

Benchmark: BM No. 3528  
 "+ Cut on Northwesterly bolt of Fire Hydrant at the Northwest corner of 45th St. and Wentworth Ave. El. 16.20

Salvage: None

**DESIGN SPECIFICATIONS**

2002 AASHTO

**DESIGN STRESSES**

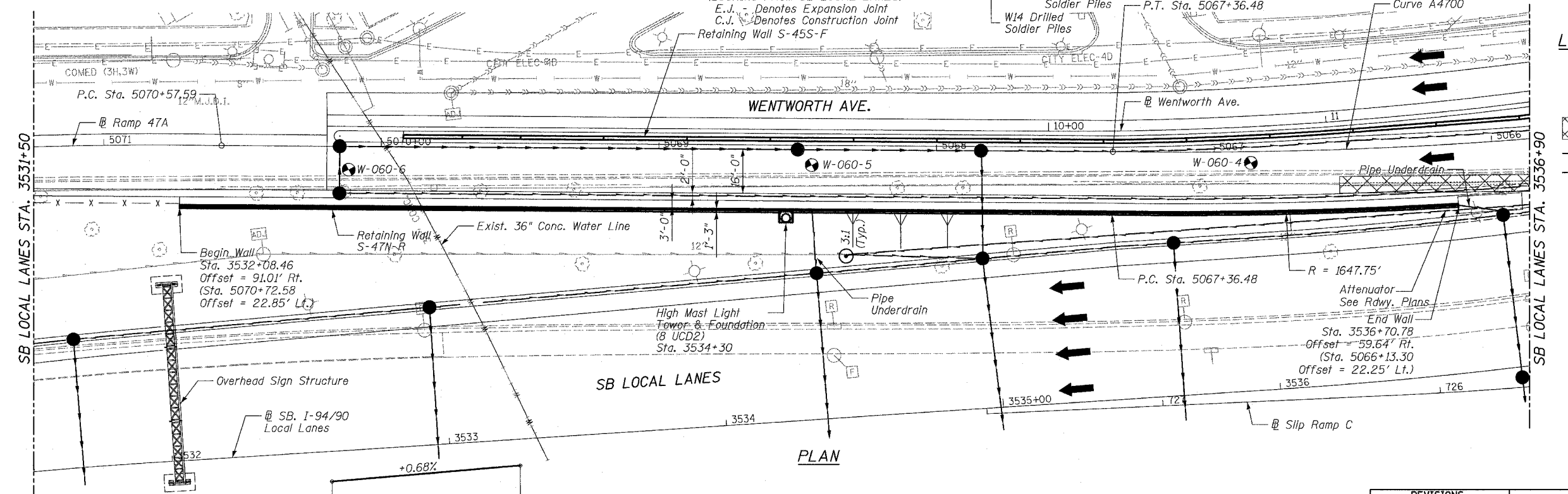
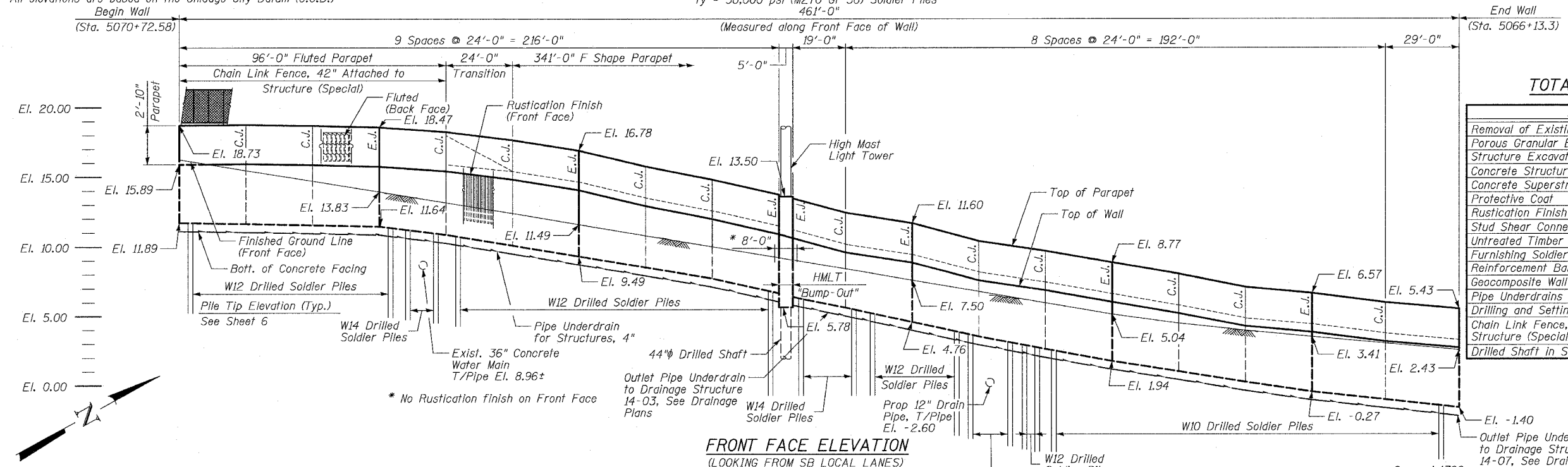
**FIELD UNITS**

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 36,000$  psi (M270 Gr 36) Soldier Piles  
 461'-0"

**LOADING**

2002 AASHTO

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	588	397
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62303		*I2021-922 PT2 ETC 2324.6-1P1 R-11		

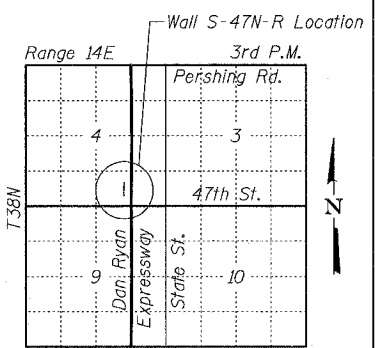


**TOTAL BILL OF MATERIAL**

Item	Unit	Quantity
Removal of Existing Structures No. 2	Each	1
Porous Granular Embankment (Special)	Cu. Yd.	6
Structure Excavation	Cu. Yd.	127
Concrete Structures	Cu. Yd.	79.4
Concrete Superstructure	Cu. Yd.	46.7
Protective Coat	Sq. Yd.	301
Rustication Finish	Sq. Ft.	1,202
Stud Shear Connectors	Each	344
Untreated Timber Lagging	Sq. Ft.	1,403
Furnishing Soldier Piles (W Section)	Foot	1,031
Reinforcement Bars, Epoxy Coated	Pound	22,210
Geocomposite Wall Drain	Sq. Yd.	117
Pipe Underdrains for Structures 4"	Foot	465
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	4,081
Chain Link Fence, 42" Attached to Structure (Special)	Foot	95
Drilled Shaft in Soil, 44"	Foot	30

**LEGEND**

- Soil Boring Location
- High Mast Lighting (Wall Mounted)
- Removal of Exist. Structures
- Proposed Underdrain
- Proposed Storm Sewer



**LOCATION SKETCH**

SHEET 1 OF 15

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 GARFIELD BLVD TO 31ST STREET (SB LOCAL LANES)

**RETAINING WALL S-47N-R  
 GENERAL PLAN AND ELEVATION**

SCALE: NTS  
 DATE: JUNE 9, 2006  
 DRAWN BY: LAM  
 CHECKED BY: BLU

**Notes:**

1. Offsets given to Front Face of Wall. Station and offsets in parentheses are along Frontage Road or ramp.
2. HMLT, foundations and work pads by others. See Special Provisions for Contractor Cooperation.
3. Wall to be built along straight chords between construction joints.
4. Min. Facing in contact with soldier pile shall be 3'-0".
5. Coordinate pipe underdrain outlet with Drainage Contractor.

PVT Sta. 3528+20.00 El. -2.46  
 PVC Sta. 3541+10.00 El. +6.39

**PROFILE GRADE LINE**  
 Along SB LOCAL LANES

BOWMAN, BARRETT & ASSOCIATES INC.  
 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
 www.bbainc.com