

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. /
2004-108 BR	*	COOK	72	41	6 SHEETS
			Contract No. 62853		

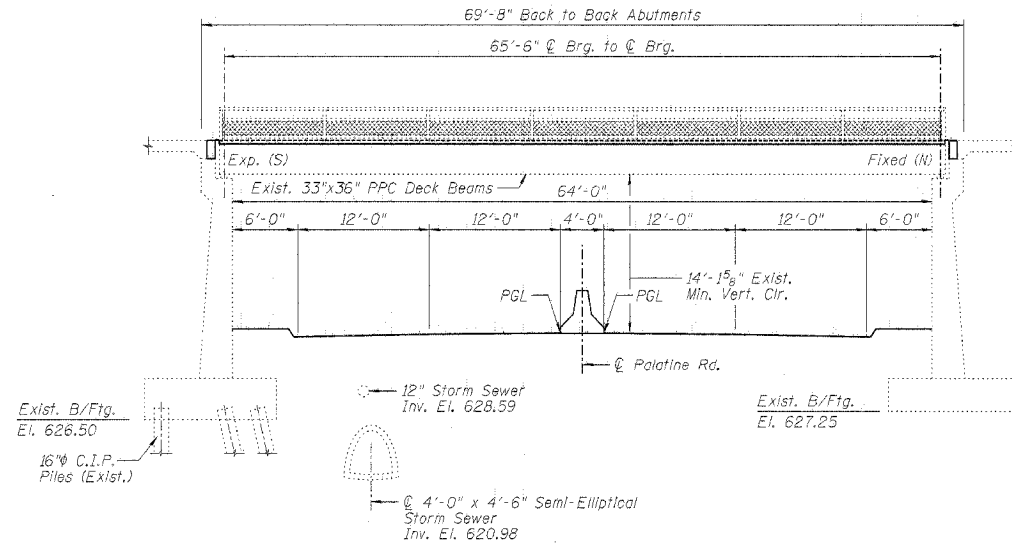
Benchmark: CCHD BM found in NW corner of the Frontage Road bridge over Palatine Road approximately 2000' east of Wheeling Road, Elev. 655.02

Existing Structure: Structure No. 016-2530 built as West Frontage Road over F.A.S. Route 116, Palatine Road, Section 110-1415 in 1963. The structure was widened in 2003. The superstructure consists of 33" x 36" PPC Deck Beams supporting a bituminous concrete wearing surface. The length of the structure is 65'-6" center to center of bearings. The existing deck width is 48'-4" out to out of deck. The deck is not skewed.

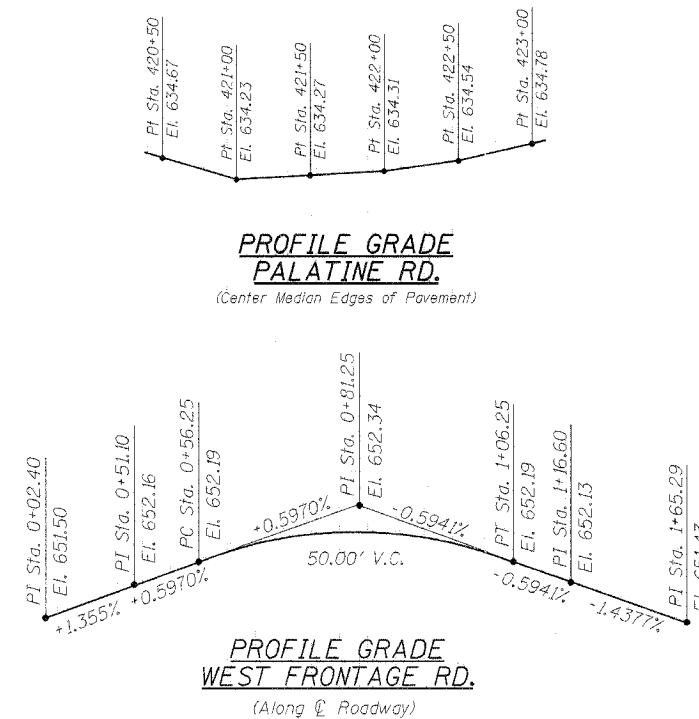
Construction Staging: The road shall be closed during construction.

Scope of Work:

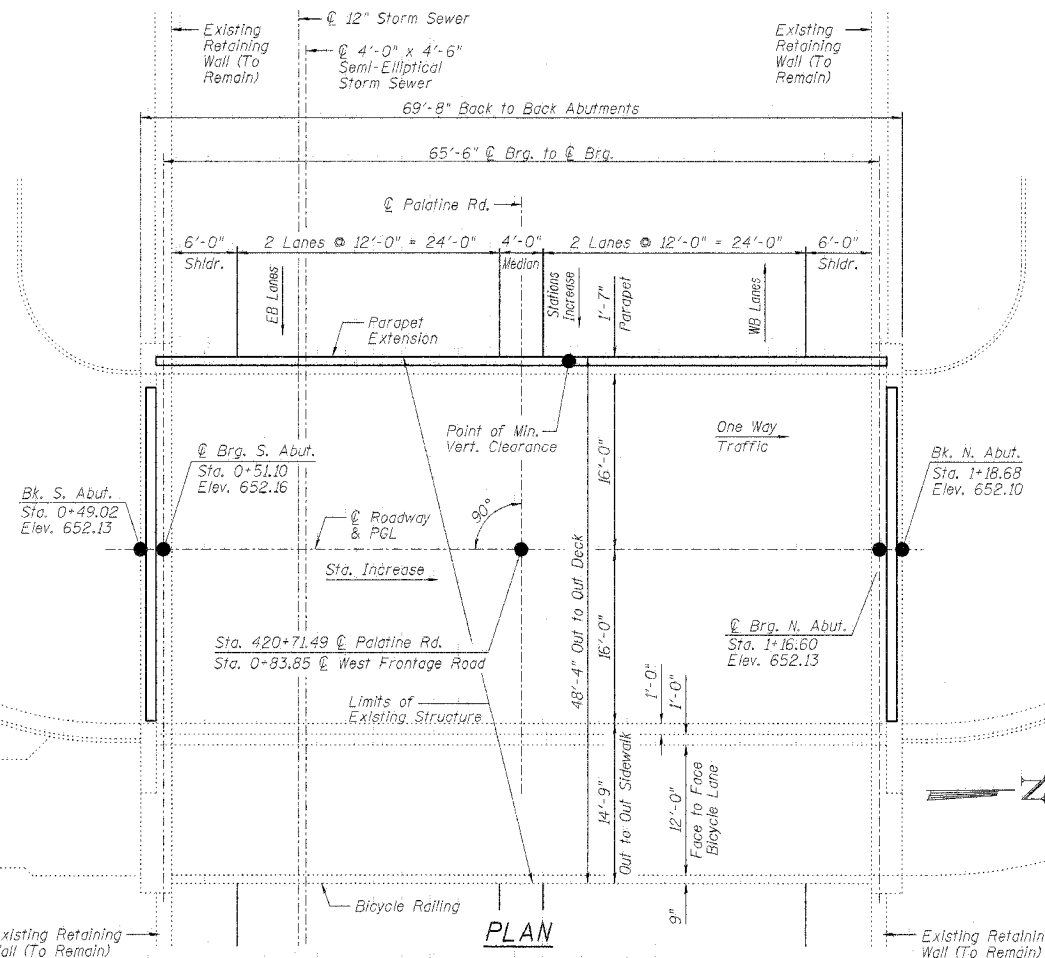
1. Remove bituminous concrete wearing surface and waterproofing membrane system and place concrete wearing surface.
2. Extend existing concrete parapet on west side of bridge.
3. Repair the concrete Deck Beams.
4. Reconstruct the expansion joints.
5. Repair the existing abutments.



ELEVATION  
(Looking West)



PROFILE GRADE  
WEST FRONTAGE RD.  
(Along Center Roadway)



PLAN

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.
2. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splice or anchorage system. Cost included with "Concrete Removal".
4. All construction joints shall be bonded.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bituminous Concrete Surface Removal Complete	Sq Yd	240
Concrete Removal	Cu Yd	2.4
Preformed Joint Seal 1 1/4"	Foot	31
Preformed Joint Seal 2 1/2"	Foot	31
Concrete Superstructure	Cu Yd	5.0
Bridge Deck Grooving	Sq Yd	220
Protective Coat	Sq Yd	310
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	30
Reinforcement Bars, Epoxy Coated	Pound	3,700
Epoxy Crack Sealing	Foot	120
Concrete Wearing Surface	Sq Yd	240
Bearing Pad Adjustment	Each	26
Cleaning and Painting Exposed Rebar	Sq Ft	5
Furnishing and Erecting Structural Steel	Pound	1,684
Formed Concrete Repair (Depth Larger Than 5")	Sq Ft	10

LOADING HS20-44

Allow 25 lbs./sq.ft. future wearing surface

DESIGN SPECIFICATIONS

1996 AASHTO w/1997 & 1998 Interims

DESIGN STRESSES

FIELD UNITS

$f_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)



Signature: [Signature]  
Date: 02-04-05  
Expire: 11-30-2006

BRANCO & ZROKA ENGINEERING, P.C.

DESIGNED	LAS
CHECKED	DAZ
DRAWN	SAW
CHECKED	LAS

February 2005

GENERAL PLAN & ELEVATION  
WEST FRONTAGE ROAD OVER PALATINE ROAD  
FAP 305/PALATINE ROAD  
SECTION 2004-108 BR  
COOK COUNTY  
STA. 0+88.97  
STRUCTURE NO. 016-2530