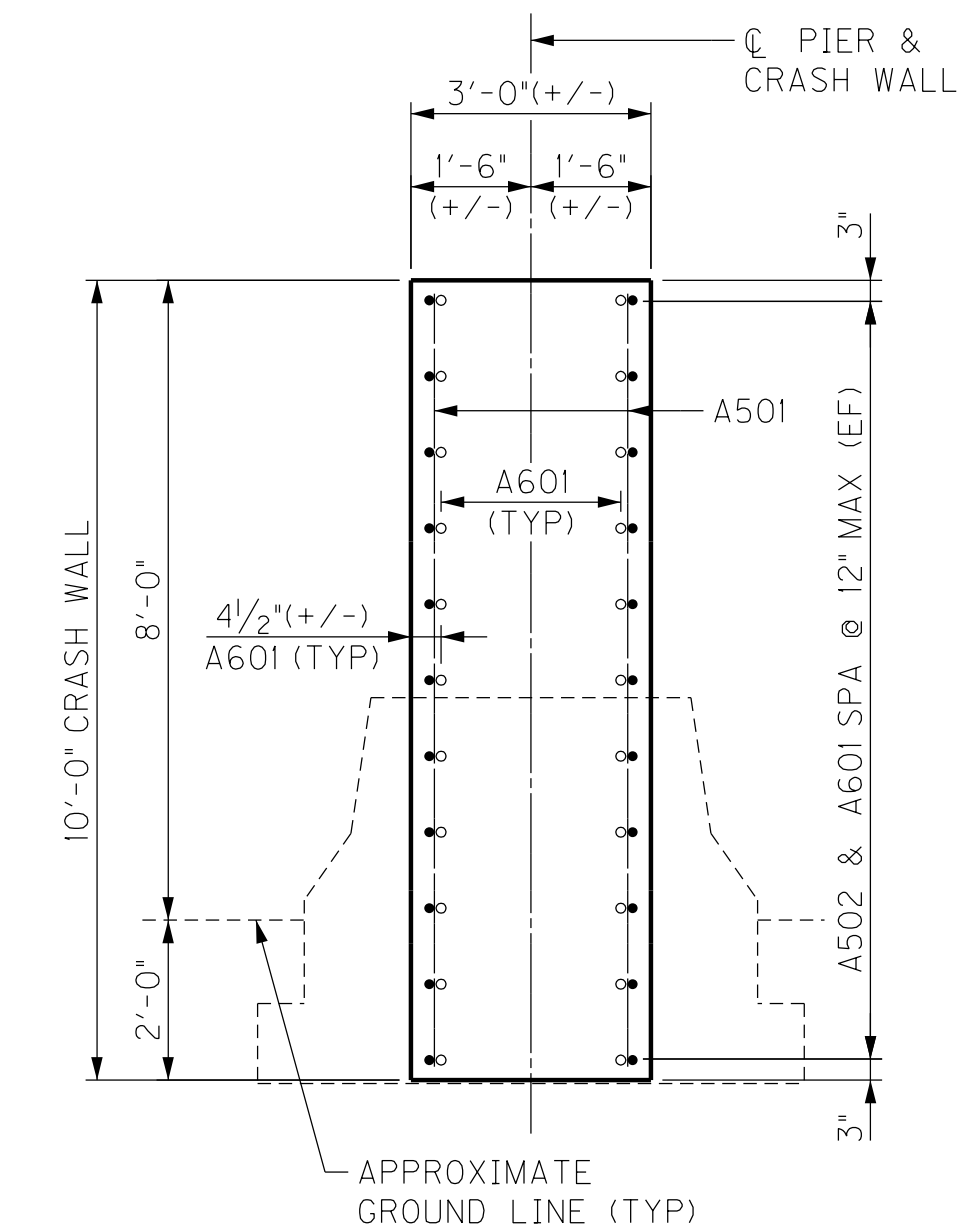
SECTION A-A



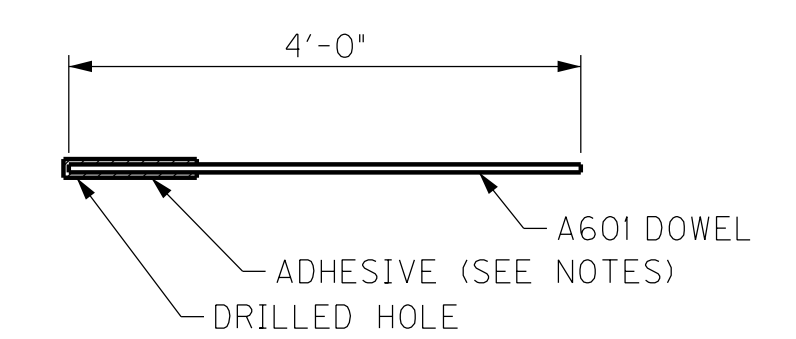
SECTION D-D



SECTION C-C



SECTION B-B



DOWEL DETAIL

NOTE:
ANCHOR DOWELS SHALL BE ADHESIVELY BONDED TO EXISTING CONCRETE IN DRILLED HOLES. THE ANCHOR DOWEL ADHESIVE SHALL BE ONE OF THE FOLLOWING:
A. HILTI HIT-HY-200
B. AN APPROVED EQUAL MEETING ACI 355.4 AND THE MINIMUM BOND STRESS OF THE HIT-HY-200.
INSTALL ANCHOR DOWELS WITH A MINIMUM EMBEDMENT INTO EXISTING CONCRETE AS SHOWN. INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS.

ITEM NUMBER	7-22115.00
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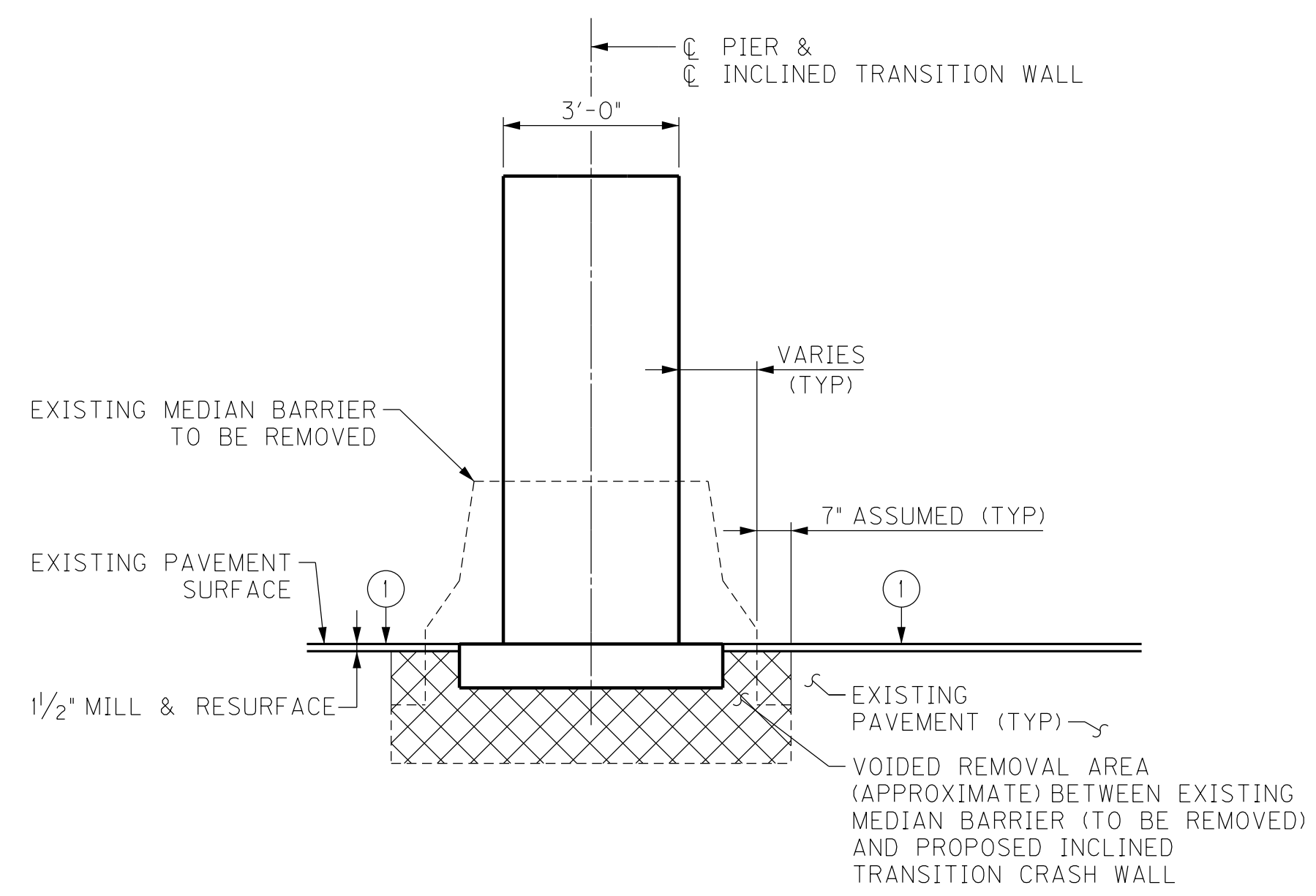
REVISION		DATE
DATE: DECEMBER 2024		CHECKED BY:
DESIGNED BY: J. AGLER		A. ADKINS
DETAILED BY: J. AGLER		A. ADKINS
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY MADISON		
ROUTE US 25	CROSSING I-75	
PIER 2 CRASH WALL ADDITION		
PREPARED BY		SHEET NO.
DLZ		S3
DRAWING NO.		

FILE NAME: X:\PROJECTS\2022\22312\10490 KYC P\WINT REHAB 2022-2024\0401 MADISON I-75\BRIDGES\SHETS\076B00039N S4.DGN

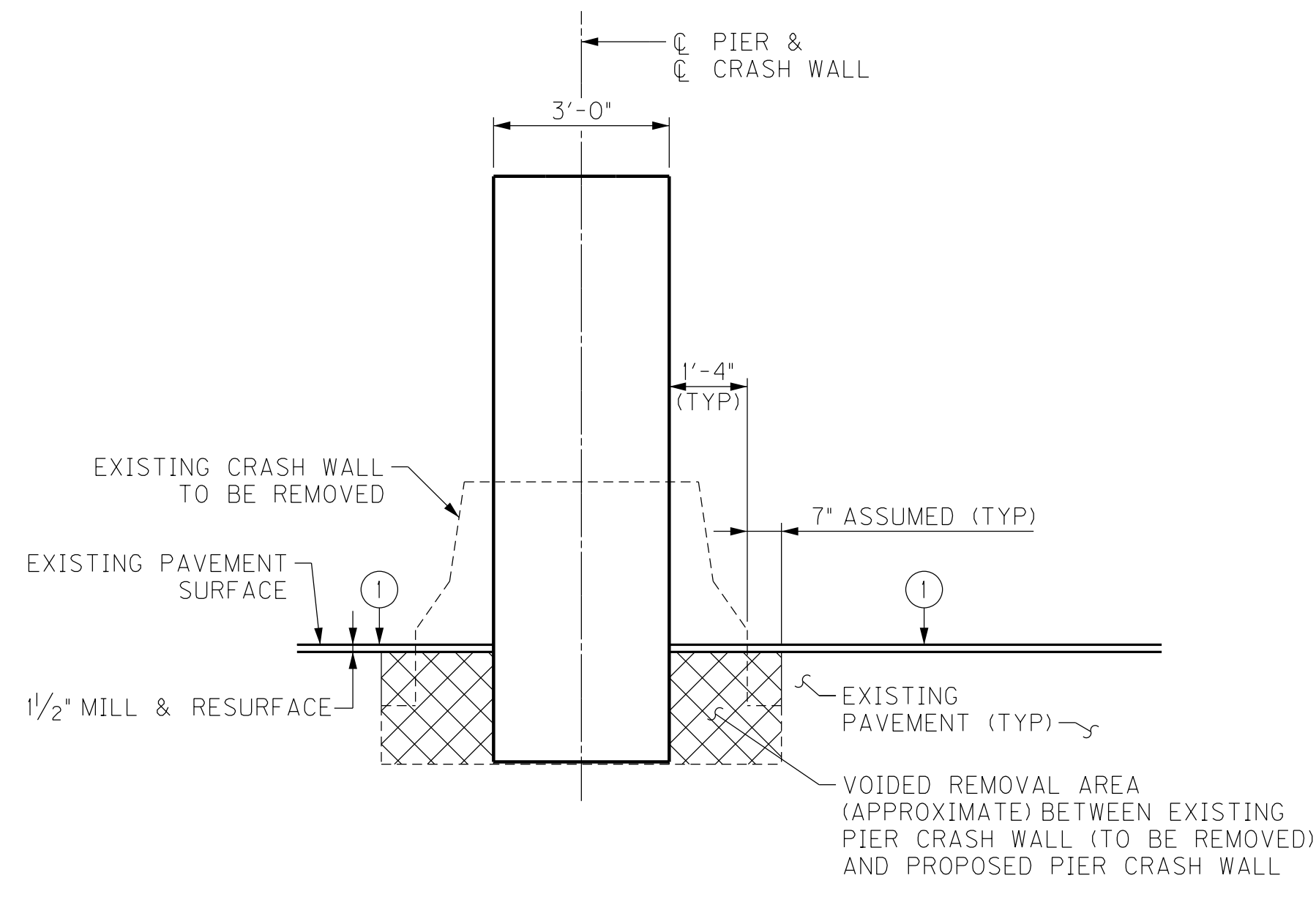
USER: jgglr
DATE PLOTTED: December 19, 2024

E-SHEET NAME:

MicroStation v8.11.9.919

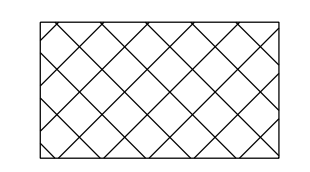


**INCLINED TRANSITION CRASH WALL
PAVEMENT REPAIR DETAIL**



**PIER CRASH WALL
PAVEMENT REPAIR DETAIL**

LEGEND



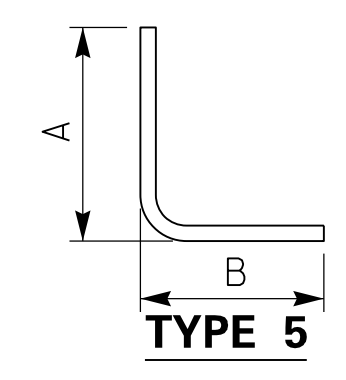
ALL VOID AREAS BETWEEN NEW CONCRETE INCLINED TRANSITION WALLS AND PIER CRASH WALLS AND THE EXISTING PAVEMENT ARE TO BE FILLED WITH THE FOLLOWING:
CL4 ASPHALT BASE 1.00D PG76-22 IN COMPACTED LIFTS BETWEEN 3" AND 4 1/2" THICK
1/2" CL4 ASPHALT SURFACE 0.38A PG76-22
THE ASPHALT QUANTITIES WILL BE SHOWN ON THE ROADWAY PAVING SUMMARY.



THE SHOULDER IS TO BE MILLED AND RESURFACED TO A DEPTH OF 1/2" ACROSS THE ENTIRE SHOULDER WIDTH THROUGH THE CRASHWALL MODIFICATION AREAS.

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH		LOCATION	DIMENSIONS								
				FT.	IN.		A	B	C	D					
							FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	
A501	STR.	144	#5	9	8	CRASH WALLS									
A502	STR.	88	5	11	2	CRASH WALLS									
A503	(5)	150	5	3	11	INCLINED CRASH WALLS	0	9	3	2					
A504	STR.	25	5	3	2	PI INCLINED CRASH WALL									
A505	STR.	33	5	24	8	INCLINED CRASH WALLS									
A506	STR.	2	5	23	0	PI INCLINED CRASH WALL									
A507	STR.	2	5	17	9	PI INCLINED CRASH WALL									
A508	STR.	2	5	12	5	PI INCLINED CRASH WALL									
A509	STR.	2	5	7	2	PI INCLINED CRASH WALL									
A510	STR.	2	5	1	10	PI INCLINED CRASH WALL									
A511	STR.	4	5	3	3	PI INCLINED CRASH WALL									
A512	STR.	4	5	3	7	PI INCLINED CRASH WALL									
A513	STR.	4	5	4	0	PI INCLINED CRASH WALL									
A514	STR.	4	5	4	4	PI INCLINED CRASH WALL									
A515	STR.	4	5	4	9	PI INCLINED CRASH WALL									
A516	STR.	4	5	5	1	PI INCLINED CRASH WALL									
A517	STR.	4	5	5	6	PI INCLINED CRASH WALL									
A518	STR.	4	5	5	10	PI INCLINED CRASH WALL									
A519	STR.	4	5	6	3	PI INCLINED CRASH WALL									
A520	STR.	4	5	6	7	PI INCLINED CRASH WALL									
A521	STR.	4	5	7	0	PI INCLINED CRASH WALL									
A522	STR.	4	5	7	5	PI INCLINED CRASH WALL									
A523	STR.	2	5	7	9	PI INCLINED CRASH WALL									
A524	STR.	2	5	24	10	PI INCLINED CRASH WALL									
A525	STR.	10	5	5	6	P2 INCLINED CRASH WALL									
A526	STR.	10	5	5	2	P2 INCLINED CRASH WALL									
A527	STR.	10	5	4	10	P2 INCLINED CRASH WALL									
A528	STR.	10	5	4	6	P2 INCLINED CRASH WALL									
A529	STR.	10	5	4	2	P2 INCLINED CRASH WALL									
A530	STR.	4	5	21	6	P2 INCLINED CRASH WALL									
A531	STR.	4	5	16	7	P2 INCLINED CRASH WALL									
A532	STR.	4	5	11	7	P2 INCLINED CRASH WALL									
A533	STR.	4	5	6	8	P2 INCLINED CRASH WALL									
A534	STR.	4	5	1	9	P2 INCLINED CRASH WALL									
A535	STR.	8	5	2	11	P2 INCLINED CRASH WALL									
A536	STR.	8	5	3	4	P2 INCLINED CRASH WALL									
A537	STR.	8	5	3	8	P2 INCLINED CRASH WALL									
A538	STR.	8	5	4	1	P2 INCLINED CRASH WALL									
A539	STR.	8	5	4	6	P2 INCLINED CRASH WALL									
A540	STR.	8	5	4	11	P2 INCLINED CRASH WALL									
A541	STR.	8	5	5	4	P2 INCLINED CRASH WALL									
A542	STR.	8	5	5	9	P2 INCLINED CRASH WALL									
A543	STR.	8	5	6	2	P2 INCLINED CRASH WALL									
A544	STR.	8	5	6	6	P2 INCLINED CRASH WALL									
A545	STR.	8	5	6	11	P2 INCLINED CRASH WALL									
A546	STR.	8	5	7	4	P2 INCLINED CRASH WALL									
A547	STR.	4	5	7	9	P2 INCLINED CRASH WALL									
A548	STR.	4	5	25	2	P2 INCLINED CRASH WALL									
A601	STR.	348	6	4	0	CRASH WALL DOWELS									
A602	STR.	56	6	11	2	P2 CRASH WALL									



REVISION		DATE
DATE: DECEMBER 2024	CHECKED BY	
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COUNTY MADISON		
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7-22115.00	DLZ	S4
		DRAWING NO.