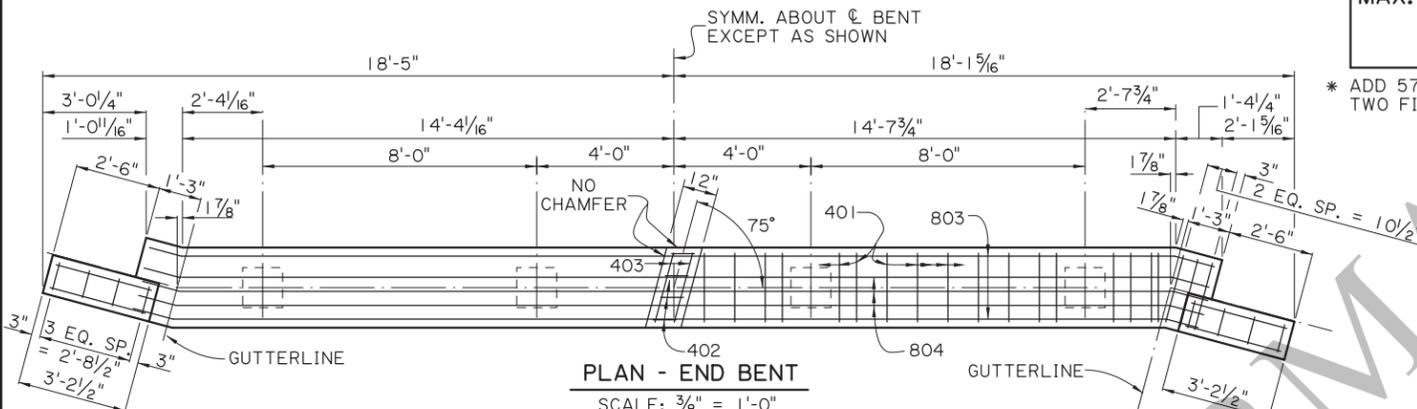


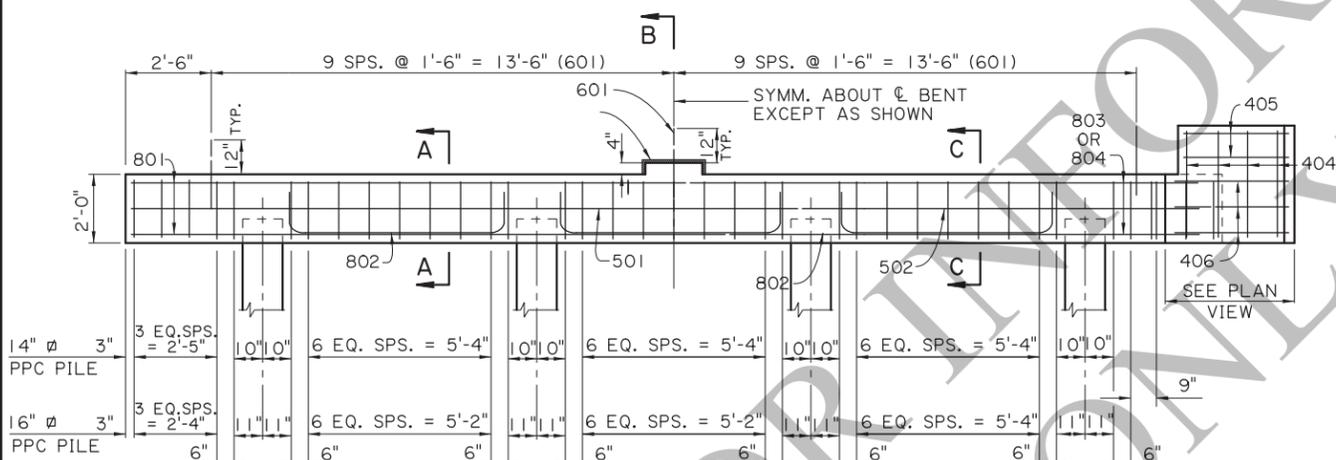
PLAN - INTERMEDIATE BENT

SCALE 3/8" = 1'-0"



PLAN - END BENT

SCALE: 3/8" = 1'-0"

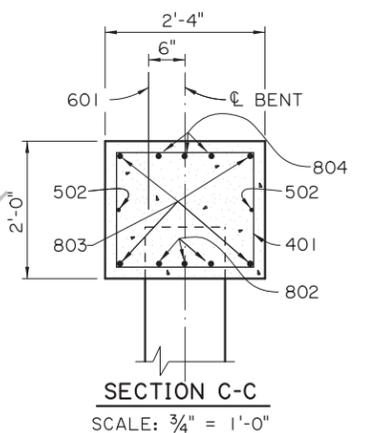
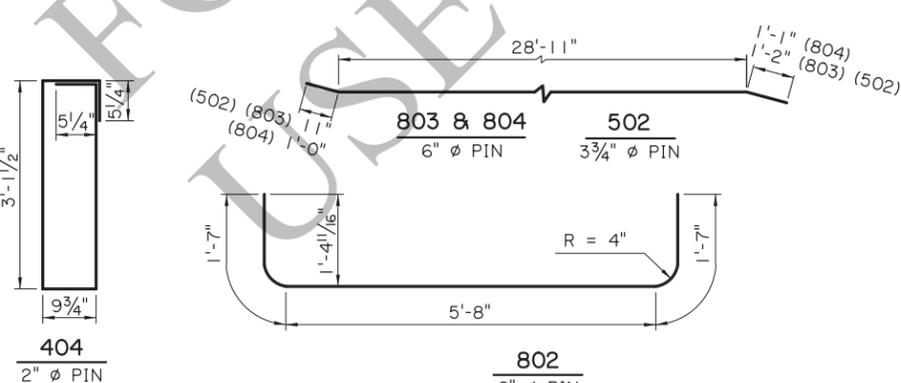
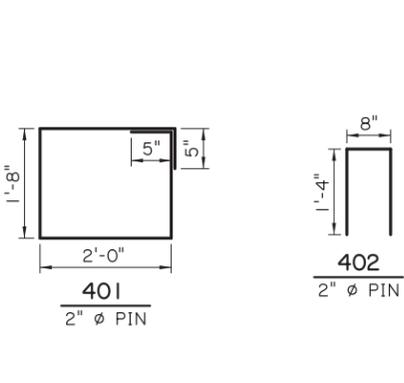


HALF ELEVATION - INTERMEDIATE BENT

SCALE 3/8" = 1'-0"

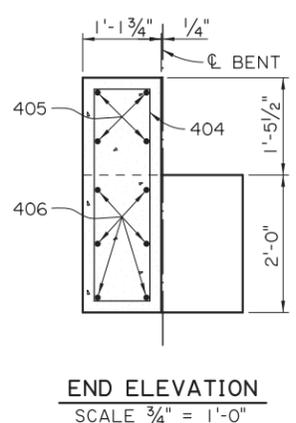
HALF ELEVATION - END BENT

SCALE 3/8" = 1'-0"



SECTION C-C

SCALE: 3/4" = 1'-0"



END ELEVATION

SCALE 3/4" = 1'-0"

ESTIMATED QUANTITIES (ONE INTER. BENT)

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	7	31'-8"	LONGIT. IN CAP
802	9	8'-10"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 301'-2" = 804 LBS.			
601	19	2'-0"	DOWELS
TOTAL NO. 6 BARS = 38'-0" = 57 LBS.			
501	2	31'-8"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 63'-4" = 66 LBS.			
401	52	8'-2"	STIRRUPS IN CAP
402	4	3'-4"	STIRRUPS IN RISER
403	2	2'-1"	LONGIT. IN RISER
TOTAL NO. 4 BARS = 319'-8" = 214 LBS.			
* TOTAL DEFORMED REINFORCING STEEL = 1,084 LBS.			
o CLASS A1 CONCRETE = 5.36 CU. YDS.			
MAX. PILE LOAD: SERVICE DEAD LOAD = 24 TONS			
SERVICE LIVE LOAD = 36 TONS			
FACTORED TOTAL LOAD = 82 TONS			

* ADD 57 LBS. OF REINFORCING STEEL (19-601 DOWELS) WHEN TWO FIXED ENDS OCCUR ON THE SAME BENT.

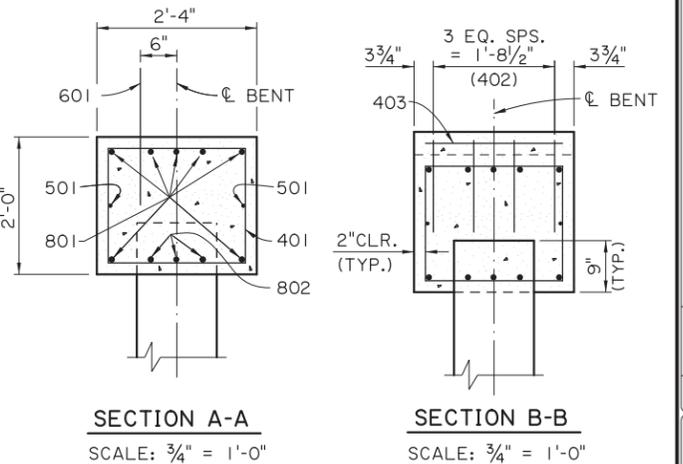
AS-DESIGNED RATING

VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.459	—
HL-93 (OPR)	1.891	—
LADV-11 (INV)	1.122	MAGNIFICATION FACTOR = 1.3

ESTIMATED QUANTITIES (ONE END BENT)

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
802	9	8'-10"	LONGIT. IN CAP
803	4	31'-0"	LONGIT. IN CAP
804	3	31'-0"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 296'-0" = 792 LBS.			
601	19	2'-0"	DOWELS
TOTAL NO. 6 BARS = 38'-0" = 57 LBS.			
502	2	31'-0"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 62'-0" = 65 LBS.			
401	39	8'-2"	STIRRUPS IN CAP
402	4	3'-4"	STIRRUPS IN RISER
403	2	2'-1"	LONGIT. IN RISER
404	8	8'-9"	STIRRUPS IN WINGWALL
405	8	2'-10"	LONGIT. IN WINGWALL
406	12	4'-0"	LONGIT. IN WINGWALL
TOTAL NO. 4 BARS = 476'-8" = 318 LBS.			
TOTAL DEFORMED REINFORCING STEEL = 1,232 LBS.			
o CLASS A1 CONCRETE = 6.10 CU. YDS.			
MAX. PILE LOAD: SERVICE DEAD LOAD = 24 TONS			
SERVICE LIVE LOAD = 36 TONS			
FACTORED TOTAL LOAD = 82 TONS			

* 16" # PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.05 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN 14" # PPC PILES ARE USED.)



SECTION A-A

SCALE: 3/4" = 1'-0"

SECTION B-B

SCALE: 3/4" = 1'-0"

NOTES:
 DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 4th EDITION, WITH 2008 & 2009 INTERIMS.
 DESIGN LOAD: LIVE LOAD IS HL-93, AND LADV-11 (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).
 STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER UNLESS SPECIFIED OTHERWISE. ALL EXPOSED FACES OF WINGWALLS AND ENDS OF CAPS SHALL RECEIVE A SURFACE FINISH AS PER THE SPECIFICATIONS.
 REINFORCING STEEL: ALL REINFORCING SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS SPECIFIED OTHERWISE. DOWELS (601 BARS) SHALL BE PROVIDED AT ALL FIXED BEARINGS AND APPROACH SLAB BEARINGS (SEE GENERAL PLAN). POSSED ENDS OF DOWELS SHALL BE WRAPPED WITH TWO LAYERS OF 15 LB. ASPHALT SATURATED FELT. CLOSE FITTING TUBES OF COMPRESSIBLE MATERIAL NOT LESS THAN 3/16" THICK MAY BE SUBSTITUTED.
 PRECAST CONCRETE PILES: CONFORM TO PILE STANDARD PLAN AND PROJECT PLANS FOR FABRICATION AND INSTALLATION. PILES WILL BE PAID FOR UNDER THE DESIGNATED PILE PAY ITEMS.
 PREFORMED JOINT MATERIAL: PREFORMED JOINT MATERIAL SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
 PAYMENT: ALL OTHER WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

SHEET NUMBER: _____

PARISH: _____

CONTROL SECTION: _____

STATE PROJECT: _____

DESIGN: J. NAKHLEH

CHECK: K. WASCOM

DETAIL: D. HYMEL

CHECK: J. NAKHLEH

REVIEW: _____

SERIES: 1 OF 11

APPROVED BY CHIEF ENGINEER: _____

DATE: 12/10/2025

REVISION OR CHANGE ORDER DESCRIPTION: _____

NO. _____

DATE _____

STATE OF LOUISIANA

REINFORCED CONCRETE PILE BENTS

28'-0" CLEAR ROADWAY

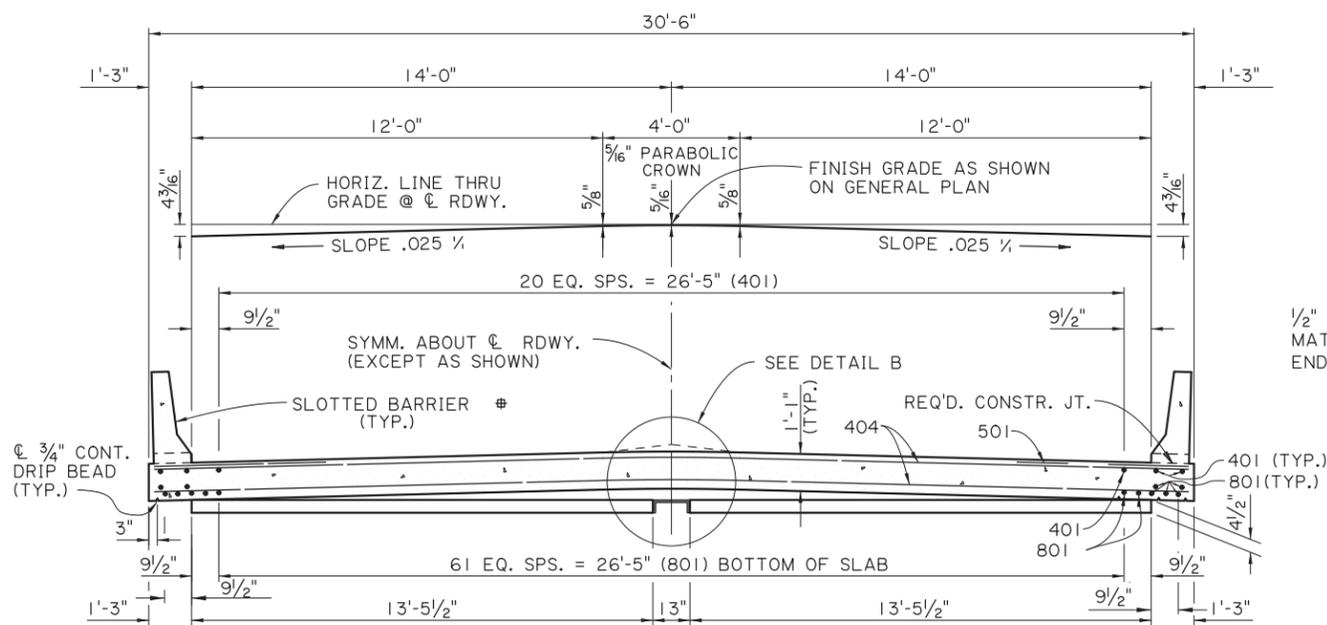
75° CROSSING TWO WAY TANGENT

PSS-75-28-20SL

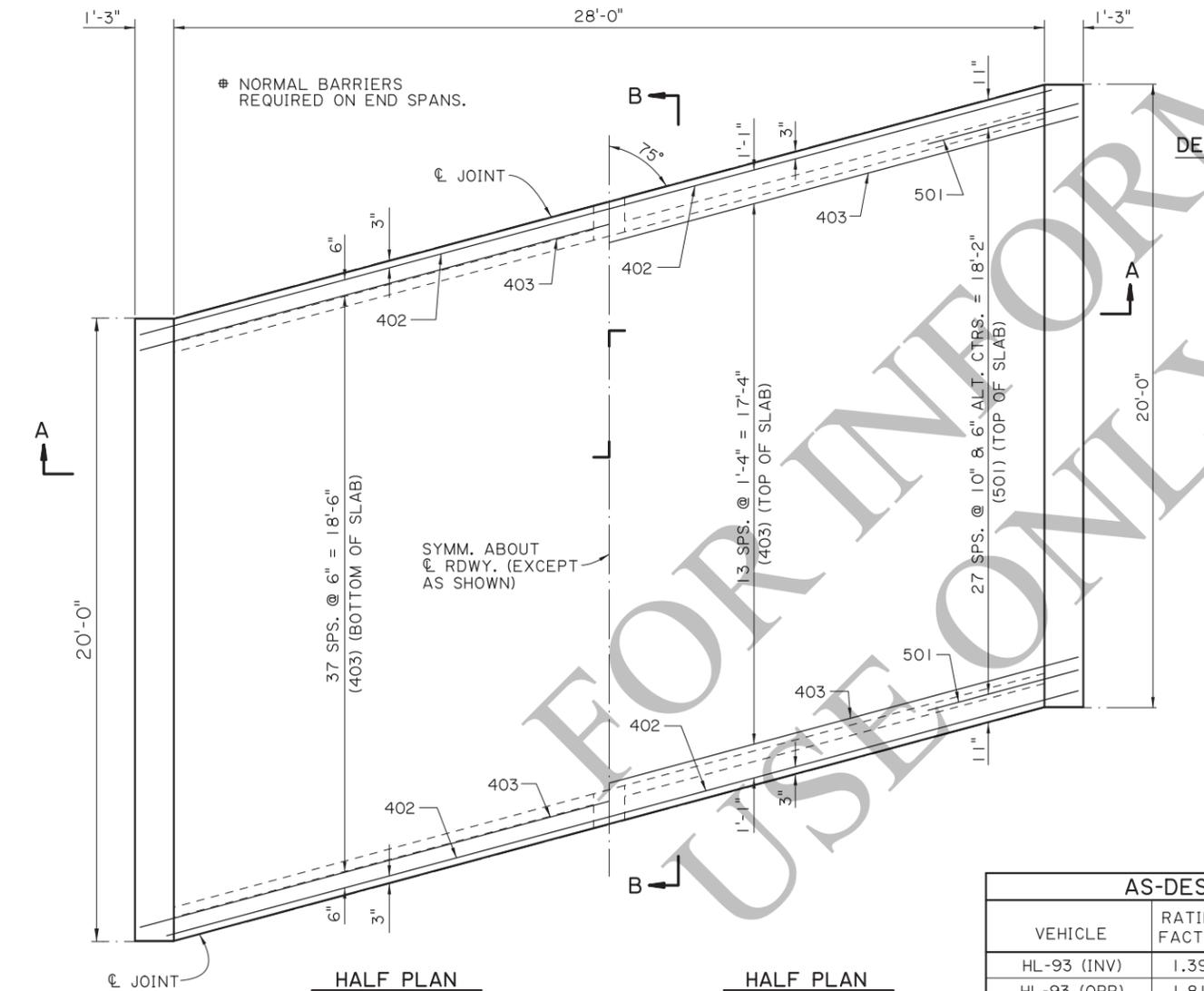
DOT

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN



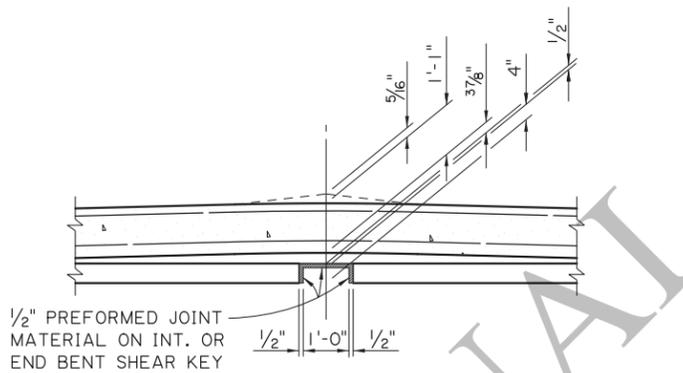
SECTION A-A



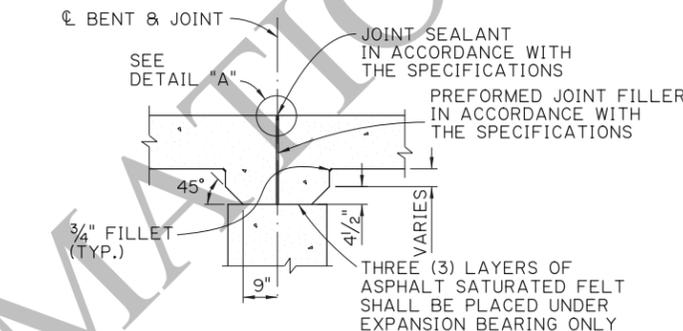
HALF PLAN
SHOWING SPACING OF
BOTTOM TRANS. REINF. STEEL
SCALE: 3/8" = 1'-0"

HALF PLAN
SHOWING SPACING OF
TOP TRANS. REINF. STEEL
SCALE: 3/8" = 1'-0"

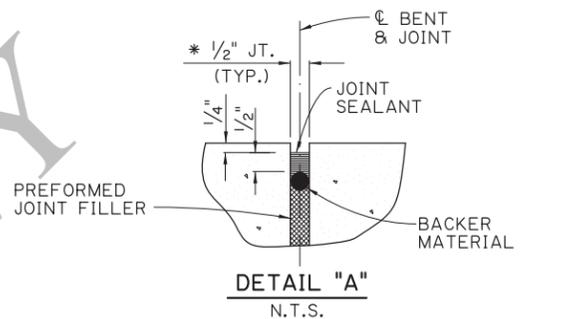
AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.398	---
HL-93 (OPR)	1.812	---
LADV-11 (INV)	1.075	MAGNIFICATION FACTOR = 1.3



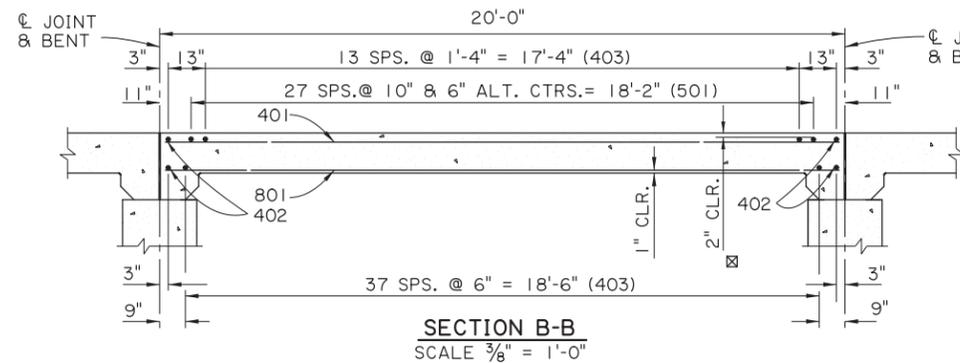
DETAIL B
SCALE: 1/2" = 1'-0"



DETAIL SHOWING TYPICAL JOINT & HAUNCH
SCALE: 1/2" = 1'-0"



DETAIL "A"
N.T.S.



SECTION B-B
SCALE 3/8" = 1'-0"

ESTIMATED QUANTITIES (ONE SPAN)				
BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION	
801	70	19'-7"	1370'-10"	LONGIT. BOT. OF SLAB
TOTAL NO. 8 BARS = 1370'-10" = 3660 LBS.				
501	56	5'-0"	280'-0"	TRANS. TOP OF SLAB
TOTAL NO. 5 BARS = 280'-0" = 292 LBS.				
401	25	19'-7"	489'-7"	LONGIT. TOP OF SLAB
402	4	30'-4"	121'-4"	TRANS. TOP & BOT. OF SLAB
403	52	31'-2"	1620'-8"	TRANS. TOP & BOT. OF SLAB
TOTAL NO. 4 BARS = 2231'-7" = 1491 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 5277 LBS.				
CLASS A1 CONCRETE = 25.47 CU. YDS.				
CONCRETE RAILING (BARRIER TYPE) = 40.00 LIN. FT.				

SPAN NOTES:

DESIGN SPECIFICATIONS:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION, WITH 2008 & 2009 INTERIMS.

DESIGN LOADS:
THE BRIDGE DECK IS DESIGNED FOR A FUTURE WEARING COURSE OF 19 PSF. THE LIVE LOAD IS HL-93, AND LADV-11 (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).

STRUCTURAL CONCRETE:
ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER UNLESS SPECIFIED OTHERWISE. ALL BARRIER RAIL SURFACES ARE TO RECEIVE A CLASS 3 SPECIAL FINISH.

REINFORCING STEEL:
ALL REINFORCING SHALL BE GRADE 60; DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS SPECIFIED OTHERWISE. ALL REINFORCING BARS SHALL BE PLACED TO PROVIDE A MINIMUM COVER OF ONE INCH FROM THE SURFACE OF THE DRAIN HOLES TO THE FACE OF THE BARS.

GUARD RAIL:
CONFORM TO PROJECT PLANS AND GUARD RAIL STANDARD PLANS.

PAYMENT:
ALL WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

FOR BRIDGES IN DISTRICT 04 & 05, MINIMUM CONCRETE COVER IN TOP OF SLAB SHALL BE 2 1/2".

SHEET NUMBER

PARISH

CONTROL SECTION

STATE PROJECT

DESIGN: J. NAKHLEH
CHECK: B. DELATTE

DETAIL: D. HYMEL
CHECK: J. NAKHLEH

REVIEW: [Signature]
SERIES: 2 OF 11

APPROVED BY CHIEF ENGINEER: [Signature]
DATE: 12/10/2025

REVISION OR CHANGE ORDER DESCRIPTION

NO. DATE

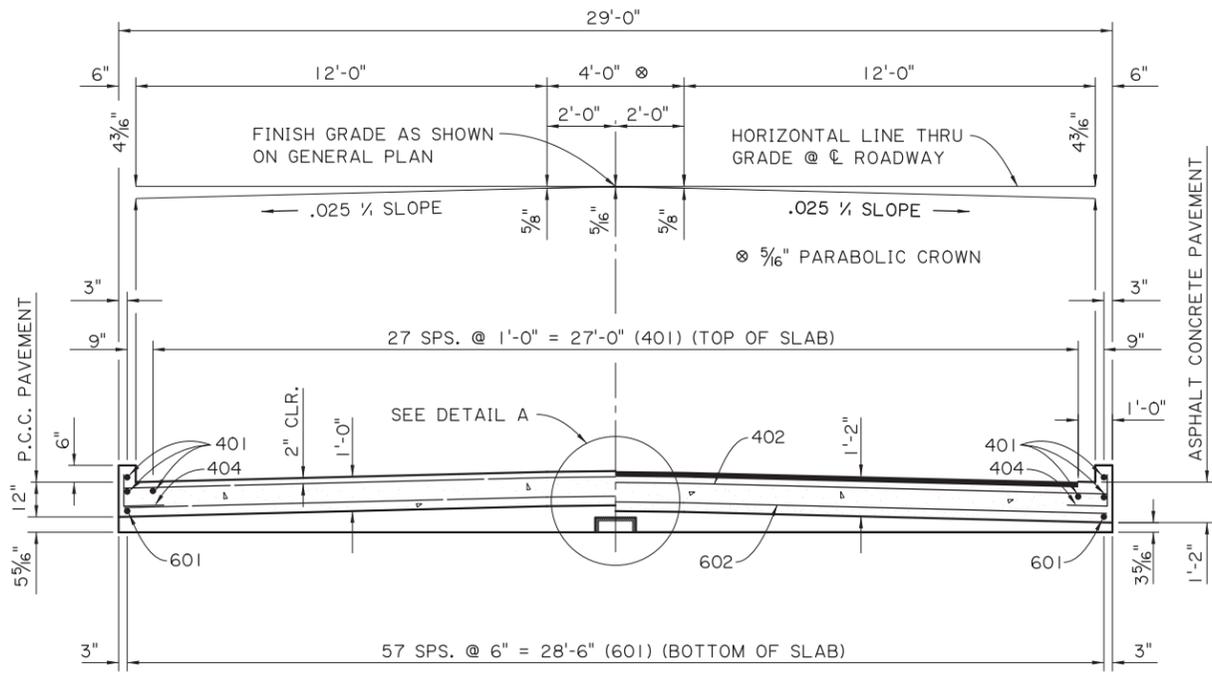
STATE OF LOUISIANA
TRANSPORTATION & DEVELOPMENT

SPAN (1 OF 2)
20' CONCRETE SLAB SPAN
28'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

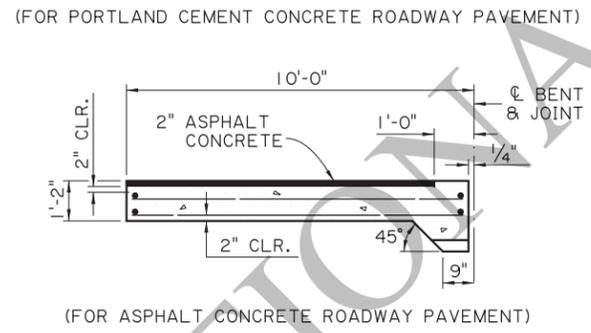
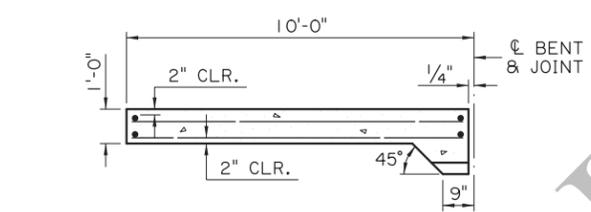
PSS-75-28-20SL

DOT
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

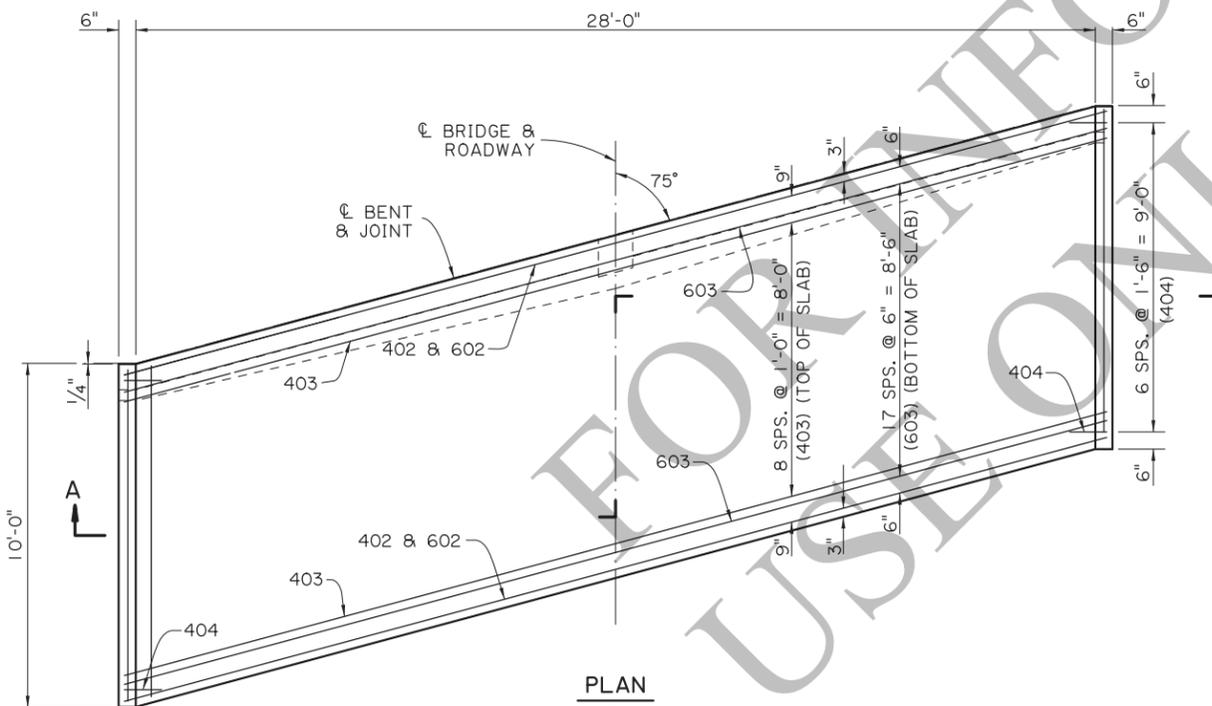
STANDARD PLAN



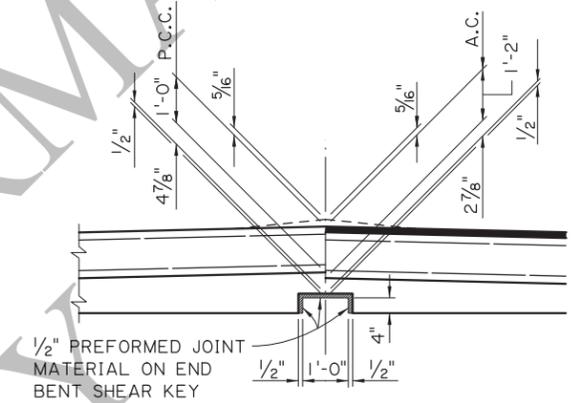
SECTION A-A
SCALE: 3/8" = 1'-0"



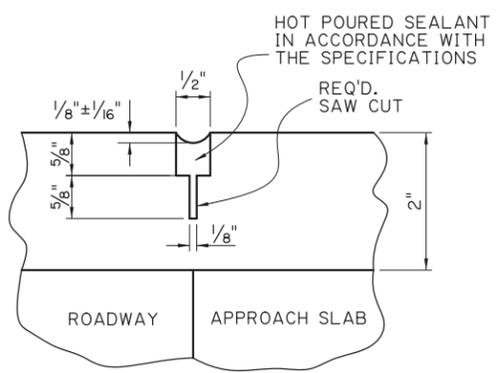
SECTION ALONG CL ROADWAY
SCALE: 3/8" = 1'-0"



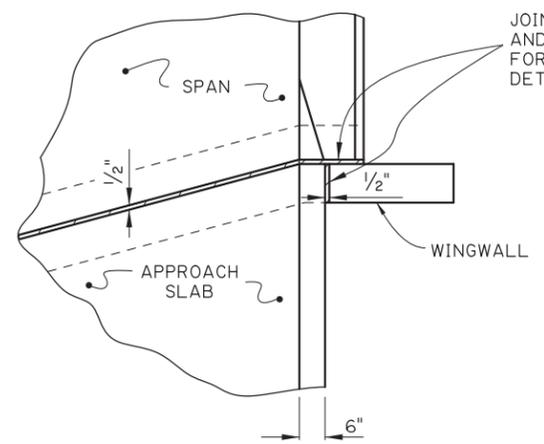
PLAN
SCALE: 3/8" = 1'-0"



DETAIL A
SCALE: 1/2" = 1'-0"



SAWING & SEALING JOINT DETAIL
N.T.S.



JOINT DETAIL
SCALE: 3/8" = 1'-0"

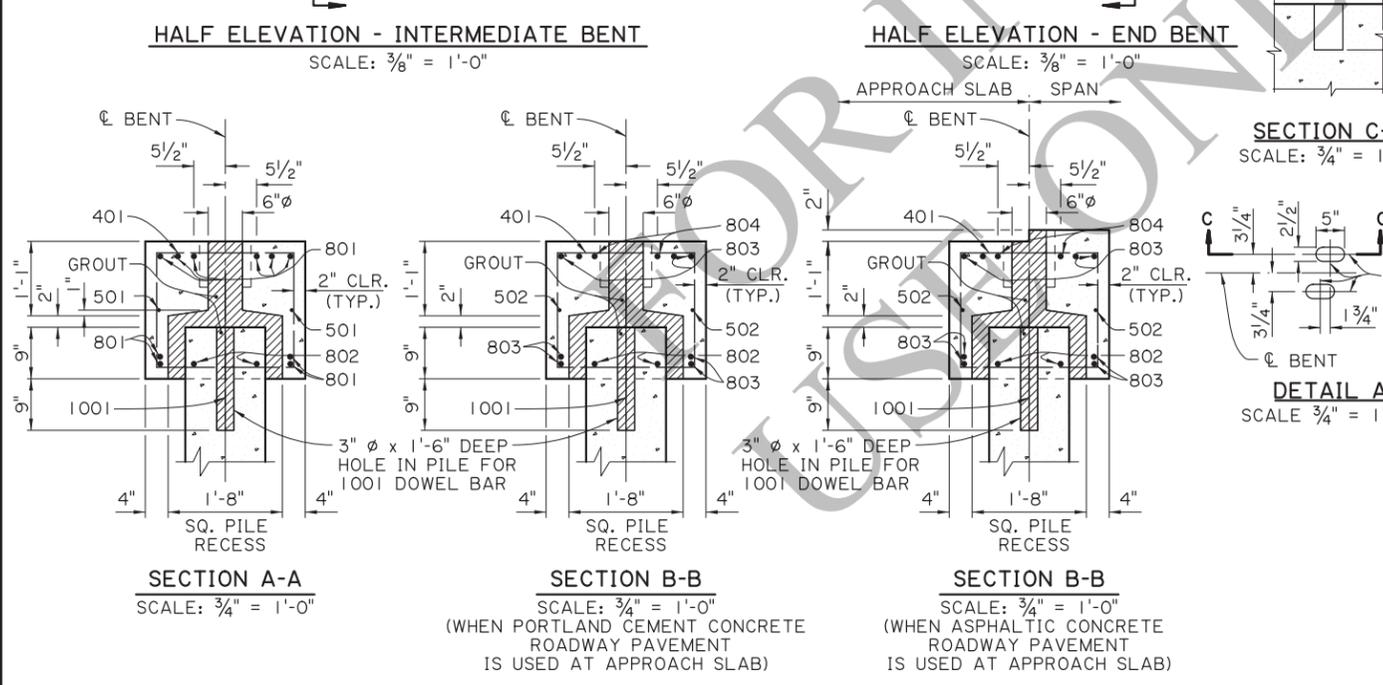
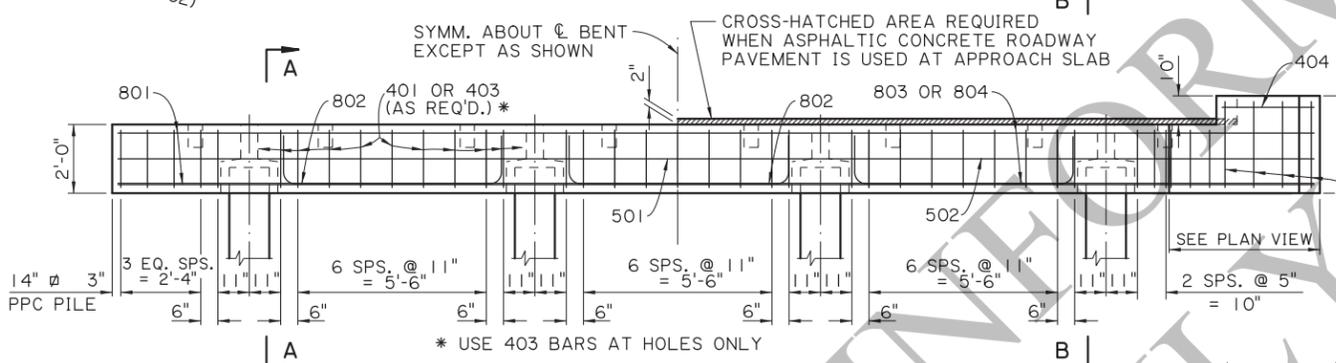
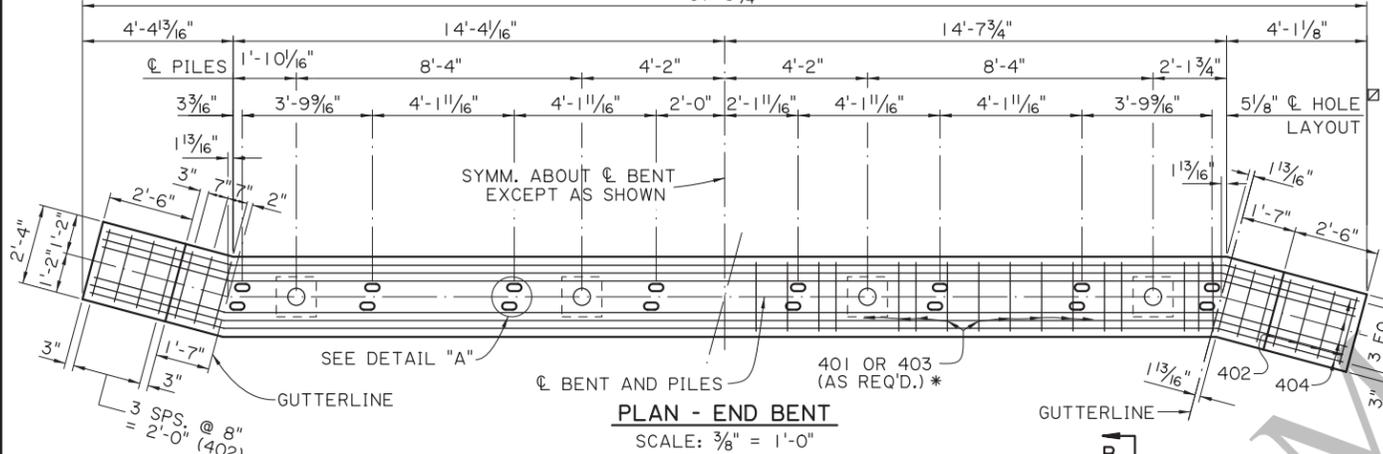
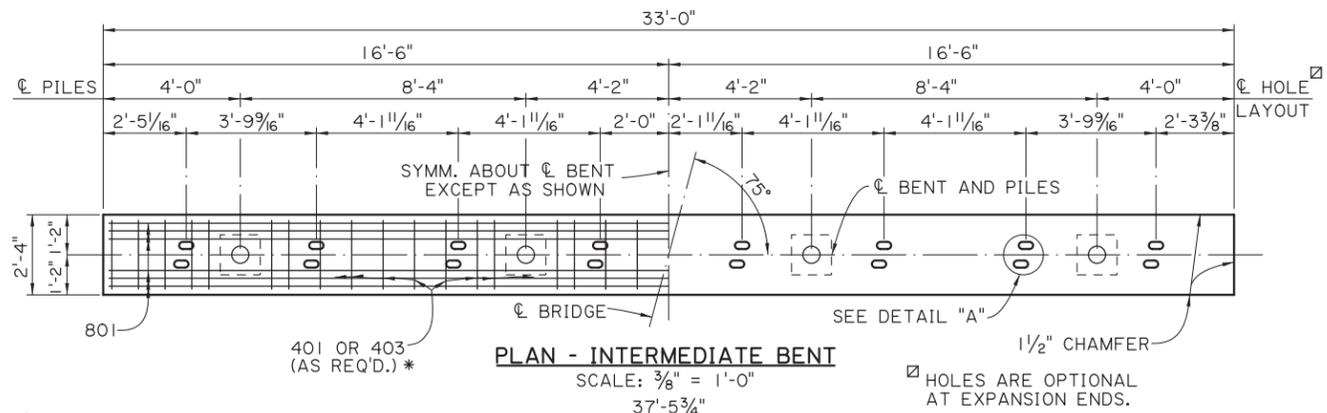
ESTIMATED QUANTITIES (ONE SLAB)				
BAR NO.	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
601	58	9'-7"	555'-10"	LONGIT. BOT. OF SLAB
602	2	29'-6"	59'-0"	TRANSV. BOT. OF SLAB
603	18	29'-8"	534'-0"	TRANSV. BOT. OF SLAB
TOTAL NO. 6 BARS = 1,148'-10" = 1,726 LBS.				
401	32	9'-7"	306'-8"	LONGIT. TOP OF SLAB & CURB
402	2	29'-6"	59'-0"	TRANSV. TOP OF SLAB
403	9	29'-8"	267'-0"	TRANSV. TOP OF SLAB
404	14	2'-0"	28'-0"	DOWELS IN CURB
TOTAL NO. 4 BARS = 660'-8" = 441 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 2,167 LBS.				
CONCRETE APPROACH SLAB = 32.22 SQ. YDS.				
<input checked="" type="checkbox"/> ASPHALT CONCRETE = 3.0 TONS				
<input checked="" type="checkbox"/> SAW CUT & SEAL = 28 LIN. FT.				

- TO BE PAID FOR UNDER ITEM CONCRETE APPROACH SLABS.
- REQUIRED WHEN APPROACH SLAB IS ADJACENT TO ASPHALT CONCRETE PAVEMENT.

APPROACH SLAB NOTES:

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 4th EDITION, WITH 2008 & 2009 INTERIMS.
STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER, UNLESS SPECIFIED OTHERWISE.
ASPHALT CONCRETE: TO BE THE SAME TYPE AS THE ASPHALT CONCRETE USED FOR THE APPROACH ROADWAY PAVEMENT OR OVERLAY.
REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO THE FABRICATION ARE OUT-TO-OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS.
BEDDING MATERIAL: FOR DETAILS OF BEDDING MATERIAL AND UNDERDRAINS SEE APPROACH SLAB STANDARD DETAILS.
SAWING & SEALING: THE ASPHALT CONCRETE SHALL BE SAW CUT AT THE END OF THE CONCRETE APPROACH SLAB THE ENTIRE ROADWAY WIDTH AND SEALED WHICH WILL BE PAID FOR UNDER THE DESIGNATED ROADWAY PAY ITEM.
PAYMENT: ALL OTHER WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE CONCRETE APPROACH SLAB PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

SHEET NUMBER	PARISH	DESIGN	CONTROL SECTION	STATE	PROJECT
	J. NAKHLEH	B. DELATTE	D. HYMEL	J. NAKHLEH	
APPROVED BY CHIEF ENGINEER:					DATE: 12/10/2025
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY		
					
APPROACH SLAB 10'-0" CONCRETE APPROACH SLAB 28'-0" CLEAR ROADWAY 75° CROSSING TWO WAY TANGENT					
					
STANDARD PLAN					

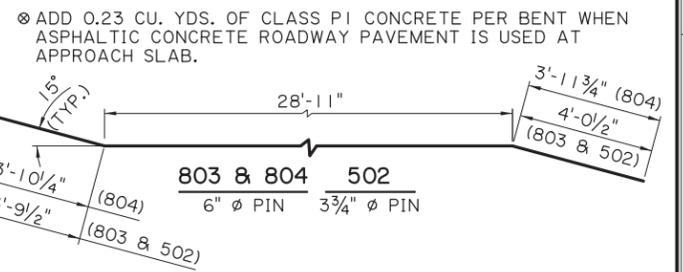
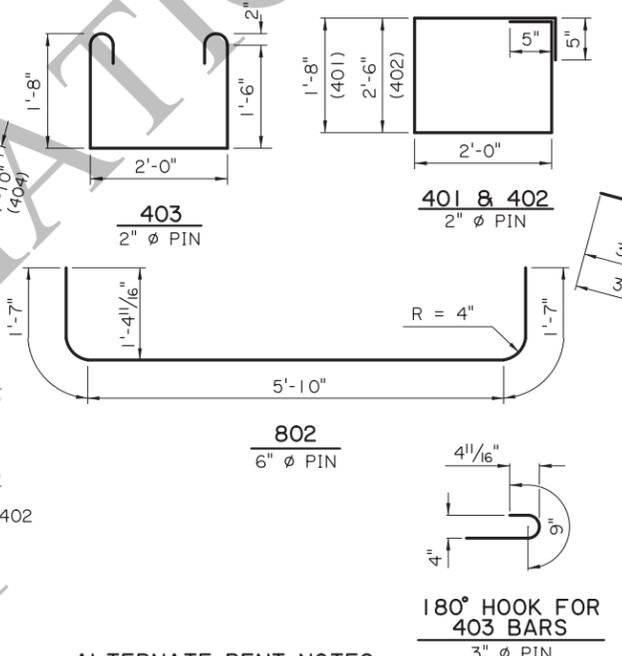


ESTIMATED QUANTITIES (ONE INTER. BENT)

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
1001	4	2'-4"	9'-4" DOWELS IN PILES
TOTAL NO. 10 BARS = 9'-4" = 40 LBS.			
801	10	32'-8"	326'-8" LONGIT. IN CAP
802	6	9'-0"	54'-0" LONGIT. IN CAP BTW. PILES
TOTAL NO. 8 BARS = 380'-8" = 1,016 LBS.			
501	2	32'-8"	65'-4" LONGIT. IN CAP
TOTAL NO. 5 BARS = 65'-4" = 68 LBS.			
401	29	8'-2"	236'-10" STIRRUPS IN CAP
403	8	6'-6"	52'-0" STIRRUPS IN CAP
TOTAL NO. 4 BARS = 288'-10" = 193 LBS.			
TOTAL DEFORMED REINFORCING STEEL = 1,317 LBS.			
TOTAL CLASS P1 CONCRETE = 5.25 CU. YDS.			
MAX. PILE LOAD: SERVICE DEAD LOAD = 20 TONS			
SERVICE LIVE LOAD = 38 TONS			
FACTORED TOTAL LOAD = 81 TONS			
TOTAL GROUT FOR PILE RECESSES = 0.28 CU. YDS.			

ESTIMATED QUANTITIES (ONE END BENT)

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
1001	4	2'-4"	9'-4" DOWELS IN PILES
TOTAL NO. 10 BARS = 9'-4" = 40 LBS.			
802	6	9'-0"	54'-0" LONGIT. IN CAP BTW. PILES
803	6	36'-9"	220'-6" LONGIT. IN CAP
804	4	36'-9"	147'-6" LONGIT. IN CAP
TOTAL NO. 8 BARS = 421'-6" = 1,121 LBS.			
502	2	36'-9"	73'-6" LONGIT. IN CAP
TOTAL NO. 5 BARS = 73'-6" = 77 LBS.			
401	29	8'-2"	236'-10" STIRRUPS IN CAP
402	8	9'-10"	78'-8" STIRRUPS IN WINGWALL
403	10	6'-6"	65'-0" STIRRUPS IN CAP
404	8	2'-2"	17'-4" LONGIT. IN WINGWALL
TOTAL NO. 4 BARS = 397'-10" = 266 LBS.			
TOTAL DEFORMED REINFORCING STEEL = 1,504 LBS.			
TOTAL CLASS P1 CONCRETE = 6.33 CU. YDS.			
MAX. PILE LOAD: SERVICE DEAD LOAD = 20 TONS			
SERVICE LIVE LOAD = 38 TONS			
FACTORED TOTAL LOAD = 81 TONS			
TOTAL GROUT FOR PILE RECESSES = 0.28 CU. YDS.			



ALTERNATE BENT NOTES:

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION, WITH 2008 & 2009 INTERIMS.

DESIGN LOAD: LIVE LOAD IS HL-93, AND LADV-11 (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).

STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS P1. STEEL SIDE FORMS AND STEEL OR CONCRETE BOTTOM FORMS SHALL BE USED FOR PRECAST COMPONENTS. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER UNLESS SPECIFIED OTHERWISE. ALL SURFACES SHALL RECEIVE A CLASS 1 ORDINARY SURFACE FINISH UPON REMOVAL OF THE FORMS.

ALL EXPOSED FACES OF WINGWALLS AND ENDS OF CAPS SHALL RECEIVE A CLASS 3 SPECIAL FINISH.

REINFORCING STEEL: ALL REINFORCING SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS SPECIFIED OTHERWISE.

GROUT: THE GROUT SHALL BE AN APPROVED FLOWABLE NON-SHRINK GROUT LISTED ON AML. THE GROUT SHALL BE TESTED FOR ACCEPTANCE PRIOR TO USAGE. SURFACES SHALL BE THOROUGHLY SATURATED WITH WATER BY FLOODING THE VOID FOR APPROXIMATELY 5 MINUTES IMMEDIATELY BEFORE THE GROUT IS PLACED. ONLY POTABLE WATER SHALL BE USED FOR SATURATION AND MIXING PURPOSES.

PRECAST UNITS: THE PLANS FOR AN ONGOING OPERATION OF FABRICATING FACILITIES SHALL BE APPROVED BY THE DEPARTMENT. EACH UNIT SHALL HAVE THE FABRICATOR'S MARK AND UNIQUE NUMBER, MEETING THE APPROVAL OF THE ENGINEER, STAMPED OR SCRIBED IN THE PLASTIC CONCRETE. ALL UNITS SHALL BE HELD AT THE PLANT FOR A MINIMUM OF 10 DAYS AFTER CASTING. THE CONCRETE SHALL REACH A MINIMUM STRENGTH OF 3,000 PSI BEFORE HANDLING IS PERMITTED. THE LIFTING INSERTS SHALL BE 1" TYPE S INSERTS AS MANUFACTURED BY DAYTON-SUPERIOR CORPORATION OR AN APPROVED EQUAL. EACH INSERT SHALL HAVE A MINIMUM LOAD CAPACITY OF 10,000 POUNDS. FOUR INSERTS WITH 1" Ø x 5" LONG COIL BOLTS SHALL BE PLACED IN THE TOP OF THE UNITS AND LOCATED AT A DISTANCE 21% OF ITS LENGTH (+/- 6") FROM EACH END AND 6" FROM THE EDGES. INSERT HOLES SHALL BE GROUT FILLED AFTER PLACEMENT OF THE UNIT. AT THE CONTRACTOR'S OPTION, A SLING OF SUFFICIENT CAPACITY MAY BE USED FOR LIFTING, PROVIDED THE SAME PICKUP LOCATIONS FROM THE ENDS ARE USED.

PRECAST CONCRETE PILES: CONFORM TO PILE STANDARD PLAN AND PROJECT PLANS FOR FABRICATION AND INSTALLATION. IF TOP CENTER OF DRIVEN PILE IS OUTSIDE OF SPECIFIED HORIZONTAL TOLERANCES BUT WITHIN SPECIFIED VERTICAL TOLERANCES, PROVIDE CAST-IN-PLACE BENT CAP IN ACCORDANCE WITH THIS STANDARD PLAN. PILES WILL BE PAID FOR UNDER THE DESIGNATED PILE PAY ITEMS.

PAYMENT: ALL OTHER WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

SHEET NUMBER

PARISH

CONTROL SECTION

STATE PROJECT

DESIGN: J. NAKHLEH

CHECK: K. WASCOM

DETAIL: D. HYMEL

CHECK: J. NAKHLEH

REVIEW: [Signature]

DATE: 12/10/2025

REVISION OR CHANGE ORDER DESCRIPTION

NO.

DATE

BY

STATE OF LOUISIANA

ALTERNATE BENTS

PRECAST CONCRETE BENTS

28'-0" CLEAR ROADWAY

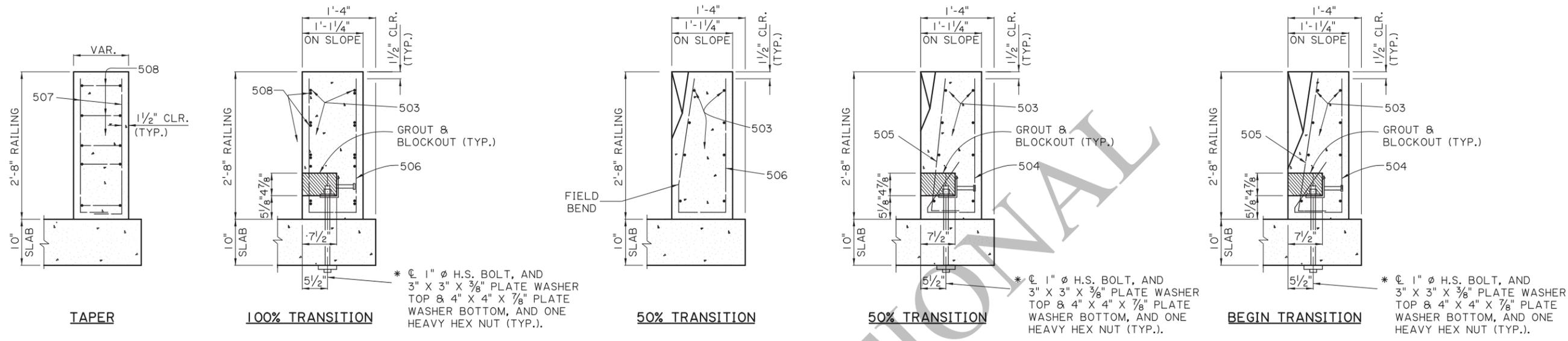
75° CROSSING TWO WAY TANGENT

PSS-75-28-20SL

DOT

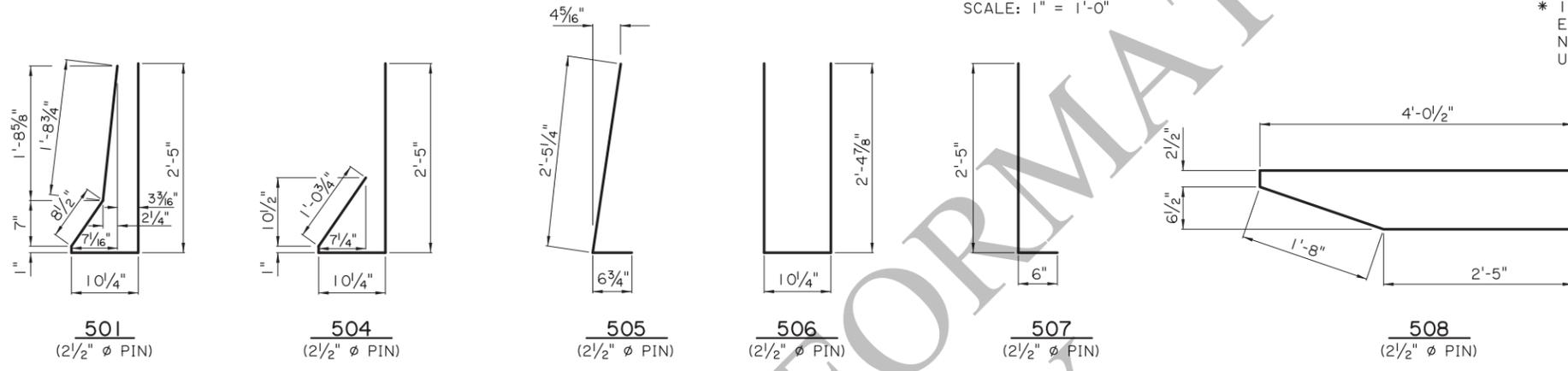
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN



BARRIER RAILING TRANSITION SECTIONS

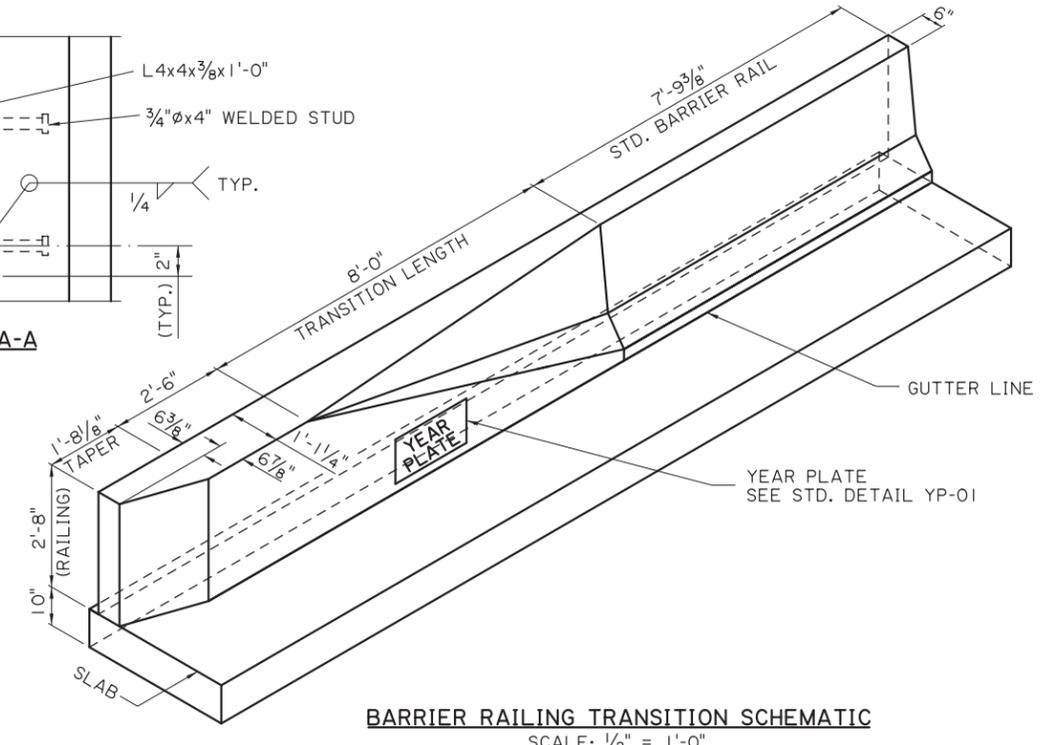
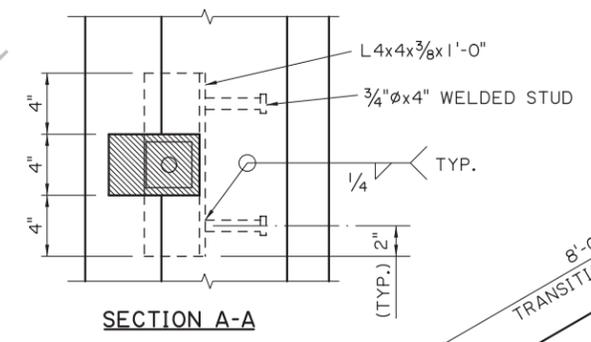
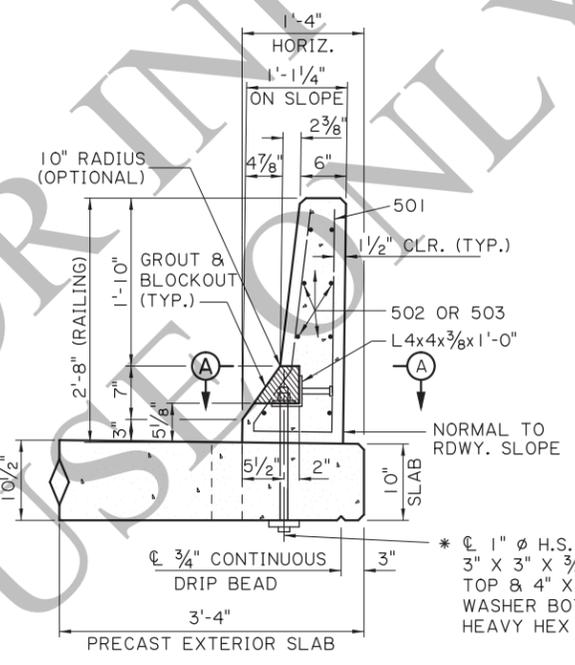
SCALE: 1" = 1'-0"



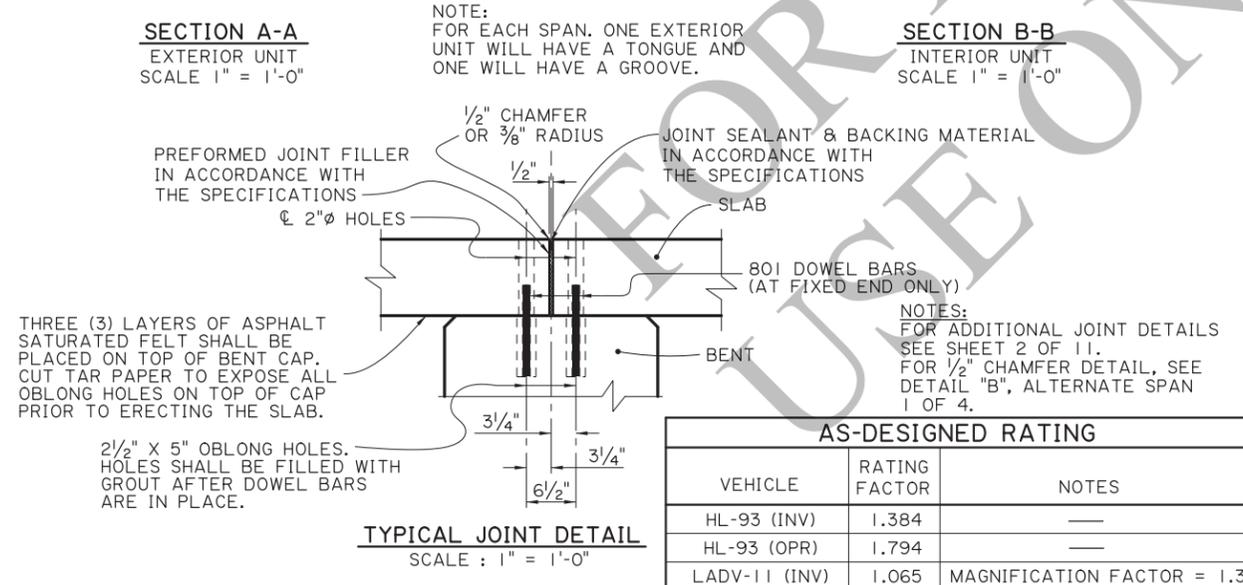
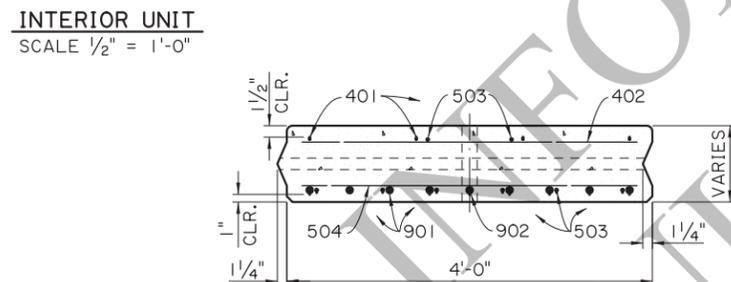
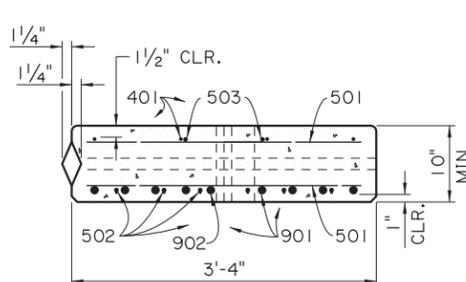
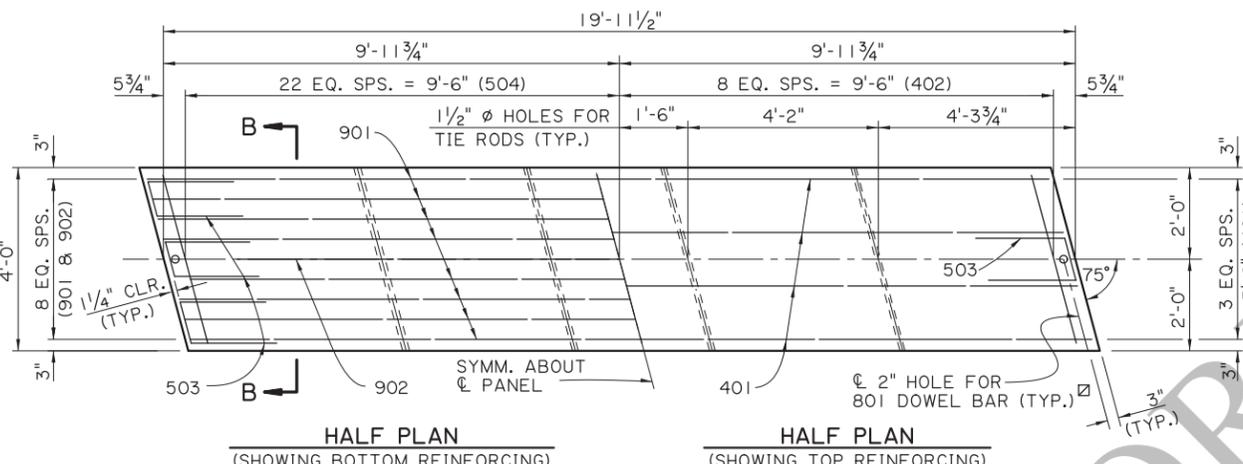
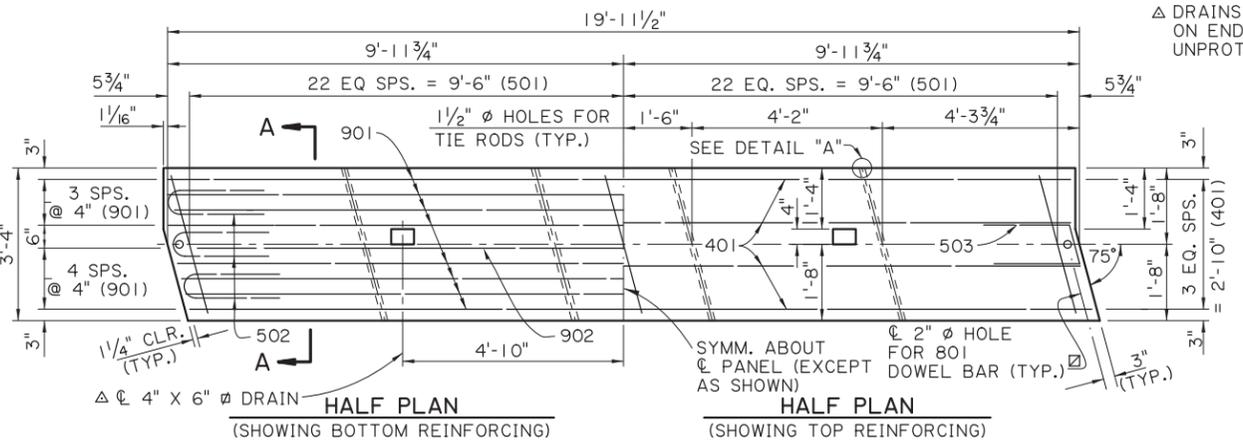
* 1" Ø THREADED STUD OF EQUAL STRENGTH, WITH 2 NUTS & 2 WASHERS, MAY BE USED IN LIEU OF H.S. BOLTS.

NOTES:

- 1) ALL BARRIER RAIL SURFACES ARE TO RECEIVE A CLASS 3 SPECIAL FINISH.
- 2) ALL SURFACES OF THE BLOCKOUTS EXCEPT THE BOTTOM MAY BE TAPERED AND ALL CORNERS MAY BE ROUNDED TO A RADIUS TO ALLOW FOR EASY REMOVAL OF PLUGS OR FORMS. AFTER PLACING AND TIGHTENING THE ANCHOR BOLTS, THE BLOCKOUTS SHALL BE FILLED WITH AN APPROVED NON-SHRINK GROUT FROM AML AND TROWELED TO THE REQUIRED FINISH AND TO THE SATISFACTION OF THE ENGINEER.
- 3) AFTER BARRIER IS PLACED AND ALIGNED, ALL GAPS UNDER BARRIER AND TOP OF SLAB SHALL BE FILLED WITH NON-SHRINK GROUT FROM AML AND ALLOWED TO SET PRIOR TO TIGHTENING OF BOLTS. IT IS IMPORTANT TO FILL ALL VOIDS AND GAPS UNDER THE BARRIER TO ENSURE EVEN BEARING ON DECK WHEN THE ANCHOR BOLTS ARE LOADED.
- 4) ALL 1" Ø BOLTS SHALL BE HIGH STRENGTH A325 OR APPROVED EQUAL. BOLT, NUT & WASHER TO BE GALVANIZED AS PER ASTM A-153. BOLTS SHALL BE TENSIONED TO 36 KIPS, OR APPROXIMATELY 540 FOOT-LB. OF TORQUE (LUBRICATED CONNECTION).



SHEET NUMBER		PARISH		CONTROL SECTION		STATE PROJECT	
DESIGN CHECK	B. DELATTE	PARISH	J. NAKHLEH	CONTROL SECTION	J. NAKHLEH	STATE PROJECT	STATE PROJECT
DETAIL CHECK	D. HYMEL	REVIEW	J. NAKHLEH	SERIES #	9 OF 11	DATE	12/01/2025
APPROVED BY CHIEF ENGINEER:							
REVISION OR CHANGE ORDER DESCRIPTION							
NO. DATE							
ALTERNATE SPAN (3 OF 4) 20'-0" PRECAST CONC. BARRIER 28'-0" CLEAR ROADWAY 75' CROSSING TWO WAY TANGENT							
STANDARD PLAN							



AS-DESIGNED RATING

VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.384	---
HL-93 (OPR)	1.794	---
LADV-11 (INV)	1.065	MAGNIFICATION FACTOR = 1.3

Δ DRAINS ARE NOT REQUIRED ON END SPANS OVER UNPROTECTED SLOPES.

ALTERNATE SPAN NOTES:

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION, WITH 2008 & 2009 INTERIMS.

DESIGN LOAD: THE BRIDGE DECK IS DESIGNED FOR A FUTURE WEARING COURSE OF 19 PSF. THE LIVE LOAD IS HL-93, AND LADV-11 (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).

STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS PI. THE BRIDGE RAIL CONCRETE SHALL BE CLASS A1 IF RAIL IS CAST IN PLACE. STEEL SIDE FORMS AND STEEL OR CONCRETE BOTTOM FORMS SHALL BE USED FOR PRECAST COMPONENTS. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER, UNLESS OTHERWISE NOTED. ALL SURFACES SHALL RECEIVE A CLASS 1 ORDINARY FINISH UPON REMOVAL OF THE FORMS. THE FINAL FINISH SHALL BE A TINE FINISH IN ACCORDANCE WITH THE SPECIFICATIONS.

REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS SPECIFIED OTHERWISE. ALL REINFORCING BARS SHALL BE PLACED TO PROVIDE A MINIMUM COVER OF 1" FROM THE DRAIN HOLES. REINFORCING STEEL MAY BE TACK WELDED FOR A DISTANCE OF NOT MORE THAN 4'-0" FROM EACH END OF UNIT. NO OTHER WELDING SHALL BE PERMITTED.

MISCELLANEOUS STEEL: HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM DESIGNATION A-325. PRESTRESSING STRANDS SHALL CONFORM TO ASTM DESIGNATION A-416, GRADE 270. PLATES, TIE RODS, AND DRIFT BOLTS SHALL CONFORM TO ASTM DESIGNATION A709, GRADE 36. STEEL SPECIFIED TO BE ZINC COATED SHALL BE IN CONFORMANCE WITH ASTM DESIGNATION A-123.

GROUT: THE GROUT SHALL BE AN APPROVED FLOWABLE NON-SHRINK GROUT LISTED ON AML. THE GROUT SHALL BE TESTED FOR ACCEPTANCE PRIOR TO USAGE. THE GROUT SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI PRIOR TO LOADING SLABS. SURFACES SHALL BE THOROUGHLY SATURATED WITH WATER BY FLOODING THE HOLES FOR APPROXIMATELY FIVE (5) MINUTES IMMEDIATELY BEFORE THE GROUT IS PLACED. ONLY POTABLE WATER SHALL BE USED FOR SATURATION AND MIXING PURPOSES.

PATCHING MATERIAL: THE PATCHING MATERIAL SHALL BE AN APPROVED PATCHING MATERIAL FOR PRECAST OR PRESTRESSED CONCRETE PRODUCTS LISTED ON AML. SURFACE PREPARATION, MIXING AND PLACEMENT SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. ONLY POTABLE WATER SHALL BE USED FOR SATURATION AND MIXING PURPOSES.

PRECAST UNITS: THE PLANS FOR AN ONGOING OPERATION OF FABRICATION FACILITIES SHALL BE APPROVED BY THE DEPARTMENT. EACH UNIT SHALL HAVE "LIVE LOAD HL-93 AND LADV-11", THE FABRICATOR'S MARK, AND UNIQUE NUMBER, MEETING THE APPROVAL OF THE ENGINEER STAMPED OR INSCRIBED IN THE PLASTIC CONCRETE. PRECAST UNITS MAY BE CAST WITH OR WITHOUT CAMBER. IF CAMBER IS PROVIDED IT SHALL NOT EXCEED 1/4" AT THE CENTERLINE OF SPAN. ALL UNITS SHALL BE HELD AT THE PLANT FOR A MINIMUM OF TEN(10) DAYS AFTER CASTING. THE CONCRETE SHALL REACH A MINIMUM STRENGTH OF 3,000 PSI BEFORE HANDLING IS PERMITTED. THE LIFTING INSERTS SHALL BE 1", TYPE S INSERTS AS MANUFACTURED BY DAYTON-SUPERIOR CORPORATION OR AN APPROVED EQUAL. EACH INSERT SHALL HAVE A MINIMUM LOAD CAPACITY OF 10,000 POUNDS. FOUR(4) INSERTS WITH 1" Ø X 5" LONG COIL BOLTS SHALL BE PLACED IN THE TOP OF THE UNIT AND LOCATED 1'-3" FROM ITS ENDS AND 1'-0" FROM ITS EDGES. INSERT HOLES SHALL BE GROUT FILLED AFTER PLACEMENT OF UNIT. AT THE CONTRACTOR'S OPTION A SLING OF SUFFICIENT CAPACITY MAY BE USED FOR LIFTING, PROVIDED THE SAME PICKUP LOCATION FROM THE ENDS ARE USED. FABRICATION TOLERANCES SHALL BE AS FOLLOWS:

- UNIT DEPTH ± 3/16"
- UNIT LENGTH + 1/8" AND -1/2"
- OVERALL SPAN WIDTH ± 2"

ALL PRECAST UNITS IN EACH BRIDGE SPAN SHALL BE MATCH CAST IN THE SAME CASTING BED TO ENSURE A PROPER FIT DURING INSTALLATION.

GUARDRAIL: CONFORM TO PROJECT PLANS AND GUARD RAIL STANDARD PLANS.

PAYMENT: ALL WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

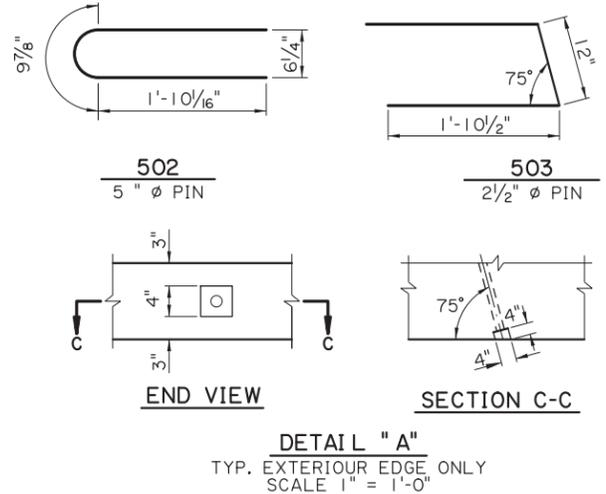
ESTIMATED QUANTITIES (ONE EXTERIOR UNIT)

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
901	8	19'-8"	LONGIT. BOT. OF SLAB
902	1	18'-11"	LONGIT. BOT. OF SLAB
TOTAL NO. 9 BARS = 176'-3" = 599 LBS.			
801	1	1'-0"	DOWELS
TOTAL NO. 8 BARS = 1'-0" = 3 LBS.			
501	90	3'-1"	TRANS. TOP & BOT. OF SLAB
502	6	4'-6"	BOT. END OF SLAB
503	2	4'-9"	TOP END OF SLAB
TOTAL NO. 5 BARS = 313'-11" = 327 LBS.			
401	4	19'-8"	LONGIT. TOP OF SLAB
TOTAL NO. 4 BARS = 78'-8" = 53 LBS.			
DEFORMED REINFORCING STEEL = 982 LBS.			
CLASS PI CONCRETE = 2.05 CU. YDS.			
CONCRETE RAILING (PER SPAN) = 40.00 LIN. FT.			

ESTIMATED QUANTITIES (ONE INTERIOR UNIT)

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
901	8	19'-8"	LONGIT. BOT. OF SLAB
902	1	18'-11"	LONGIT. BOT. OF SLAB
TOTAL NO. 9 BARS = 176'-3" = 599 LBS.			
801	1	1'-0"	DOWELS
TOTAL NO. 8 BARS = 1'-0" = 3 LBS.			
503	8	4'-9"	TOP & BOT. END OF SLAB
504	44	3'-9"	TRANS. BOT. OF SLAB
TOTAL NO. 5 BARS = 203'-0" = 212 LBS.			
401	4	19'-8"	LONGIT. TOP OF SLAB
402	17	3'-9"	TRANS. TOP OF SLAB
TOTAL NO. 4 BARS = 142'-5" = 95 LBS.			
DEFORMED REINFORCING STEEL = 909 LBS.			
CLASS PI CONCRETE = 2.46 CU. YDS.			

○ BASED ON A 10" SLAB THICKNESS



SHEET NUMBER

PARISH

CONTROL SECTION

STATE PROJECT

DESIGN: J. NAKHLEH
CHECK: B. DELATTE

DETAIL: D. HYMEL
CHECK: J. NAKHLEH

REVIEW: J. NAKHLEH

SERIES: 10 OF 11

APPROVED BY CHIEF ENGINEER: [Signature]

DATE: 12/10/2025

REVISION OR CHANGE ORDER DESCRIPTION

NO. DATE

BY

STATE OF LOUISIANA
TRANSPORTATION & DEVELOPMENT

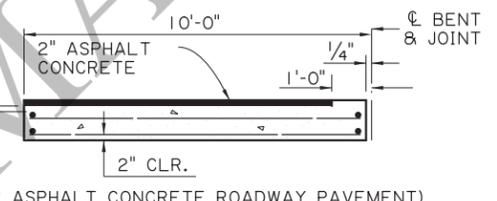
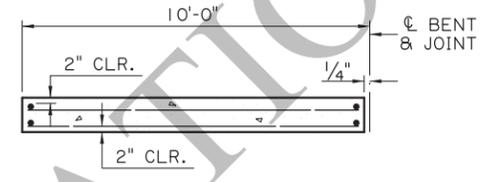
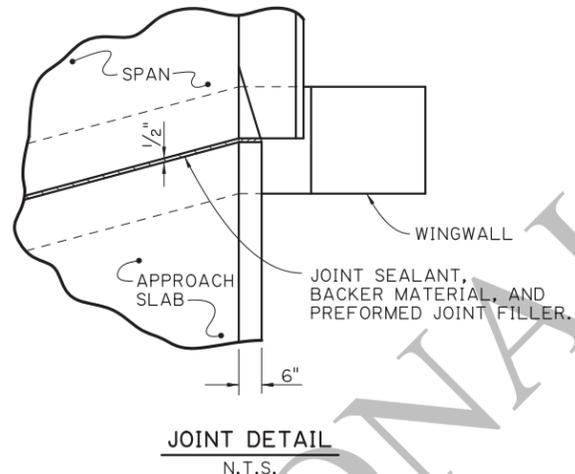
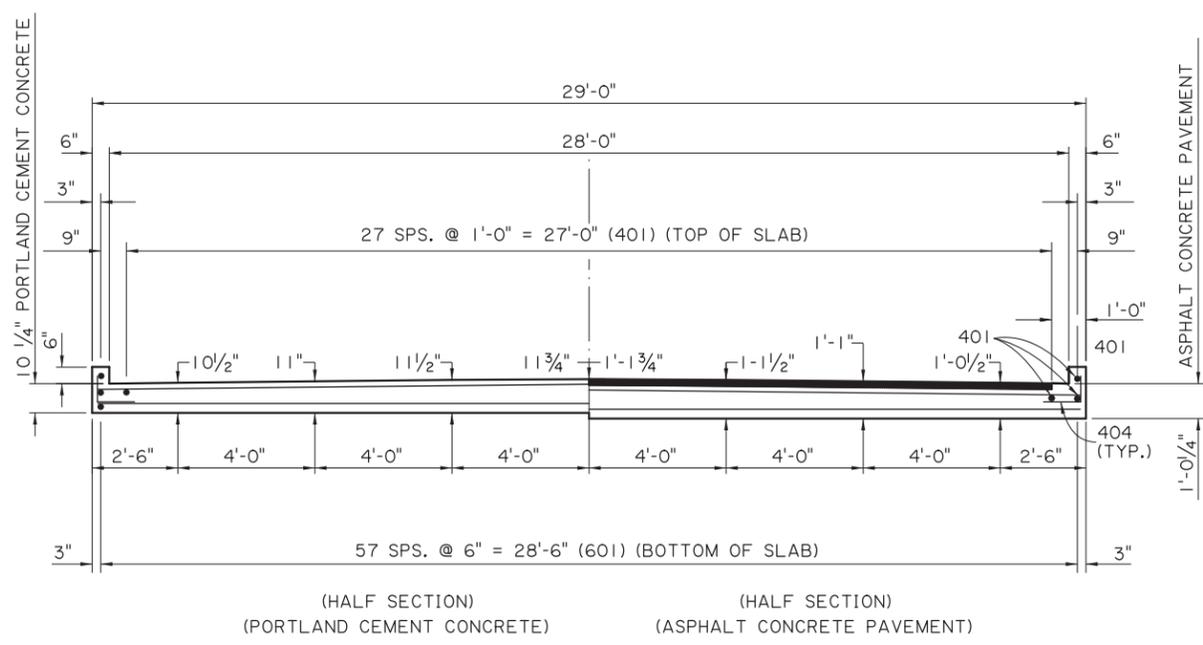
ALTERNATE SPAN (4 OF 4)
20'-0" PRECAST CONC. SLAB UNIT

28'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

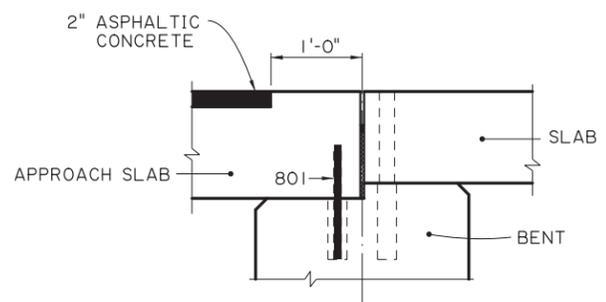
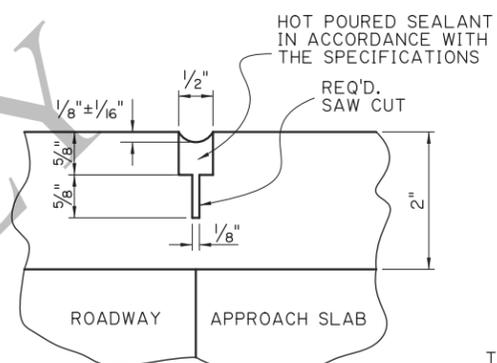
PSS-75-28-20SL

DOT
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN



SECTION ALONG C ROADWAY
SCALE: 1/4" = 1'-0"

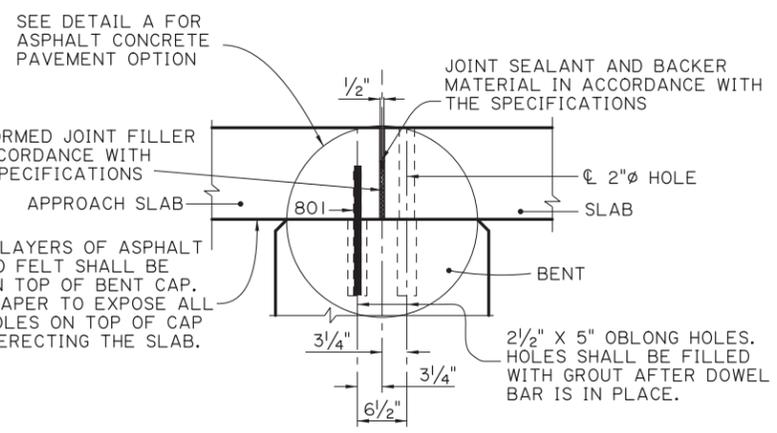


ESTIMATED QUANTITIES (ONE SLAB)				
BAR NO.	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	8	1'-0"	8'-0"	DOWELS
TOTAL NO. 8 BARS = 8'-0" = 21 LBS.				
601	58	9'-7"	555'-10"	LONGIT. BOT. OF SLAB
602	2	29'-6"	59'-0"	TRANSV. BOT. OF SLAB
603	18	29'-8"	534'-0"	TRANSV. BOT. OF SLAB
TOTAL NO. 6 BARS = 1,148'-10" = 1,726 LBS.				
401	32	9'-7"	306'-8"	LONGIT. TOP OF SLAB & CURB
402	2	29'-6"	59'-0"	TRANSV. TOP OF SLAB
403	9	29'-8"	267'-0"	TRANSV. TOP OF SLAB
404	14	1'-10"	25'-8"	DOWELS IN CURB
TOTAL NO. 4 BARS = 658'-4" = 440 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 2,187 LBS.				
CONCRETE APPROACH SLAB = 32.22 SQ. YDS.				
ASPHALT CONCRETE = 3.0 TONS				
SAW CUT & SEAL = 28 LIN. FT.				

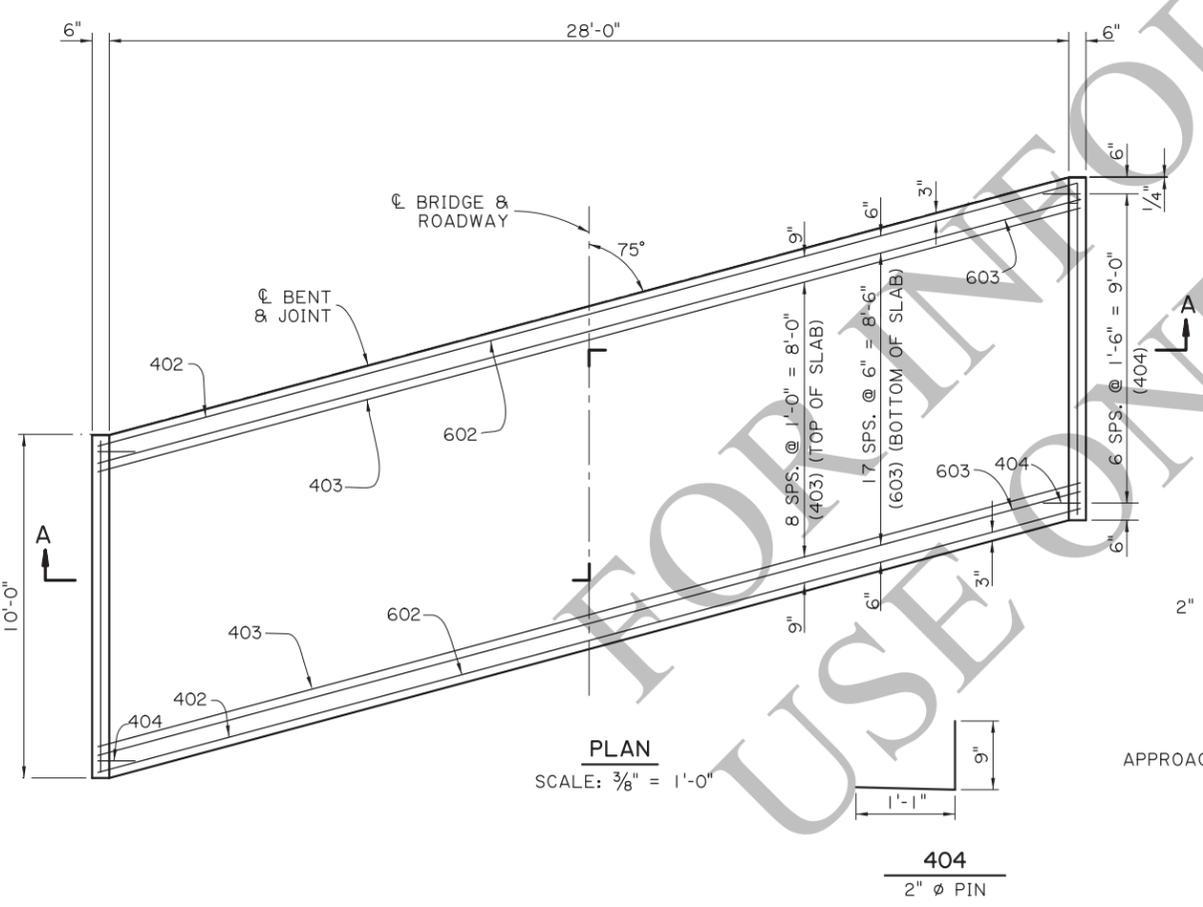
TO BE PAID FOR UNDER ITEM CONCRETE APPROACH SLABS.
 REQUIRED WHEN APPROACH SLAB IS ADJACENT TO ASPHALT CONCRETE PAVEMENT.

APPROACH SLAB NOTES:

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 4th EDITION, WITH 2008 & 2009 INTERIMS.
 STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER, UNLESS SPECIFIED OTHERWISE.
 ASPHALT CONCRETE: TO BE THE SAME TYPE AS THE ASPHALT CONCRETE USED FOR THE APPROACH ROADWAY PAVEMENT OR OVERLAY.
 REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO THE FABRICATION ARE OUT-TO-OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS.
 BEDDING MATERIAL: FOR DETAILS OF BEDDING MATERIAL AND UNDERDRAINS SEE APPROACH SLAB STANDARD DETAIL.
 SAWING & SEALING: THE ASPHALT CONCRETE SHALL BE SAW CUT AT THE END OF THE CONCRETE APPROACH SLAB THE ENTIRE ROADWAY WIDTH AND SEALED WHICH WILL BE PAID FOR UNDER THE DESIGNATED ROADWAY PAY ITEM.
 PAYMENT: ALL OTHER WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE CONCRETE APPROACH SLAB PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.



NOTE: FOR ADDITIONAL JOINT DETAILS SEE SHEET 2 OF 11.



SHEET NUMBER: []
 DESIGN: B. DELATTE
 CHECK: J. NAKHLEH
 PARISH: []
 CONTROL SECTION: []
 STATE: []
 PROJECT: []
 APPROVED BY CHIEF ENGINEER: [Signature]
 DATE: 12/01/2025
 REVISION OR CHANGE ORDER DESCRIPTION: []
 NO. [] DATE []
 STATE OF LOUISIANA
 ALTERNATE APPROACH SLAB
 10'-0" CAST-IN-PLACE
 28'-0" CLEAR ROADWAY
 75° CROSSING TWO WAY TANGENT
 DOT
 LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
 STANDARD PLAN
 PSS-75-28-20SL