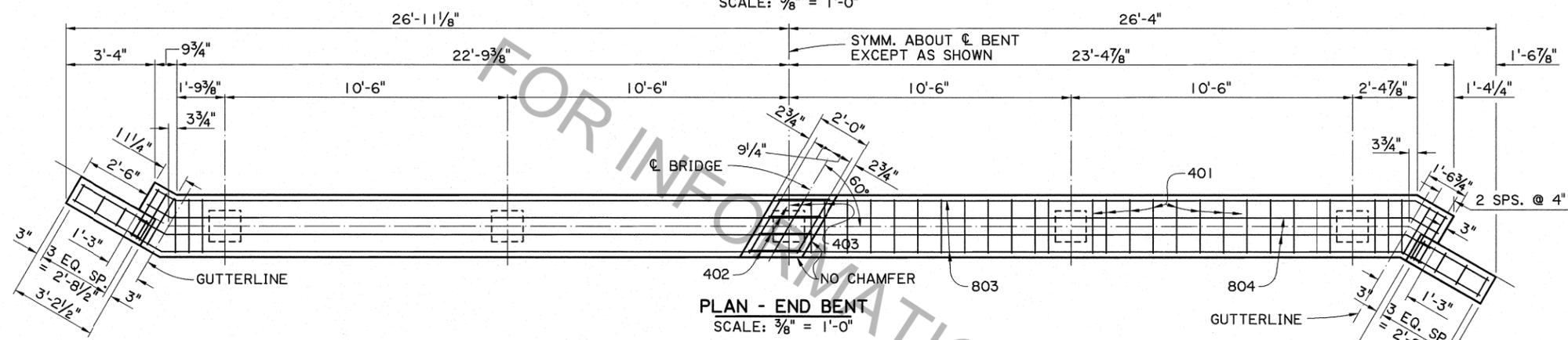


ESTIMATED QUANTITIES (ONE INTER. BENT)				
BAR NO.	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	6	48'-8"	292'-0"	LONGIT. IN CAP
802	8	11'-4"	90'-8"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 382'-8" = 1,022 LBS.				
601	31	2'-0"	62'-0"	DOWELS
TOTAL NO. 6 BARS = 62'-0" = 93 LBS.				
501	2	48'-8"	97'-4"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 97'-4" = 102 LBS.				
401	58	8'-2"	473'-8"	STIRRUPS IN CAP
402	4	4'-7"	18'-4"	STIRRUPS IN RISER
403	3	2'-3"	6'-9"	LONGIT. IN RISER
TOTAL NO. 4 BARS = 498'-9" = 333 LBS.				
* TOTAL DEFORMED REINFORCING STEEL = 1,550 LBS.				
CLASS A CONCRETE = 8.29 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 30 TONS				
SERVICE LIVE LOAD = 42 TONS				
FACTORED TOTAL LOAD = 100 TONS				

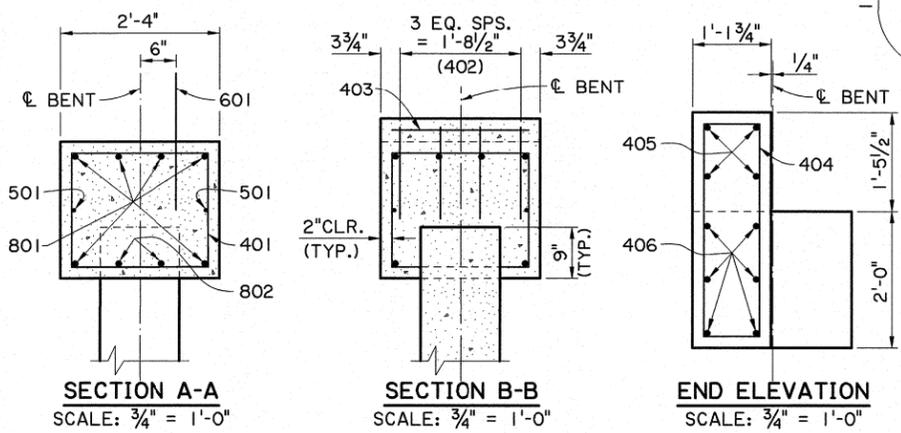
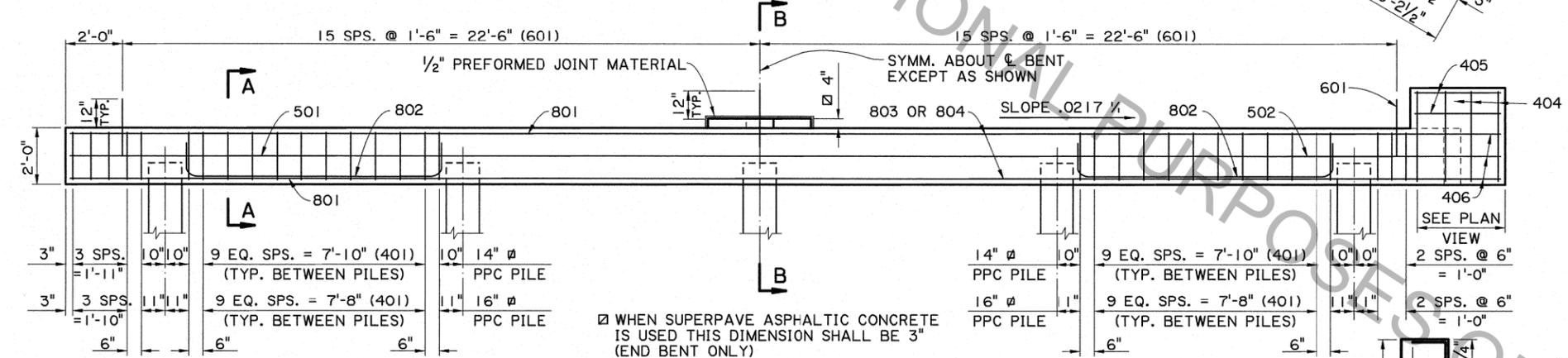
* ADD 93 LBS. OF REINFORCING STEEL (31-601 DOWELS) WHEN TWO FIXED ENDS OCCUR ON THE SAME BENT.



ESTIMATED QUANTITIES (ONE END BENT)				
BAR NO.	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
802	8	11'-4"	90'-8"	LONGIT. IN CAP
803	4	48'-3"	193'-0"	LONGIT. IN CAP
804	2	48'-4"	96'-8"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 380'-4" = 1,015 LBS.				
601	31	2'-0"	62'-0"	DOWELS
TOTAL NO. 6 BARS = 62'-0" = 93 LBS.				
502	2	48'-3"	96'-6"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 96'-6" = 101 LBS.				
401	60	8'-2"	490'-0"	STIRRUPS IN CAP
402	4	4'-7"	18'-4"	STIRRUPS IN RISER
403	3	2'-3"	6'-9"	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
TOTAL NO. 4 BARS = 655'-9" = 438 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 1,647 LBS.				
CLASS A CONCRETE = 9.06 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 30 TONS				
SERVICE LIVE LOAD = 42 TONS				
FACTORED TOTAL LOAD = 100 TONS				

16" # PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.06 CU. YDS. OF CLASS A CONCRETE PER BENT WHEN 14" # PPC PILES ARE USED.)

WHEN SUPERPAVE ASPHALTIC CONCRETE IS USED, SUBTRACT 0.02 CU. YDS. OF CLASS A CONCRETE.



AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.977	
HL-93 (OPR)	2.562	
LADV-11 (INV)	1.520	MAGNIFICATION FACTOR = 1.3

502, 803, & 804
502-3 3/4" # PIN
803 & 804-6" # PIN

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 A. 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 805.13 OF THE STANDARD SPECIFICATIONS, EXCEPT WHEN SPECIFIED ELSEWHERE IN THE PLANS. 1/2" PREFORMED JOINT MATERIAL AND ASPHALT SATURATED FELT SHALL BE INCLUDED IN THE PRICE BID FOR CLASS A CONCRETE.

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. 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 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.

PREFORMED JOINT MATERIAL: PREFORMED JOINT MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 805.12 OF THE STANDARD SPECIFICATIONS.

SHEET NUMBER

DESIGNED BY: J. NAKHLEH
CHECKED BY: B. DELATTE
DATE: 1/18/2012

PARISH: J. NAKHLEH
FEDERAL PROJECT: D. HYMEL
STATE PROJECT: J. NAKHLEH

REVISION DESCRIPTION

NO. DATE

BY

REINFORCED CONCRETE PILE BENT
40'-0" CLEAR ROADWAY
60' CROSSING ONE WAY TANGENT

BRIDGE AND STRUCTURAL DESIGN