

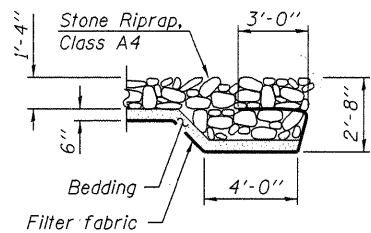
Benchmark: S.E. B-Bolt of fire hyd. at S.W. corner of 5th Ave. and Winston Dr.
Sta. 34+64.25, Offset 64.75', Elev. 625.561

Existing Structure: S.N. 016-0691 built in 1929 as FAU 2742, Section F. Overlay was placed in 1999 and in 2010. A single span reinforced concrete bridge. Superstructure on closed abutments, 32' long and 56' out to out. Existing superstructure & portions of substructure to be removed and replaced using stage construction, keeping one lane open in the southbound direction during stage I and one lane in each direction during stage II. Northbound traffic will be detoured during stage I.

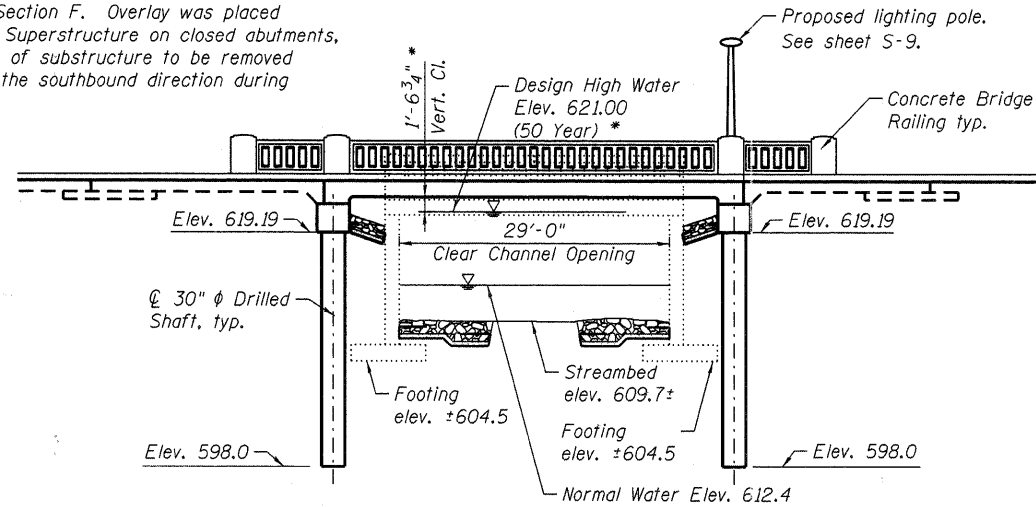
No Salvage.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	South Abut.	North Abut.
	604.5	604.5



SECTION B-B



ELEVATION

NOTES:

1. Appr. Railing will be omitted on the NW corner of the bridge
2. For Section A-A see sheet S-2.
3. Existing Watermain and gas main in conflict with proposed drilled shaft to be relocated by others prior to drilling operations.

WATERWAY INFORMATION

Drainage Area = 9.0 Sq. Mi. Proposed Low Grade Elev. 624.43 @ Sta. 37+00									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head-Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	425	326	327	621.0	0.0	0.0	621.0	621.0
Base	50	645	326	327	621.0*	0.0	0.0	621.0	621.0
Overtopping	100	770	326	330	621.1	0.0	0.0	621.1	621.1
Max. Calc.	500	1010	326	333	621.2	0.0	0.0	621.2	621.2

All Elevations are based on FIS Datum -0.281' = Highway Datum

* The vertical clearance was determined using the 50 year HWE (622.9) of the Des Plaines River.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges 17th Edition

DESIGN STRESSES

FIELD UNITS

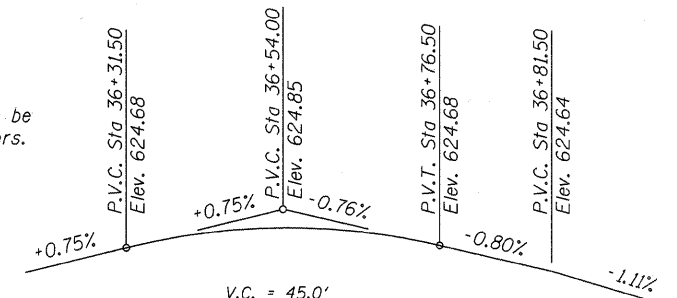
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

LOADING HS 20-44

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

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

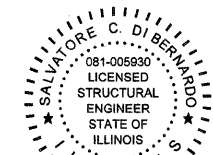


PROFILE

along 5th Avenue

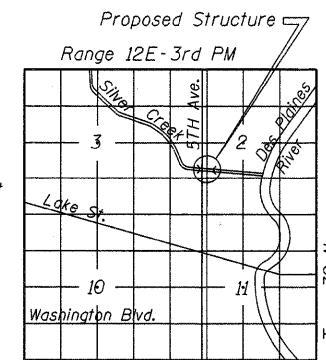
APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Carl Perry
ENGINEER OF BRIDGES AND STRUCTURES

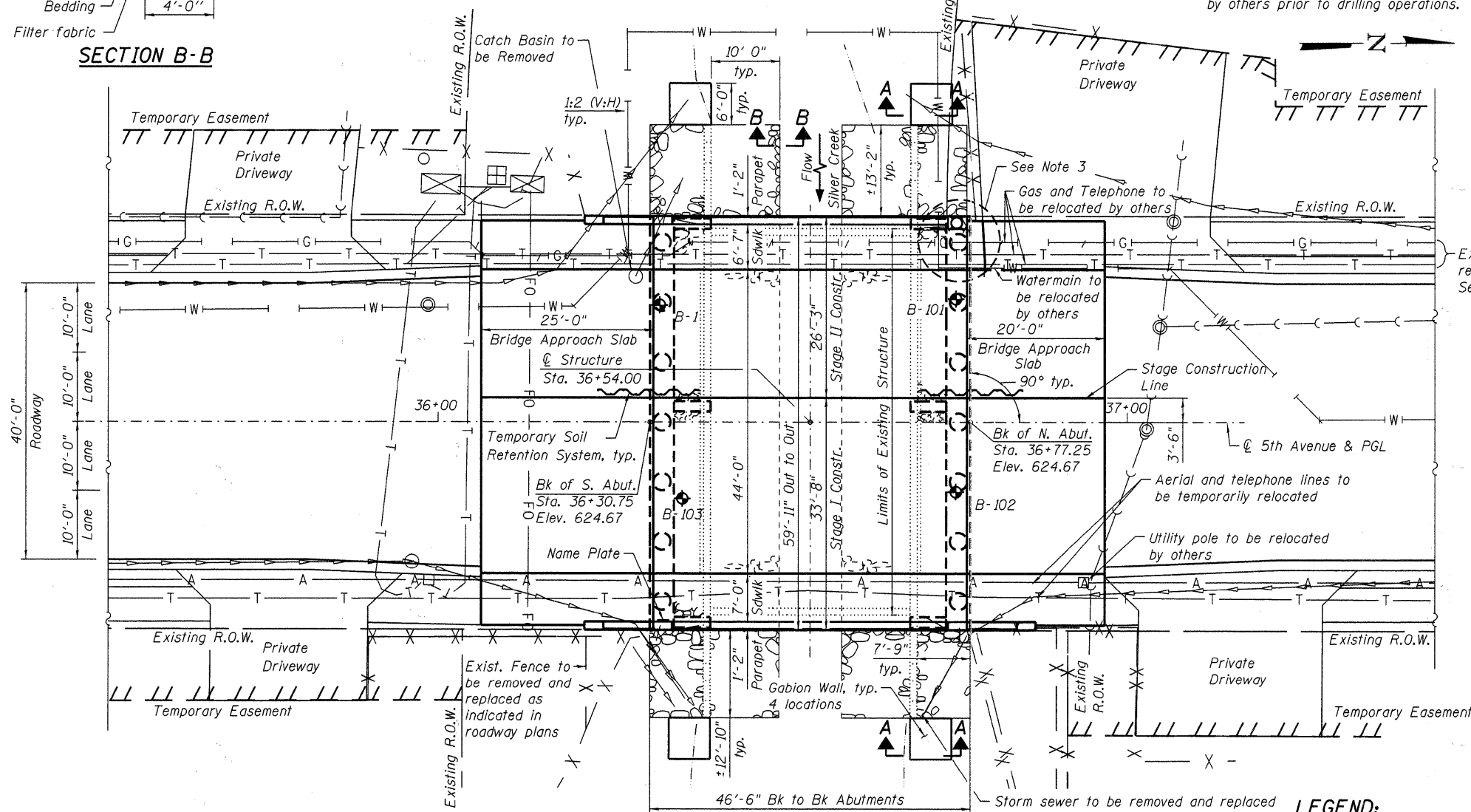


DATE: 10/25/2011
SEAL EXPIRES: 11/30/2012

GENERAL PLAN
FIFTH AVENUE OVER SILVER CREEK
F.A.U. RTE. 2742 SEC. 3222-W-BR
COOK COUNTY
STATION 36+54.00
STRUCTURE NO. 016-2818



LOCATION SKETCH



PLAN

LEGEND:

- ◆ Soil Boring Location
- W— Existing 12" Water Main
- G— Existing 4" Gas Main

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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USER NAME	DESIGNED	CHECKED	DRAWN	CHECKED
rdenley	BWS	DL	RD	SCD
	REVISED	REVISED	REVISED	REVISED

SHEET NO. S-1 OF S-17 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2742	3222-W-BR	COOK	51	26
CONTRACT NO. 62116				ILLINOIS FED. AID PROJECT