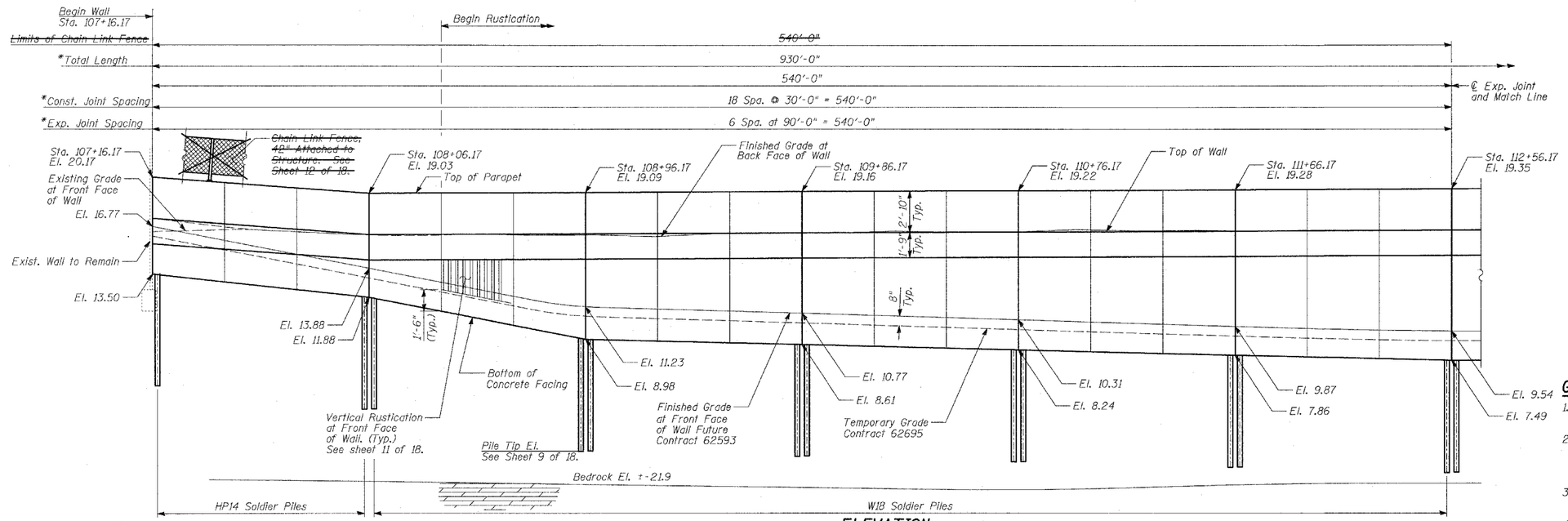
Benchmarks: BM 3558 Set "+" southwesterly flange bolt of hydrant at northwest intersection of Normal St. and 98th Place. El. 18.15

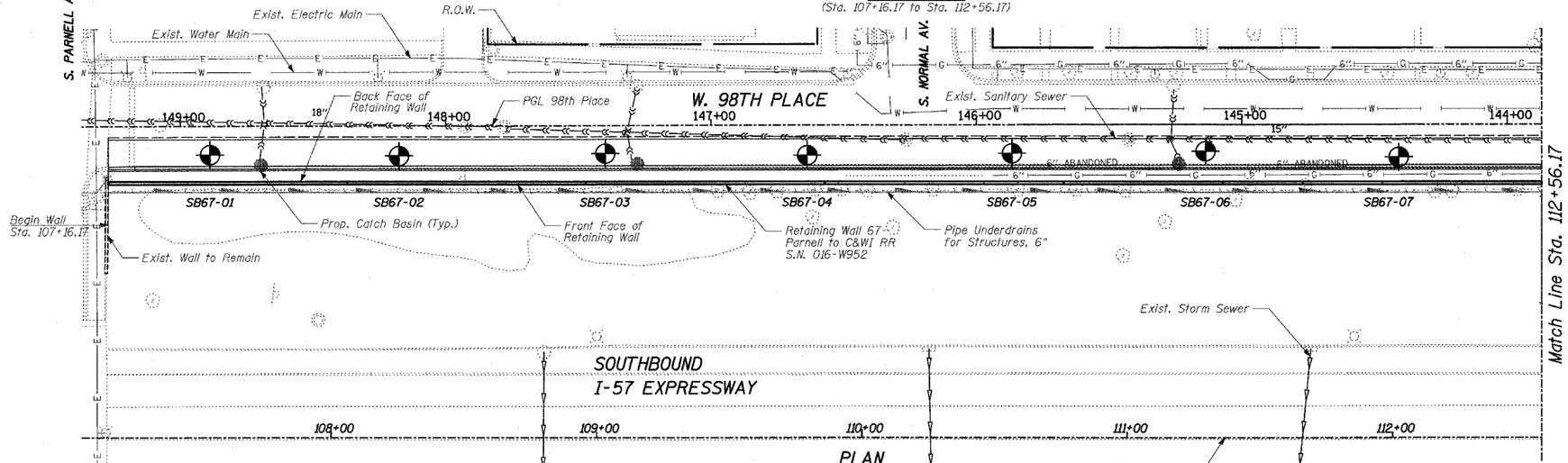
Existing Structure: None.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	•	COOK	907	636
STA. 1200+00.00		TO STA. 1365+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (1516.1, 1717 & 1818) R-9				62695



ELEVATION

(Sta. 107+16.17 to Sta. 112+56.17)



PLAN

(Sta. 107+16.17 to Sta. 112+56.17)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	CU YD	802
Concrete Structures	CU YD	424
Protective Coat	SQ YD	1,362
Rustication Finish	SQ FT	5,621
Stud Shear Connectors	EACH	1,674
Untreated Timber Lagging	SQ FT	5,824
Furnishing Soldier Piles (HP Section)	FOOT	322
Furnishing Soldier Piles (W Section)	FOOT	4,656
Reinforcement Bars, Epoxy Coated	POUND	51,530
Geocomposite Wall Drain	SQ YD	699
Pipe Underdrains for Structures, 6"	FOOT	930
Drilling and Setting Soldier Piles (In Soil)	CU FT	25,302
Drilling and Setting Soldier Piles (In Rock)	CU FT	49
~~Chain Link Fence, 42" Attached to Structure~~	~~FOOT~~	~~930~~

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. All exposed concrete edges shall be chamfered $\frac{3}{4}$" except as noted.
5. Protective Coat shall be applied to exposed surfaces of the concrete facing.
6. Existing utilities in conflict with soldier pile wall construction shall be abandoned or relocated according directions given on the roadway plans.
7. All construction joints shall be bonded.
8. 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)
9. The wall shall be backfilled (where applicable) prior to placing the concrete facing.
10. Riser Shaft and Receiving Pit to have been constructed in Contract 62692.
11. The Contractor is responsible to coordinate all electrical crossings with this Contract and with Contract 62583.

INDEX OF SHEETS

1. GENERAL PLAN
2. GENERAL PLAN
3. PLAN AND ELEVATION STA. 107+16.17 TO STA. 108+96.17
4. PLAN AND ELEVATION STA. 108+96.17 TO STA. 110+76.17
5. PLAN AND ELEVATION STA. 110+76.17 TO STA. 112+56.17
6. PLAN AND ELEVATION STA. 112+56.17 TO STA. 114+36.17
7. PLAN AND ELEVATION STA. 114+36.17 TO STA. 115+86.17
8. PLAN AND ELEVATION STA. 115+86.17 TO STA. 116+46.17
9. PILE LAYOUT, DETAILS & BILL OF MATERIAL
10. WALL CROSS SECTIONS & DETAILS
11. RUSTICATION DETAILS
12. ~~CHAIN LINK FENCE, 42" ATTACHED TO STRUCTURE~~
13. BORING LOGS SB67-01 & SB67-02
14. BORING LOGS SB67-03 & SB67-04
15. BORING LOGS SB67-05 & SB67-06
16. BORING LOGS SB67-07 & SB67-08
17. BORING LOGS SB67-09 & SB67-10
18. BORING LOGS SB67-11 & SB67-12

LEGEND

Boring Location

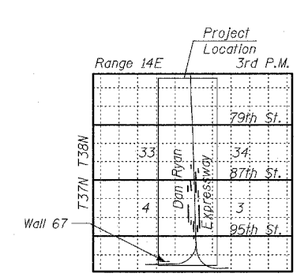
* Measured along Front Face of Wall.

DESIGN SPECIFICATION

AASHTO 2002 Standard Specifications for Highway Bridges

DESIGN STRESSES FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M270 Grade 36) Soldier Piles



LOCATION SKETCH

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

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

For drawings 1 thru 18 of 18

SHEET 1 OF 18

REVISIONS NAME	DATE
REVISED	04/15/05

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG W. 98TH PLACE
PARNELL TO C&WI RR
WALL 67 - GENERAL PLAN
STA. 117+16.17 TO STA. 116+46.17

S.N. 016-W952 — DESIGNED BY: MI. DJR
SCALE: N.T.S. — DRAWN BY: DJR, TB
DATE: MARCH 25, 2005 — CHECKED BY: TD, MI

TY·LIN INTERNATIONAL

$FILE$ $TIME$ $DATE$