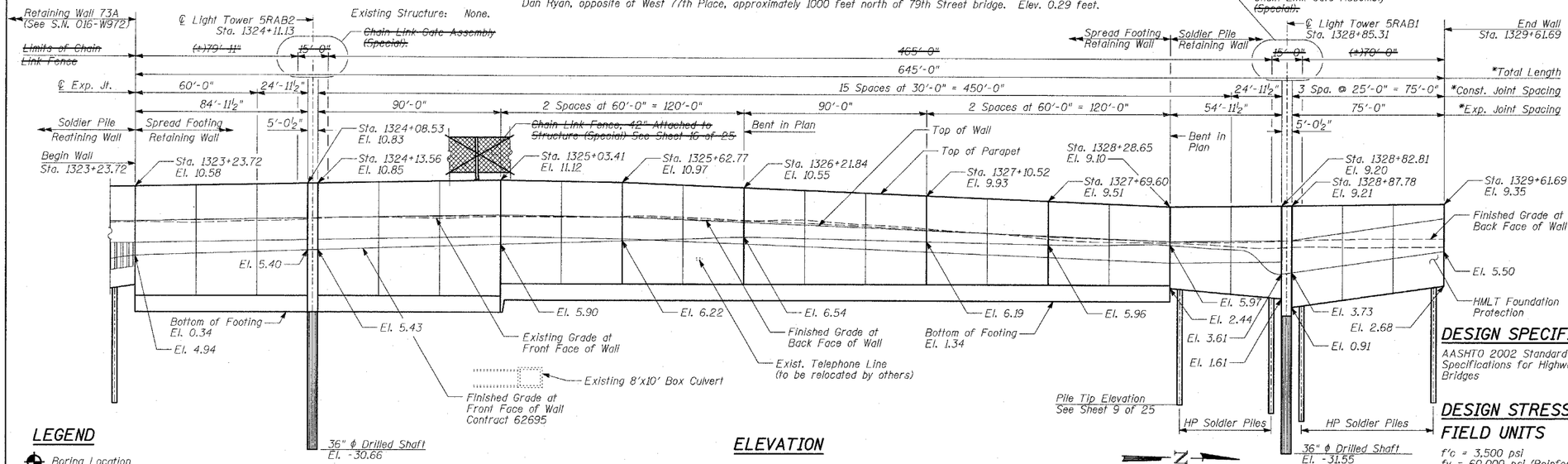
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	•	COOK	907	611
STA. 1200+00.00	TO STA. 1365+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (1516.1, 1717 & 1818) R-9				62695

Benchmarks: BM 3810 Cut square on southerly corner of metal base for overhead sign, on the westerly side of southbound Dan Ryan, opposite of West 77th Place, approximately 1000 feet north of 79th Street bridge. Elev. 0.29 feet.

Existing Structure: None.

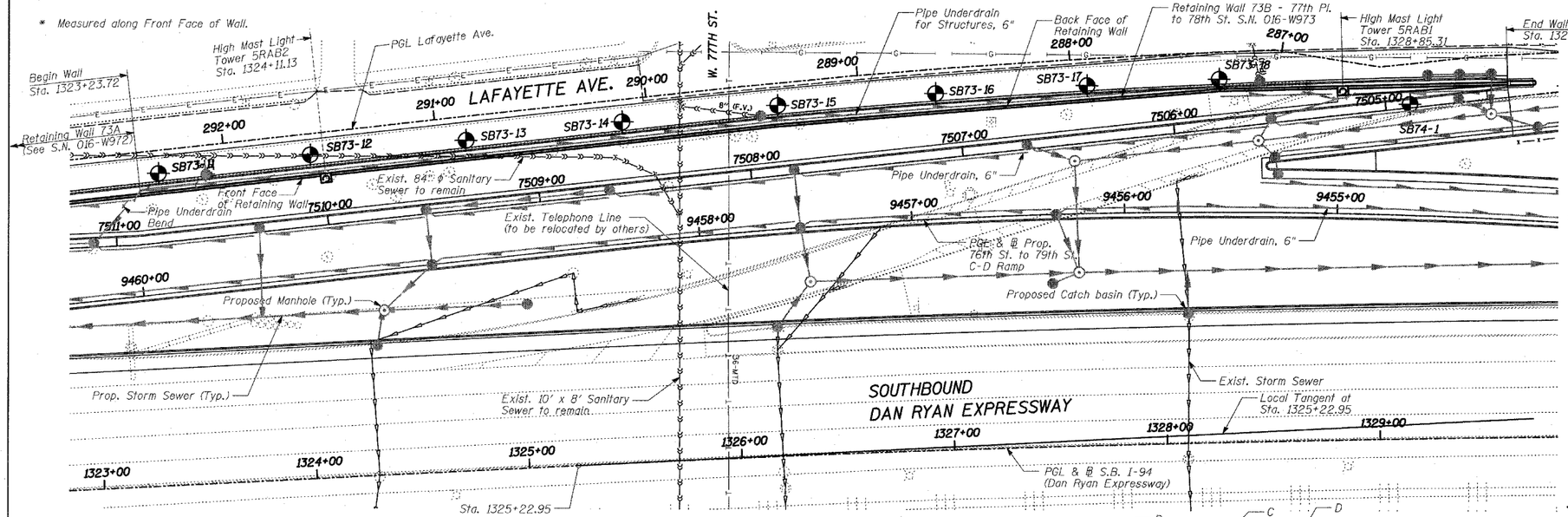
ELEVATION



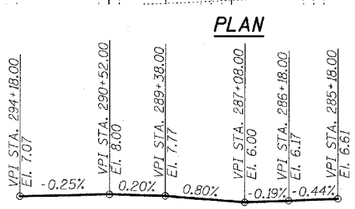
LEGEND

Boring Location

* Measured along Front Face of Wall.

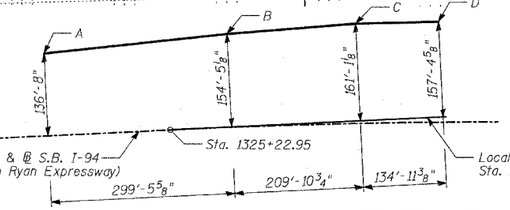


PLAN



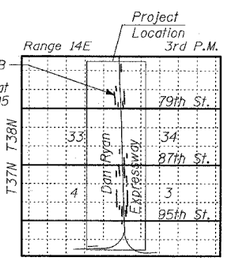
PROFILE GRADE

(Lafayette Ave.)



OFFSET SKETCH

Point	Sta.	Offset to ℄ S.B. I-57
A	1323+23.72	136'-8" Lt.
B	1326+21.84	154'-10⅝" Lt.
C	1328+28.65	165'-3½" Lt.
D	1329+61.69	166'-0⅝" Lt.



LOCATION SKETCH

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 footings is 2200 psf.

CURVE DATA

S.B. I-94 SBDR03:
Δ = 3° 16' 11.04" (RT)
D = 0° 30' 28.59"
R = 11,280.00
L = 643.72
E = 4.59
T = 321.95
P.C. STA = 1325+22.95
P.I. STA = 1328+44.90
P.T. STA = 1331+66.67

TOTAL BILL OF MATERIAL

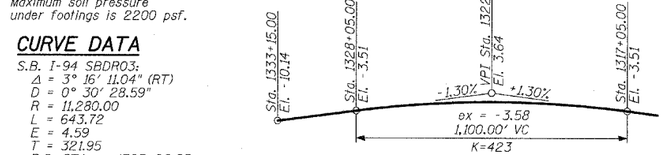
ITEM	UNIT	TOTAL
Porous Granular Embankment	CU YD	482
Structure Excavation	CU YD	1,465
Concrete Structures	CU YD	447
Protective Coat	SQ YD	640
Rustication Finish	SQ FT	1,179
Stud Shear Connectors	EACH	108
Untreated Timber Lagging	SQ FT	368
Furnishing Soldier Piles (HP Section)	FOOT	502
Reinforcement Bars, Epoxy Coated	POUND	61,240
Geocomposite Wall Drain	SQ YD	322
Pipe Underdrains for Structures, 6"	FOOT	645
Drilling and Setting Soldier Piles (in Soil)	CU FT	2,562
~~Chain Link Fence, 42" Attached to Structure (Special)~~	~~FOOT~~	~~615~~
~~Chain Link Gate Assembly (Special)~~	~~EACH~~	~~2~~
Drilled Shaft in Soil 36"	FOOT	62

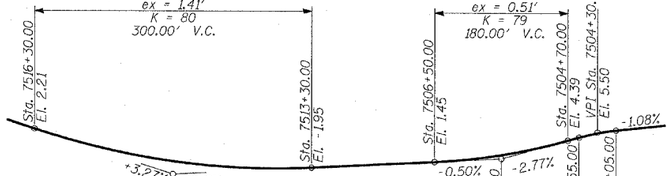
INDEX OF SHEETS

1. GENERAL PLAN
2. PLAN AND ELEVATION STA. 1323+23.72 TO STA. 1325+03.41
3. PLAN AND ELEVATION STA. 1325+03.41 TO STA. 1326+21.84
4. PLAN AND ELEVATION STA. 1326+21.84 TO STA. 1327+69.60
5. PLAN AND ELEVATION STA. 1327+69.60 TO STA. 1328+87.78
6. PLAN AND ELEVATION STA. 1328+87.78 TO STA. 1329+61.69
7. HIGH MAST LIGHT TOWER FOUNDATION PROTECTION
8. HIGH MAST LIGHT TOWER FOUNDATION PROTECTION SECTIONS
9. PILE LAYOUT, DETAILS & BILL OF MATERIAL
10. LIGHT TOWER 5RAB2 FOUNDATION DETAILS
11. LIGHT TOWER 5RAB1 FOUNDATION DETAILS
12. LIGHT TOWER DETAILS
13. WALL CROSS SECTIONS & DETAILS (1 OF 2)
14. WALL CROSS SECTIONS & DETAILS (2 OF 2)
15. RUSTICATION DETAILS
16. ~~CHAIN LINK FENCE, 42" ATTACHED TO STRUCTURE (SPECIAL)~~
17. ~~GATE PLAN AND NOTES~~
18. ~~GATE ELEVATIONS~~
19. ~~GATE SECTIONS~~
20. ~~GATE SECTIONS AND DETAILS~~
21. BORING LOGS SB73-11 & SB73-12
22. BORING LOGS SB73-13 & SB73-14
23. BORING LOGS SB73-15 & SB73-16
24. BORING LOGS SB73-17 & SB73-18
25. BORING LOGS SB74-01 & SB74-02

PROFILE GRADE

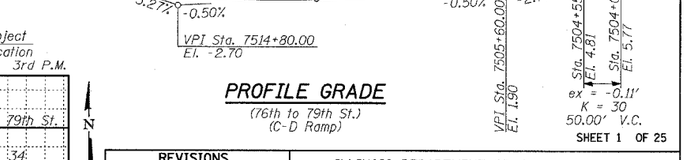
(S.B. I-94)





PROFILE GRADE

(76th to 79th St.)
(C-D Ramp)



GENERAL NOTES:

1. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
2. The Contractor is responsible for the design and performance of the lagging using no less than 3" nominal rough-sawn thickness and the minimum tabulated unit stress in bending (F_b), used in the design of timber lagging shall be 1000 psi.
3. The soldier piles shall be cleaned and given one shop coat of Inorganic Zinc-Rich primer.
4. The soldier pile portion of the wall shall be backfilled (where applicable) prior to placing the concrete facing.
5. All exposed concrete edges shall be chamfered ¾" except as noted.
6. Protective Coat shall be applied to exposed surfaces of the concrete wall.
7. Existing utilities in conflict with retaining wall construction shall be abandoned or relocated according to directions given on the roadway plans.
8. All construction joints shall be bonded.
9. All elevations shown are based on the Chicago City Datum of 0.00, which is 579.19 feet above mean tide New York. (NAVD 88)
10. The Contractor is responsible to coordinate all electrical crossings with this Contract and with Contract 62583.

TY·LIN INTERNATIONAL

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

Signed Phillip D. Frey
Phillip D. Frey, S.E. Ill. Lic. No. 081-004826 Expires 11-30-2006
Date 3/25/05

For drawings 1 thru 25 of 25.

REVISIONS NAME	DATE
REVISED	04/15/05

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG LAFAYETTE AVE.
77TH PL. TO 78TH ST.
WALL 73B - GENERAL PLAN
STA. 1323+23.72 TO STA. 1329+61.69

S.N. 016-W973 DESIGNED BY: MI. DJR
SCALE: N.T.S. DRAWN BY: DJR
DATE: MARCH 25, 2005 CHECKED BY: TD, MI

SHEET 1 OF 25

$FILE$
$TIME$
$DATE$