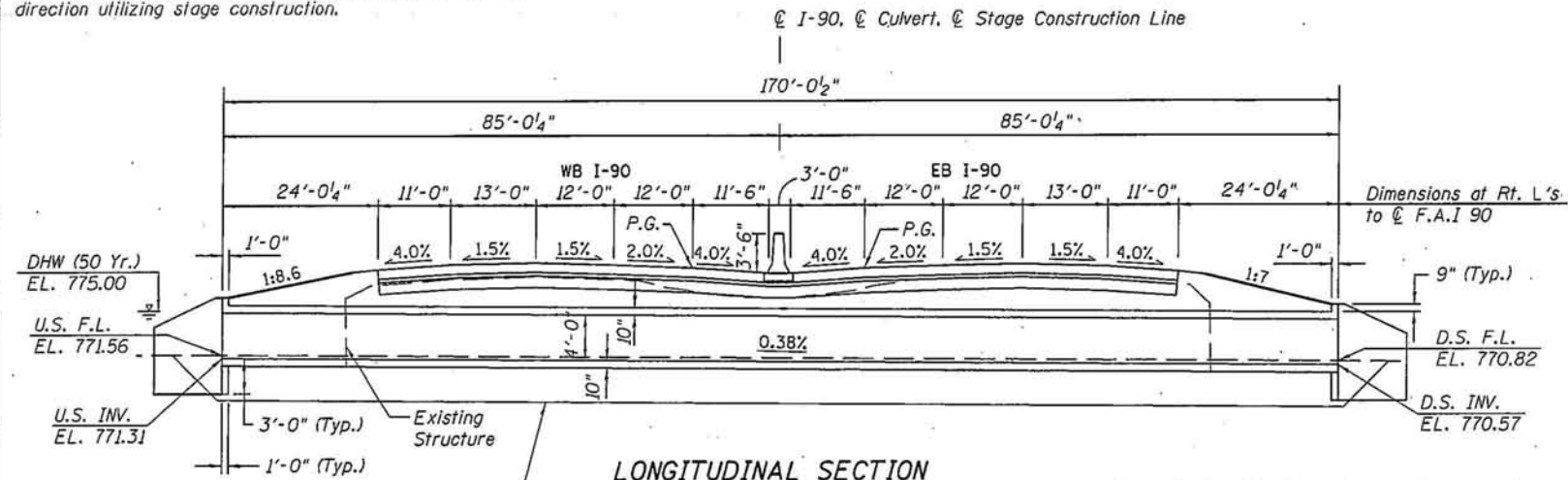


Bench Mark: Toe of Sign, Sta. 100+84.16, 86.5' RT; Elevation 777.04

Existing Structure: S.N. 101-1031 built 1959 at sta. 96+09.07
 is a R.C. double 8'x4' box culvert 154 feet long. Skew 29° 49' 23"
 RT. Structure to be removed and replaced.

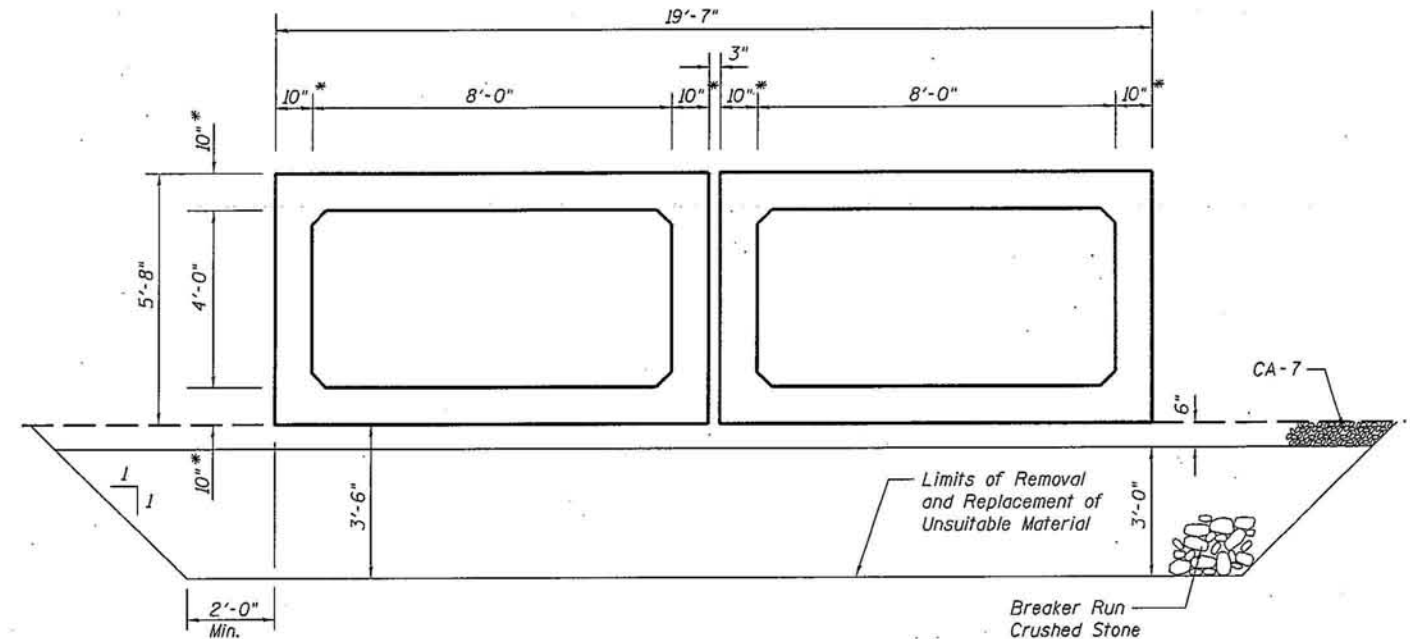
Salvage: No Salvage

Staging: Two lanes of traffic shall be maintained in each
 direction utilizing stage construction.



LONGITUDINAL SECTION
 (Looking South)
 (Dimensions are 1 to \varnothing Roadway)

See Sheet 2 of 2 for Stage Construction
 and Maintenance of Traffic Details.



SECTION THRU PRECAST BARREL
 2 - Cell Precast Box Culvert

* Slab and wall thickness may be redefined in final design

APPROVED

JUN 16 2011

AS A BASIS FOR
 PREPARATION OF DETAILED PLANS

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft)	Upstream	Downstream
	768.31	767.57

HIGHWAY CLASSIFICATION

F.A.I. 90
 Functional Class: Interstate
 ADT: 49850 (2013); 79450 (2033)
 ADTT: 17950 (2013); 28602 (2033)
 DHV: 7945
 Design Speed: 70 m.p.h.
 Posted Speed: 65 m.p.h.
 Directional Distribution: (50:50) (NB:SB)
 One Way Traffic

LOADING HS 20-44 & ALTERNATE
 Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
 2002 AASHTO Specifications plus Interims

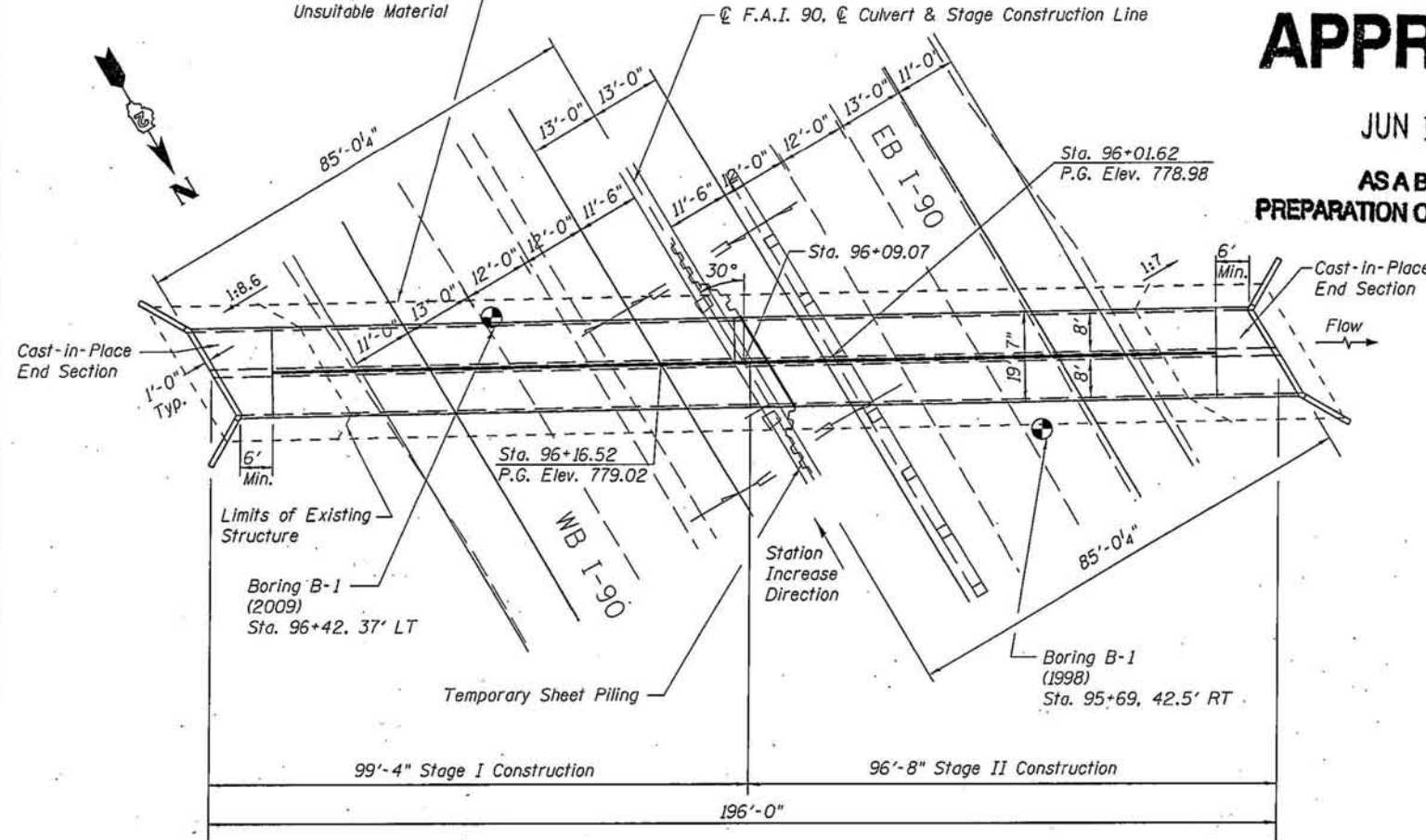
DESIGN STRESSES

FIELD UNITS

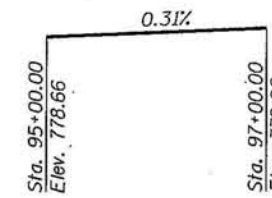
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi

PRECAST UNITS

$f'_c = 5,000$ psi
 $f_y = 65,000$ psi
 (welded wire fabric)



PLAN



PROFILE GRADE
 (along \varnothing roadway)

**SMALL CULVERT WATERWAY
 INFORMATION TABLE**

Drainage Area = 271 ac.
 Low Grade Elev. 778.40 @ Sta. 92+50.92

Flood	Freq. Yr.	Q	Headwater El.	
		C.F.S.	Exist.	Prop.
Ten Year	10	134	773.67	773.81
Design	50	266	774.79	775.00
Base	100	345	775.41	775.65
Max. Calc.	500	535	776.74	777.08



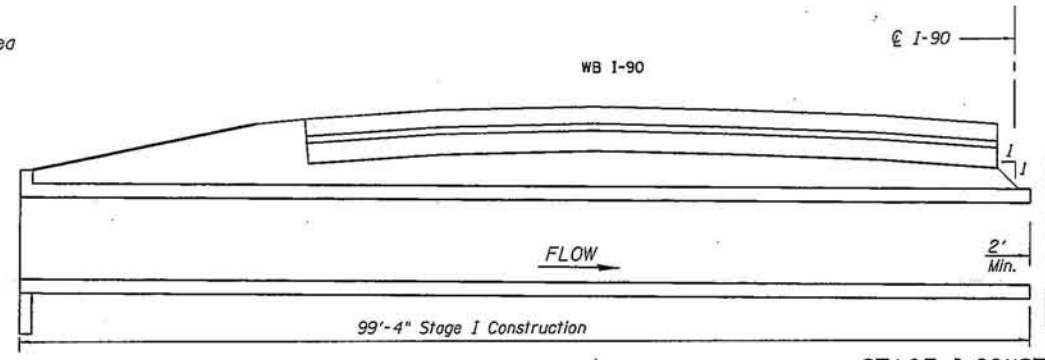
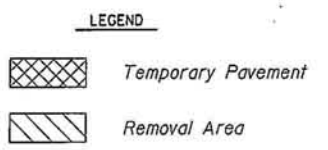
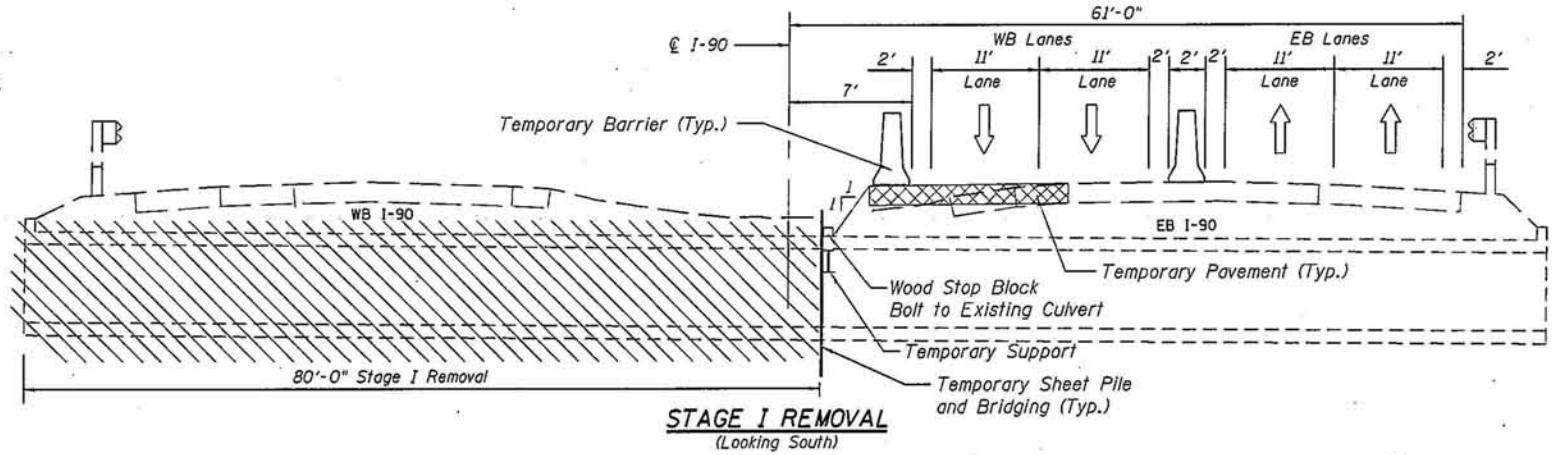
LOCATION SKETCH

GENERAL PLAN
I-90 OVER TRIBUTARY TO DRY RUN CREEK
SECTION (X2-1)R
WINNEBAGO COUNTY
STATION 96+09.07
STRUCTURE NO. 101-1095

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

SHEET NO. 1	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		(X2-1)R	WINNEBAGO	-	
2 SHEETS	CONTRACT NO. 64C29		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

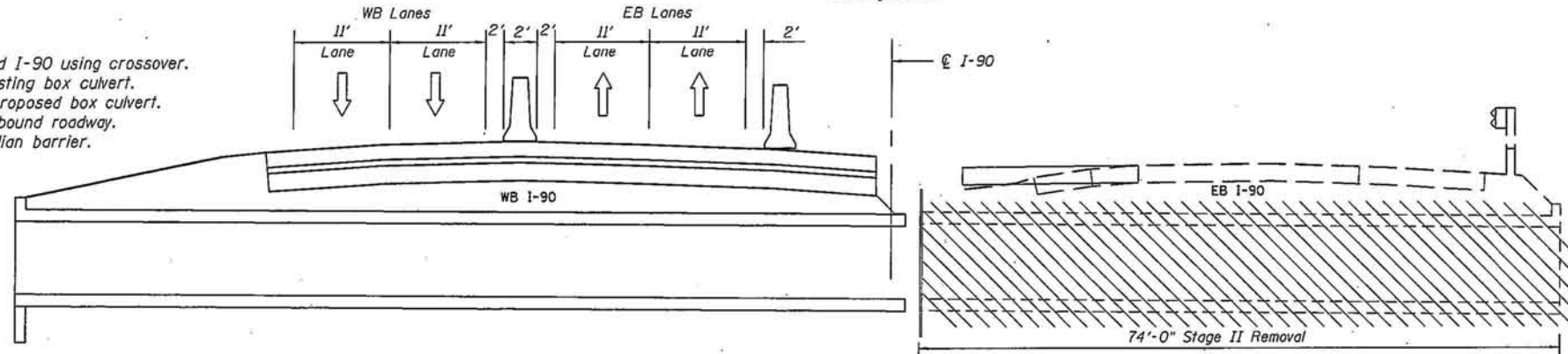
- STAGE I**
1. Construct temporary pavement.
 2. Shift traffic to Eastbound I-90 using crossover.
 3. Remove east half of existing box culvert.
 4. Construct east half of proposed box culvert.
 5. Construct proposed Westbound roadway.



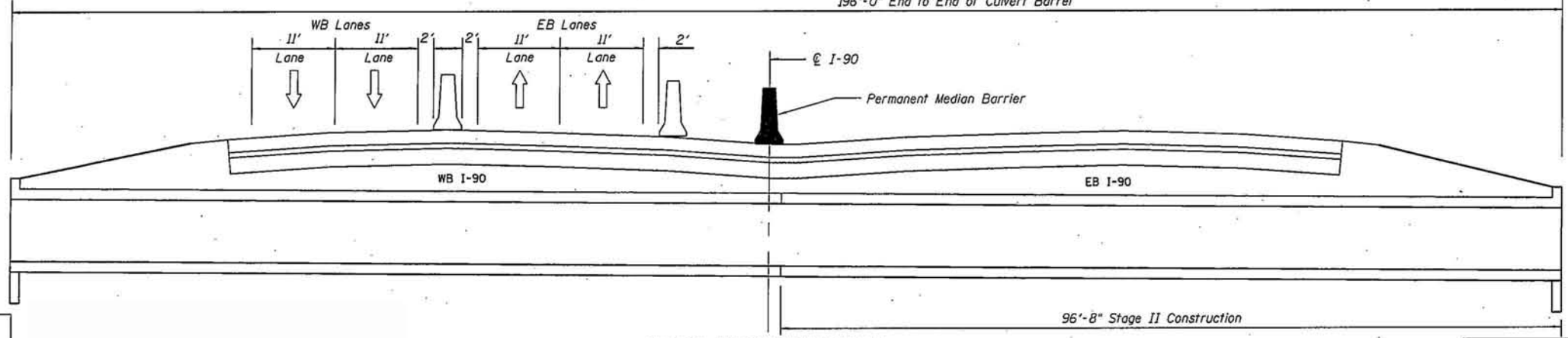
STAGE I REMOVAL
(Looking South)

STAGE I CONSTRUCTION
(Looking South)

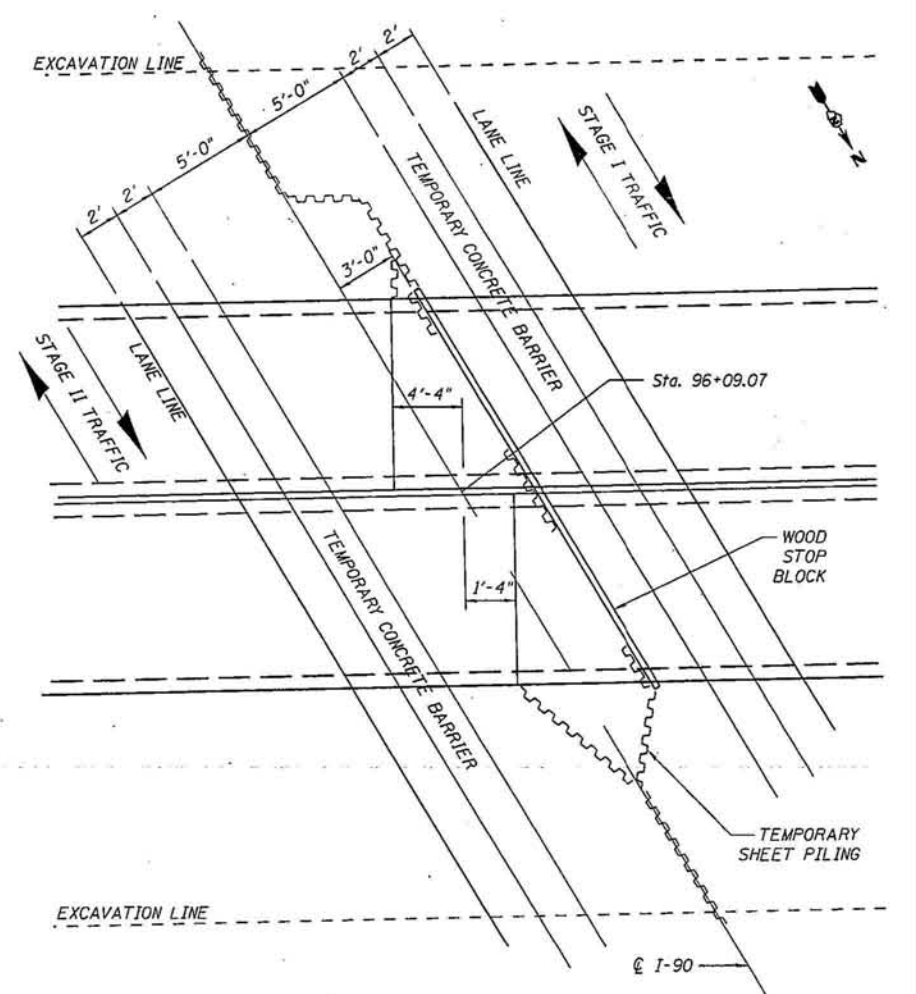
- STAGE II**
1. Shift traffic to Westbound I-90 using crossover.
 2. Remove west half of existing box culvert.
 3. Construct west half of proposed box culvert.
 4. Construct proposed Eastbound roadway.
 5. Construct permanent median barrier.



STAGE II REMOVAL
(Looking South)



STAGE II CONSTRUCTION
(Looking South)



STAGING DETAIL

APPROVED

JUN 16 2011

AS A BASIS FOR
PREPARATION OF DETAILED PLANS

GENERAL PLAN
I-90 OVER TRIBUTARY TO DRY RUN CREEK
SECTION (X2-1)R
WINNEBAGO COUNTY
STATION 96+09.07
STRUCTURE NO. 101-1095

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

SHEET NO. 2	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		(X2-1)R	WINNEBAGO	-	
2 SHEETS	CONTRACT NO. 64C29				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			