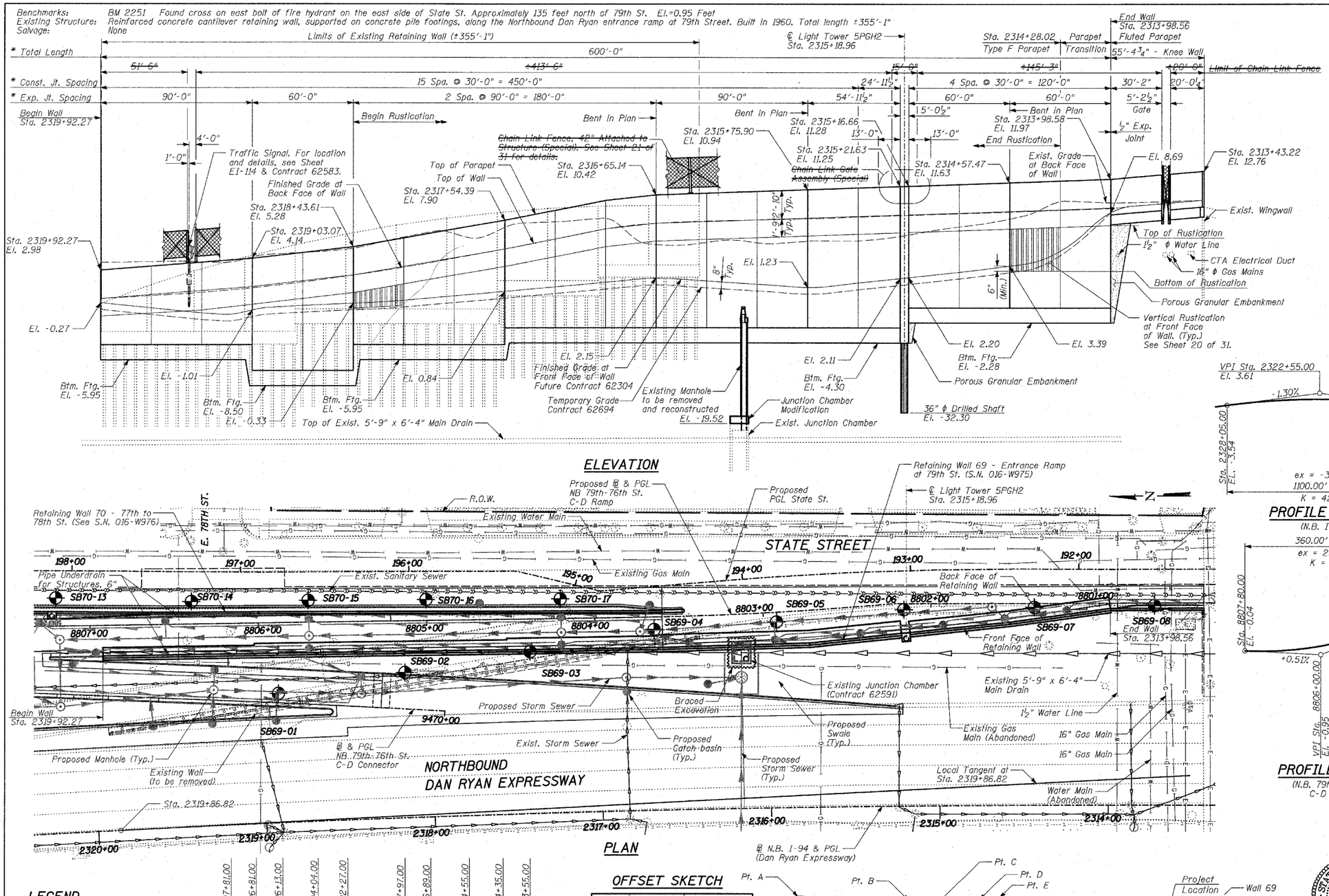
Benchmarks: BM 2251 Found cross on east bolt of fire hydrant on the east side of State St. Approximately 135 feet north of 79th St. El.=0.95 Feet
Existing Structure: Reinforced concrete cantilever retaining wall, supported on concrete pile footings, along the Northbound Dan Ryan entrance ramp at 79th Street. Built in 1960. Total length ±355'-1"
Salvage: None

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK	860	574
STA. 2200+00.00		TO STA. 2362+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

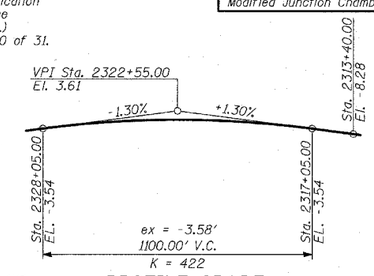
* (1516.1, 1717 & 1818) R-8

62694



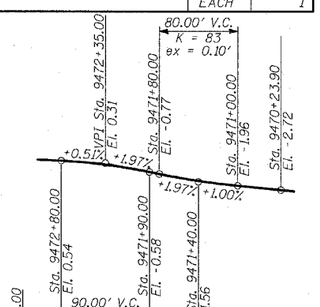
ELEVATION

PLAN



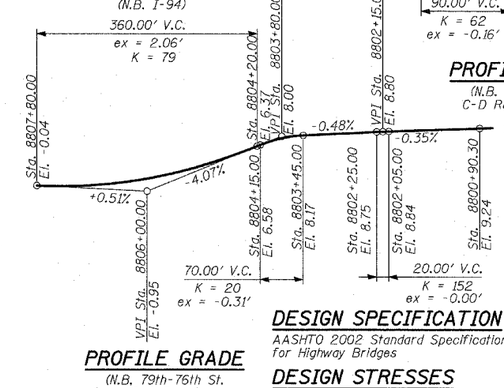
PROFILE GRADE

(N.B. I-94)



PROFILE GRADE

(N.B. 79th-76th St. C-D Ramp Connector)



PROFILE GRADE

(N.B. 79th-76th St. C-D Ramp)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	CU YD	1,219
Removal of Existing Structures No. 2	EACH	1
Structure Excavation	CU YD	3,205
Concrete Structures	CU YD	645
Protective Coat	SQ YD	824
Rustication Finish	SQ FT	1,765
Reinforcement Bars, Epoxy Coated	POUND	79,170
Geocomposite Wall Drain	SQ YD	527
Pipe Underdrains for Structures, 6"	FOOT	600
~~Chain Link Gates (Special)~~	~~EACH~~	~~1~~
Braced Excavation	CU YD	218
~~Chain Link Fence, 42" Attached to Structure (Special)~~	~~FOOT~~	~~631~~
~~Chain Link Gate Assembly (Special)~~	~~EACH~~	~~1~~
Drilled Shaft in Soil 36"	FOOT	28
Modified Junction Chamber	EACH	1

DESIGN SPECIFICATION

AASHTO 2002 Standard Specifications for Highway Bridges

DESIGN STRESSES

FIELD UNITS

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

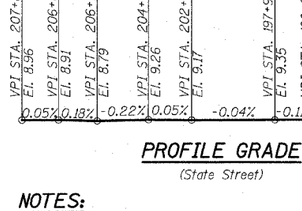
LOADING

Maximum soil pressure under retaining wall footing is 2,650 psf.
Maximum soil pressure under knee wall is 700 psf.

LEGEND

Boring Location

* Measured along Front Face of Wall.



PROFILE GRADE

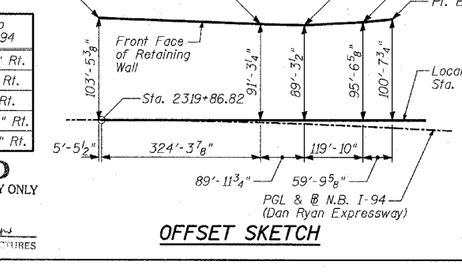
(State Street)

OFFSET SKETCH

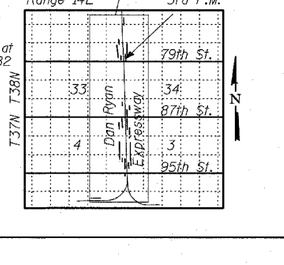
Point	Station	Offset to ℄ N.B. I-94
A	2319+92.27	103'-5⅜" Rt.
B	2316+65.14	95'-9⅞" Rt.
C	2315+75.90	96'-8½" Rt.
D	2314+57.47	107'-10⅝" Rt.
E	2313+98.56	115'-10⅝" Rt.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



OFFSET SKETCH



STATE OF ILLINOIS
PHILLIP D. FREY
081-004826
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed Phillip D. Frey
Phillip D. Frey, S.E. Il. Lic. No. 081-004826
Expires 11-30-2006.
For drawings 1 thru 31 of 31

Date 3/18/05

SHEET 1 OF 31

NOTES:

1. For General Notes and Index of Sheets, see Sheet 2 of 31.

TY·LIN INTERNATIONAL

REVISIONS NAME	DATE
REVISED	05/06/05
REVISED	04/15/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG STATE ST.
ENTRANCE RAMP AT 79TH ST.
WALL 69 - GENERAL PLAN
STA. 2319+92.27 TO STA. 2313+98.56

S.N. 016-W975 — DESIGNED BY: MI, DJR
SCALE: N.T.S. — DRAWN BY: DJR, PAL
DATE: MARCH 18, 2005 — CHECKED BY: TD, MI

05/03/2005 03:28:33 PM