



PROPOSED PROFILE GRADE ELEVATION  
EXISTING PROFILE GRADE ELEVATION  
55+00 56+00 57+00 58+00 59+00  
PROFILE

**BENCHMARK DATA**

BM #M023 STA. 386+17.66 EL. 623.56 OFFSET 141.27' RT.  
BM #M024 STA. 403+07.46 EL. 614.00 OFFSET 71.35' RT.

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLAN SHEET 285 AND 286 OF 1679

**NOTES**

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.  
DESIGN TRAFFIC:  
2010 ADT = 22,100 2010 ADTT = 1,105  
2030 ADT = 24,100 2030 ADTT = 1,205  
DIRECTIONAL DISTRIBUTION = 70%

**SOIL BORING LOCATIONS**

BORING	STATION	OFFSET
B-701	55+53.60	8.70' LT.
B-702	55+85.44	86.57' LT.
B-703	56+88.91	49.76' RT.
B-704	57+68.56	52.35' RT.
B-705	58+25.55	8.28' LT.
B-706	56+39.16	52.15' RT.

**S.R. 2 CURVE DATA**

P.I. STA. 381+42.54  
Δ = 27° 57' 37" (RT)  
Dc = 1° 15' 00"  
R = 4,583.66'  
T = 1,141.15'  
L = 2,236.83'  
E = 139.92'  
e<sub>MAX</sub> = 0.036

**LEGEND**

- SOIL BORING LOCATION
  - \* - STAGE 1, PHASE B, STEP 3 CONSTRUCTION (44'-0")
  - \*\* - STAGE 1, PHASE B, STEP 4 CONSTRUCTION (40'-0")
  - ⊙ - 16.0' REQUIRED MINIMUM VERTICAL CLEARANCE  
16.88' ACTUAL MINIMUM VERTICAL CLEARANCE (RAMP E)  
16.33' ACTUAL MINIMUM VERTICAL CLEARANCE (RAMP F)
  - \*\*\* - 11'-6" REQUIRED MINIMUM HORIZONTAL CLEARANCE  
21'-5" ACTUAL MINIMUM HORIZONTAL CLEARANCE
  - \*\*\*\* - 11'-4 7/8" REQUIRED MINIMUM HORIZONTAL CLEARANCE  
11'-4 7/8" ACTUAL MINIMUM HORIZONTAL CLEARANCE
  - § - FOR STATION LOCATION OF ALL LIGHT POLES, SEE SHEET 2/47
- FOR LIST OF ABBREVIATIONS SEE SHEET 3/47

**EXISTING STRUCTURE**

TYPE: FOUR-SPAN CONTINUOUS COMPOSITE ROLLED STEEL BEAMS WITH A CONCRETE DECK SUPERSTRUCTURE ON CONCRETE CAP AND COLUMN PIERS AND CONCRETE STUB ABUTMENTS. THE SUBSTRUCTURE IS SUPPORTED ON PILE FOUNDATIONS  
SPANS: 46'-0"±, 75'-0"±, 75'-0"± AND 46'-0"± C/C BRG.  
ROADWAY: 66'-0"± F/F CURB WITH 5'-0" SIDEWALKS AND 14'-0"± RAISED MEDIAN  
LOADING: CF 2000  
WEARING SURFACE: MONOLITHIC CONCRETE  
SKEW: 21°06'46"± R.F.  
APPROACH SLABS: AS-1-81, 25'-0"± LONG (FWD.)  
AS-1-54, 25'-0"± LONG (REAR)  
ALIGNMENT: TANGENT  
CROWN: 0.016± PER FT.  
STRUCTURE FILE NO.: 4300815  
DATE BUILT: 1960 REHABILITATED: 1991

**PROPOSED STRUCTURE**

PROPOSED WORK: CONSTRUCT NEW STEEL PLATE GIRDER WITH NEW WIDENED CONCRETE DECK ON MODIFIED PIER AND NEW CONCRETE ABUTMENTS WITH MSE WALLS.  
TYPE: TWO-SPAN COMPOSITE CONCRETE DECK ON WELDED STEEL (54" WEB) PLATE GIRDERS (A709 50W) ON SEMI-INTEGRAL STUB ABUTMENTS ON STEEL PILES WITH MSE WALLS AND CAP AND COLUMN CONC. PIER ON EXISTING AND PROPOSED STEEL PILES.  
SPANS: 118'-10" AND 118'-4" C/C BEARINGS  
ROADWAY: 70'-0" F/F CURB WITH 6'-0" SIDEWALKS  
WEARING SURFACE: 1" MONOLITHIC CONCRETE  
LOADING: HS25 AND ALT. MILITARY LOAD. AND FWS (60 PSF)  
SKEW: 20°53'20" R.F.  
APPROACH SLABS: 30'-0" LONG (AS-1-81)  
ALIGNMENT: TANGENT  
CROWN: 0.02' PER FOOT  
COORDINATES: LAT. 41° 39' 19" W; LONG. 81° 24' 14" N

DESIGN AGENCY: **ARCADIS**  
ARCADIS U.S., Inc.  
100 Superior Avenue, Suite 1250 Cleveland, Ohio 44114  
Tel: 216-781-6877 Fax: 216-781-6243 www.arcadis-us.com

DATE: 4/07  
REVIEWED: CMD  
DRAWN: MPB  
DESIGNED: RBB  
CHECKED: SKS

LAKE COUNTY  
STA. 55+64.16 TO  
STA. 58+04.52

**S I T E P L A N**  
BRIDGE NO. LAK-2-0542  
LOST NATION ROAD OVER STATE ROUTE 2

**LAK-2-3.32**  
**PID 13486**

1 / 47  
1547  
1679