

Consulting Engineers 2531 TILLER LANE COLUMBUS, OHIO 43231

SUPERSTRUCTURE DETAILS

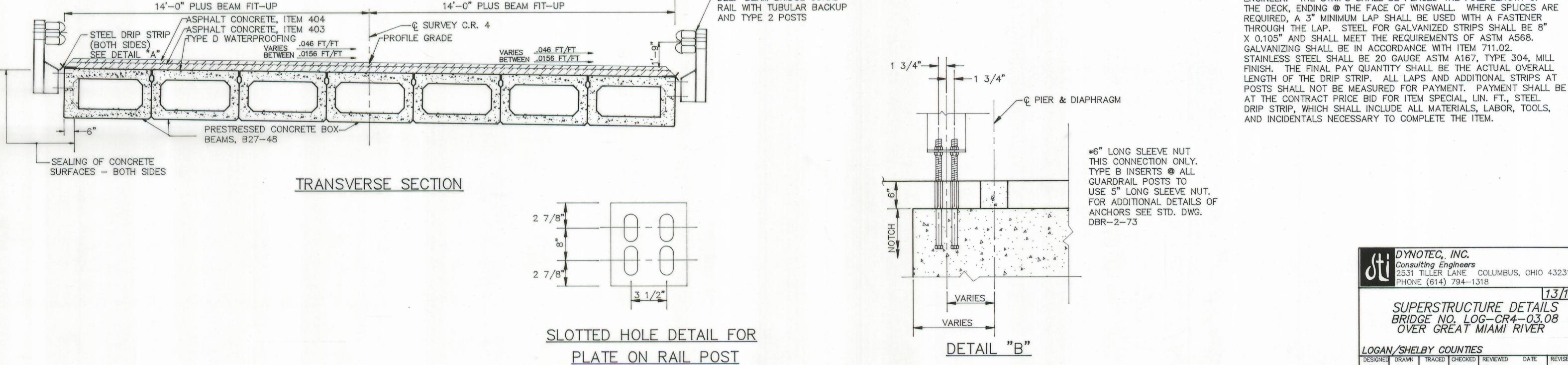
BRIDGE NO. LOG-CR4-03.08 OVER GREAT MIAMI RIVER

13/15

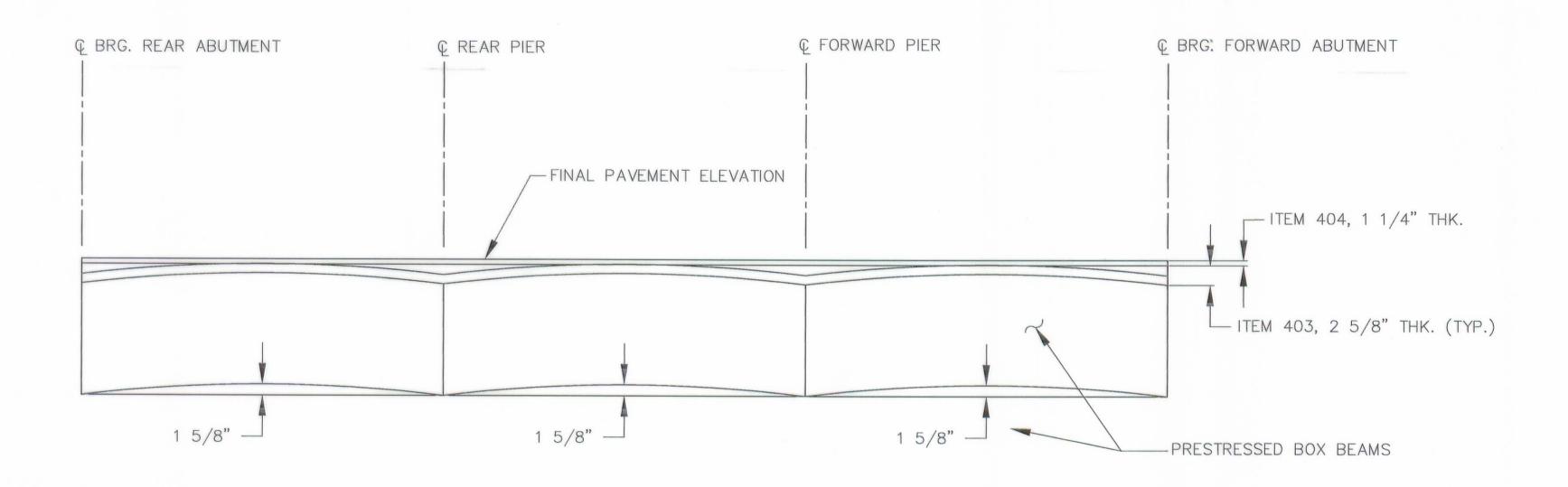
TAI 10/93 01/94

PHONE (614) 794-1318

LOGAN/SHELBY COUNTIES



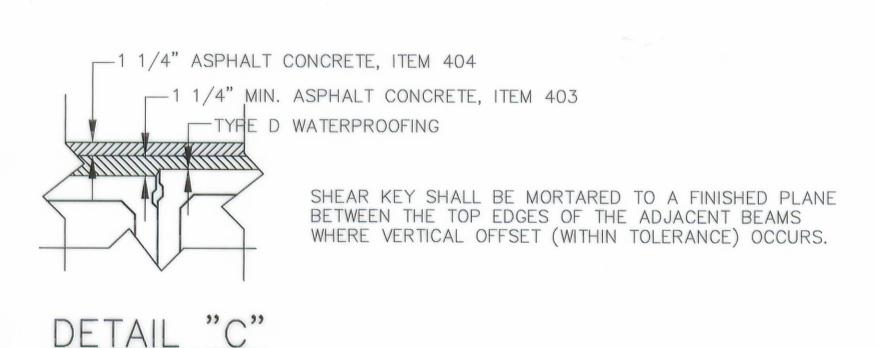


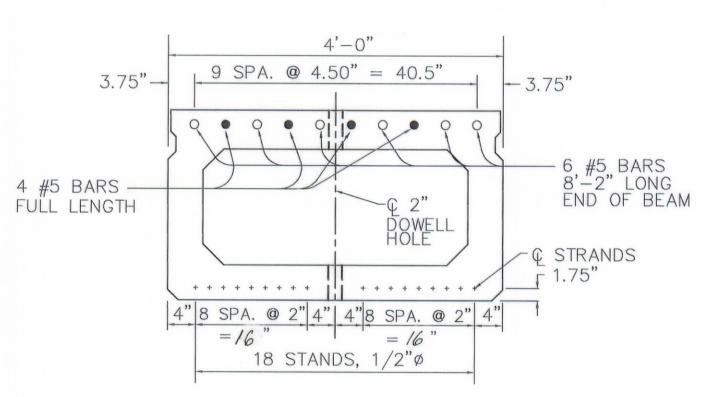


## CAMBER DETAIL

ASPHALT CONCRETE SURFACE COURSE SHALL CONSIST OF A VARIABLE THICKNESS OF 403 AND A 1 1/4" THICKNESS OF 404. THE 403 SHALL BE PLACED IN TWO OPERATIONS. THE FIRST COURSE SHALL BE 1 1/4" UNIFORM THICKNESS. THE SECOND COURSE SHALL BE FEATHERED TO PLACE THE SURFACE PARALLEL TO AND 1 1/4" BELOW FINAL PAVEMENT SURFACE ELEVATIONS.

CALCULATED CAMBER AT TIME OF PAVING, INCLUDING ALLOWANCE FOR CAMBER DUE TO CREEP, IS 1 3/8". CALCULATED DEFLECTION DUE TO WEIGHT OF SURFACE COURSE AND RAILING IS 1/8". NET FINAL CAMBÉR OF BEAMS IS 1 1/4". THIS IS 1 1/4" IN EXCESS OF THE AMOUNT REQUIRED TO PLACE THE TOP OF THE BEAM PARALLEL TO THE PROFILE GRADE. THIS EXCESS AMOUNT SHALL BE COMPENSATED FOR BY THICKENING THE 403 LEVELING COURSE FROM 1 1/4" AT CENTER OF SPANS TO 2 5/8" AT ENDS OF SPANS.





TYPICAL BEAM DETAIL, B27-48

## THE FOLLOWING DETAILS FROM PSBD-1-81 APPLY TO THIS PROJECT:

SHEET 1 OF 4: BEAM LIFTING INSERTS, WALL THICKENING AT GUARDRAIL ANCHORS, DETAILS AND REINFORCEMENT OF BEAM ENDS.

SHEET 2 OF 4: TYPICAL PLANS OF DIAPHRAGMS AND TRANVERSE TIE RODS, END DETAILS OF TRANVERSE TIE ROD ANCHORAGE, NORMAL CROWN TREATMENT AT & ROADWAY, BEAM DIMENSIONAL TOLERANCES.

SHEET 3 OF 4: 48" WIDE NON-COMPOSITE BEAMS.

SHEET 4 OF 4: PARTIAL PLAN OF BEAM CONNECTION OVER PIER.

## THE FOLLOWING NOTES FROM PSBD-1-81 APPLY TO THIS PROJECT:

SHEET 1 OF 4: TRANSVERSE TIE RODS, PRESTRESSING STRANDS, GALVANIZING, ANCHOR DOWELS, BEARING PADS, NOTCHES, END OF BEAMS, AND AS REQUIRED TO SUPPLEMENT APPLICABLE DETAILS.

SHEET 2 OF 4: AS REQUIRED TO SUPPLEMENT APPLICABLE DETAILS.

SHEET 3 OF 4: AS REQUIRED TO SUPPLEMENT APPLICABLE DETAILS.

SHEET 4 OF 4: AS REQUIRED TO SUPPLEMENT APPLICABLE DETAILS.

## SUPERSTRUCTURE NOTES

PRESTRESSING STRANDS: 1/2" Ø, 270k, SEVEN-WIRE STRESS STRANDS. As = 0.163 sq. in. INITIAL TENSION: 28,000 LBS. PER STRAND. TENSION AT RELEASE: 26,000 LBS. PER STRAND. FINAL TENSION AFTER ALL LOSSES: 21,700 LBS. PER STRAND. MINIMUM CONCRETE STRENGTH @ 28 DAYS: 5,500 p.s.i.. MINIMUM CONCRETE STRENGTH @ REALEASE: 4,000 p.s.i..

AT THE CONTRACTOR'S OPTION, BEAM WITDTHS MAY BE VARIED PROVIDED THE OVER ALL BRIDGE WIDTH REMAINS AS PER PLAN. IF A CHANGE IN WIDTH ARRANGEMENT IS ELECTED, BEARINGS SHALL BE REDESIGNED BY THE CONTRACTOR'S PROFESSIONAL ENGINEER. ANY CHANGE AS DESCRIBED ABOVE SHALL BE AT NO EXTRA COST TO THE COUNTY AND MUST BE SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL.



DYNOTEC, INC. Consulting Engineers

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SUPERSTRUCTURE DETAILS BRIDGE NO. LOG-CR4-0308 OVER GREAT MIAMI RIVER LOGAN/SHELBY COUNTY

DRAWN | CHECKED | REVIEWED | REVISED

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RJS RAK