

CHAPTER V
GRADE SEPARATION REPORTS

Bridge Memorandum

Job No: J4P1343
Jackson County

Bridge No: A6309
Rte. 50 (EBL) over Rte. 7

Final Layout: (75 ft. – 98 ft. – 98 ft.) Continuous Composite Plate Girder spans

Roadway Width: 38 ft. (unsymmetrical) plus 16 in. Safety Barrier Curbs

Alignment: Tangent

Skew: C/L Rte 7 is skewed at 1d-54m-46s left advance to C/L Median Rte 50

Loading: HS20 Modified (Alternate Military)

Grade: 400' vertical curve; VPI Sta 1016+00.00, Elev 1021.00, +0.8089% Bk, -0.3267% Ahd

Tie Station: 1014+70.68 at fill face of Bent 1 (along C/L roadway EBL).

Fill Exception: Sta.1014+70.68 to Sta. 1017+44.2 +/- (along C/L roadway EBL).

Traffic Handling: Route 50 traffic to be diverted onto ramps and the adjacent new westbound structure A6310 during the Phase II construction of this bridge.

Existing Bridge: Remove exist. eastbound bridge at estimated cost of \$37,000

General Notes:

- * Sta 1015+97.34 C/L Median Rte 50 = Sta 197+65.37 Rte 7.
- * Stationing for Rte 50 (EBL) is at C/L Median Rte 50.
- * Profile grade for Rte 50 (EBL) is 30'-0" right of C/L Median Rte 50.
- * C/L roadway Rte 50 (EBL) is 42'-0" right of C/L Median Rte 50.
- * C/L structure Rte 50 (EBL) is 45'-0" right of C/L Median Rte 50.
- * Use integral end bents with 16'-6" long wings.
- * Provide standard bridge approach slabs (Bridge item).
- * Stationing for Rte 7 is at C/L Rte 7.
- * Rdwy. surface along Rte. 7 to be based on template cross-slopes from exist. edge of pavement elev. (per survey data).
- * New structure is to provide a 16'-9" minimum vertical clearance above Rte. 7 (allows for 3" of future resurfacing).
- * Earth end fills (with 4" concrete slope protection) are to be sloped at 3:1 normal from the edge of a variable width flat bottom ditch (Rdwy item). A berm at elevation 1010.0 (approximately 22' wide) is to be provided at Bent 4. (Bridge length at the east end has been increased to avoid interference of end bent piles with the existing culvert).
- * The roadway template for the widened Route 7 is to be graded during the bridge construction although paving for the widened roadway will occur at a later date.
- * Due to the rise in grade along Route 7 and because of matching bridge lengths with the adjacent structure A6310, the width of the flat bottom ditch will be greater than the 4'-0" minimum width and will vary in order to intersect the face of the 3:1 constant spill fill slope across the width of both new structures as well as maintain a uniform ditch slope.
- * Because of matching bridge length with the adjacent structure, constant 3:1 spill slopes and approximately uniform grade of Route 7; the transition in width of the flat bottom ditch is expected to be uniform from its widest at the south side of this structure to 4'-0" width at the north side of the adjacent structure A6310.
- * Provide right of way as required for construction.
- * Provide a minimum 15'-6" vertical by 22'-0" horizontal opening for each direction of Rte. 7 traffic during construction.
- * Provisions for lighting, conduit, sign supports, utility attachments, sidewalks, pedestrian fences or other special items will not be required in the bridge design.
- * Drain basins (Roadway Items) are to be provided beyond the ends of both bridge approach slabs.
- * District contacts are Scott Humphrey (816) 889-6460 and Carl Bradley (816) 889-6577.

Bridge _____ Date Feb. 28, 2000

Stephen R. Spradlin

District _____ Date _____

District _____ Date _____

New Bridge: \$923,000
Bridge Removal: \$37,000
Total Estimate: \$960,000

Grade Separation Report Form