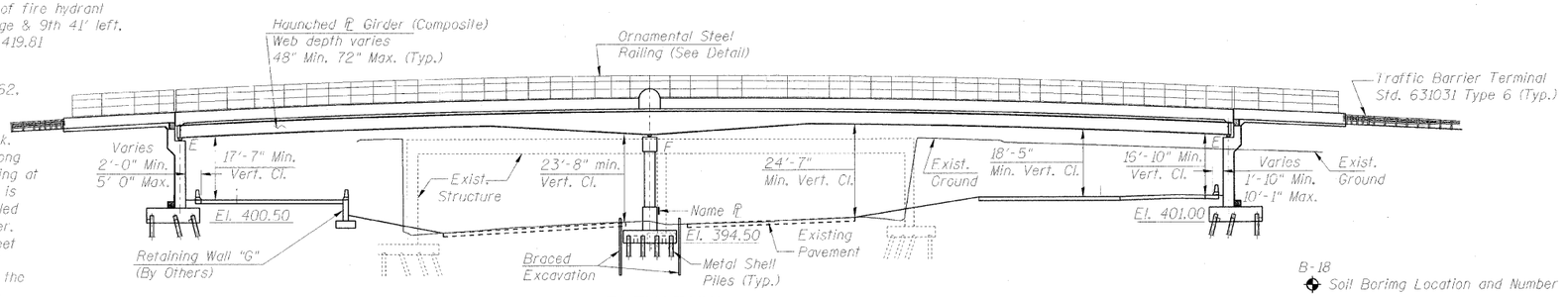
BENCHMARK BMRFS13:
Cut "x" on North cap bolt of fire hydrant
Southerly quadrant Exchange & 9th 41' left.
Sta. 5+41 (9th St.) Elev. 419.81

EXISTING STRUCTURE:
S.N. 082-0016, built in 1962, is a two span continuous non-composite rolled steel beam bridge with a 7" deck. The beams are 141'-11¼" long from ℄ bearing to ℄ bearing at the abutments. The bridge is supported by two high-walled abutments and a frame pier. The deck is approx. 73 feet wide at the north end and approx. 77.5 feet wide at the south end. Exchange Ave. will be closed and traffic detoured during construction. No Salvage.



ELEVATION

B-18 ◆ Soil Boring Location and Number

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

DESIGN STRESSES

FIELD UNITS

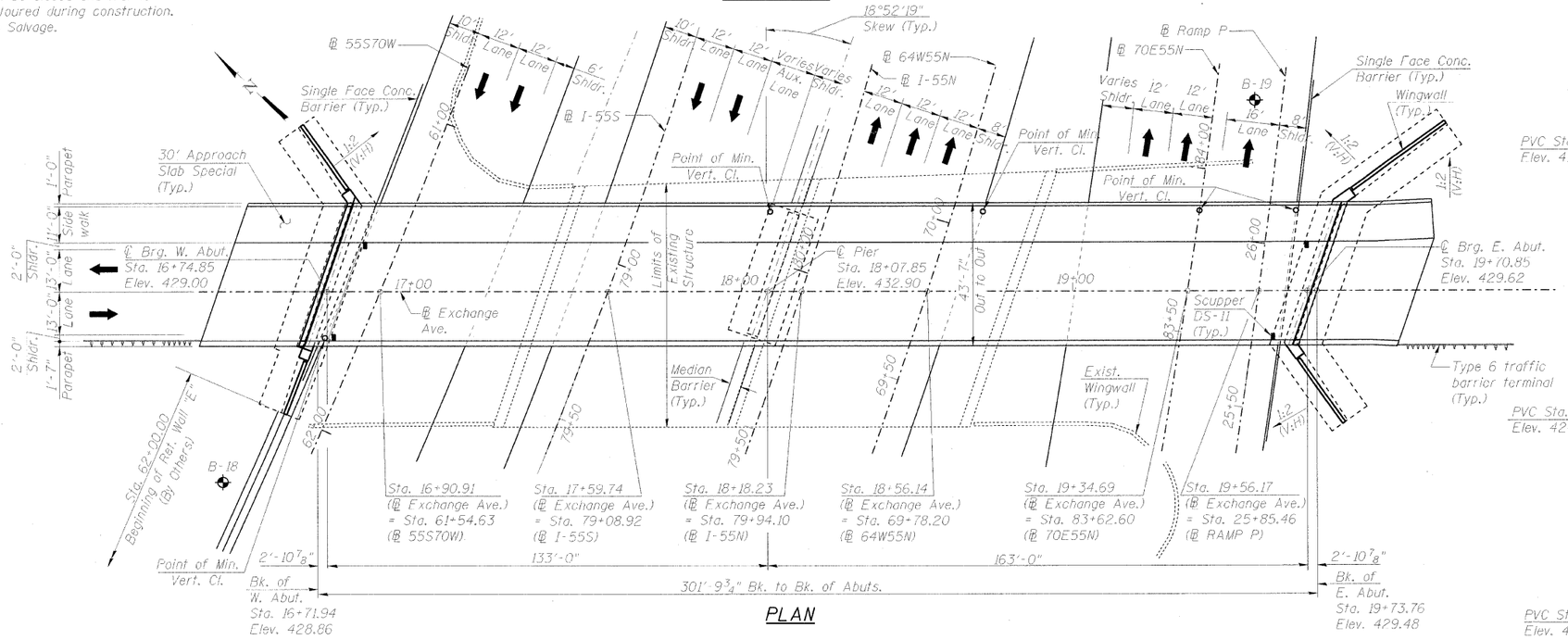
f'c = 3,500 psi
fy = 60,000 psi (reinf.)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

LOADING HL-93

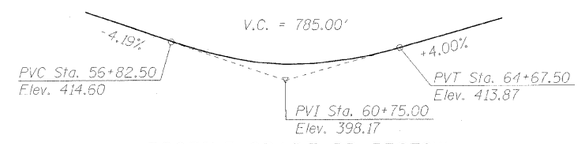
Allow 50#/sq. ft. for future wearing surface

SEISMIC DATA

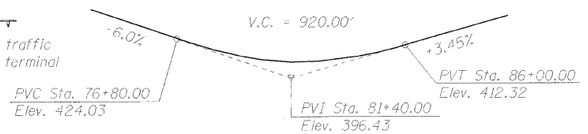
Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.24g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.54g
Soil Site Class - D



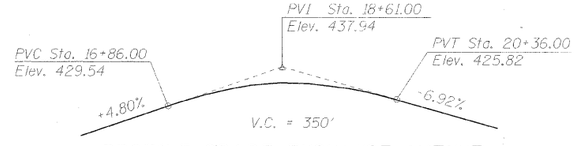
PLAN



PROFILE GRADE PR_55S70W



PROFILE GRADE PR_70E55N

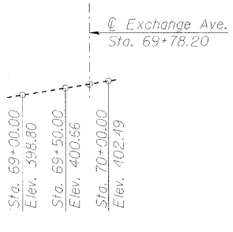


PROFILE GRADE EXCHANGE AVENUE

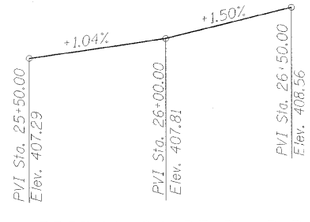
APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Rafael E. Anderson (JDD)
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
JIXING HE
081-005253
CHICAGO
LICENSED STRUCTURAL ENGINEER

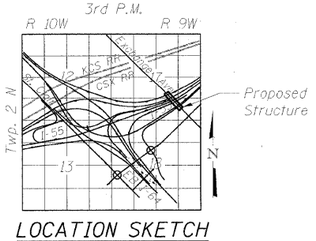
DATE: 10-09-2009
EXPIRES 11-30-2010



PROFILE GRADE 64W55N (EXIST.)



PROFILE GRADE RAMP P



LOCATION SKETCH

FILE NAME = $FILES$	USER NAME = $USER$	DESIGNED - JXH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN EXCHANGE AVENUE OVER I-55 /70 (S.N. 082-0378)		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JHR	REVISED -				70	82-1-1HB	ST. CLAIR	236	160
	PLOT SCALE = $SCALE$	CHECKED - CHY	REVISED -						CONTRACT NO. 76C55		
	PLOT DATE = $DATE$	DATE - 10-09-09	REVISED -		SCALE:	SHEET NO. S-1 OF S-37 SHEETS STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		