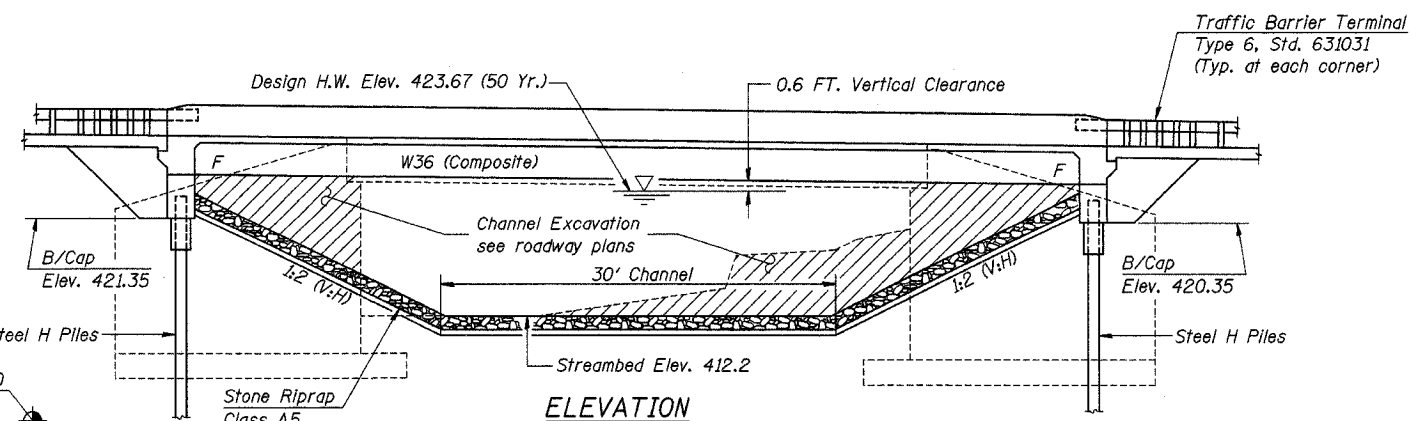


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 42	2BR	WASHINGTON	33	15
FED. ROAD DIST. NO. 8	ILLINOIS	PROJECT		
Sheet 1 of 16			CONTRACT #76389	

Bench Mark: Disc In SE Headwall of Bridge S.N. 095-0024. Elev. 430.18

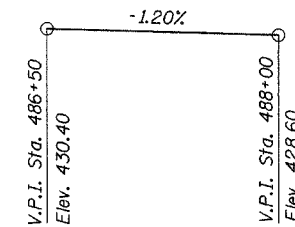
Existing Structure: S.N. 095-0024 built in 1936 as S.B.I. Route 127, Sec. 2-B-NRH at Sta. 487+25. Structure is a single span RC T-beam bridge on closed abutments with timber piles. Overall length is 53'-0" back to back abutments. Bridge width is 43'-6" out to out of deck with a 39'-8" clear roadway width. Structure is to be removed and replaced with a single span composite WF bridge on integral abutments. Traffic shall be maintained at all times utilizing Stage Construction.

No Salvage.

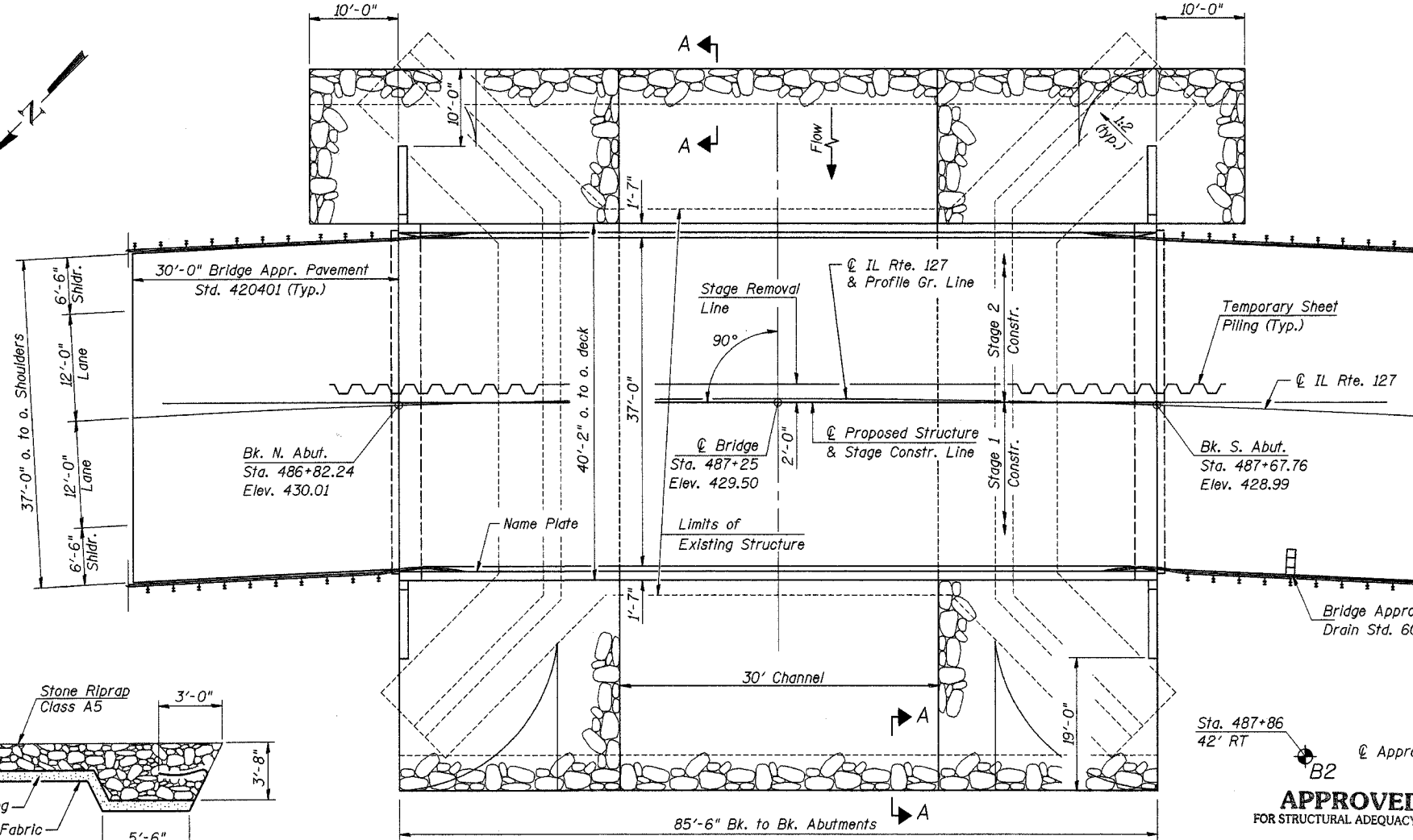
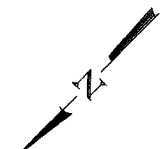


ELEVATION

Sta. 486+70
60' LT
B1



PROFILE GRADE
(along IL Rte. 42)



PLAN

CURVE DATA

(IL Rte. 42)
 $\Delta = 44^\circ 23' 09''$
 $D = 4^\circ 23' 56''$
 $T = 531.35'$
 $R = 1,302.50'$
 $L = 1,009.02'$
 $E = 104.21'$
 $S.E. = 0.063'/ft.$
 $P.C. Sta. = 478+86.04$
 $P.I. Sta. = 484+17.40$
 $P.T. Sta. = 488+95.06$

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

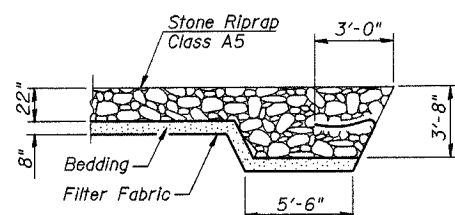
Allow 50#/Sq. Ft. for future wearing surface

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (Structural Steel)
 (M270 GR. 50)

SEISMIC DATA

Seismic Performance Category (SPC) = B
 Bedrock Acceleration Coefficient (A) = 0.10
 Site Coefficient (S) = 1.0

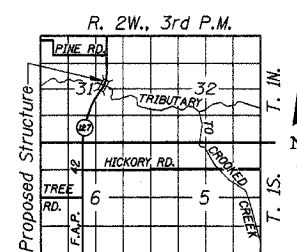


SEC A-A

WATERWAY INFORMATION

Drainage Area = 12.36 Sq. Mi.		Low Grade Elev. 426.02		Sta. 492+12		
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
Design	50	3231	444 547	423.67	2.09 1.52	425.76 425.19
Base	100	3712	458 567	423.95	2.44 1.75	426.39 425.70
Overtopping	Exist.	71	3425	449	—	426.02
	Prop.	167	4000	—	579	—
Max. Calc.	—	—	—	—	—	—

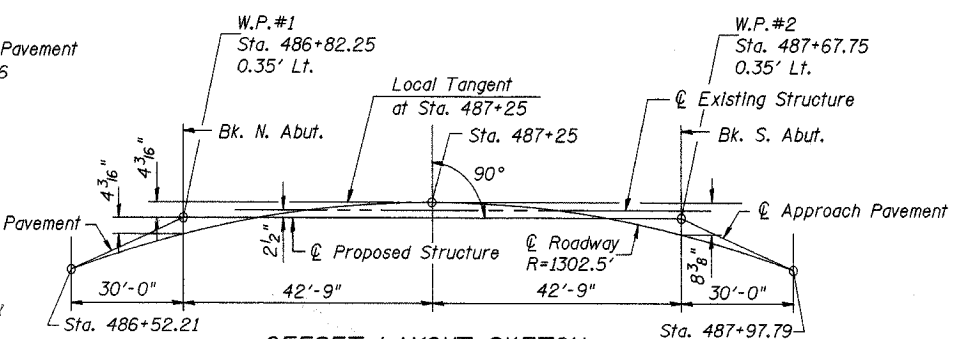
DESIGNED	Ruben V. Boehler
CHECKED	Tim S. Howard
DRAWN	Nicole L. Darling
CHECKED	Michael D. Cummins



LOCATION SKETCH

STATION 487+25
 BUILT 200_ BY
 STATE OF ILLINOIS
 F.A.P. RTE. 42 SEC. 2BR
 LOADING HS20
 STR. NO. 095-0076

LETTERING FOR NAME PLATE
 See Std. 515001



OFFSET LAYOUT SKETCH



(Expires 11/30/2006)

GENERAL PLAN & ELEVATION

IL ROUTE 127 OVER TRIBUTARY TO CROOKED CREEK
 F.A.P. ROUTE 42 SECTION 2BR
 WASHINGTON COUNTY
 STA. 487+25
 S.N. 095-0076

CUMMINS ENGINEERING CORPORATION
 JOB #: 2158
 FILE #: 2158GPE
 DATE: 2/10/05