EXISTING STRUCTURE: S.N. 055-0018
A Single Span (1 @ 32'-6") Reinforced Concrete T-Beam Bridge on Closed Concrete Abutments. 29'-7" F.-F. of Abut. Skewed 11° Left Ahead. Sta. 454+15 To be Removed by Contractor.
Traffic shall be Maintained by Stage Construction, No Salvage.

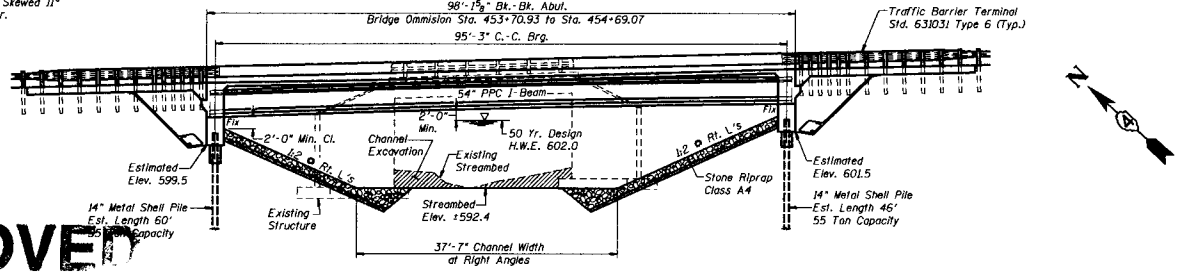
BENCH MARK: Chiseled "□" on Northeast Wingwall of S.N. 055-0018 Elev. 609.74

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

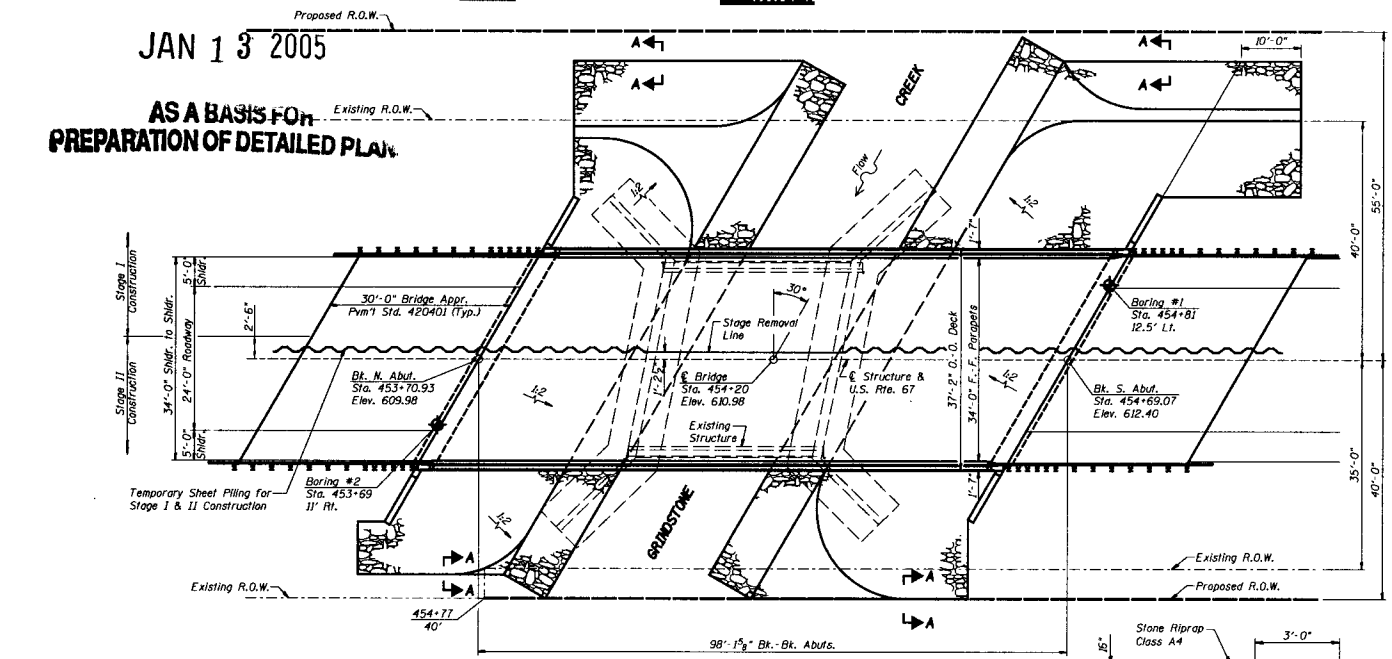
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.P. 310	(41A)BR-1	McDONOUGH		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT-		

SHEET NO.
SHEETS

APPROVED
JAN 13 2005
AS A BASIS FOR PREPARATION OF DETAILED PLAN

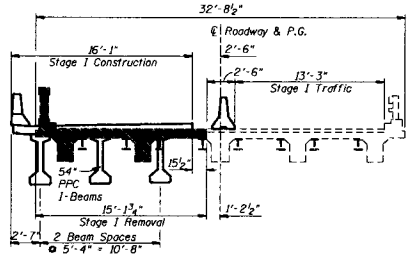


N. ABUT. **ELEVATION** S. ABUT.

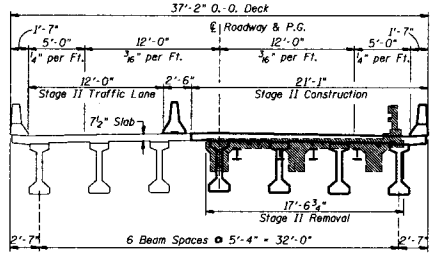


PLAN

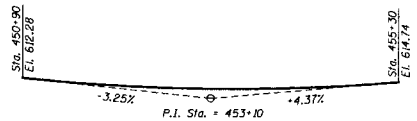
NOTE: Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the engineer.



CROSS SECTION STAGE I
Looking Upstation (South)



CROSS SECTION STAGE II
Looking Upstation (South)



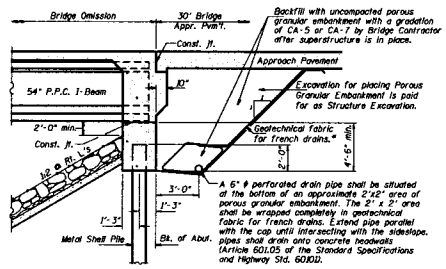
P.I. Sta. = 453+10
v.c. = 440
Elev. = 605.13
x = 4.19'

PROFILE GRADE
(Along ℄ Roadway)

WATERWAY INFORMATION

Drainage Area = 12.48 Sq. Mi. Low Grade Elev. = 608.01 @ Sta. 453+00

Flood	Freq. Yr.	Q c.f.s.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head-ft. Exist.	Head-ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1412	219	534	601.4	1.0	0.5	602.4	601.9
Design	50	2175	236	580	602.0	1.8	1.0	603.8	603.0
Base	100	2499	242	598	602.2	2.3	1.1	604.5	603.3
Overtopping	—	—	—	—	—	—	—	—	—
Max. Calc.	500	3293	256	636	602.7	3.3	1.6	606.0	604.3



SECTION THRU INTEGRAL ABUTMENT
(Dimensions @ Rt. L's.)

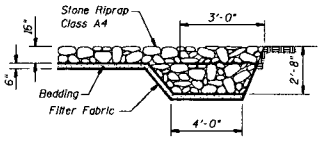
HIGHWAY CLASSIFICATION
F.A.P. Route 310 (US 67)
Class: Other Principle Arterial
A.D.T.: 2850(2001) 3235(2021)
D.H.V.: 285(2001) 320(2021)
Design Speed: 55 mph
Posted Speed: 55 mph

DESIGN SPECIFICATIONS
Design in accordance with AASHTO Specs. Dated 2002.

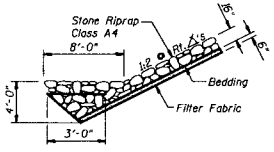
LOADING HS20-44
Allow 50#/Sq. Ft. for Future Wearing Surface.

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)
PRECAST PRESTRESSED UNITS
f'_c = 6,000 psi
f'_{ci} = 5,000 psi
f'_s = 270,000 psi (½" ϕ Low Lax Strands)
f_{si} = 201,960 psi (½" ϕ Low Lax Strands)

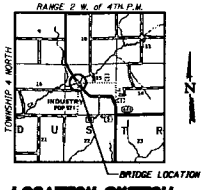
SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.042
Site Coefficient (S) = 1.0



SECTION A-A



STONE RIPRAP ANCHOR DETAIL



LOCATION SKETCH

TYPE, SIZE & LOCATION
F.A.P. 310 SECTION (41A)BR-1
U.S. ROUTE 67 OVER GRINDSTONE CREEK
McDONOUGH COUNTY
STA. 454+20 (S.N. 055-0049)

Designed By: M.R. Leslie
Date: 5/04
Checked By: B.K. Converse
Date: 5/04
Drawn By: F.D. Lochat
Date: 9/04