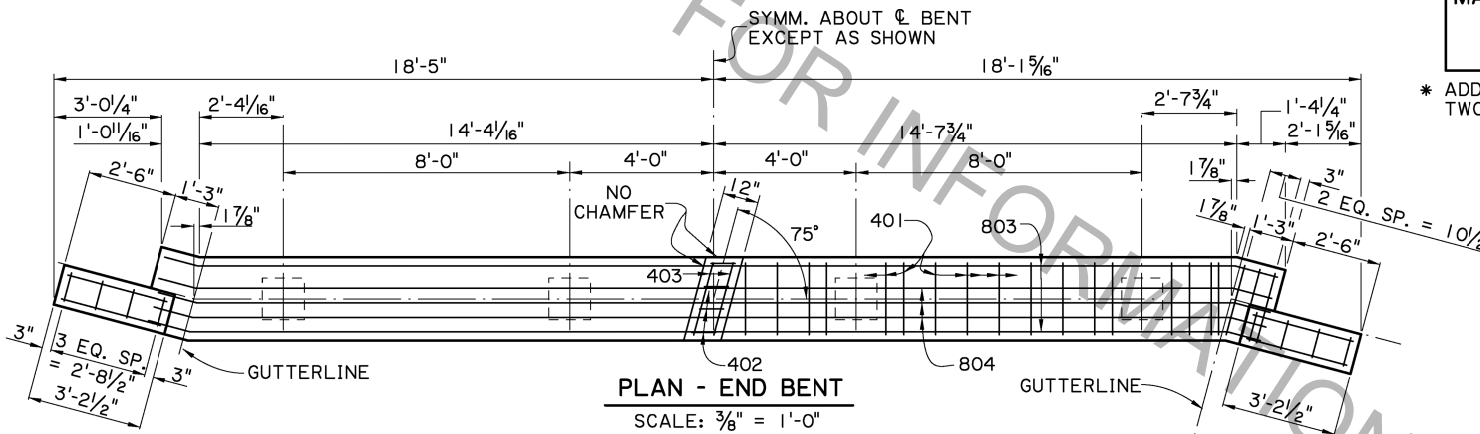


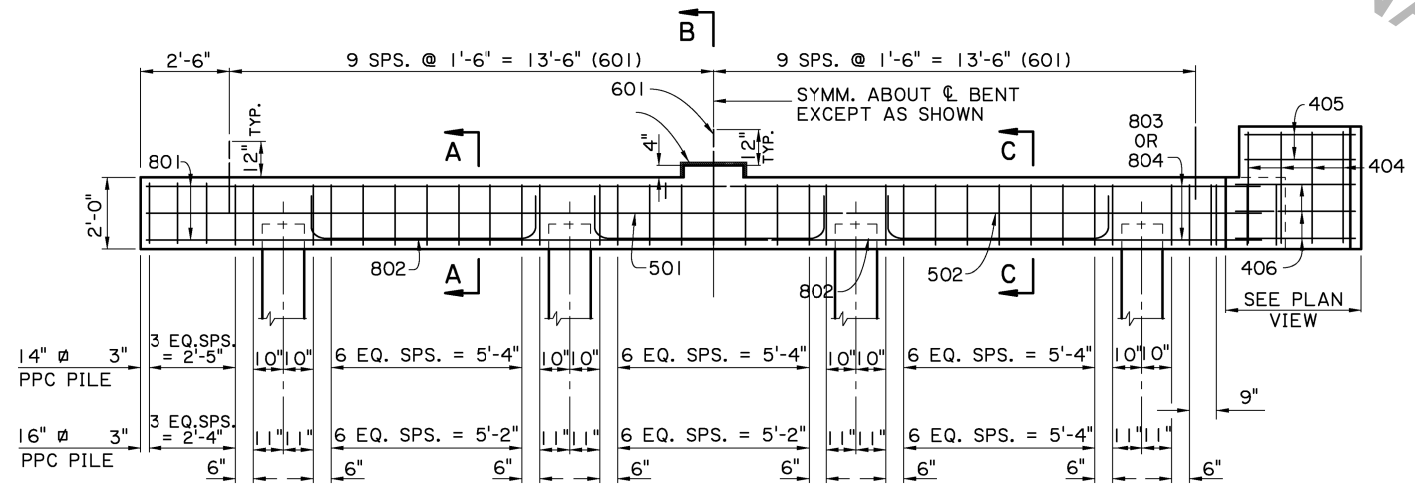
PLAN - INTERMEDIATE BENT

SCALE 3/8" = 1'-0"



PLAN - END BENT

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

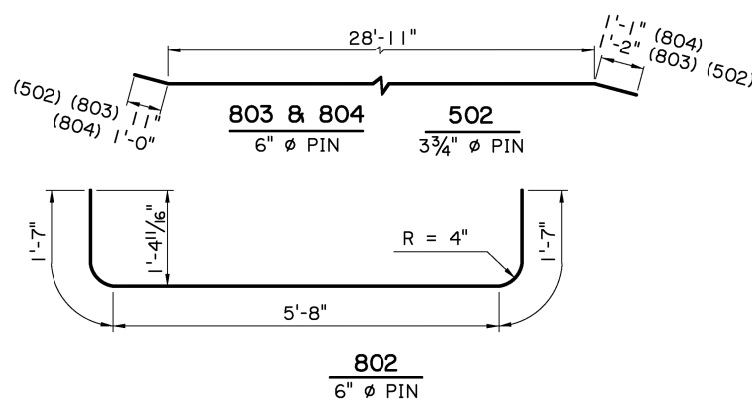
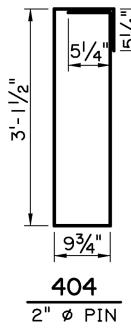
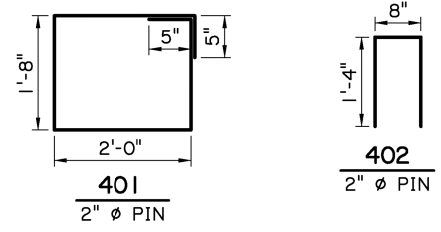


HALF ELEVATION - INTERMEDIATE BENT

SCALE 3/8" = 1'-0"

HALF ELEVATION - END BENT

SCALE 3/8" = 1'-0"



END ELEVATION

SCALE 3/4" = 1'-0"

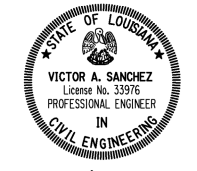
**ESTIMATED QUANTITIES (ONE INTER. BENT)**

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	7	31'-8"	221'-8" LONGIT. IN CAP
802	9	8'-10"	79'-6" LONGIT. IN CAP
<b>TOTAL NO. 8 BARS = 301'-2" = 804 LBS.</b>			
601	19	2'-0"	38'-0" DOWELS
<b>TOTAL NO. 6 BARS = 38'-0" = 57 LBS.</b>			
501	2	31'-8"	63'-4" LONGIT. IN CAP
<b>TOTAL NO. 5 BARS = 63'-4" = 66 LBS.</b>			
401	52	8'-2"	302'-2" STIRRUPS IN CAP
402	4	3'-4"	13'-4" STIRRUPS IN RISER
403	2	2'-1"	4'-2" LONGIT. IN RISER
<b>TOTAL NO. 4 BARS = 319'-8" = 214 LBS.</b>			
<b>TOTAL DEFORMED REINFORCING STEEL = 1,084 LBS.</b>			
<b>CLASS A1 CONCRETE = 5.36 CU. YDS.</b>			
<b>MAX. PILE LOAD: SERVICE DEAD LOAD = 24 TONS</b>			
<b>SERVICE LIVE LOAD = 36 TONS</b>			
<b>FACTORED TOTAL LOAD = 82 TONS</b>			

\* 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

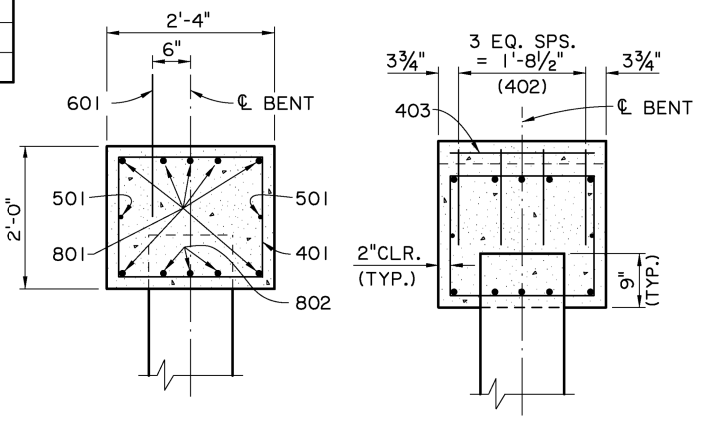


Victor A. Sanchez  
05/17/17

**ESTIMATED QUANTITIES (ONE END BENT)**

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
802	9	8'-10"	79'-6" LONGIT. IN CAP
803	4	31'-0"	124'-0" LONGIT. IN CAP
804	3	31'-0"	93'-0" LONGIT. IN CAP
<b>TOTAL NO. 8 BARS = 296'-0" = 792 LBS.</b>			
601	19	2'-0"	38'-0" DOWELS
<b>TOTAL NO. 6 BARS = 38'-0" = 57 LBS.</b>			
502	2	31'-0"	62'-0" LONGIT. IN CAP
<b>TOTAL NO. 5 BARS = 62'-0" = 65 LBS.</b>			
401	39	8'-2"	318'-6" STIRRUPS IN CAP
402	4	3'-4"	13'-4" STIRRUPS IN RISER
403	2	2'-1"	4'-2" LONGIT. IN RISER
404	8	8'-9"	70'-0" STIRRUPS IN WINGWALL
405	8	2'-10"	22'-8" LONGIT. IN WINGWALL
406	12	4'-0"	48'-0" LONGIT. IN WINGWALL
<b>TOTAL NO. 4 BARS = 476'-8" = 318 LBS.</b>			
<b>TOTAL DEFORMED REINFORCING STEEL = 1,232 LBS.</b>			
<b>CLASS A1 CONCRETE = 6.10 CU. YDS.</b>			
<b>MAX. PILE LOAD: SERVICE DEAD LOAD = 24 TONS</b>			
<b>SERVICE LIVE LOAD = 36 TONS</b>			
<b>FACTORED TOTAL LOAD = 82 TONS</b>			

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:**

CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

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 OTHERWISE NOTED. ALL EXPOSED FACES OF WINGWALLS AND ENDS OF CAPS SHALL RECEIVE A SURFACE FINISH AS PER SUBSECTION 805.08 OF THE STANDARD SPECIFICATIONS, EXCEPT WHEN SPECIFIED ELSEWHERE IN THE PLANS.

REINFORCING STEEL: ALL REINFORCING SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS OTHERWISE NOTED. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS OTHERWISE NOTED. DOWELS (601 BARS) SHALL BE PROVIDED AT ALL FIXED BEARINGS AND APPROACH SLAB BEARINGS (SEE GENERAL PLAN). ALL EXPOSED 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: FOR DETAILS SEE STANDARD DETAIL BD.2.5.1.0.01 (CS-216). EXTERIOR PILES ARE TO BE BATTERED OUTWARD AT 1/2 ON 12 IN THE LONGITUDINAL DIRECTION OF THE BENT, WHEN NOTED ON THE GENERAL PLAN.

BASIS OF PAYMENT: ALL MATERIALS SHALL BE PAID FOR UNDER "BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE" ACCORDING TO THE SPECIFICATIONS.

PERFORMED JOINT MATERIAL: PERFORMED JOINT MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 815.04 OF THE STANDARD SPECIFICATIONS.

SHEET NUMBER: \_\_\_\_\_

DESIGNED BY: J. NAKHLEH  
CHECKED BY: K. WASCOM

PARISH: \_\_\_\_\_  
CONTROL SECTION: \_\_\_\_\_  
STATE: \_\_\_\_\_  
PROJECT: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
SERIES #: \_\_\_\_\_

BY: \_\_\_\_\_  
REVISION OR CHANGE ORDER DESCRIPTION: \_\_\_\_\_

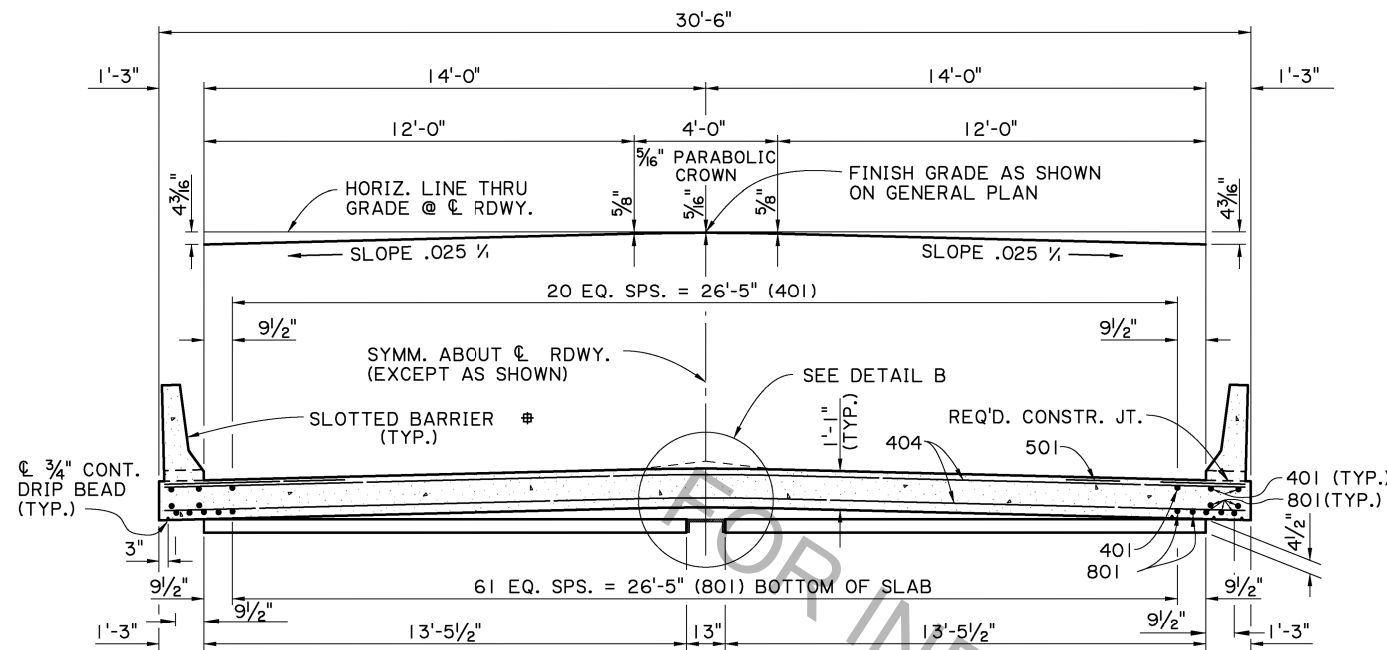
NO. \_\_\_\_\_

DATE: \_\_\_\_\_

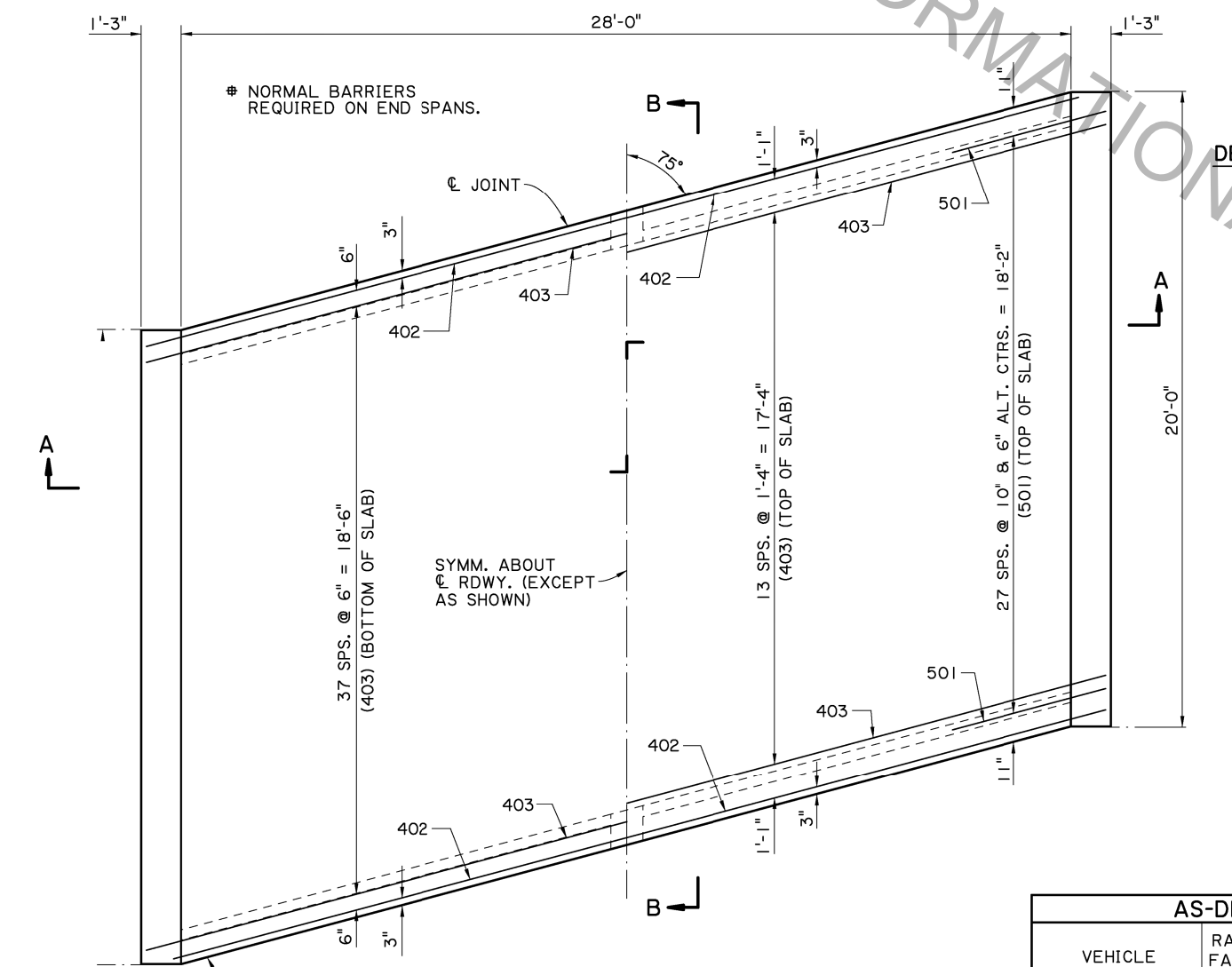
REINFORCED CONCRETE PILE BENTS  
28'-0" CLEAR ROADWAY  
75' CROSSING TWO WAY TANGENT

STANDARD DETAIL  
PSS-75-28-20SL

DOTD  
DOTD BRIDGE DESIGN



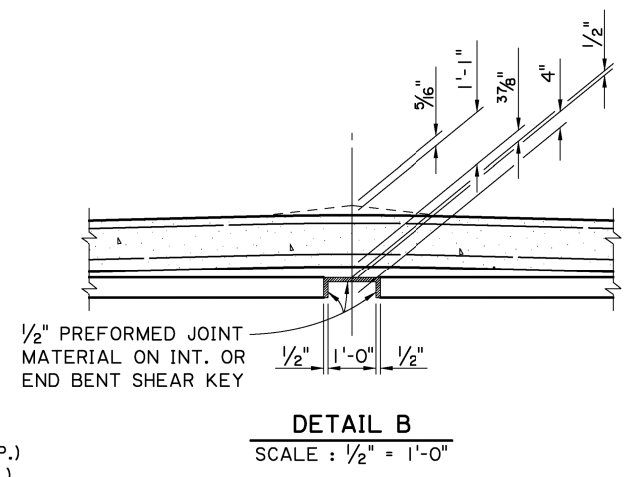
**SECTION A-A**



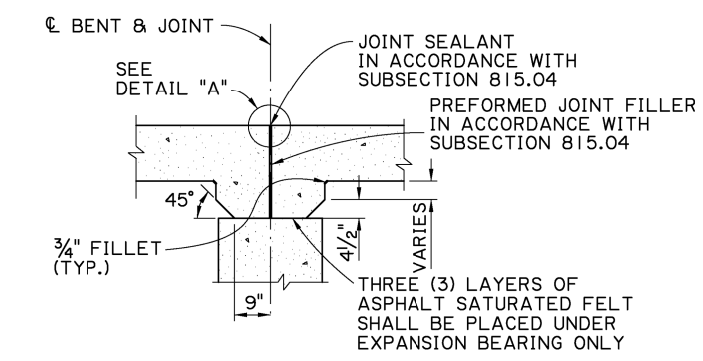
**HALF PLAN**  
SHOWING SPACING OF  
BOTTOM TRANS. REINF. STEEL  
SCALE : 3/8" = 1'-0"

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

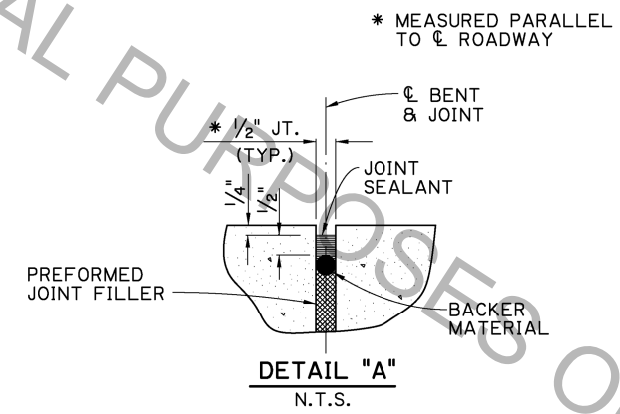
AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.398	
HL-93 (OPR)	1.812	
LADV-11 (INV)	1.075	MAGNIFICATION FACTOR = 1.3



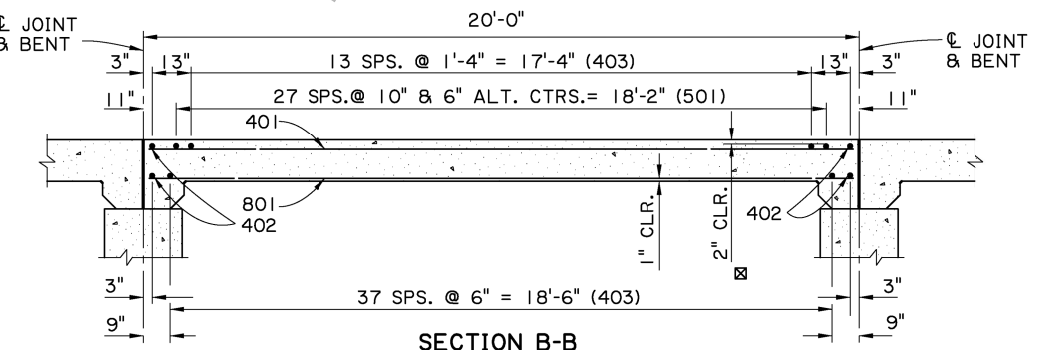
**DETAIL B**  
SCALE : 1/2" = 1'-0"



**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
<b>TOTAL NO. 8 BARS = 1370'-10" = 3660 LBS.</b>				
501	56	5'-0"	280'-0"	TRANS. TOP OF SLAB
<b>TOTAL NO. 5 BARS = 280'-0" = 292 LBS.</b>				
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
<b>TOTAL NO. 4 BARS = 2231'-7" = 1491 LBS.</b>				
<b>TOTAL DEFORMED REINFORCING STEEL = 5277 LBS.</b>				
<b>CLASS A1 CONCRETE = 25.47 CU. YDS.</b>				
<b>CONCRETE RAILING (BARRIER TYPE) = 40.00 LIN. FT.</b>				

**SPAN NOTES:**

**CONSTRUCTION SPECIFICATIONS:**  
LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

**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 OTHERWISE NOTED. 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 OTHERWISE NOTED. 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:**  
REFER TO THE GENERAL PLAN FOR GUARD RAIL REQUIREMENTS. PROVIDE HOLES FOR GUARD RAIL CONNECTIONS ACCORDING TO STANDARD PLAN BD.1.1.1.0.01 (GR-200) ON ALL FOUR BRIDGE RAIL ENDS.

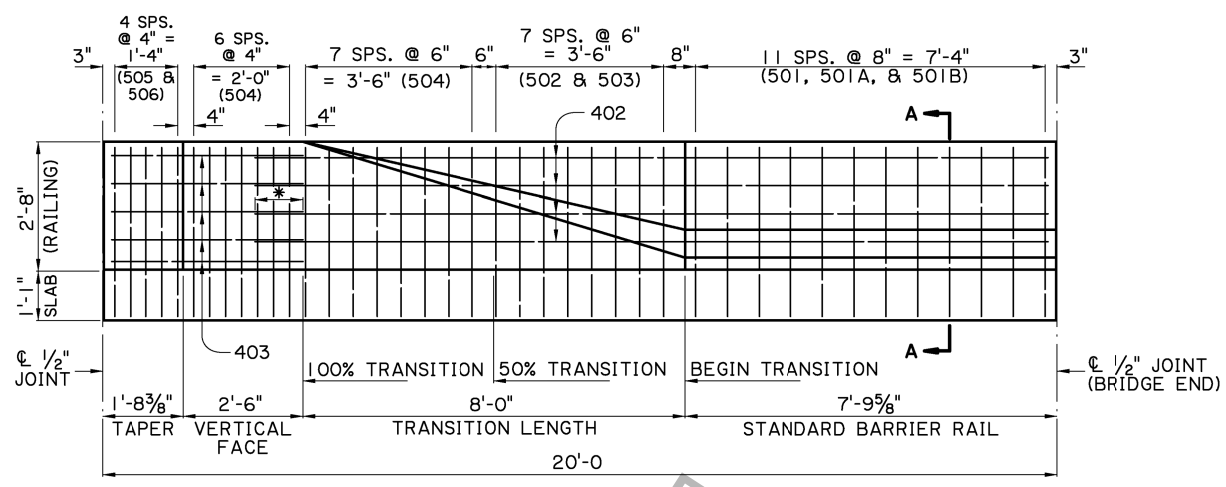
**BASIS OF PAYMENT:**  
ALL MATERIAL SHALL BE PAID FOR UNDER "BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE" ACCORDING TO THE SPECIFICATIONS.

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

SHEET NUMBER	2 OF 11
DESIGNED	J. NAKHLEH
CHECKED	B. DELATTE
DATE	05/17/17
PROJECT	20' CONCRETE SLAB SPAN
STATE	LA
SECTION	75° CROSSING TWO WAY TANGENT
PARISH	ASSUMED
CONTROL	ASSUMED
REVISION OR CHANGE	ORDER DESCRIPTION
NO.	
DATE	
BY	

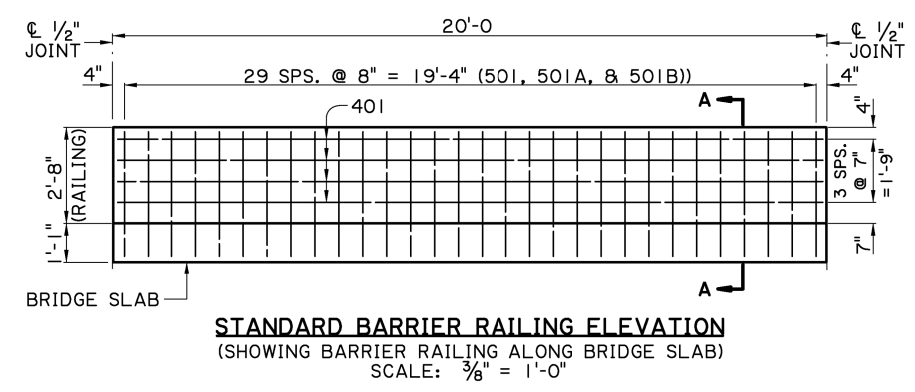
SPAN (1 OF 2)  
20' CONCRETE SLAB SPAN  
28'-0" CLEAR ROADWAY  
75° CROSSING TWO WAY TANGENT  
PSS-75-28-20SL



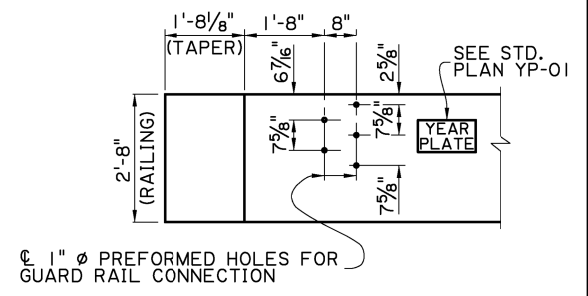


\* 1'-0" (MIN.) SPLICE

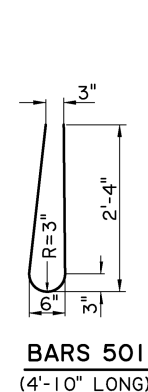
**BARRIER RAILING TRANSITION ELEVATION**  
(SHOWING BARRIER RAILING AT END OF BRIDGE)  
SCALE: 1/2" = 1'-0"



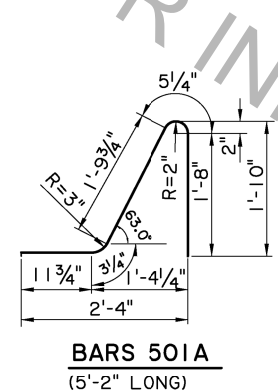
**STANDARD BARRIER RAILING ELEVATION**  
(SHOWING BARRIER RAILING ALONG BRIDGE SLAB)  
SCALE: 3/8" = 1'-0"



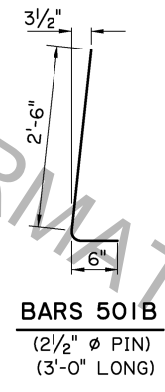
**GUARD RAIL CONNECTION DETAIL**  
(FOR GUARD RAIL DETAILS, SEE STANDARD PLAN BD.1.1.1.0.01 (GR-200).  
SCALE: 1/2" = 1'-0"



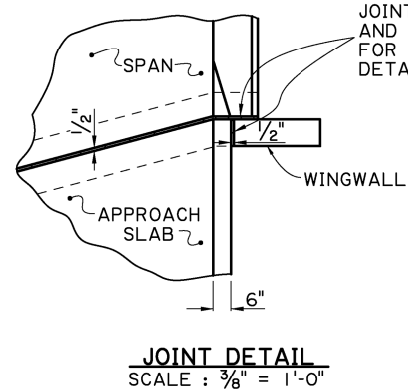
**BARS 501**  
(4'-10" LONG)



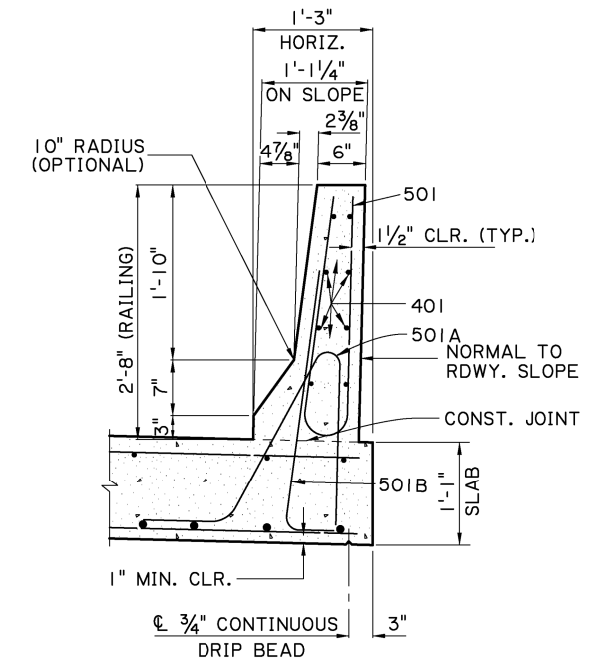
**BARS 501A**  
(5'-2" LONG)



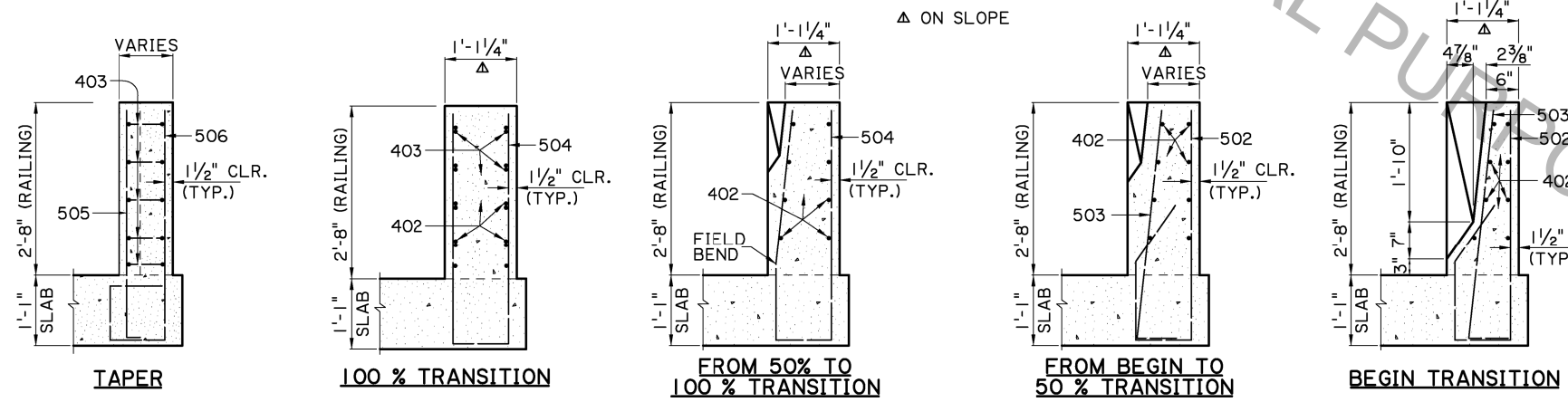
**BARS 501B**  
(2 1/2" Ø PIN)  
(3'-0" LONG)



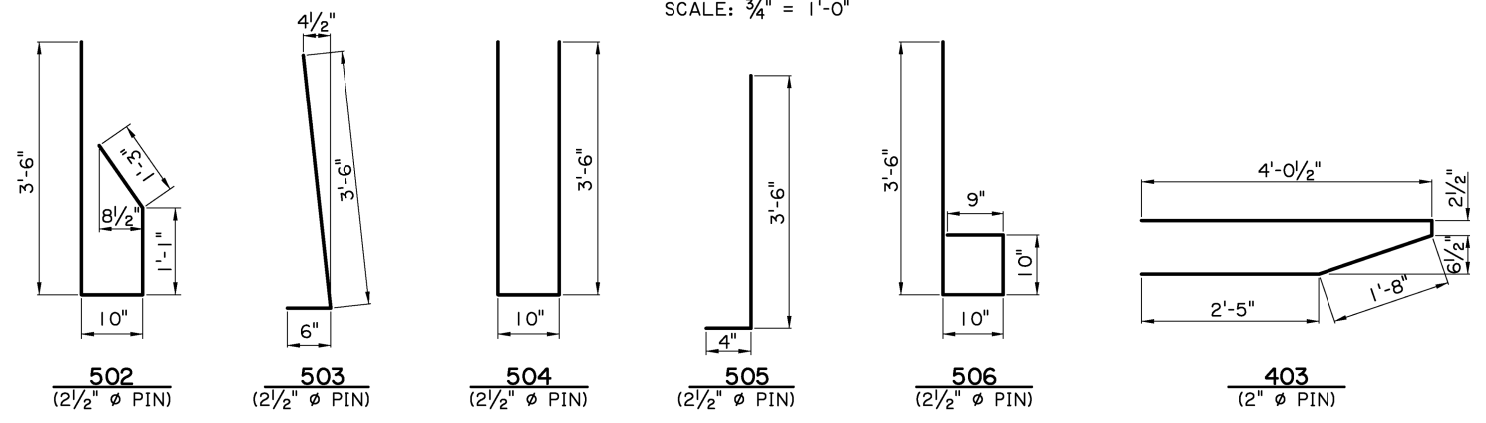
**JOINT DETAIL**  
SCALE: 3/8" = 1'-0"



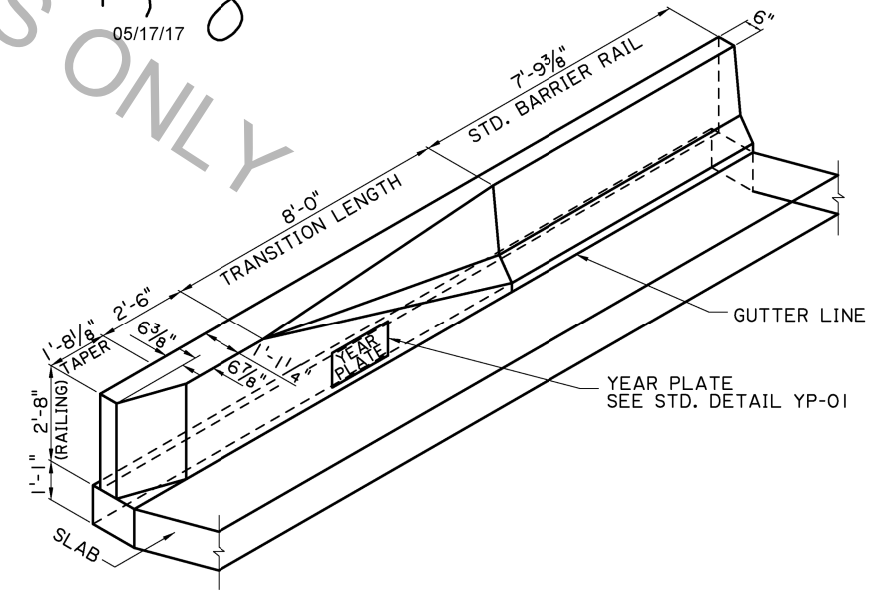
**SECTION A-A**  
SCALE: 1" = 1'-0"



**BARRIER RAILING TRANSITION SECTIONS**  
SCALE: 3/4" = 1'-0"

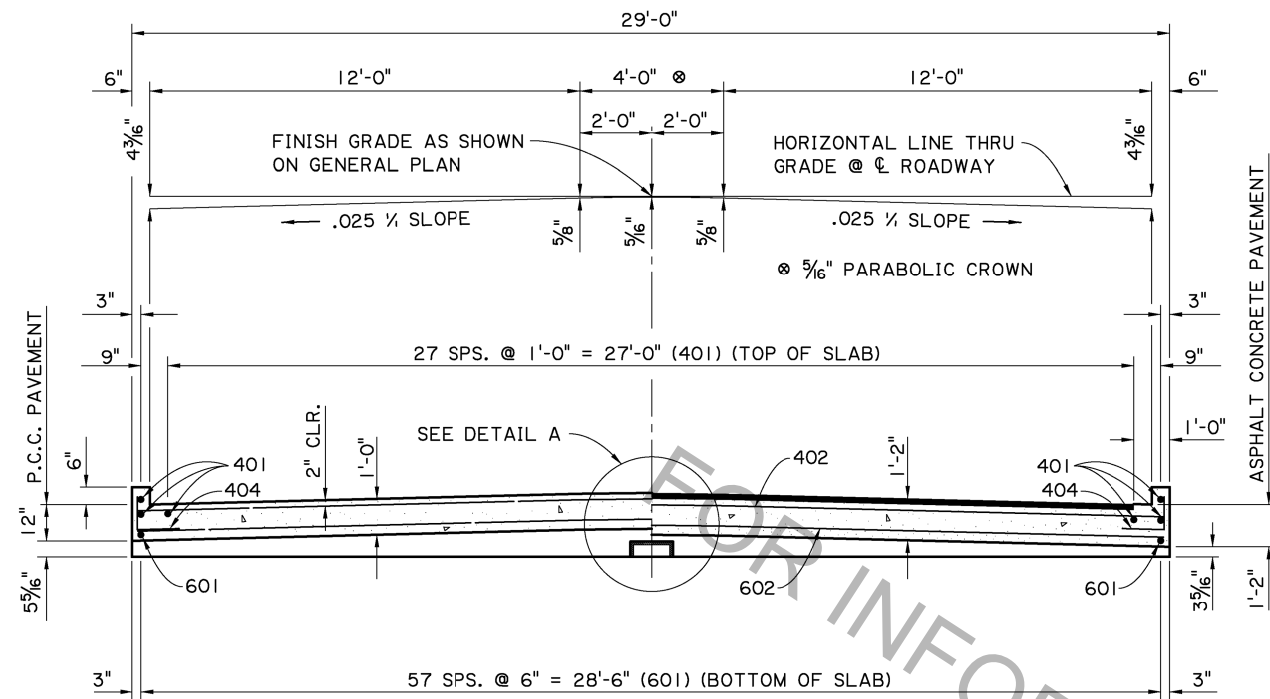


Victor A. Sanchez  
05/17/17

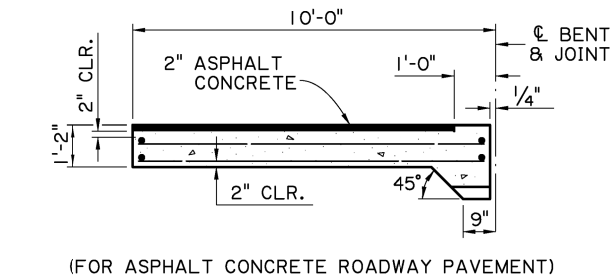
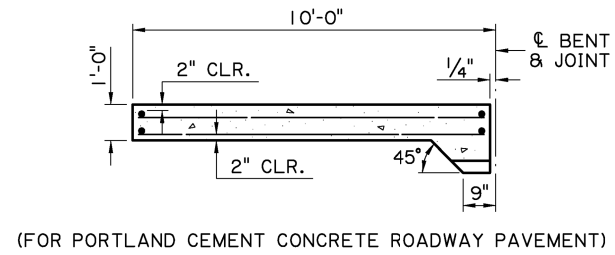


**BARRIER RAILING TRANSITION SCHEMATIC**  
SCALE: 3/8" = 1'-0"

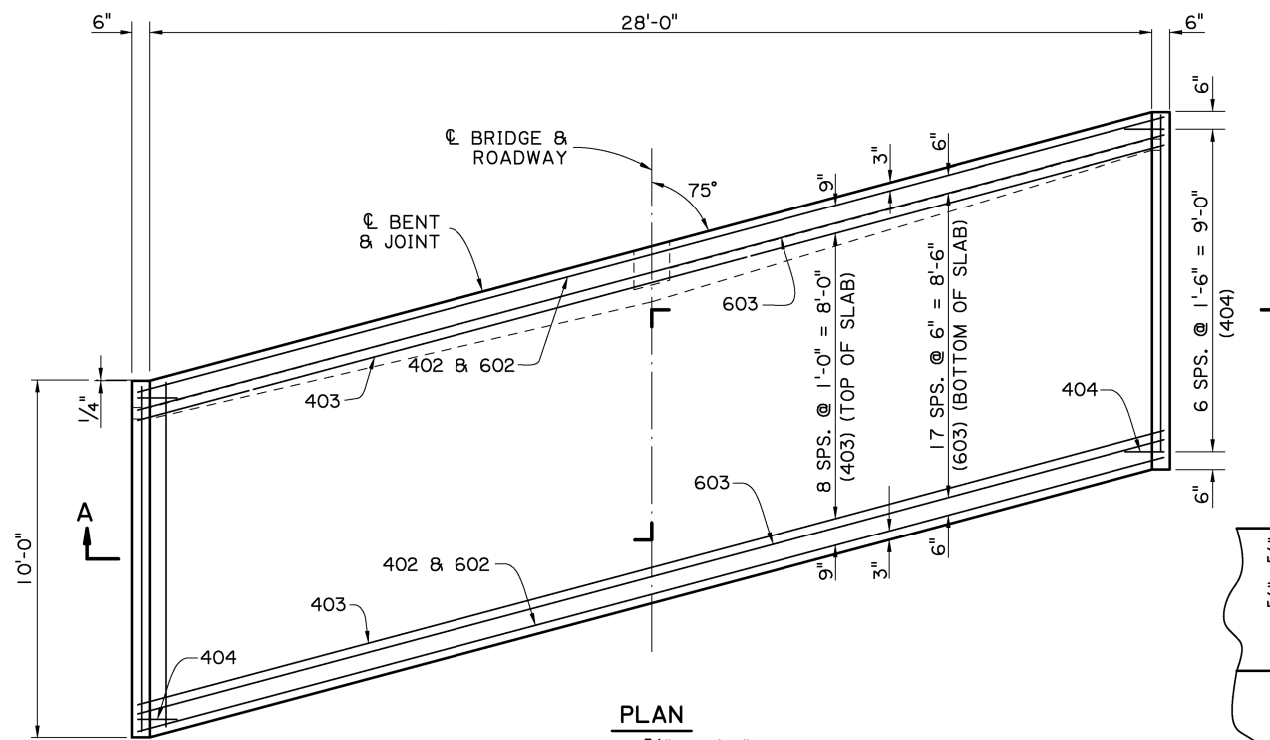
SHEET NUMBER	PARISH	DESIGNED	CONTROL SECTION	STATE	PROJECT
	B. DELATTE	J. NAKHLEH	D. HYMEL	05/17/17	
CHECKED	J. NAKHLEH	REVIEWED	3 OF 11		
NO.	DATE	BY	REVISION OR CHANGE ORDER DESCRIPTION		
<b>SPAN (2 OF 2)</b> 20'-0" CONCRETE BARRIER 28'-0" CLEAR ROADWAY 75° CROSSING TWO WAY TANGENT STANDARD DETAIL PSS-75-28-20SL					



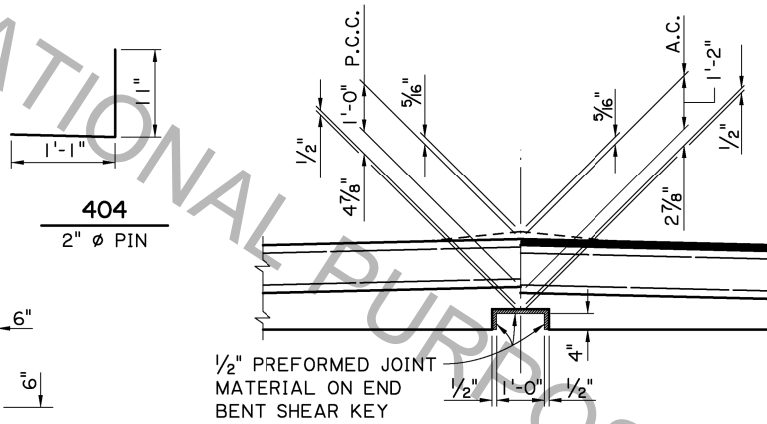
**SECTION A-A**  
SCALE: 3/8" = 1'-0"



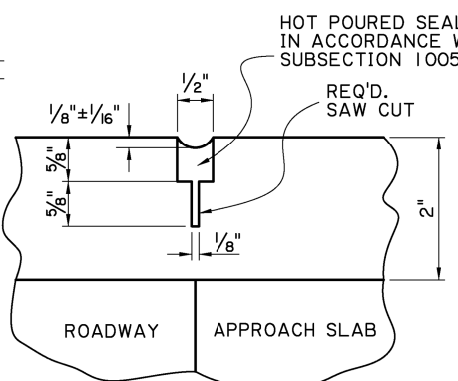
**SECTION ALONG CL ROADWAY**  
SCALE: 3/8" = 1'-0"



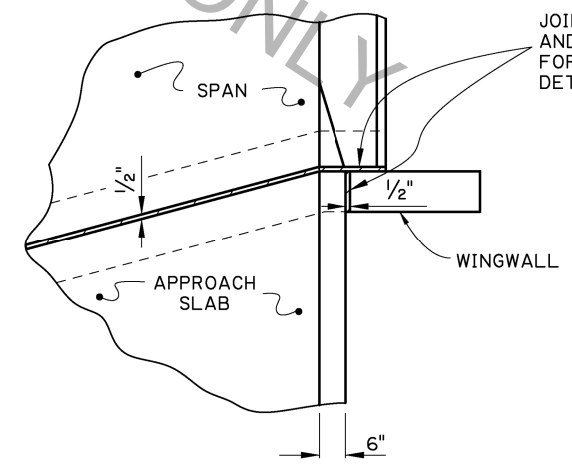
**PLAN**  
SCALE: 3/8" = 1'-0"



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



**SAWING & SEALING JOINT DETAIL**  
N.T.S.



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

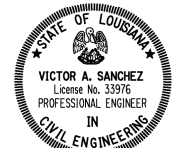
ESTIMATED QUANTITIES (ONE SLAB)				
BAR NO.	UNIT	LENGTH	TOTAL LENGTH	LOCATION
601	58	9'-7"	555'-10"	LONGIT. BOT. OF SLAB
602	2	29'-6"	59'-0"	TRANSV. BOT. OF SLAB
603	18	29'-8"	534'-0"	TRANSV. BOT. OF SLAB
<b>TOTAL NO. 6 BARS = 1,148'-10" = 1,726 LBS.</b>				
401	32	9'-7"	306'-8"	LONGIT. TOP OF SLAB &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

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

**APPROACH SLAB NOTES:**

**CONSTRUCTION SPECIFICATIONS:** LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.  
**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 OTHERWISE NOTED.  
**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 OTHERWISE NOTED. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS.  
**BEDDING MATERIAL:** FOR DETAILS OF BEDDING MATERIAL AND UNDERDRAINS. SEE STANDARD DETAIL BD.2.10.1.0.07.  
**SAWING & SEALING:** THE ASPHALT CONCRETE SHALL BE SAW CUT AT THE END OF THE CONCRETE APPROACH SLAB THE ENTIRE ROADWAY WIDTH AND SEALED. COST TO BE INCLUDED WITH CONCRETE APPROACH SLABS.  
**BASIS OF PAYMENT:** ALL MATERIAL SHALL BE PAID FOR UNDER 'CONCRETE APPROACH SLABS' ACCORDING TO THE SPECIFICATIONS, EXCEPT WHERE NOTED ON THIS SHEET.

JOINT SEALANT, BACKER MATERIAL, AND PREFORMED JOINT FILLER. FOR DETAILS SEE SPAN SHEET, DETAIL "A".

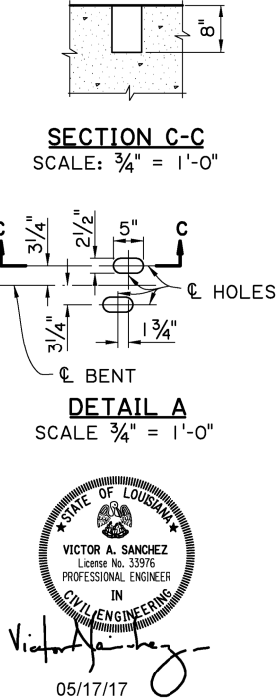
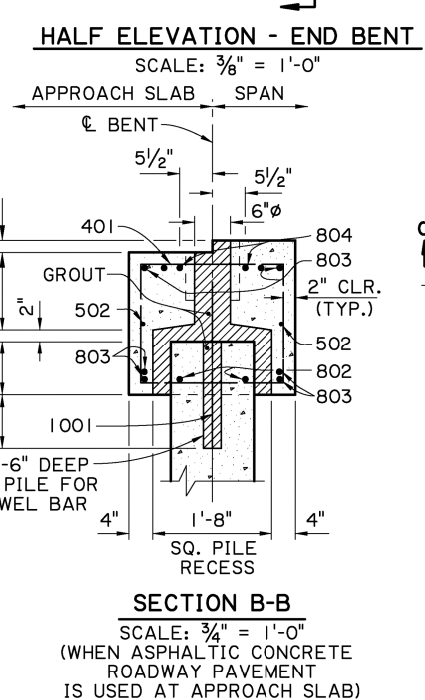
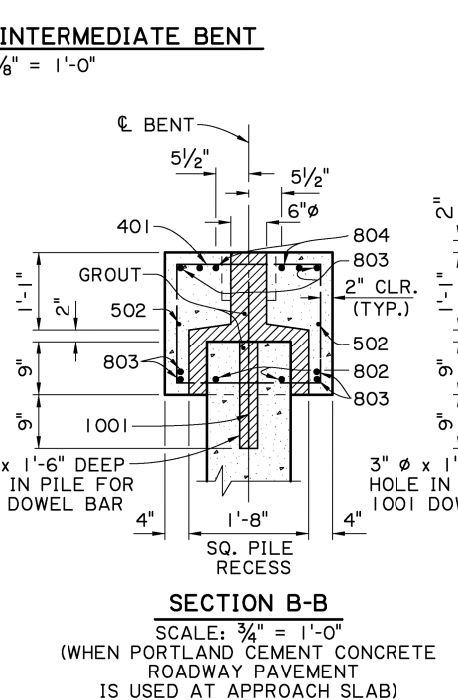
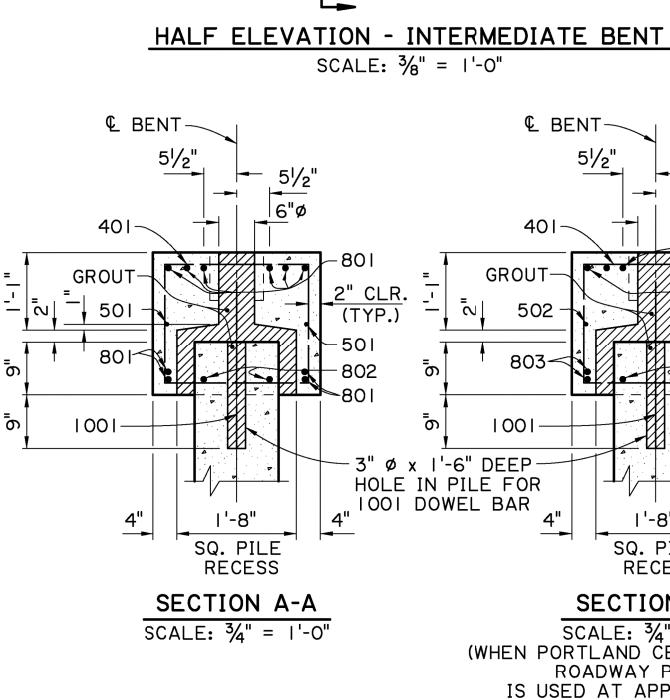
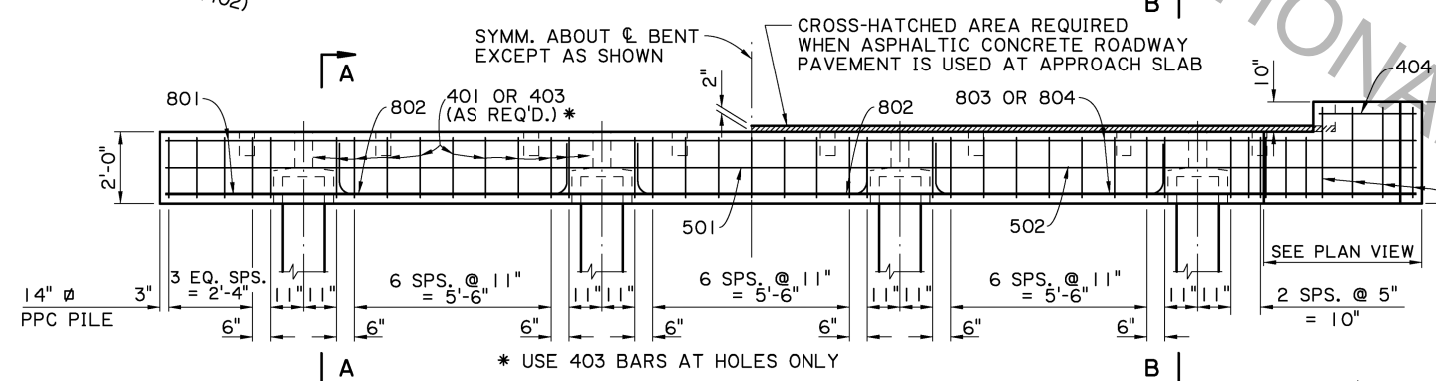
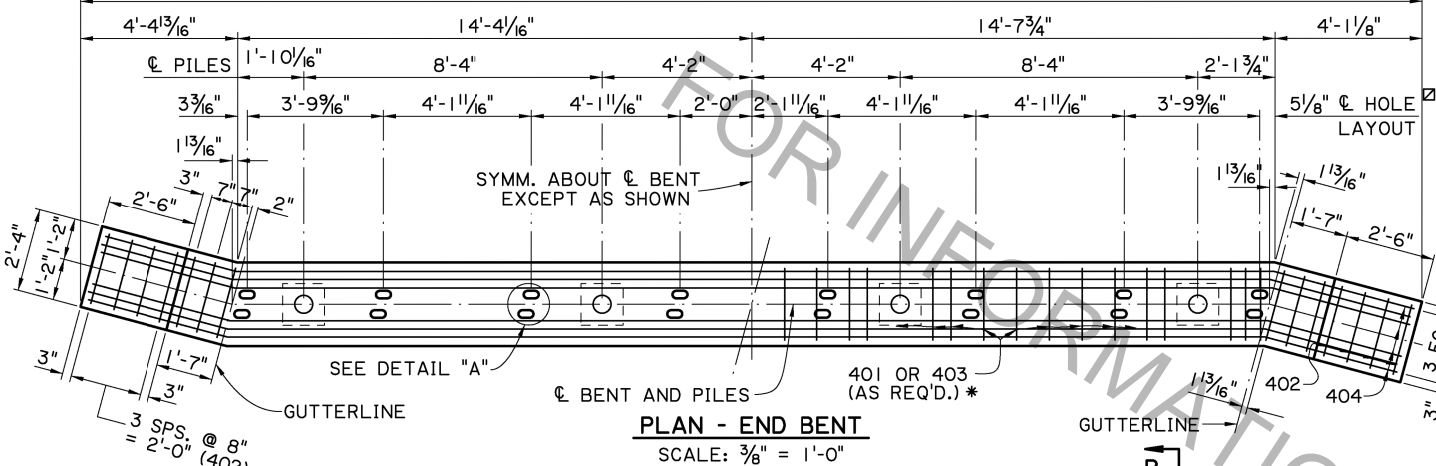
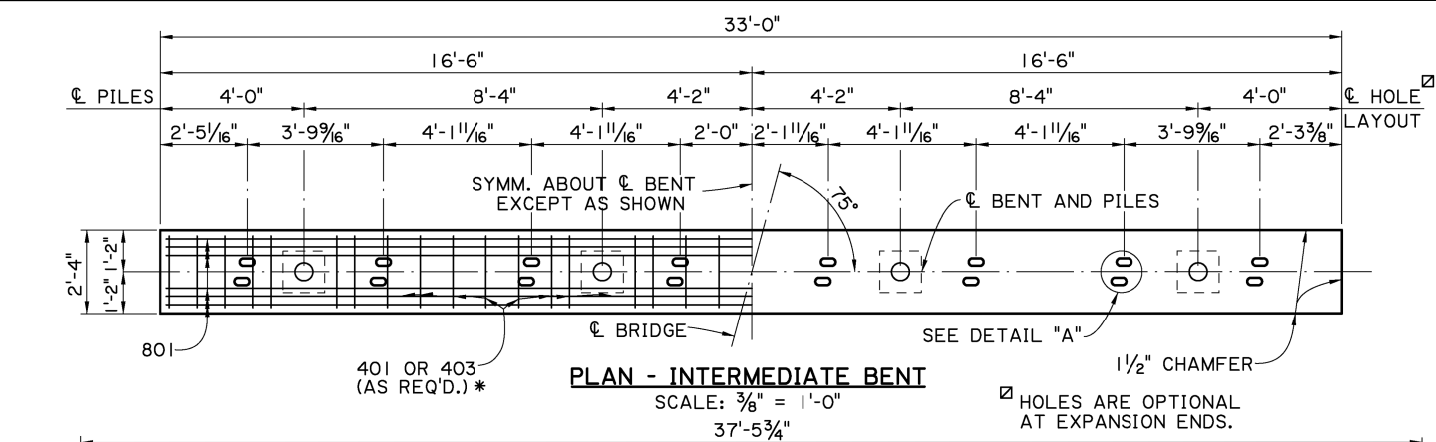


Victor A. Sanchez  
05/17/17

DESIGNED	J. NAKHLEH	PARISH	
CHECKED	B. DELATTE	CONTROL SECTION	
DATE	05/17/17	STATE	LA
PROJECT	APPROACH SLAB	NO.	4
REVISION OR CHANGE ORDER DESCRIPTION		DATE	
		BY	

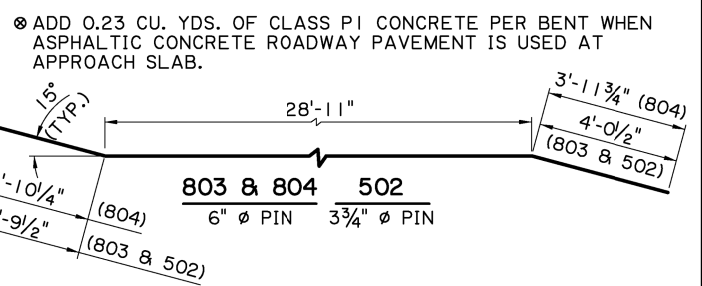
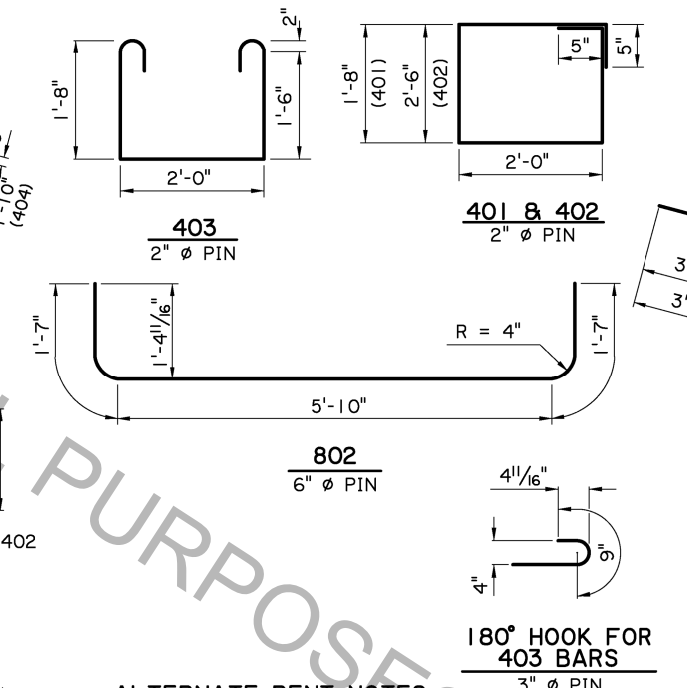
APPROACH SLAB  
10'-0" CONCRETE APPROACH SLAB  
28'-0" CLEAR ROADWAY  
75° CROSSING TWO WAY TANGENT  
STANDARD DETAIL  
PSS-75-28-20SL





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

ESTIMATED QUANTITIES (ONE END BENT)				
BAR NO.	UNIT	TOTAL LENGTH	LOCATION	
1001	4	2'-4"	9'-4"	DOWELS IN PILES
<b>TOTAL NO. 10 BARS = 9'-4" = 40 LBS.</b>				
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
<b>TOTAL NO. 8 BARS = 421'-6" = 1,121 LBS.</b>				
502	2	36'-9"	73'-6"	LONGIT. IN CAP
<b>TOTAL NO. 5 BARS = 73'-6" = 77 LBS.</b>				
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
<b>TOTAL NO. 4 BARS = 397'-10" = 266 LBS.</b>				
<b>TOTAL DEFORMED REINFORCING STEEL = 1,504 LBS.</b>				
<b>TOTAL CLASS P1 CONCRETE = 6.33 CU. YDS.</b>				
<b>MAX. PILE LOAD: SERVICE DEAD LOAD = 20 TONS</b>				
<b>SERVICE LIVE LOAD = 38 TONS</b>				
<b>FACTORED TOTAL LOAD = 81 TONS</b>				
<b>TOTAL GROUT FOR PILE RECESSES = 0.28 CU. YDS.</b>				

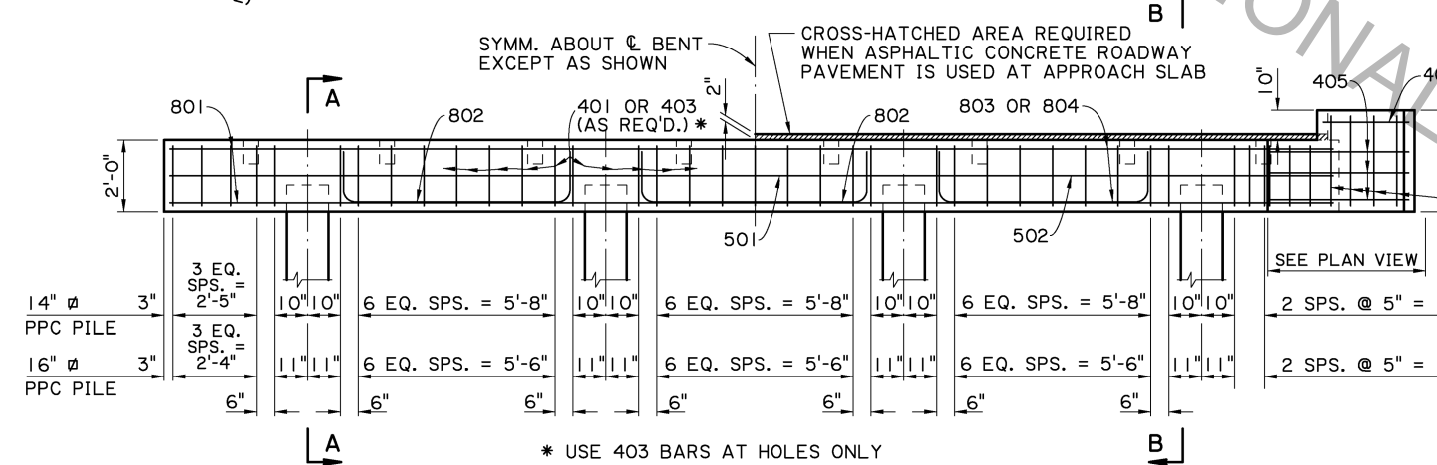
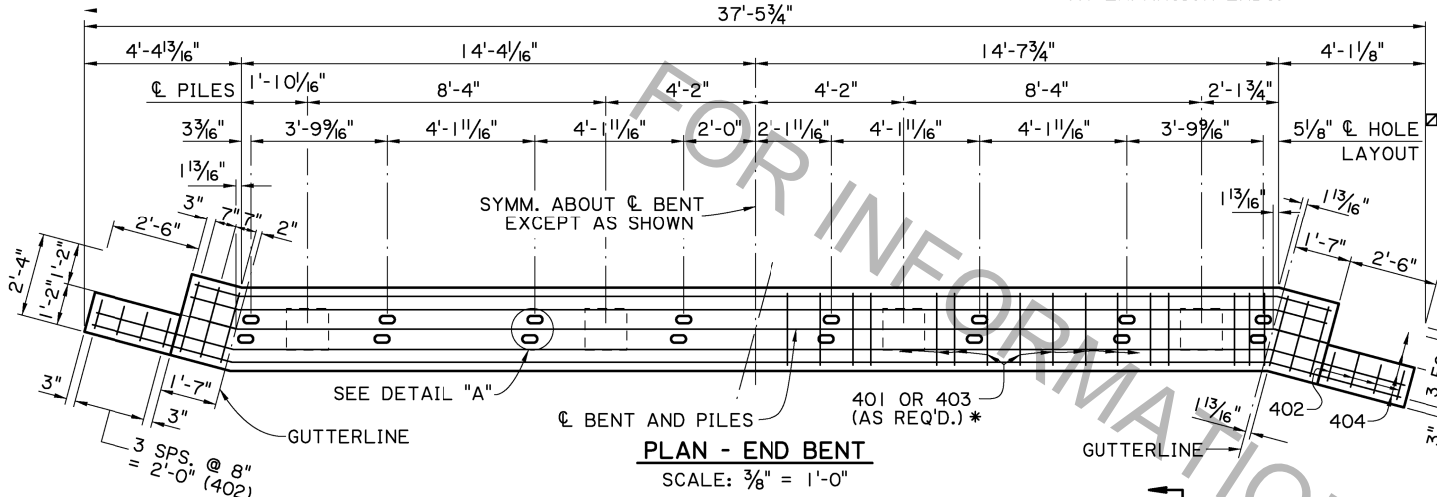
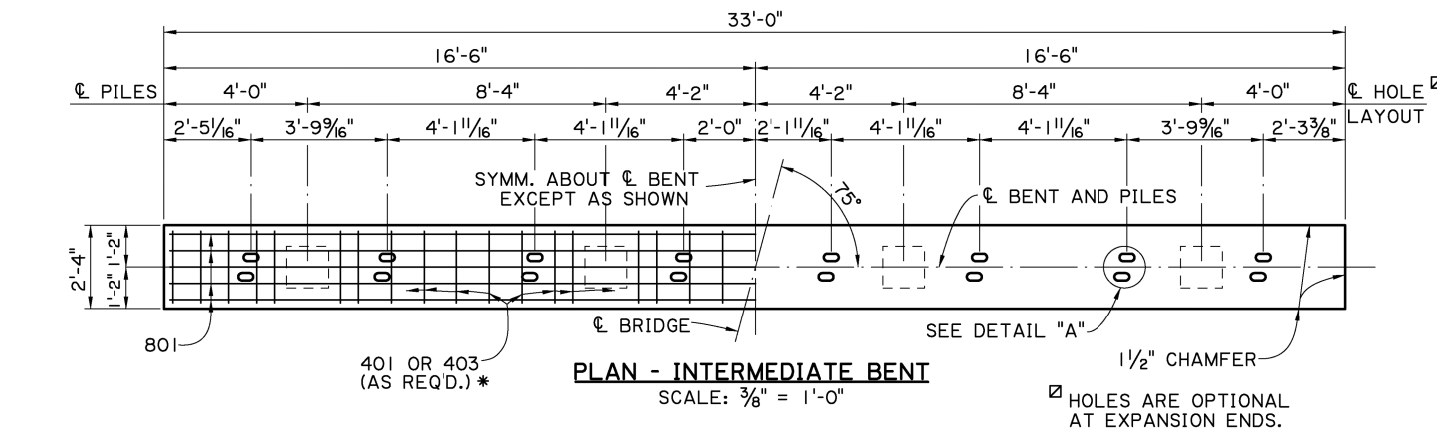


AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.904	—
HL-93 (OPR)	2.468	—
LADV-11 (INV)	1.465	MAGNIFICATION FACTOR = 1.3

**ALTERNATE BENT NOTES:**

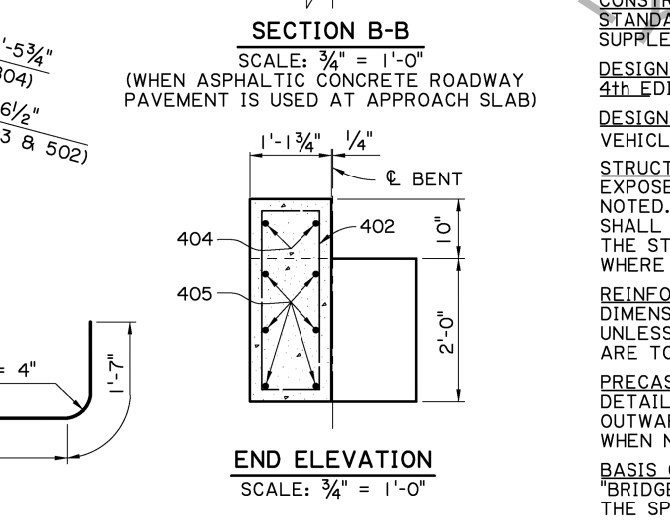
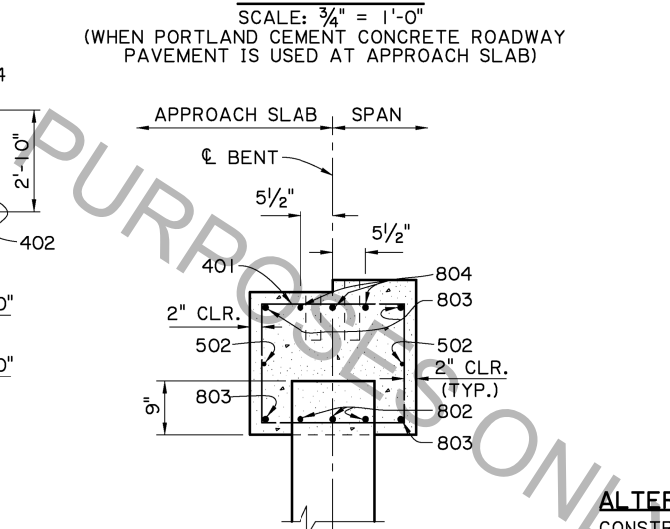
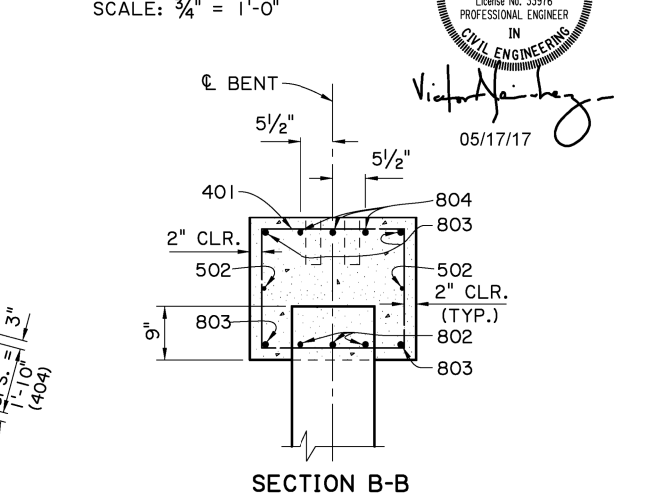
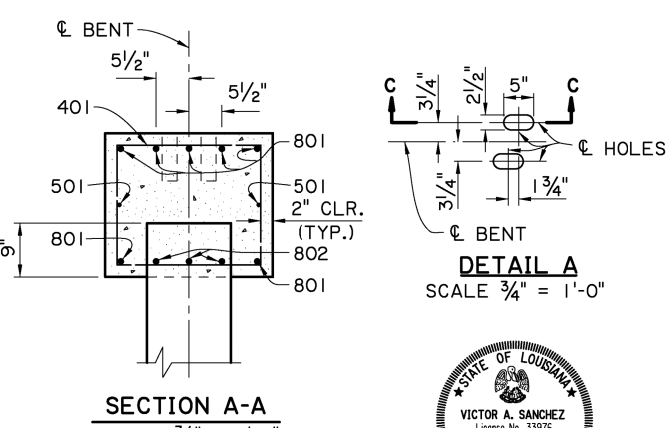
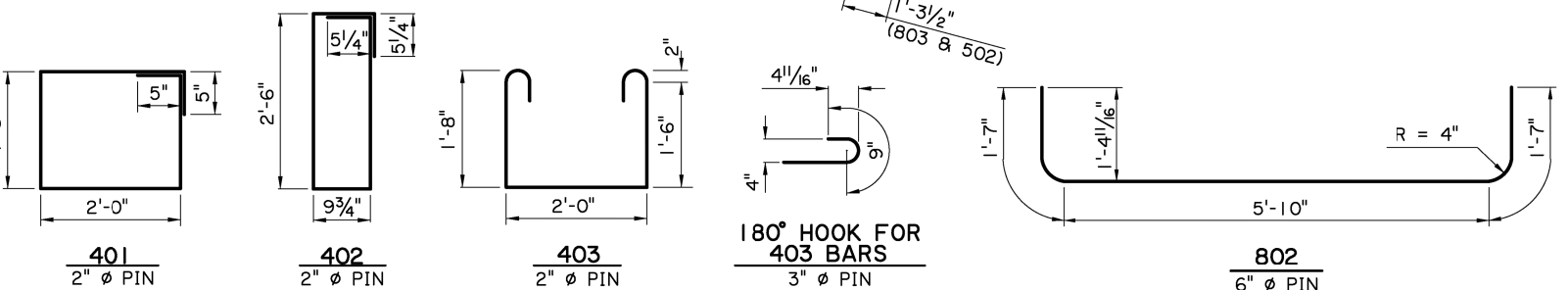
CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.  
 DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION, WITH 2008 & 2009 INTERIMS.  
 DESIGN LOAD: LIVE LOAD IS HL-93, AND 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 OTHERWISE NOTED. 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 OTHERWISE NOTED. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS OTHERWISE NOTED.  
 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: PILES SHALL BE FABRICATED ACCORDING TO STANDARD DETAIL BD.2.5.1.0.01(CS-216). CENTROID OF THE PILE AT CUTOFF ELEVATION SHALL NOT VARY FROM THE PLAN LOCATION BY MORE THAN 3" MEASURED EITHER PERPENDICULAR OR PARALLEL TO THE CENTERLINE OF BENT. IF THE CENTROID OF A PILE IS OUTSIDE THESE LIMITS BUT WITHIN THE ACCURACY OF DRIVING REQUIRED BY THE SPECIFICATIONS, A BENT CAP SHALL BE PROVIDED ACCORDING TO THE CAST-IN-PLACE ALTERNATE. EXTERIOR PILES ARE TO BE BATTERED OUTWARD A 1/2" ON 12" IN THE LONGITUDINAL DIRECTION OF THE BENT, WHEN NOTED ON THE GENERAL PLAN.  
 BASIS OF PAYMENT: ALL MATERIALS SHALL BE PAID FOR UNDER "BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE" ACCORDING TO THE SPECIFICATIONS.

SHEET NUMBER: \_\_\_\_\_  
 PARISH: \_\_\_\_\_  
 CONTROL SECTION: \_\_\_\_\_  
 STATE PROJECT: \_\_\_\_\_  
 DESIGNED: J. NAKHLEH  
 CHECKED: K. WASCOM  
 DETAILED: D. HYMEI  
 CHECKED: J. NAKHLEH  
 REVIEWED: \_\_\_\_\_  
 DATE: 05/17/17  
 REVISION OR CHANGE ORDER DESCRIPTION: \_\_\_\_\_  
 NO. \_\_\_\_\_  
 DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 STANDARD DETAIL: PSS-75-28-20SL  
 DOTD BRIDGE DESIGN  
 ALTERNATE BENTS  
 PRECAST CONCRETE BENTS  
 28'-0" CLEAR ROADWAY  
 75' CROSSING TWO WAY TANGENT



**AS-DESIGNED RATING**

VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.518	
HL-93 (OPR)	1.967	
LADV-11 (INV)	1.168	MAGNIFICATION FACTOR = 1.3



**ESTIMATED QUANTITIES (ONE INTER. BENT)**

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	7	32'-8"	LONGIT. IN CAP
802	9	9'-0"	LONGIT. IN CAP BTW. PILES
<b>TOTAL NO. 8 BARS = 309'-8"</b>			<b>= 827 LBS.</b>
501	2	32'-8"	LONGIT. IN CAP
<b>TOTAL NO. 5 BARS = 65'-4"</b>			<b>= 68 LBS.</b>
401	29	8'-2"	STIRRUPS IN CAP
403	8	6'-6"	STIRRUPS IN CAP
<b>TOTAL NO. 4 BARS = 288'-10"</b>			<b>= 193 LBS.</b>
<b>TOTAL DEFORMED REINFORCING STEEL = 1,088 LBS.</b>			
<b>TOTAL CLASS A1 CONCRETE = 5.51 CU. YDS.</b>			
<b>MAX. PILE LOAD: SERVICE DEAD LOAD = 20 TONS</b>			
<b>SERVICE LIVE LOAD = 38 TONS</b>			
<b>FACTORED TOTAL LOAD = 81 TONS</b>			

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

**ESTIMATED QUANTITIES (ONE END BENT)**

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
802	9	9'-0"	LONGIT. IN CAP BTW. PILES
803	4	31'-9"	LONGIT. IN CAP
804	3	31'-9"	LONGIT. IN CAP
<b>TOTAL NO. 8 BARS = 303'-0"</b>			<b>= 810 LBS.</b>
502	2	31'-9"	LONGIT. IN CAP
<b>TOTAL NO. 5 BARS = 63'-6"</b>			<b>= 66 LBS.</b>
401	29	8'-2"	STIRRUPS IN CAP
402	8	7'-6"	STIRRUPS IN WINGWALL
403	10	6'-6"	STIRRUPS IN CAP
404	4	2'-2"	LONGIT. IN WINGWALL
405	12	3'-11"	LONGIT. IN WINGWALL
<b>TOTAL NO. 4 BARS = 417'-6"</b>			<b>= 279 LBS.</b>
<b>TOTAL DEFORMED REINFORCING STEEL = 1,155 LBS.</b>			
<b>TOTAL CLASS A1 CONCRETE = 5.96 CU. YDS.</b>			
<b>MAX. PILE LOAD: SERVICE DEAD LOAD = 20 TONS</b>			
<b>SERVICE LIVE LOAD = 38 TONS</b>			
<b>FACTORED TOTAL LOAD = 81 TONS</b>			

$\square$  16"  $\phi$  PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.05 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN 14"  $\phi$  PPC PILES ARE USED.) ADD 0.23 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN ASPHALTIC CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB.

**ALTERNATE BENT NOTES:**  
CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.  
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 OTHERWISE NOTED. ALL EXPOSED FACES OF WINGWALLS AND ENDS OF CAPS SHALL RECEIVE A SURFACE FINISH AS PER SUBSECTION 805.08 OF THE STANDARD SPECIFICATIONS, EXCEPT WHEN SPECIFIED ELSEWHERE IN THE PLANS.  
REINFORCING STEEL: ALL REINFORCING SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS OTHERWISE NOTED. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS OTHERWISE NOTED.  
PRECAST CONCRETE PILES: FOR DETAILS OF PILES SEE STANDARD DETAIL BD.2.5.1.0.01 (CS-216). EXTERIOR PILES ARE TO BATTERED OUTWARD AT 1/2" ON 12" IN THE LONGITUDINAL DIRECTION OF THE BENT, WHEN NOTED ON THE GENERAL PLAN.  
BASIS OF PAYMENT: ALL MATERIALS SHALL BE PAID FOR UNDER "BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE" ACCORDING TO THE SPECIFICATIONS.

SHEET NUMBER

DESIGNED BY: J. NAKHLEH  
CHECKED BY: K. WASCOM  
PARISH: LA  
CONTROL SECTION: 05/17/17  
STATE PROJECT: 75-28-205L  
SERIES #: 6 OF 11

DATE: 05/17/17

REVISION OR CHANGE ORDER DESCRIPTION

NO.

BY

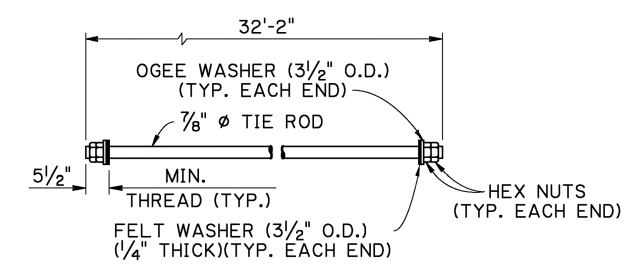
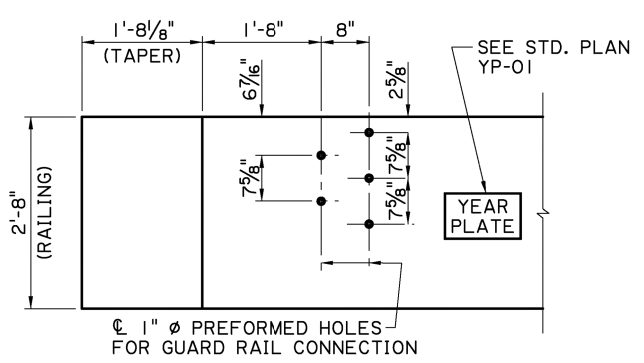
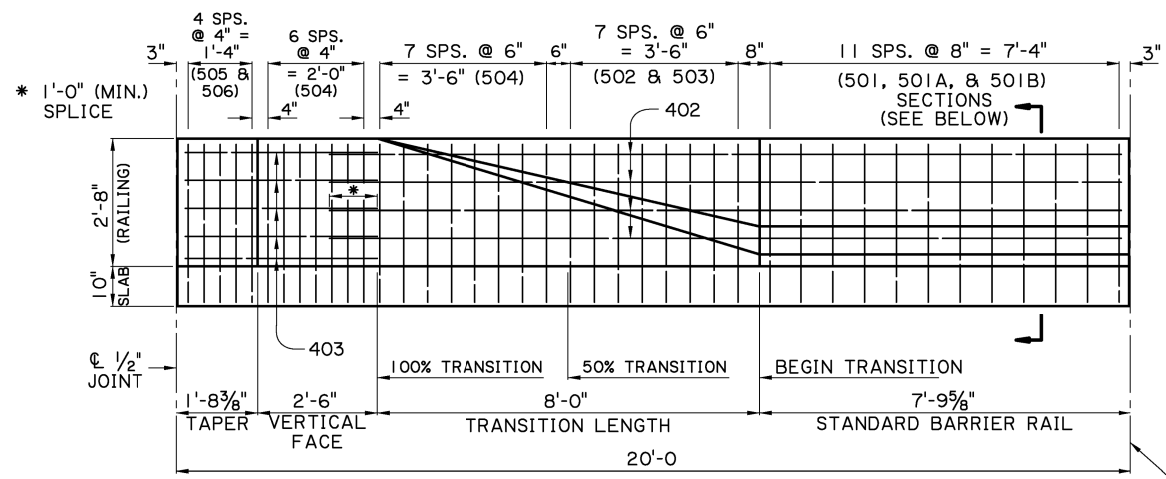
NO.

DATE

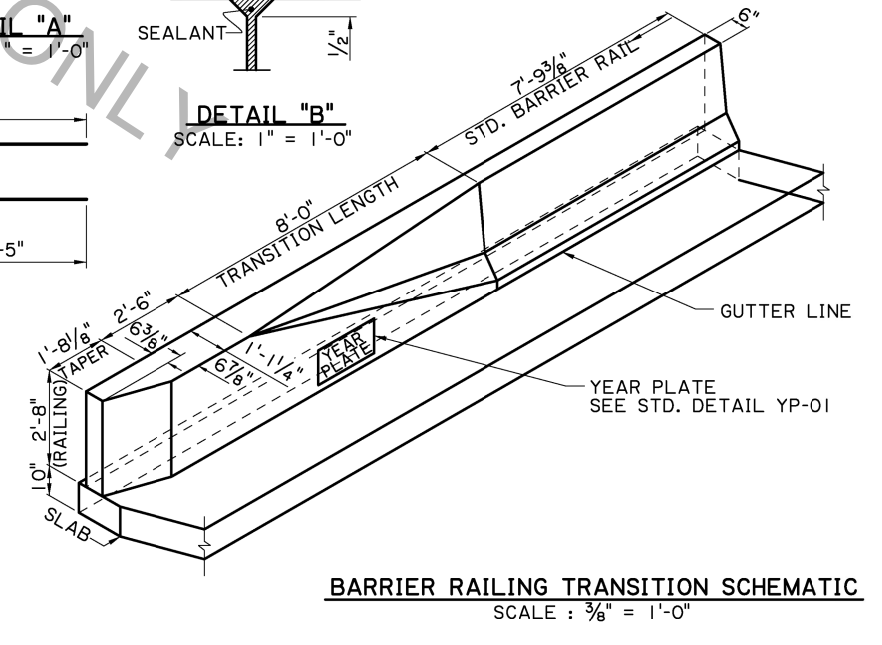
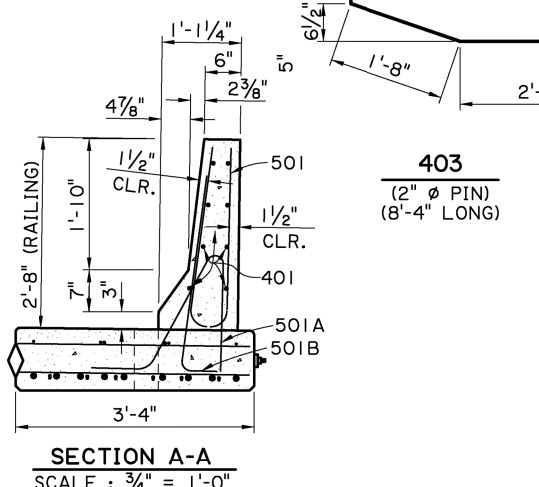
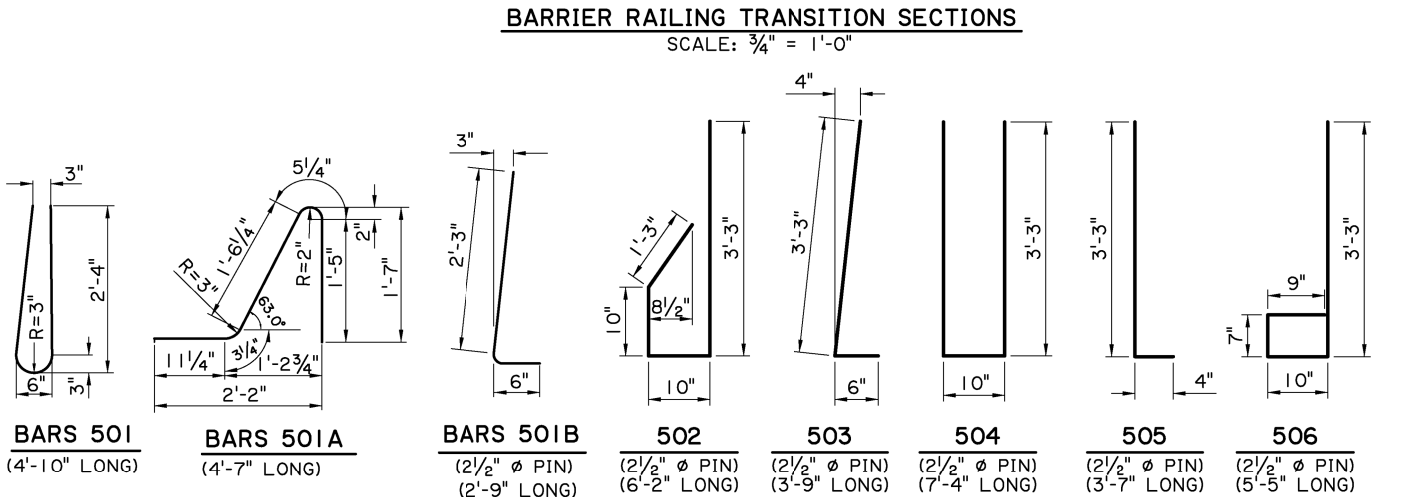
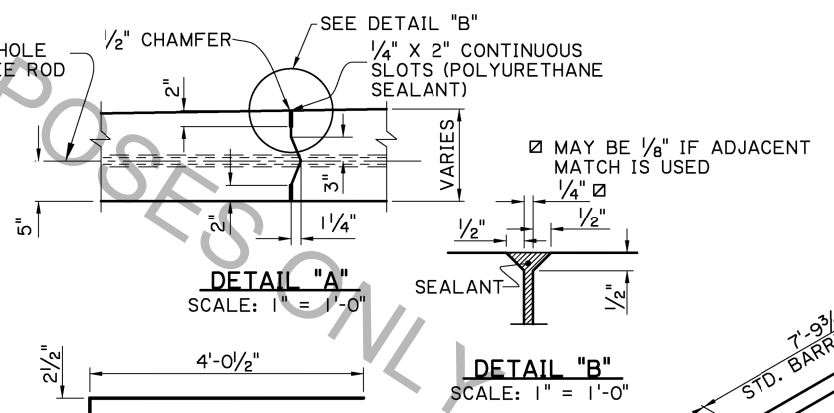
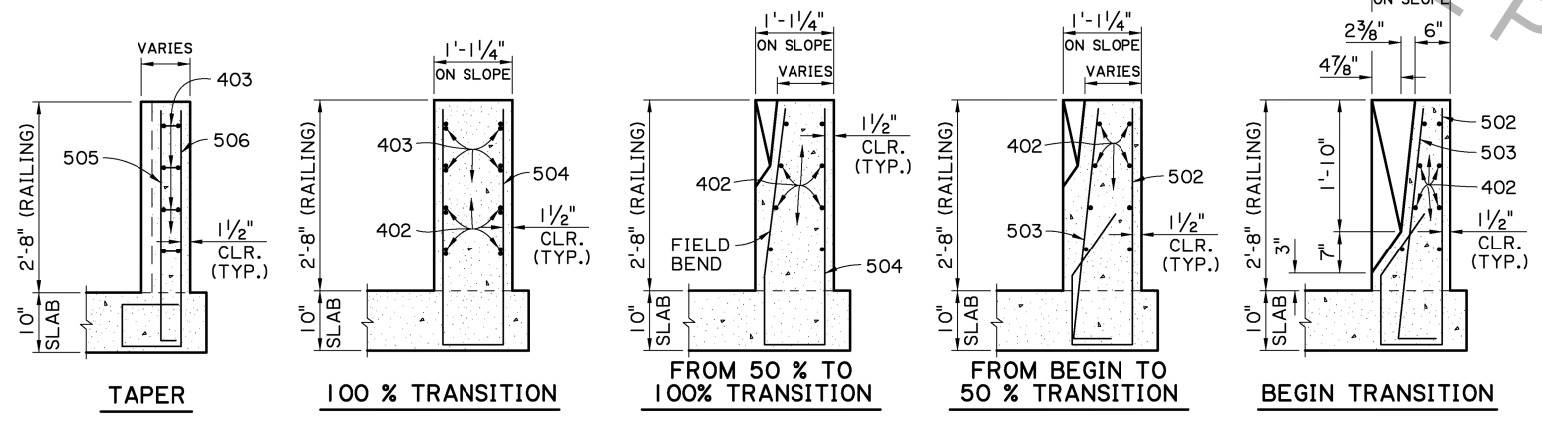
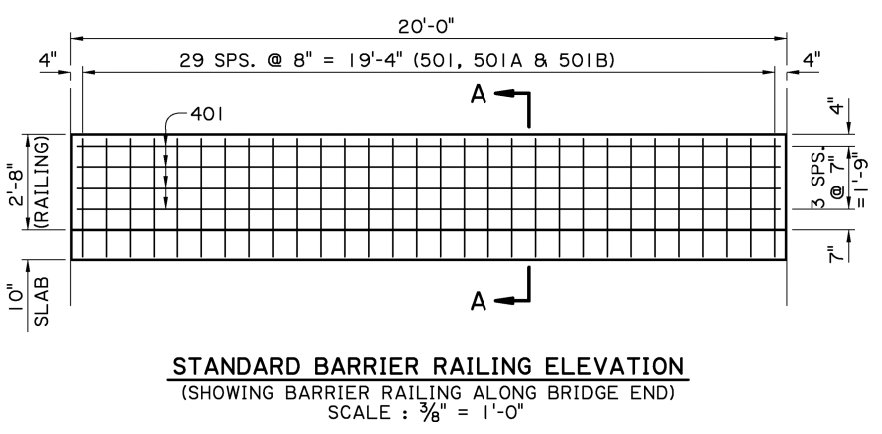
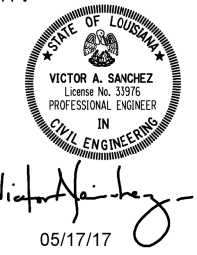
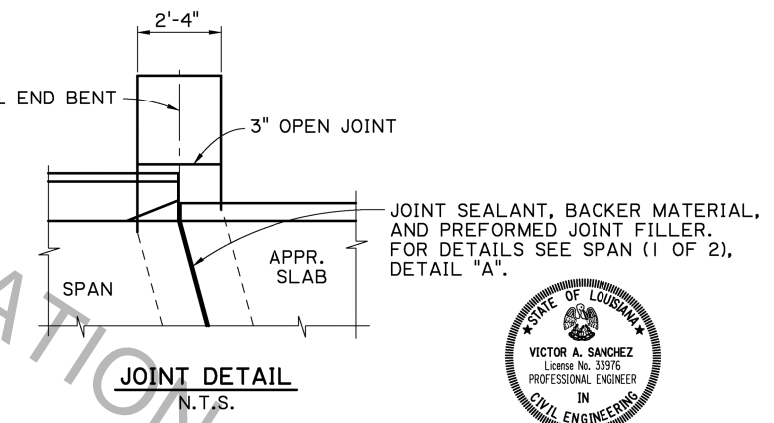
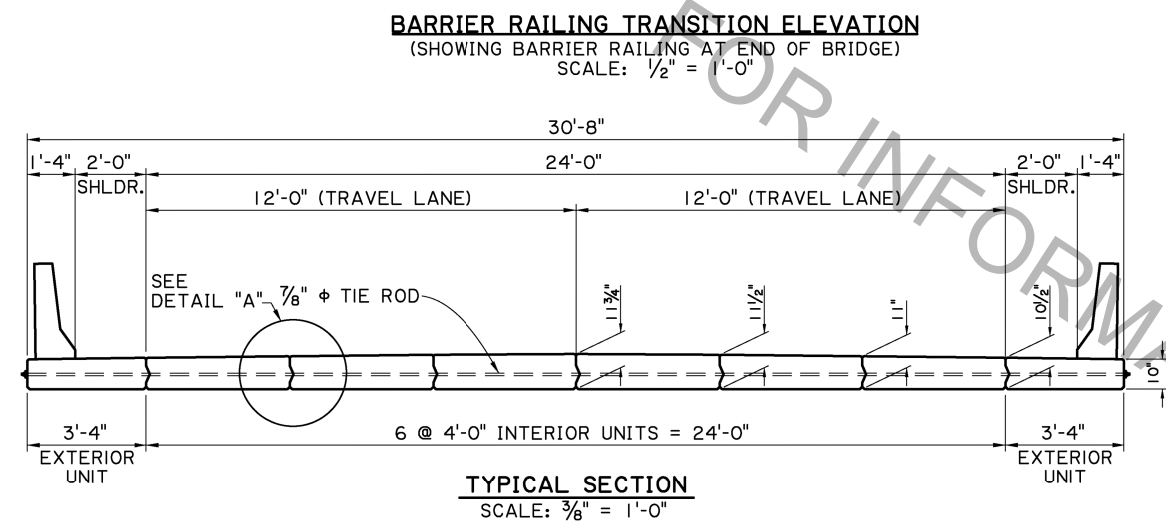
ALTERNATE BENTS  
CAST-IN-PLACE CONCRETE BENTS  
28'-0" CLEAR ROADWAY  
75' CROSSING TWO WAY TANGENT

STANDARD DETAIL  
DOTD BRIDGE DESIGN  
PSS-75-28-205L

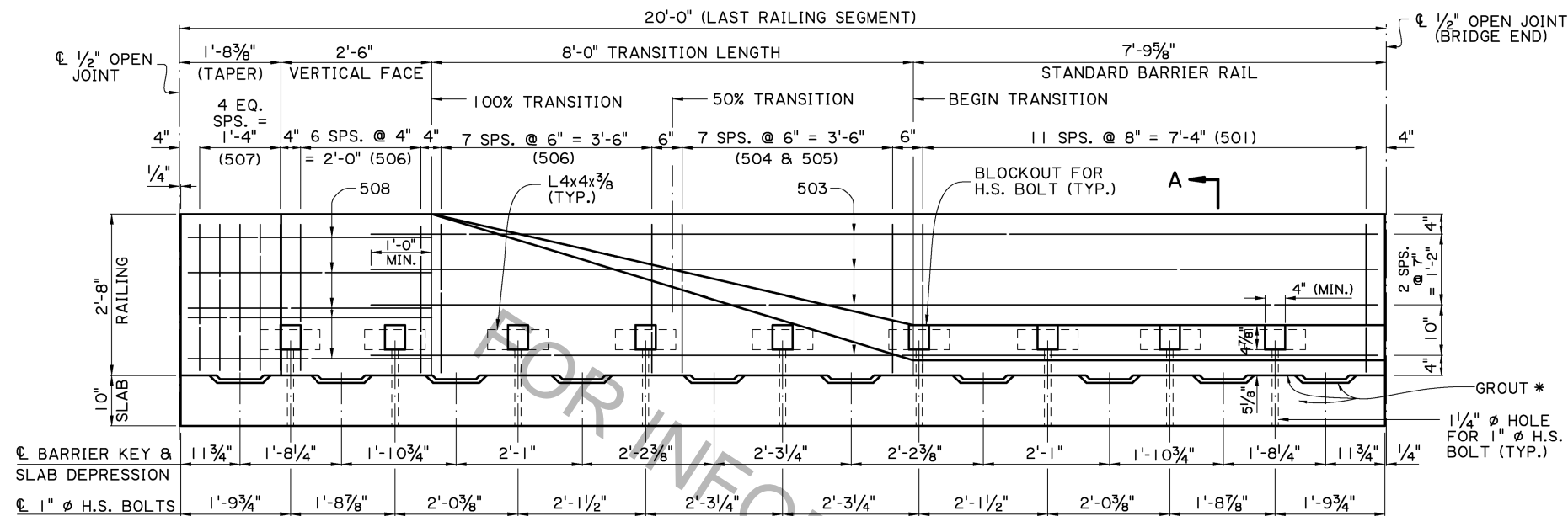




NOTE:  
THE NUTS & WASHERS FOR THE TIE ROD SHALL BE ZINC COATED AND THE EXPOSED ENDS TO THE TIE RODS SHALL BE PAINTED WITH AN APPROVED COATING. AS A FINAL OPERATION THE CONTRACTOR SHALL BE REQUIRED TO TORQUE THE INSTALLED TIE ROD TO 170 FT. LBS. JUST PRIOR TO PAINTING. ALL EXPOSED ENDS SHALL BE PAINTED WITH AN APPROVED COATING AFTER STRESSING. ONE (1) MECHANICAL SPLICE MAY BE USED IN SPLICING THE 7/8"  $\phi$  TIE ROD. THE SPLICE SHALL DEVELOP AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH OF THE TIE ROD IN TENSION. THE MECHANICAL SPLICE SHALL BE ZINC COATED OR PAINTED WITH AN APPROVED COLD GALVANIZING REPAIR COMPOUND FROM AML PRIOR TO PLACING THE TIE ROD IN THE STRUCTURE.



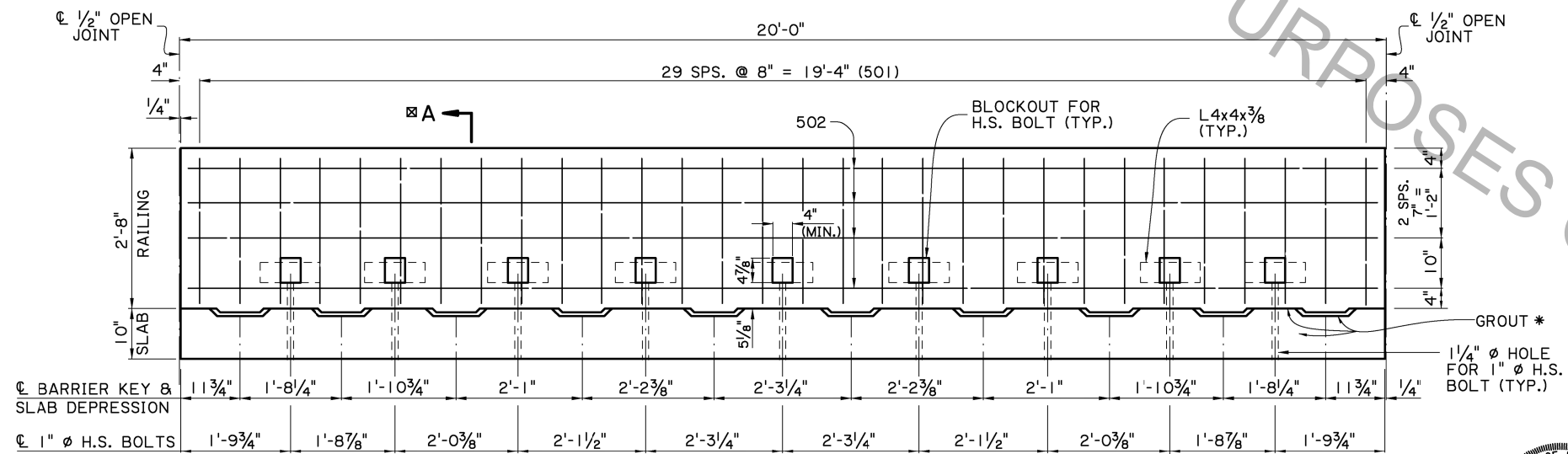
SHEET NUMBER	PARISH	STATE	PROJECT
DESIGNED BY: B. DELATTE	CHECKED BY: J. NAKHLEH	CONTROL SECTION	REVIEWED BY: 05/17/17
DATE	NO.	REVISION OR CHANGE ORDER DESCRIPTION	BY
05/17/17	7 OF 11	ALTERNATE SPAN (1 OF 4) 20'-0" PRECAST CONCRETE SLAB SPAN 28'-0" CLEAR ROADWAY 75' CROSSING TWO WAY TANGENT	
<b>DOTD</b> DOTD BRIDGE DESIGN			
STANDARD DETAIL PSS-75-28-20SL			



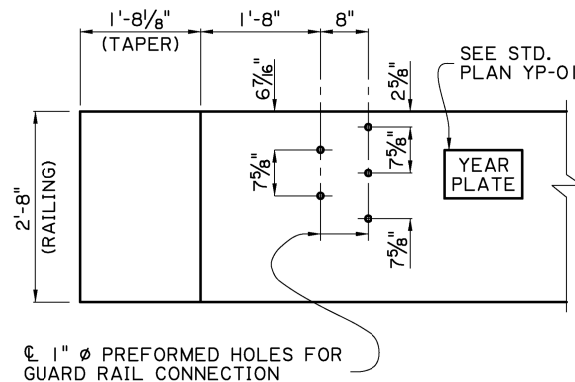
**PRECAST BARRIER RAILING TRANSITION ELEVATION**  
 (SHOWING BARRIER RAILING AT END OF BRIDGE)  
 SCALE: 3/4" = 1'-0"

FOR SECTION A-A & TRANSITION SECTIONS  
 SEE ALTERNATE SPAN (3 OF 4)

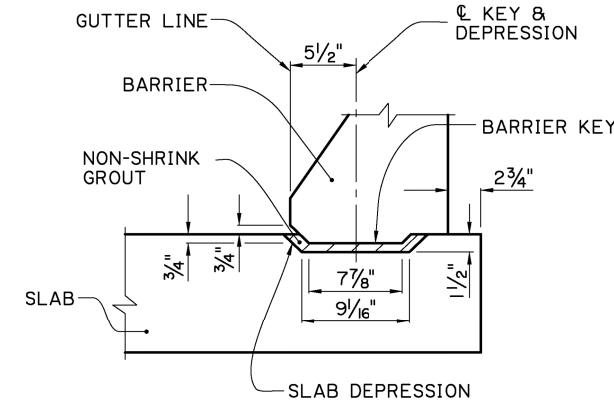
\* PLACE OR INJECT NON-SHRINK GROUT AS REQUIRED IN BETWEEN SLAB DEPRESSIONS TO FILL ALL VOIDS AND GAPS FOR FULL EVEN BEARING OF THE BARRIER ON THE SLAB. SEE NOTE 3, SHEET 9 OF 11.



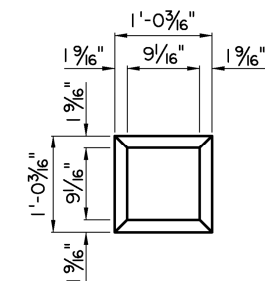
**STANDARD PRECAST BARRIER RAILING ELEVATION**  
 (SHOWING BARRIER RAILING ALONG BRIDGE SLAB)  
 SCALE: 3/4" = 1'-0"



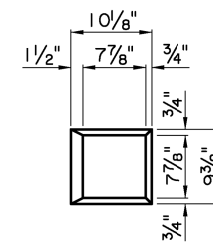
**GUARD RAIL CONNECTION DETAIL**  
 (FOR GUARD RAIL DETAILS,  
 SEE STANDARD PLAN BD.1.1.1.0.01 (GR-200).  
 SCALE: 3/4" = 1'-0"



**ELEVATION**  
 SCALE: 1 1/2" = 1'-0"



**PLAN-DEPRESSION**  
 SCALE: 1" = 1'-0"



**PLAN-KEY**  
 SCALE: 1" = 1'-0"

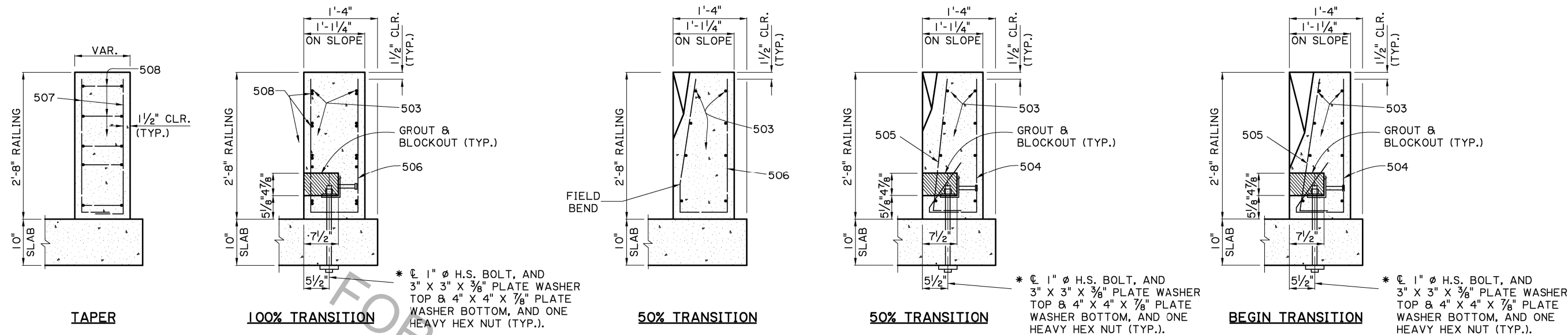
**BARRIER KEY AND  
 PANEL DEPRESSION DETAILS**



Victor A. Sanchez  
 05/17/17

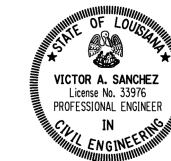
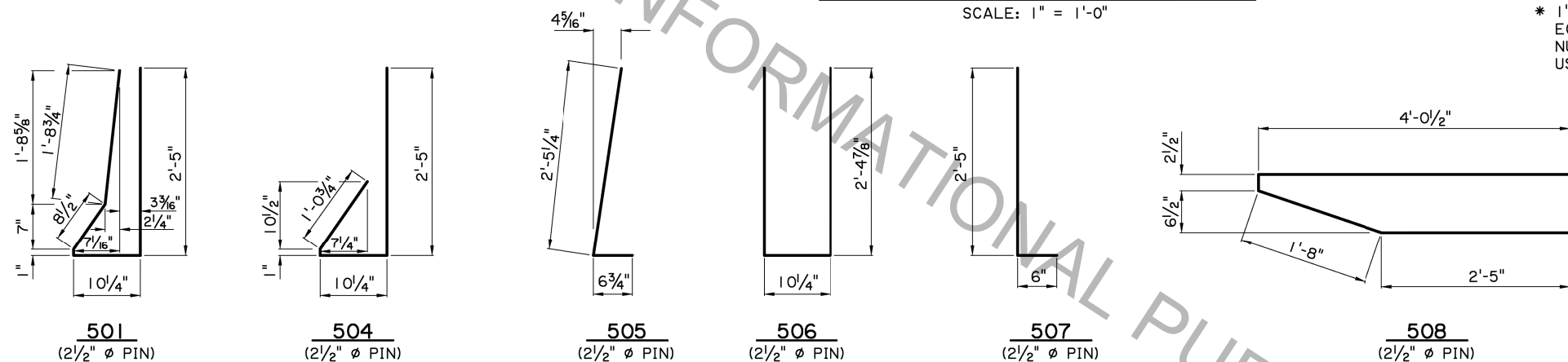
SHEET NUMBER	
DESIGNED	B. DELATTE
CHECKED	J. NAKHLEH
CONTROL SECTION	D. HYMEL
STATE	LA
PROJECT	05/17/17
REVISION	05/17/17
SERIES #	B OF 11
BY	
DATE	
NO.	
REVISION OR CHANGE ORDER DESCRIPTION	
ALTERNATE SPAN (2 OF 4)	
20'-0" PRECAST CONC. BARRIER	
28'-0" CLEAR ROADWAY	
75' CROSSING TWO WAY TANGENT	
STANDARD DETAIL	
PSS-75-28-20SL	
DOTD	
DOTD BRIDGE DESIGN	





**BARRIER RAILING TRANSITION SECTIONS**

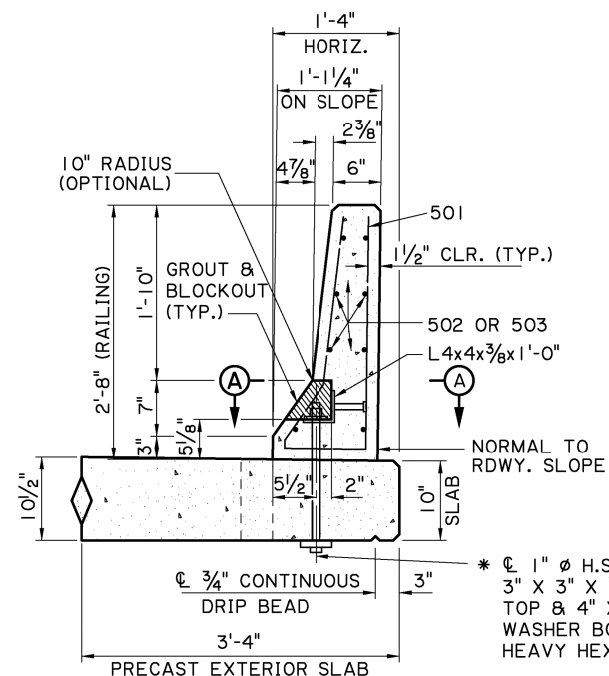
SCALE: 1" = 1'-0"



Victor A. Sanchez  
 05/17/17

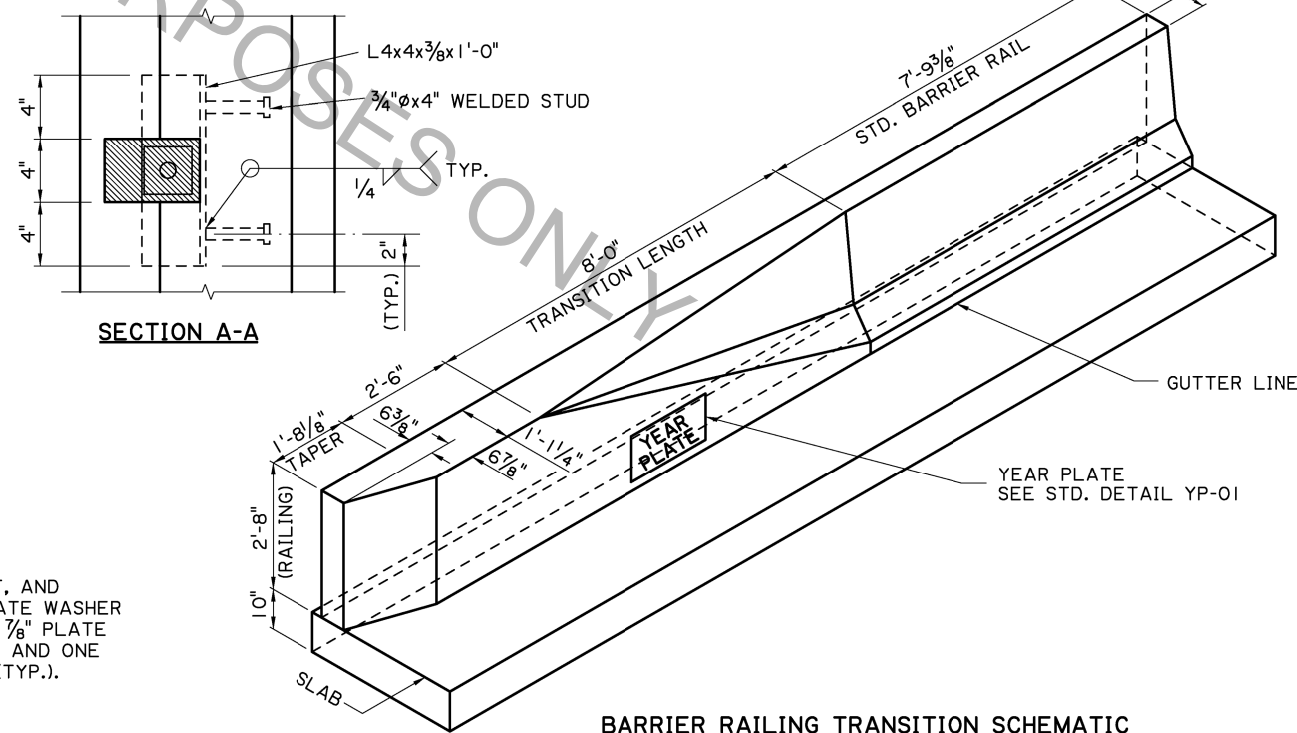
**NOTES:**

- 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).



**SECTION A-A**

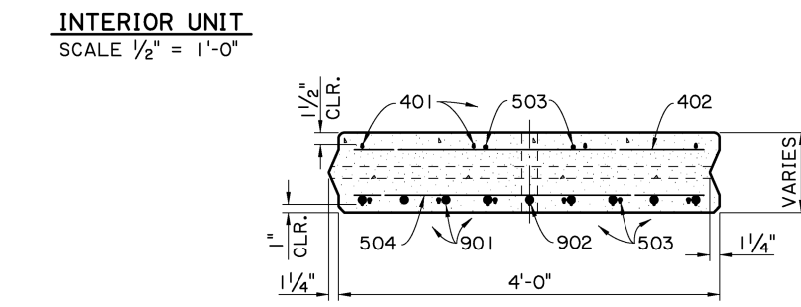
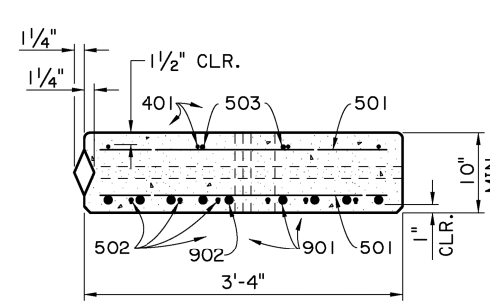
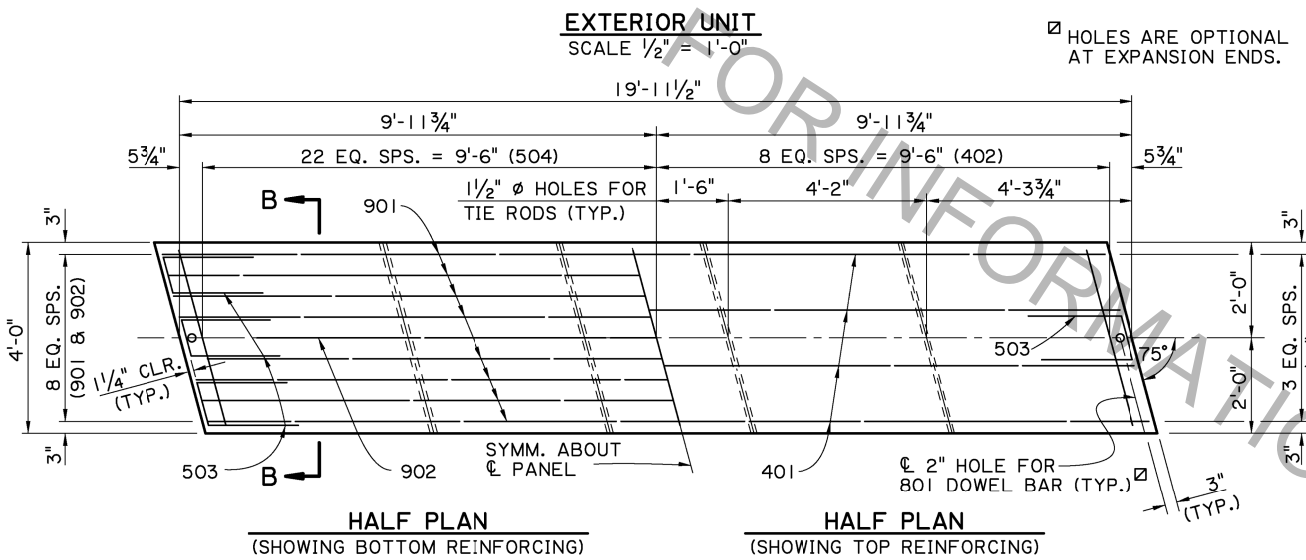
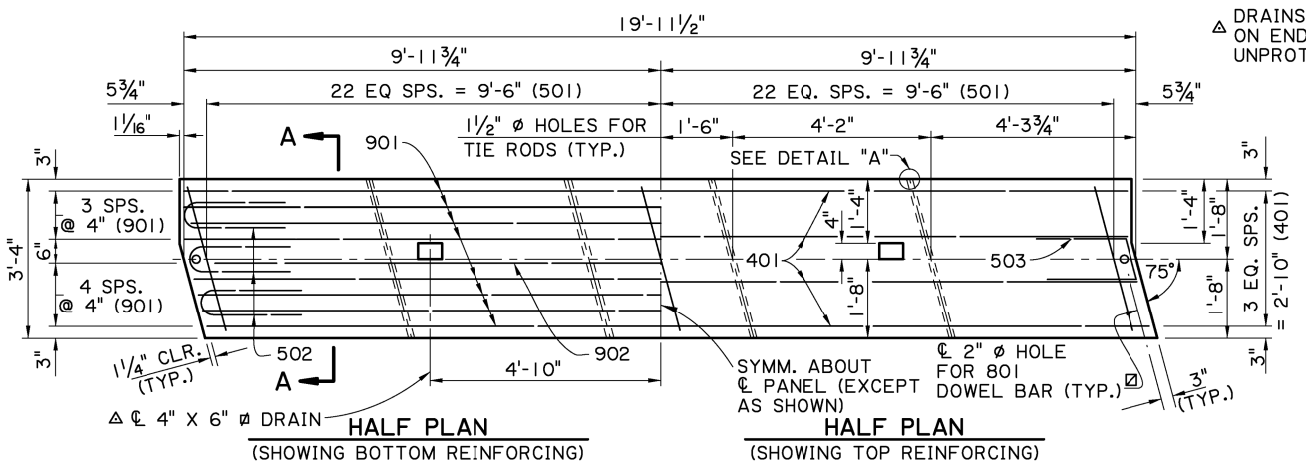
SCALE: 1" = 1'-0"



**BARRIER RAILING TRANSITION SCHEMATIC**

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

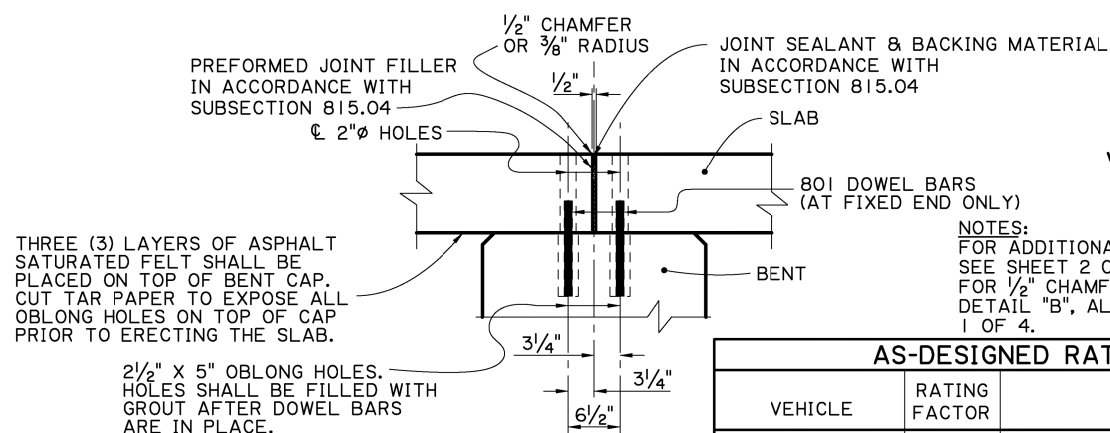
SHEET NUMBER	PARISH	DESIGNED	CONTROL SECTION	STATE	PROJECT
	B. DELATTE	J. NAKHLEH	D. HYMEL	05/17/17	9 OF 11
CHECKED	J. NAKHLEH	CHECKED	J. NAKHLEH	REVIEWED	05/17/17
DATE	NO.	NO.	NO.	NO.	NO.
REVISION OR CHANGE ORDER DESCRIPTION	BY	DATE	NO.	NO.	NO.
ALTERNATE SPAN (3 OF 4) 20'-0" PRECAST CONC. BARRIER 28'-0" CLEAR ROADWAY 75' CROSSING TWO WAY TANGENT					
STANDARD DETAIL P55-75-28-20SL					



**SECTION A-A**  
EXTERIOR UNIT  
SCALE 1" = 1'-0"

NOTE:  
FOR EACH SPAN, ONE EXTERIOR UNIT WILL HAVE A TONGUE AND ONE WILL HAVE A GROOVE.

**SECTION B-B**  
INTERIOR UNIT  
SCALE 1" = 1'-0"



**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

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

ALTERNATE SPAN NOTES:

CONSTRUCTION SPECIFICATIONS : LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

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 P1. 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 SUB-SECTION 805.08.5.3 OF THE LOUISIANA STANDARD SPECIFICATIONS.

REINFORCING STEEL : ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS OTHERWISE NOTED. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS OTHERWISE NOTED. 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 ± 3/8"
- 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 : REFER TO GENERAL PLAN FOR GUARDRAIL REQUIREMENTS. PROVIDE HOLES FOR GUARDRAIL CONNECTIONS ACCORDING TO STANDARD PLAN BD.1.1.1.0.01 (GR-200) ON ALL FOUR(4) BRIDGE ENDS.

BASIS OF PAYMENT : ALL MATERIALS SHALL BE PAID FOR UNDER "BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE" ACCORDING TO THE SPECIFICATIONS.

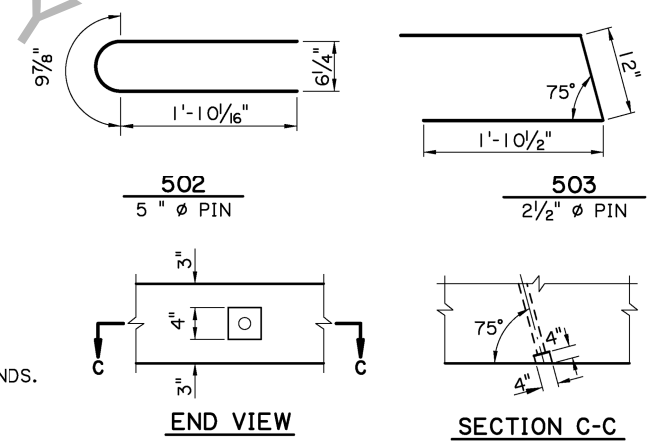
**ESTIMATED QUANTITIES (ONE EXTERIOR UNIT)**

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
901	8 19'-8"	157'-4"	LONGIT. BOT. OF SLAB
902	1 18'-11"	18'-11"	LONGIT. BOT. OF SLAB
<b>TOTAL NO. 9 BARS = 176'-3" = 599 LBS.</b>			
801	1 1'-0"	1'-0"	DOWELS
<b>TOTAL NO. 8 BARS = 1'-0" = 3 LBS.</b>			
501	90 3'-1"	277'-6"	TRANS. TOP & BOT. OF SLAB
502	6 4'-6"	27'-0"	BOT. END OF SLAB
503	2 4'-9"	9'-6"	TOP END OF SLAB
<b>TOTAL NO. 5 BARS = 313'-11" = 327 LBS.</b>			
401	4 19'-8"	78'-8"	LONGIT. TOP OF SLAB
<b>TOTAL NO. 4 BARS = 78'-8" = 53 LBS.</b>			
<b>DEFORMED REINFORCING STEEL = 982 LBS.</b>			
<b>CLASS P1 CONCRETE = 2.05 CU. YDS.</b>			
<b>CONCRETE RAILING (PER SPAN) = 40.00 LIN. FT.</b>			

**ESTIMATED QUANTITIES (ONE INTERIOR UNIT)**

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
901	8 19'-8"	157'-4"	LONGIT. BOT. OF SLAB
902	1 18'-11"	18'-11"	LONGIT. BOT. OF SLAB
<b>TOTAL NO. 9 BARS = 176'-3" = 599 LBS.</b>			
801	1 1'-0"	1'-0"	DOWELS
<b>TOTAL NO. 8 BARS = 1'-0" = 3 LBS.</b>			
503	8 4'-9"	38'-0"	TOP & BOT. END OF SLAB
504	44 3'-9"	146'-3"	TRANS. BOT. OF SLAB
<b>TOTAL NO. 5 BARS = 203'-0" = 212 LBS.</b>			
401	4 19'-8"	78'-8"	LONGIT. TOP OF SLAB
402	17 3'-9"	63'-9"	TRANS. TOP OF SLAB
<b>TOTAL NO. 4 BARS = 142'-5" = 95 LBS.</b>			
<b>DEFORMED REINFORCING STEEL = 909 LBS.</b>			
<b>CLASS P1 CONCRETE = 2.46 CU. YDS.</b>			

○ BASED ON A 10" SLAB THICKNESS



**DETAIL "A"**  
TYP. EXTERIOUR EDGE ONLY  
SCALE 1" = 1'-0"

SHEET NUMBER

DESIGNED BY: J. NAKHLEH  
CHECKED BY: B. DELATTE  
DATE: 05/17/17

PARISH: PARRISH  
CONTROL SECTION: CONTROL SECTION  
STATE PROJECT: STATE PROJECT

REVISION OR CHANGE ORDER DESCRIPTION

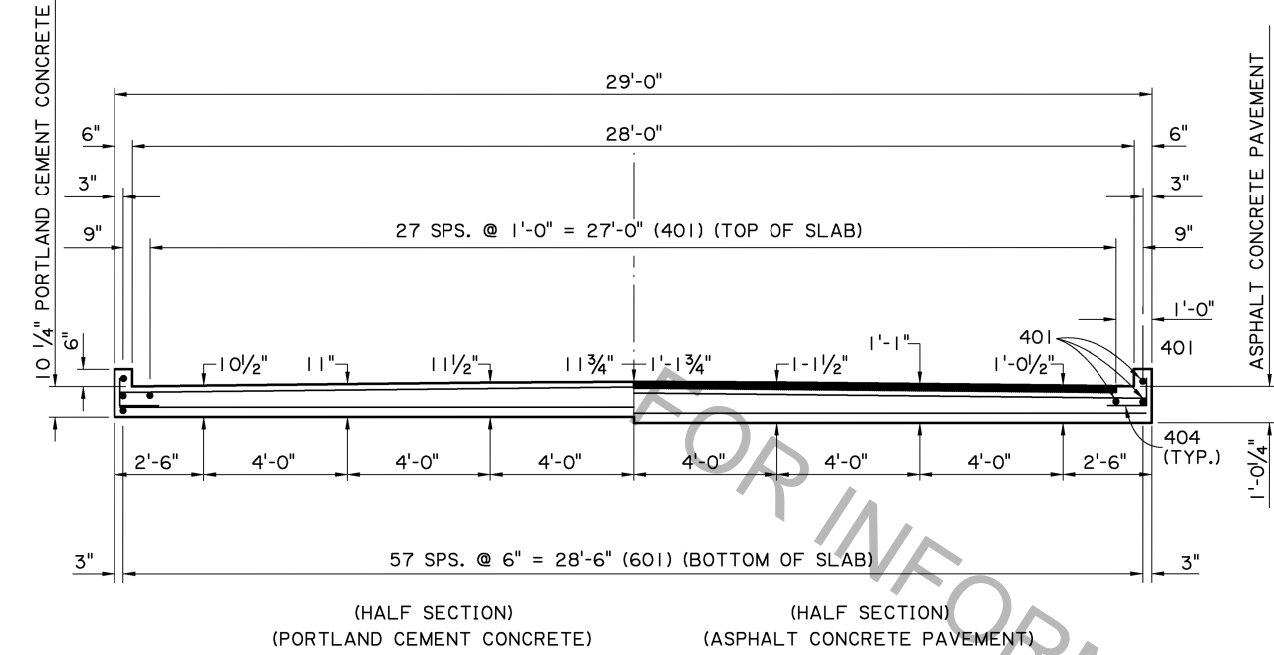
NO. DATE

ALTERNATE SPAN (4 OF 4)  
20'-0" PRECAST CONCRETE SLAB UNIT  
28'-0" CLEAR ROADWAY  
75° CROSSING TWO WAY TANGENT

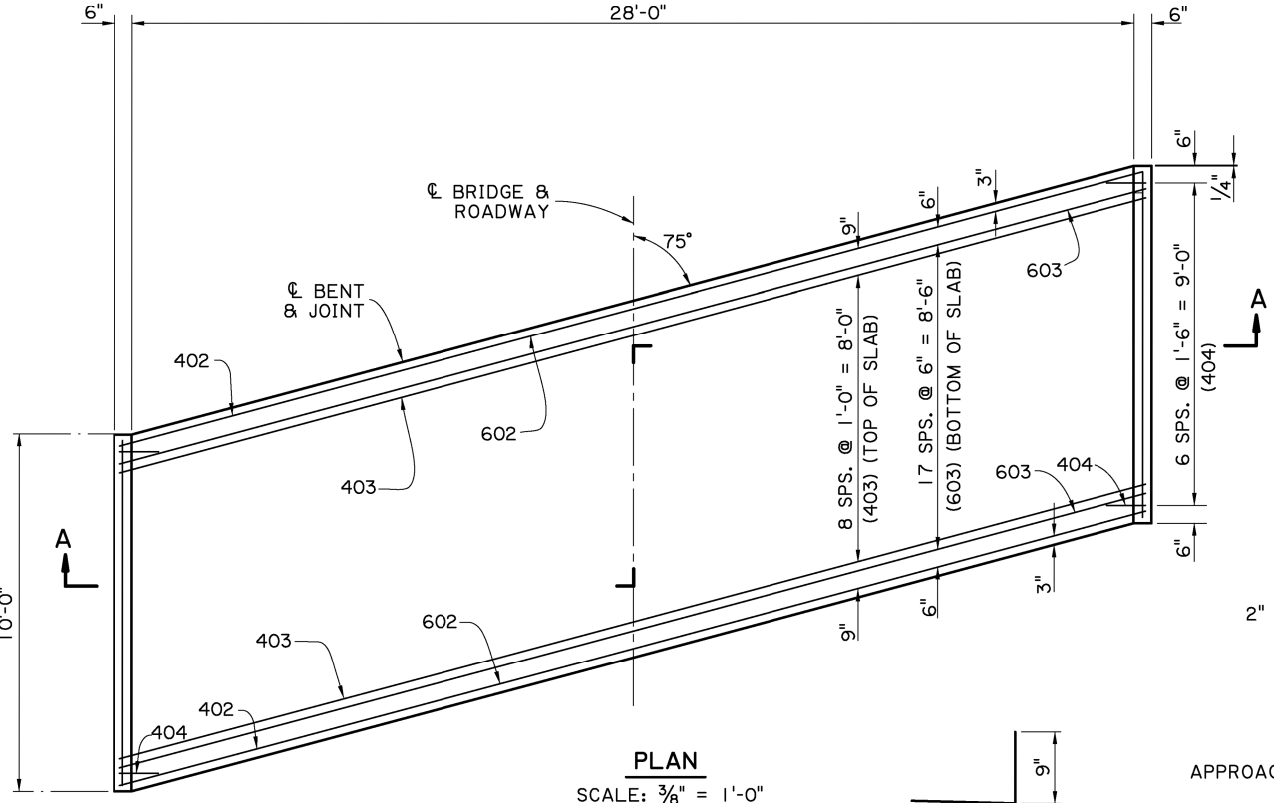
STANDARD DETAIL  
PSS-75-28-20SL

DOTD  
DOT BRIDGE DESIGN

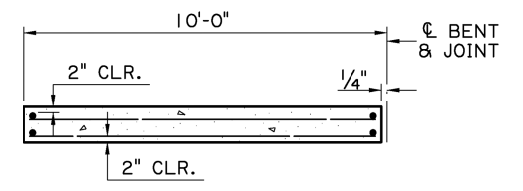
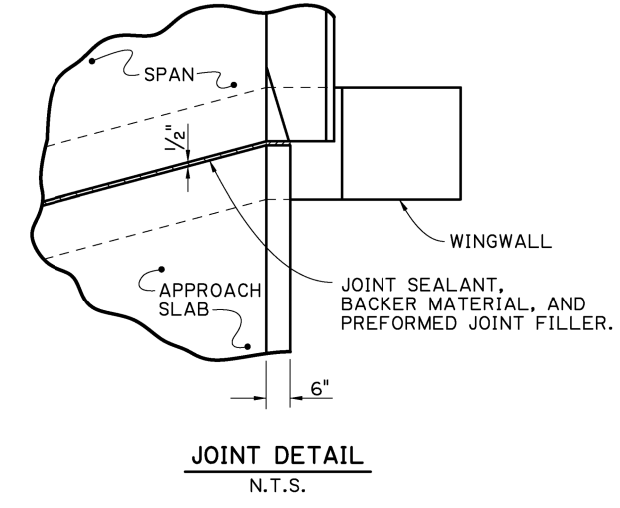
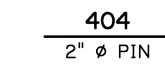




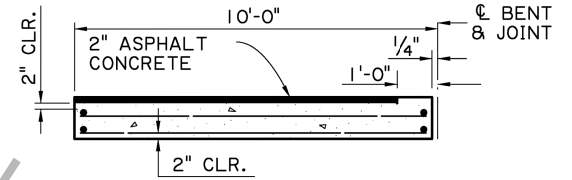
**SECTION A-A**  
SCALE: 3/8" = 1'-0"



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

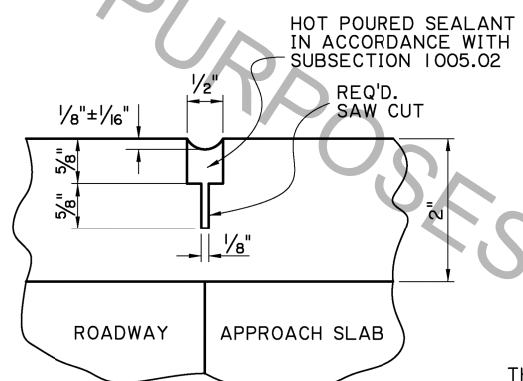


(FOR PORTLAND CEMENT CONCRETE ROADWAY PAVEMENT)

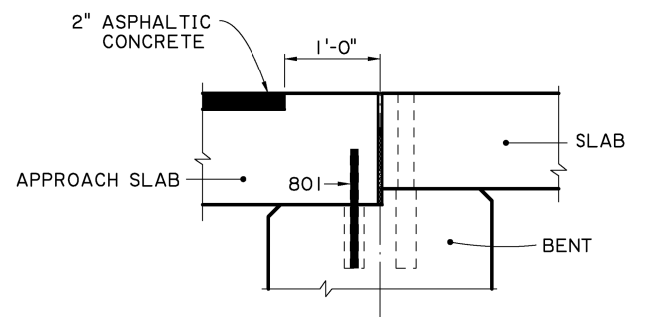


(FOR ASPHALT CONCRETE ROADWAY PAVEMENT)

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



**SAWING & SEALING JOINT DETAIL**  
N.T.S.



**DETAIL A**  
SCALE: 1" = 1'-0"  
(ASPHALT CONCRETE PAVEMENT OPTION)

ESTIMATED QUANTITIES (ONE SLAB)				
BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION	
801	8	1'-0"	8'-0"	DOWELS
<b>TOTAL NO. 8 BARS = 8'-0" = 21 LBS.</b>				
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
<b>TOTAL NO. 6 BARS = 1,148'-10" = 1,726 LBS.</b>				
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
<b>TOTAL NO. 4 BARS = 658'-4" = 440 LBS.</b>				
<b>TOTAL DEFORMED REINFORCING STEEL = 2,187 LBS.</b>				
<b>CONCRETE APPROACH SLAB = 32.22 SQ. YDS.</b>				
<b>ASPHALT CONCRETE = 3.0 TONS</b>				
<b>SAW CUT &amp; SEAL = 28 LIN. FT.</b>				

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

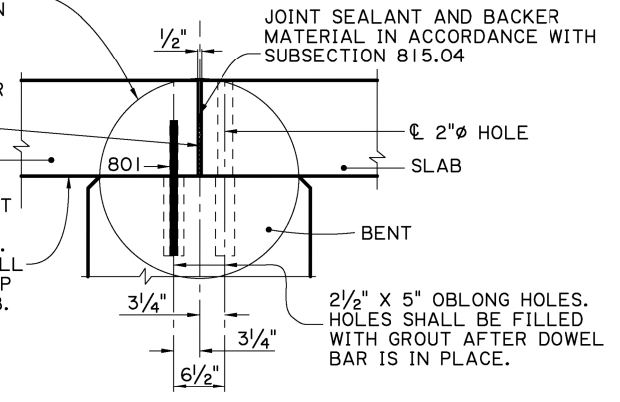
**APPROACH SLAB NOTES:**

**CONSTRUCTION SPECIFICATIONS:** LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.  
**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 OTHERWISE NOTED.  
**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 OTHERWISE NOTED. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS.  
**BEDDING MATERIAL:** FOR DETAILS OF BEDDING MATERIAL AND UNDERDRAINS. SEE STANDARD DETAIL BD.2.10.1.0.07.  
**SAWING & SEALING:** THE ASPHALT CONCRETE SHALL BE SAW CUT AT THE END OF THE CONCRETE APPROACH SLAB THE ENTIRE ROADWAY WIDTH AND SEALED. COST TO BE INCLUDED WITH CONCRETE APPROACH SLABS.  
**BASIS OF PAYMENT:** ALL MATERIAL SHALL BE PAID FOR UNDER 'CONCRETE APPROACH SLABS' ACCORDING TO THE SPECIFICATIONS, EXCEPT WHERE NOTED ON THIS SHEET.

SEE DETAIL A FOR ASPHALT CONCRETE PAVEMENT OPTION

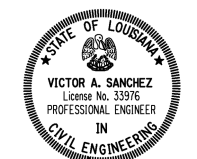
PREFORMED JOINT FILLER IN ACCORDANCE WITH SUBSECTION 815.04

THREE (3) LAYERS OF ASPHALT SATURATED FELT SHALL BE PLACED ON TOP OF BENT CAP. CUT TAR PAPER TO EXPOSE ALL OBLONG HOLES ON TOP OF CAP PRIOR TO ERECTING THE SLAB.



**TYPICAL JOINT DETAIL**  
SCALE: 1" = 1'-0"

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



Victor A. Sanchez  
05/17/17

SHEET NUMBER

DESIGNED BY: B. DELATTE  
CHECKED BY: J. NAKHLEH  
CONTROL SECTION: D. HYMEL  
CHECKED BY: J. NAKHLEH  
REVIEWED: 05/17/17  
SERIES #: 11 OF 11

PARISH: \_\_\_\_\_  
STATE: \_\_\_\_\_  
PROJECT: \_\_\_\_\_

BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

REVISION OR CHANGE ORDER DESCRIPTION

NO. \_\_\_\_\_

ALTERNATE APPROACH SLAB  
10'-0" CAST-IN-PLACE APPROACH SLAB  
28'-0" CLEAR ROADWAY  
75° CROSSING TWO WAY TANGENT

STANDARD DETAIL  
PSS-75-28-20SL

STATE OF LOUISIANA  
VICTOR A. SANCHEZ  
License No. 33976  
PROFESSIONAL ENGINEER  
IN  
CIVIL ENGINEERING

DOTD  
DOTD BRIDGE DESIGN