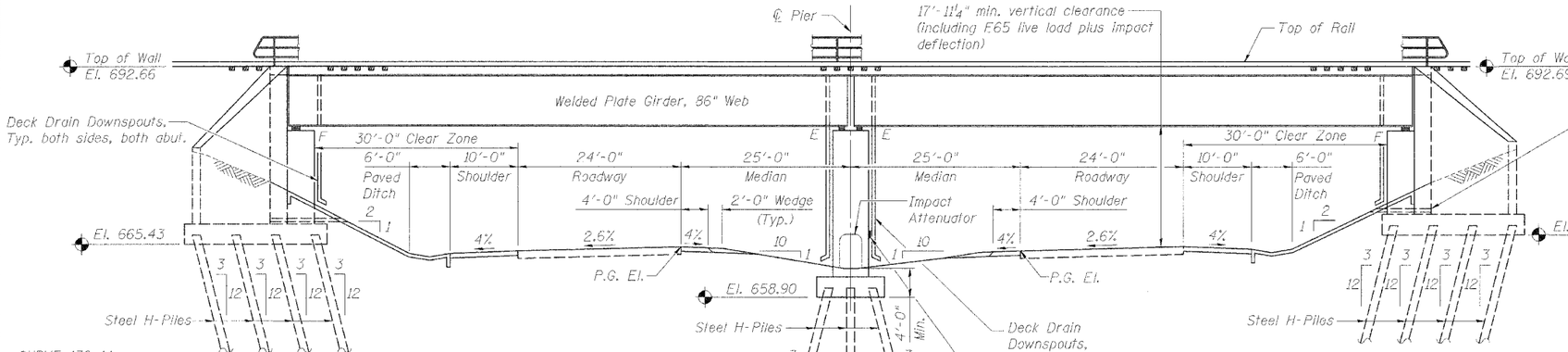
Benchmark: #33 Iron Rod with cap, 24'-5 5/8" Lt. ; B.N.S.F. Sta. 1010+79.14 (N 1,376,589.403, E 2,138,781.303) El. 692.74
Existing Structure: None. B.N.S.F. R.R. traffic will be maintained on shoofly constructed south of existing alignment.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 315	55-2	McDONOUGH	1025	517
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT-		

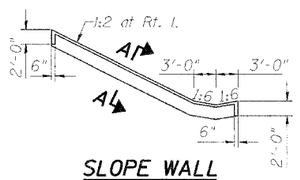
SHEET NO. 1
19 SHEETS

Contract # 68205

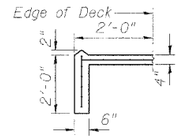


ELEVATION

Roadway dimensions @ Rt. L's to Rte. 336 Tangent



SLOPE WALL



SECTION A-A

Structure to be owned and maintained by State of Illinois Department of Transportation.

B.N.S.F. R.R.
BUILT 20-- BY
STATE OF ILLINOIS
F.A.P. RTE. 315 SEC. 55-2
STA. 554+41.57
LOADING COOPER'S E-80
STR. NO. 055-9901

NAME PLATE

See Std. 515001

INDEX OF SHEETS

1 General Plan & Elevation
2 Total Bill of Material, General Notes, & Substructure Layout
3 Deck Details
4 Pedestrian Railing
5 Framing Plan
6 Diaphragms
7 Bearings, Reaction & Moment Tables
8 Anchor Bolt Details
9 West Abutment Details
10 West Abutment & Wing Wall Reinforcement
11 East Abutment Details
12 East Abutment & Wing Wall Reinforcement
13 Pier Details
14-19 Boring Logs

DESIGN SPECIFICATIONS

2005 A.R.E.M.A. Specifications

DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi Reinforcement
fy = 50,000 psi Structural Steel (AASHTO M270, Grade 50)

DESIGN LOADING

1.) Cooper's E-80 with diesel impact
2.) Allow 60 psf for future 6" additional ballast
3.) Walkway live load 85 psf
4.) Alternate short term loading per B.N.S.F. requirements: Cooper's E-65 with diesel impact while a fascia girder is temporarily out of sevice for repairs. (Dead load to a girder is unchanged.)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4.0% g
Site Coefficient (S) = 1.0

HORIZONTAL CURVE DATA

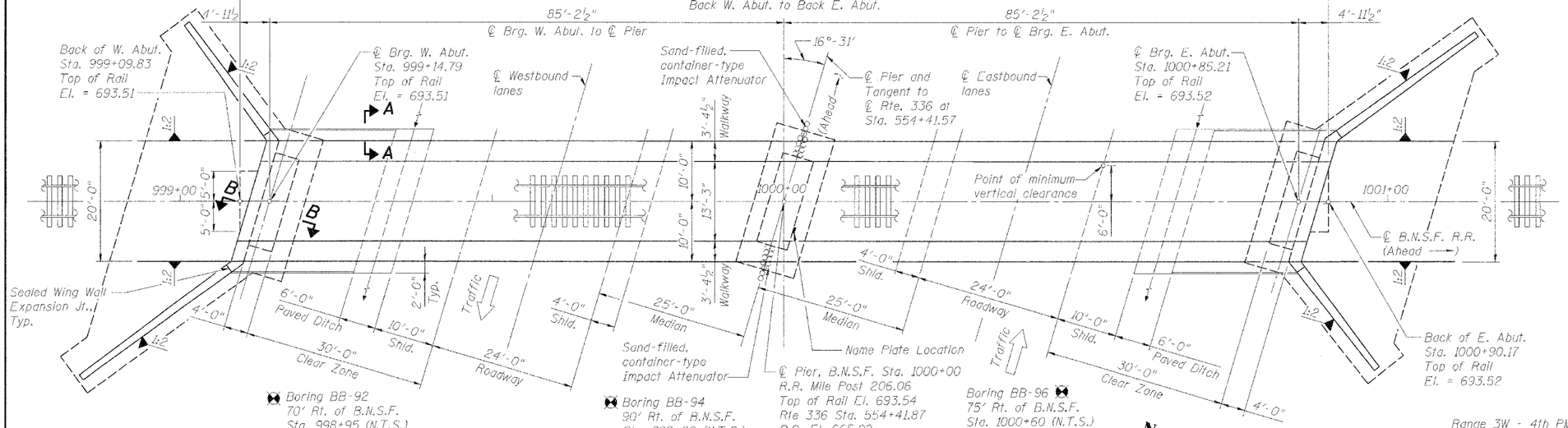
CURVE 136-14
P.I. STA= 561+78.45
Δ= 18° 14' 29" LT.
D= 0° 44' 58"
R= 7,645.00'
T= 1,227.36
L= 2,433.94
E= 97.90
P.C. STA= 549+51.09
P.T. STA= 573+85.04
S.E. = 2.6%

Boring BB-93
86' Lt. of B.N.S.F.
Sta. 999+40 (N.T.S.)

Boring BB-95
82' Lt. of B.N.S.F.
Sta. 1000+22 (N.T.S.)

Boring BB-97
70' Lt. of B.N.S.F.
Sta. 1001+04 (N.T.S.)

CURVE DATA



Boring BB-92
70' Rt. of B.N.S.F.
Sta. 998+95 (N.T.S.)

Boring BB-94
90' Rt. of B.N.S.F.
Sta. 999+82 (N.T.S.)

Boring BB-96
75' Rt. of B.N.S.F.
Sta. 1000+60 (N.T.S.)

PLAN

TOP OF RAIL ELEVATIONS B.N.S.F. R.R.

Showing Proposed Grade

PROFILE GRADE IL RTE 336

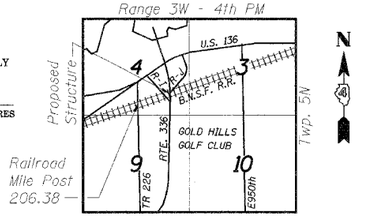
DESIGNED	PJL
CHECKED	WDL
DRAWN	MGM
CHECKED	PJL

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS · PHILIP J. LANE · 4084 · LICENSED STRUCTURAL ENGINEER · PEORIA, IL

Phillip J. Lane
Illinois Licensed Structural Engineer No. 4084
Lic. Expires: 11/30/06

3/30/06
Date



LOCATION SKETCH

GENERAL PLAN & ELEVATION
BURLINGTON NORTHERN
SANTA FE RAILROAD OVER
IL. ROUTE 336
F.A.P. ROUTE 315 SECT. 55-2
McDONOUGH COUNTY
STATION 554+41.87
STRUCTURE NO. 055-9901
B.N.S.F. LINE SEGMENT 0011
B.N.S.F. BRIDGE NO. 206.04

STS CONSULTANTS
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IL Design Firm Reg. No. 224-001522