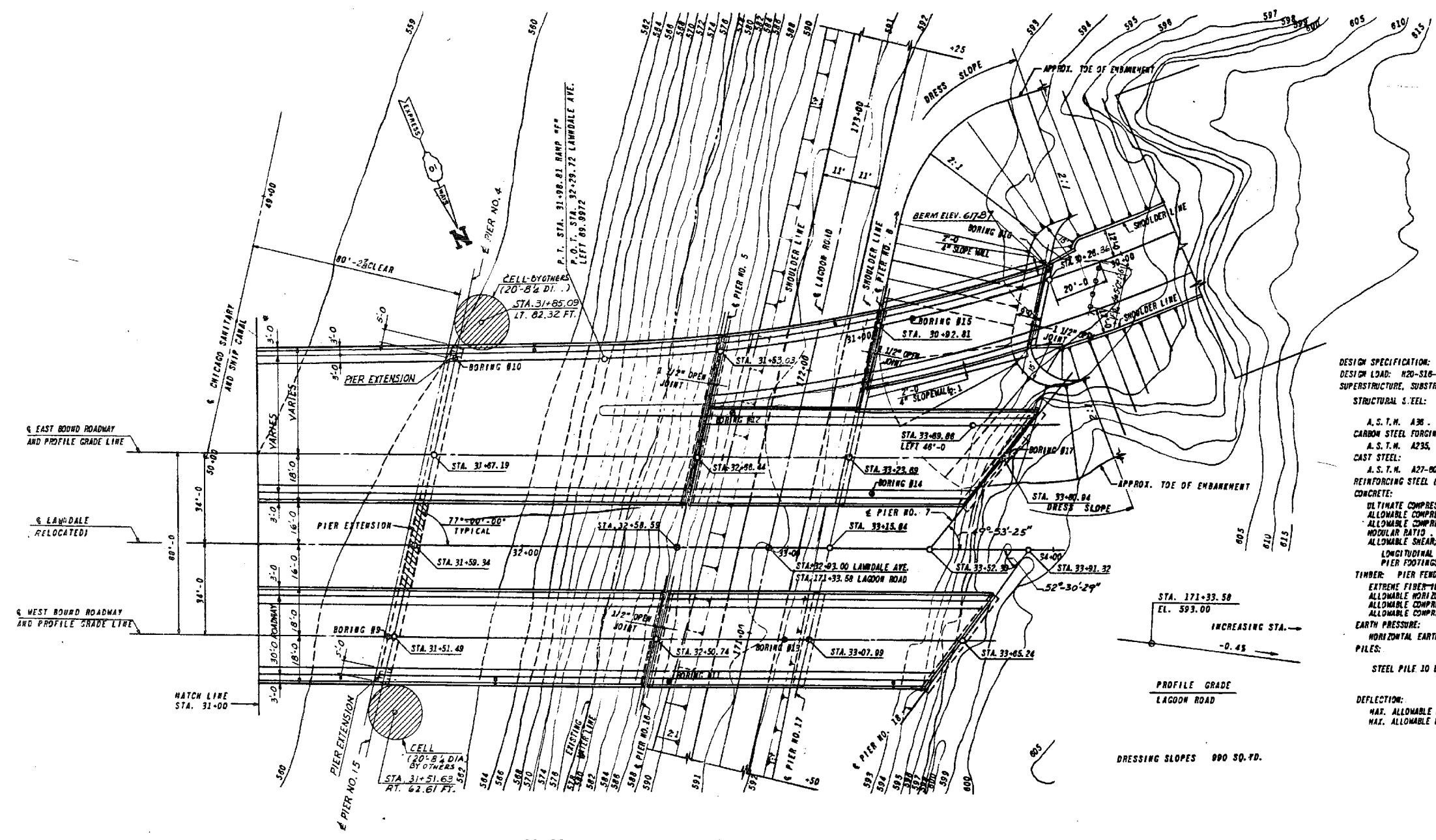


F.A. RT.	SECTION	EXPRESSWAYS	TOTAL SHEETS	SHEET NO.
133	0707-626 B	SOUTHWEST	95	8
BYA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

B. M. CONCRETE MONUMENT #12  
 STA. 30+05 LT. 395'  
 ELEV. 635.043



**DESIGN DATA**

DESIGN SPECIFICATION: AASHTO 1961 EDITION  
 DESIGN LOAD: H20-S16-44  
 SUPERSTRUCTURE, SUBSTRUCTURE AND ABUTMENTS:  
 STRUCTURAL STEEL:  
 A. S. T. M. A36 . . . . .  $f_c = 20,000$  psi  
 CARBON STEEL FORGINGS:  
 A. S. T. M. A235, CLASS F . . . . .  $f_y = 40,000$  psi  
 CAST STEEL:  
 A. S. T. M. A27-80, GRADE 65-35 . . . . .  $f_y = 35,000$  psi  
 REINFORCING STEEL (INTERMEDIATE AND HARD GRADE) . . . . .  $f_s = 20,000$  psi  
 CONCRETE:  
 ULTIMATE COMPRESSION . . . . .  $f'_c = 3,500$  psi  
 ALLOWABLE COMPRESSION (WITHOUT EARTH PRESSURE) . . . . .  $f_c = 1,400$  psi  
 ALLOWABLE COMPRESSION (WITH EARTH PRESSURE) . . . . .  $f_c = 1,200$  psi  
 MODULAR RATIO . . . . .  $n = 10$   
 ALLOWABLE SHEAR: BEAMS WITHOUT WEB REINFORCEMENT . . . . .  $v = 90$  psi  
 LONGITUDINAL BARS ANCHORED . . . . .  $u = 90$  psi  
 PIER FOOTINGS . . . . .  $v = 75$  psi  
 TIMBER: PIER FENDER  
 EXTREME FIBER-IN BENDING, PARALLEL TO GRAIN . . . . .  $f = 3,300$  psi  
 ALLOWABLE HORIZONTAL SHEAR . . . . .  $u = 400$  psi  
 ALLOWABLE COMPRESSION, PERPENDICULAR TO GRAIN . . . . .  $f = 1,500$  psi  
 ALLOWABLE COMPRESSION, PARALLEL TO GRAIN . . . . .  $f = 3,100$  psi  
 EARTH PRESSURE:  
 HORIZONTAL EARTH PRESSURE = EQUIV. FLUID PRESSURE . . . . . 40 p/cf  
 PILES:  
 STEEL PILE 10 HP 87 . . . . . 60 TONS  
 DEFLECTION:  
 MAX. ALLOWABLE LIVE LOAD DEFLECTION, COMPOSITE . . . . . 1/1200 SPAN  
 MAX. ALLOWABLE LIVE LOAD DEFLECTION, NON-COMPOSITE . . . . . 1/1000 SPAN

GENERAL PLAN WEST PART

REVISIONS		ILLINOIS DIVISION OF HIGHWAYS	
NAME	DATE	SOUTHWEST EXPRESSWAY	
		F.A. RT 133	
		LAWDALE AVE. STRUCTURE OVER	
		CHICAGO SANITARY AND SHIP CANAL	
		SECTION 0707-626B	
		GENERAL PLAN WEST PART	
DESIGNED BY	ST.	SCALE	HORIZ. VERT. $1"=20'$
REVIEWED BY	C.W.N.	DATE	8-5-83
		DRAWN BY	D.U.
		CHECKED BY	L.D.B.

**benesch**  
 engineers · scientists · planners  
 Alfred Benesch & Company  
 205 North Michigan Avenue, Suite 2400  
 Chicago, Illinois 60601  
 312-565-0450 Job No. 10093

FILE NAME =	USER NAME =	DESIGNED -	REVISOR -
0160486.60J16.X02.existgpe.dgn	tjenicke	FSM	
	PLOT SCALE =	CHECKED -	REVISOR -
		RMM	
	PLOT DATE =	DRAWN -	REVISOR -
	6/23/2014	FSM	
		CHECKED -	REVISOR -
		RMM	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS GENERAL PLAN SPANS 4 THRU 7  
 STRUCTURE NO. 016-0486

SHEET NO. SGX2 OF SGX48 SHEETS

FOR INFORMATION ONLY

F.A.P. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-038B-R	COOK	821	692
CONTRACT NO.			60J16	
ILLINOIS FED. AID PROJECT				

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