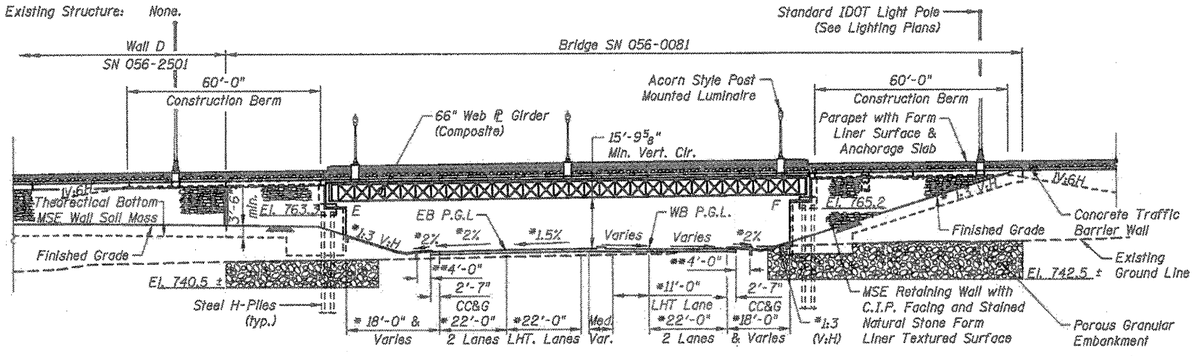
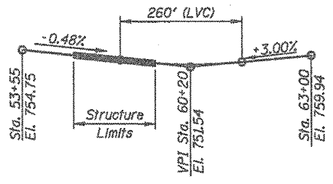
Benchmark: Control Point CP10, Iron Rod in gravel lot, IL Rte 31 Station 127+66.44, offset 99.87 feet Right; Elev. 737.99.

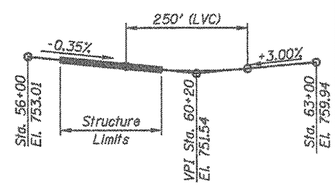
Existing Structure: None.



ELEVATION
(Looking West)
* at Rt. Angles to ℄ Algonquin Road
** at Rt. Angles to Back of Curb



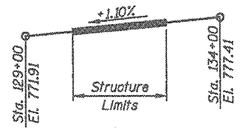
PROPOSED PROFILE
WESTBOUND ALGONQUIN ROAD



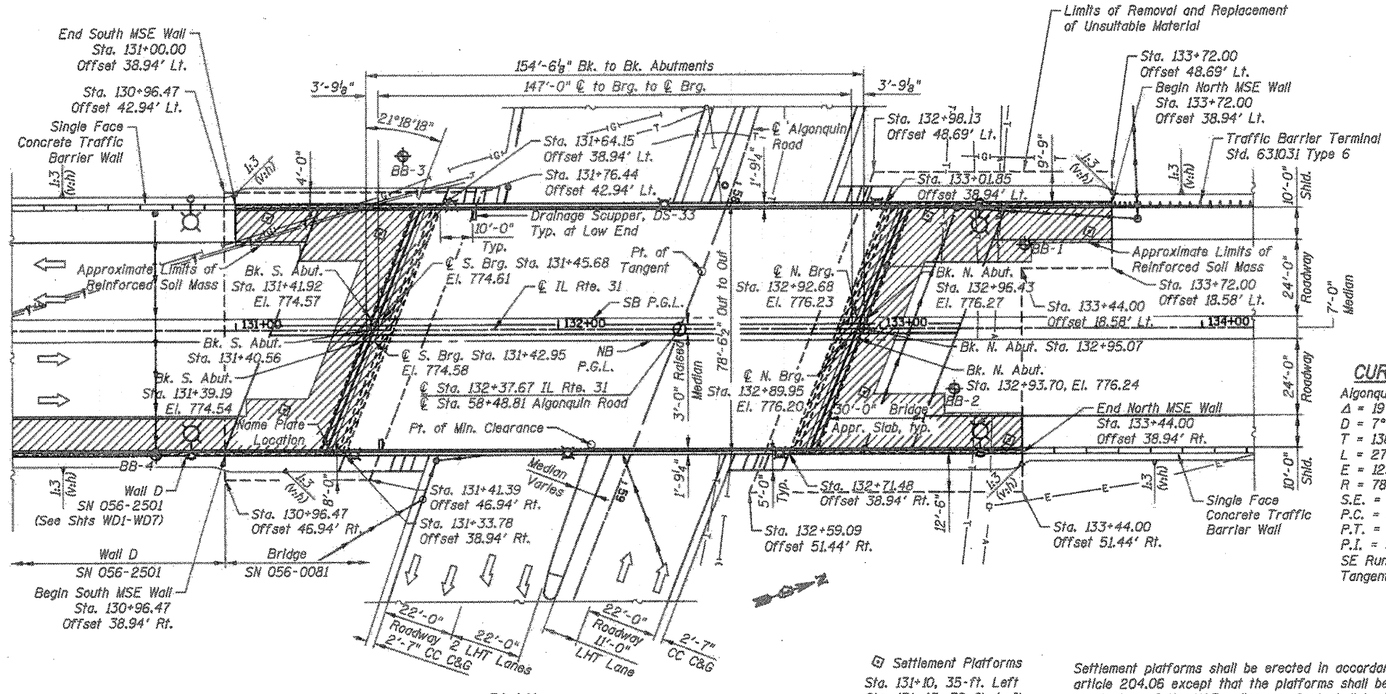
PROPOSED PROFILE
EASTBOUND ALGONQUIN ROAD

STATION 132+37.67
BUILT 201_ BY
STATE OF ILLINOIS
O.R. 0003
SEC 18A-2
LOADING HL-93
STRUCTURE NO. 056-0081

NAME PLATE
See Std. 515001



PROPOSED PROFILE
IL ROUTE 31
(Along NB & SB PGL's)



PLAN

Note:
MSE Wall Offsets measured from ℄ IL Rte. 31 to front face of C.I.P. facing.

[G] Settlement Platforms
Sta. 131+10, 35-ft. Left
Sta. 131+45, 30-ft. Left
Sta. 131+15, 25-ft. Right
Sta. 131+65, 30-ft. Left
Sta. 133+15, 35-ft. Left
Sta. 133+40, 35-ft. Right
Sta. 132+95, 20-ft. Right

Settlement platforms shall be erected in accordance with article 204.06 except that the platforms shall be placed at the bottom of the MSE soil mass. Cost shall be included in the cost of Mechanically Stabilized Earth Retaining Wall.

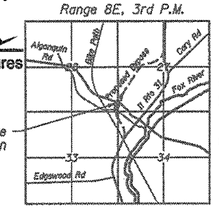
CURVE DATA
Algonquin Road
Δ = 19° 57' 21.30" (RT)
D = 7° 17' 37.78"
T = 136.20'
L = 273.60'
E = 12.06'
R = 785.54'
S.E. = 2.0%
P.C. = Sta. 55+55.95
P.T. = Sta. 58+29.55
P.I. = Sta. 56+94.15
SE Runoff = 45' (WB), Sta. 58+15 to 58+60
Tangent Runout = 45' (WB), Sta. 58+60 to 59+05

CIVILTECH ENGINEERING, INC.
GREGORY J. HATLESTAD, S.E.

STATE OF ILLINOIS · GREGORY J. HATLESTAD · 061-005562 · LICENSED STRUCTURAL ENGINEER

GREGORY J. HATLESTAD, S.E.
061-005562
EXP 11/30/12
DATE 3/15/12

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures



LOCATION SKETCH

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.081
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.142
Soil Site Class = D

DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (AASHTO M270 Gr. 50- Main Girders)
fy = 36,000 psi (AASHTO M270 Gr. 36- Secondary Members)

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

GENERAL PLAN AND ELEVATION
IL ROUTE 31 OVER ALGONQUIN ROAD
O.R. 0003 SECTION 18A-2
McHENRY COUNTY
STATION 132+37.67, STRUCTURE NO. 056-0081

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DRAWN	- M. LANGE	REVISED	-
DESIGNED	- D. ATKINS	REVISED	-
CHECKED	- G. HATLESTAD	REVISED	-
DATE	- 3/23/2012	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 31 OVER ALGONQUIN ROAD
STRUCTURE NO. 056-0081
SHEET NO. 5B1 OF SB32 SHEETS

O.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0003	18A-2	MCHENRY	825	494
		CONTRACT NO. 60F72		
		ILLINOIS FED. AID PROJECT		